## MEMORANDUM

TO: Honorable Mayor and Members of the Common Council
FROM: Peggy Steeno, Finance Director/Comptroller/Treasurer
DATE: $\quad$ November 5, 2019
SUBJECT: Approve Initial Resolutions Authorizing an Amount Not To Exceed $\$ 13,450,000$ of General Obligation Bonds of the City of West Allis

Approve Resolution Directing Publication of Notice to Electors
Approve Resolution directing the advertisement and sale of up to $\$ 13,450,000$ aggregate principal amount of General Obligation Corporate Purpose Bonds, Series 2019 A, of the City of West Allis

## BACKGROUND

In order to borrow money through a general obligation public bonding process, the City is required to issue an initial resolution stating its intent, along with another resolution that authorizes staff to proceed with the preparation and documentation needed to sell the bonds and receive the proceeds. The sale of the bonds cannot occur until at least 30 days after the initial resolution is authorized.

## ANALYSIS

The currently proposed general obligation borrowing of $\$ 13,450,000$ includes the following:

- $\$ 2,750,000$ of tax exempt general obligation corporate purpose bonds to fund street improvement projects that call for a ten (10) year borrowing as included in the 2019 Budget approved by the Council on November 20, 2018 (Budget included \$2,750,000);
- $\$ 1,540,000$ of tax exempt general obligation corporate purpose bonds to fund:
(1) water system improvements that call for a fifteen (15) year borrowing as included in the 2019 Budget approved by the Council on November 20, 2018 (Budget included \$1,530,600 for infrastructure improvements and \$177,500 for equipment, plus one project that was put on hold);
- $\$ 2,500,000$ of tax exempt general obligation corporate purpose bonds to fund sanitary sewer improvements that call for a fifteen (15) year borrowing included in the 2019 Budget as approved by the Council on November 20, 2018 (Budget included \$2,572,600 for infrastructure); and
- $\$ 6,660,000$ of tax exempt refunding bonds to refinance the 2008, 2009, 2011, and 2012 issues, which is solely being done to save the City interest costs over the remaining payments. The refinancing will save the City approximately $\$ 205,000$ in future debt repayments, however, please note that some of this savings, approximately $\$ 20,000$, will be offset since the extra borrowing, greater
than $\$ 10,000,000$, puts the City in a non-bank qualified position which is likely to increase the overall interest rate slightly.

Also, please find attached a Pre-Sale Report, issued by Ehlers, Inc., the City's Financial Advisor, which outlines additional details of the proposed borrowings.

## FISCAL IMPACT

The above amounts, totaling $\$ 13,450,000$, if borrowed, will be added to the City's outstanding debt obligations, and funded through the applicable budgets, specifically the Debt Service Fund/General Fund, the Water Utility Fund, and the Sanitary Sewer Utility Fund. Also, the refunding will positively affect the applicable budgets, specifically the Debt Service Fund/General Fund, the Water Utility Fund, the Sanitary Sewer Utility Fund and TIF Funds, by saving approximately $\$ 185,000$ in future interest costs.

## RECOMMENDATION

Staff recommends adoption of the above noted resolutions.

November 5, 2019

## Pre-Sale Report for

City of West Allis, Wisconsin

## \$13,450,000 General Obligation Corporate Purpose Bonds, Series 2019A



> Prepared by:

Dawn Gunderson-Schiel, CPFO/CIPMA
Senior Municipal Advisor

Todd Taves, CIPMA
Senior Municipal Advisor

## Executive Summary of Proposed Debt

| Proposed Issue: | \$13,450,000 General Obligation Corporate Purpose Bonds, Series 2019A |
| :---: | :---: |
| Purposes: | The proposed issue includes financing for the following purposes: <br> Finance 2019 Streets, Water and Sewer projects. <br> Refinance various outstanding issues. Debt Service on the refundings will be paid from ad valorem property taxes, sewer utility revenues and water utility revenues. <br> - Current Refunding of 2008A GO Corporate Purpose Bonds. <br> Interest rates on the obligations proposed to be refunded are $4.00 \%$ to $4.25 \%$. The refunding is expected to reduce debt service expense by approximately $\$ 34,329$ over the next 4 years. The Net Present Value Benefit of the refunding is estimated to be $\$ 32,994$, equal to $3.51 \%$ of the refunded principal. <br> This refunding is considered to be a Current Refunding as the obligations being refunded are either callable (pre-payable) now, or will be within 90 days of the date of issue of the new Bonds. <br> - Current Refunding of 2009 GO Corporate Purpose Bonds. <br> Interest rates on the obligations proposed to be refunded are $4.00 \%$ to $4.35 \%$. The refunding is expected to reduce debt service expense by approximately $\$ 49,234$ over the next 4 years. The Net Present Value Benefit of the refunding is estimated to be $\$ 46,659$ equal to $4.55 \%$ of the refunded principal. <br> This refunding is considered to be a Current Refunding as the obligations being refunded are either callable (pre-payable) now, or will be within 90 days of the date of issue of the new Bonds. <br> - Current Refunding of the 2011A GO Corporate Purpose Bonds. <br> Interest rates on the obligations proposed to be refunded are $3.00 \%$ to $3.50 \%$. The refunding is expected to reduce debt service expense by approximately $\$ 65,522$ over the next 7 years. The Net Present Value Benefit of the refunding is estimated to be $\$ 61,107$, equal to $3.25 \%$ of the refunded principal. <br> This refunding is considered to be a Current Refunding as the obligations being refunded are either callable (pre-payable) now, or will be within 90 days of the date of issue of the new Bonds. <br> - Current Refunding of the 2012B GO Corporate Purpose Bonds. <br> Interest rates on the obligations proposed to be refunded are $2.25 \%$ to $3.00 \%$. The refunding is expected to reduce debt service expense by approximately $\$ 56,081$ over the next 8 years. The Net Present |

$\left.\begin{array}{|l|l|}\hline & \begin{array}{r}\text { Value Benefit of the refunding is estimated to be } \$ 51,354, \text { equal to } \\ 1.91 \% \text { of the refunded principal. } \\ \text { This refunding is considered to be a Current Refunding as the } \\ \text { obligations being refunded are either callable (pre-payable) now, or } \\ \text { will be within } 90 \text { days of the date of issue of the new Bonds. }\end{array} \\ \text { - 2019 Sewer Projects. Debt service will be paid from Sewer Utility } \\ \text { revenues. } \\ \text { - 2019 Streets Projects. Debt service will be paid from ad valorem } \\ \text { property taxes. } \\ \text { - 2019 Water Projects. Debt service will be paid from Water Utility } \\ \text { revenues. }\end{array}\right\}$

| Basis for Recommendation: | Based on our knowledge of your situation, your objectives communicated to us, our advisory relationship as well as characteristics of various municipal financing options, we are recommending the issuance of Bonds as a suitable option based on: <br> - The expectation this form of financing will provide the overall lowest cost of funds while also meeting the City's objectives for term, structure and optional redemption. <br> - The City having adequate General Obligation debt capacity to undertake this financing. <br> - The City's current practice and Capital Improvements Plan which identified issuance of General Obligation Bonds to finance these projects. <br> - The existing General Obligation pledge securing the obligations to be refunded. |
| :---: | :---: |
| Method of Sale/Placement: | We will solicit competitive bids for the purchase of the Bonds from underwriters and banks. <br> We will include an allowance for discount bidding in the terms of the issue. The discount is treated as an interest item and provides the underwriter with all or a portion of their compensation in the transaction. <br> If the Bonds are purchased at a price greater than the minimum bid amount (maximum discount), the unused allowance may be used to reduce your borrowing amount. |
| Premium Pricing: | In some cases, investors in municipal bonds prefer "premium" pricing structures. A premium is achieved when the coupon for any maturity (the interest rate paid by the issuer) exceeds the yield to the investor, resulting in a price paid that is greater than the face value of the bonds. The sum of the amounts paid in excess of face value is considered "reoffering premium." The underwriter of the bonds will retain a portion of this reoffering premium as their compensation (or "discount") but will pay the remainder of the premium to the City. <br> Any premium amount received for that portion of the Bond being issued for the purpose of refunding existing debt will be used to reduce the issue size. Any premium amount received for the remainder of the Bonds that is in excess of the underwriting discount and any capitalized interest amounts must be placed in the debt service fund and used to pay a portion of the interest payments due on the Bonds. These adjustments may slightly change the true interest cost of the original bid, either up or down. We anticipate using any premium amounts received to reduce the issue size. |

$\left.\begin{array}{|l|l|}\hline & \begin{array}{l}\text { The amount of premium allowed can be restricted in the bid } \\ \text { specifications. Restrictions on premium may result in fewer bids, but may also } \\ \text { eliminate large adjustments on the day of sale and unintended results with } \\ \text { respect to debt service payment impacts. Ehlers will identify appropriate } \\ \text { premium restrictions for the Bonds intended to achieve the City's objectives for } \\ \text { this financing. }\end{array} \\ \hline \text { Other Considerations: } & \begin{array}{l}\text { The Bonds will be offered with the option of the successful bidder utilizing a } \\ \text { term bond structure. By offering underwriters the option to "term up" some of } \\ \text { the maturities at the time of the sale, it gives them more flexibility in finding a } \\ \text { market for your Bonds. This makes your issue more marketable, which can } \\ \text { result in lower borrowing costs. In the event that the successful bidder utilizes } \\ \text { a term bond structure, we recommend the City retain a paying agent to handle } \\ \text { responsibility for processing mandatory redemption/call notices associated with } \\ \text { term bonds. }\end{array} \\ \hline \text { Review of Existing Debt: } & \begin{array}{l}\text { We have reviewed all outstanding indebtedness for the City and find that, other } \\ \text { than the obligations proposed to be refunded by the Bonds, there are no other } \\ \text { refunding opportunities at this time. } \\ \text { Investment of and Accounting }\end{array} \\ \text { for Proceeds: } & \begin{array}{l}\text { In order to more efficiently segregate funds for this project and maximize } \\ \text { outstanding debt and will alert you to any future refunding opportunities. }\end{array} \\ \text { interest earnings, we recommend using an investment advisor, to assist with the } \\ \text { investment of bond proceeds until they are needed to pay project costs. Ehlers }\end{array}\right\}$

|  | Investment Partners, a subsidiary of Ehlers and registered investment advisor, <br> can discuss an appropriate investment strategy with the City. |
| :--- | :--- |
| Risk Factors: | GO with Planned Abatement: The City expects to abate a portion of the City <br> debt service with water utility revenues and sewer utility revenues. In the event <br> these revenues are not available, the City is obligated to levy property taxes in <br> an amount sufficient to make all debt payments. <br> Current Refunding: The Bonds are being issued to finance a current refunding <br> of prior City debt obligations. Those prior debt obligations are currently <br> "callable". The new Bonds will not be pre-payable until April 1, 2028. |
| This refunding is being undertaken based in part on an assumption that the City |  |
| does not expect to pre-pay off this debt prior to the new call date and that market |  |
| conditions warrant the refunding at this time. |  |$|$| Other Service Providers: | This debt issuance will require the engagement of other public finance service <br> providers. This section identifies those other service providers, so Ehlers can <br> coordinate their engagement on your behalf. Where you have previously used <br> a particular firm to provide a service, we have assumed that you will continue <br> that relationship. For services you have not previously required, we have <br> identified a service provider. Fees charged by these service providers will be <br> paid from proceeds of the obligation, unless you notify us that you wish to pay <br> them from other sources. Our pre-sale bond sizing includes a good faith estimate <br> of these fees, but the final fees may vary. If you have any questions pertaining <br> to the identified service providers or their role, or if you would like to use a <br> different service provider for any of the listed services please contact us. <br> Bond Counsel: Quarles \& Brady LLP <br> Paying Agent: Issuer, unless term bonds offered, then Bond Trust Services <br> Corp. <br> Rating Agency: Moody's Investors Service, Inc. |
| :--- | :--- |

## Proposed Debt Issuance Schedule

| Pre-Sale Review by City Council: | November 5, 2019 |
| :--- | :--- |
| Due Diligence Call to review Official Statement: | Week of December 9, 2019 |
| Distribute Official Statement: | December 9, 2019 |
| Conference with Rating Agency: | Week of December 9, 2019 |
| City Council Meeting to Award Sale of the Bonds: | December 17, 2019 |
| Estimated Closing Date: | December 30, 2019 |
| Redemption Date for Bonds Being Refunded: | January 21, 2020 |

## Attachments

Estimated Sources and Uses of Funds
Estimated Proposed Debt Service Schedule/Tax Levy Impact
Estimated Debt Service Comparison with savings
Estimates Debt Service savings by issue
Bond Buyer Index

## Ehlers Contacts

| Municipal Advisors: | Dawn Gunderson-Schiel | (262) 796-6166 |
| :--- | :--- | :--- |
|  | Todd Taves | (262) 796-6173 |
| Disclosure Coordinator: | Sue Porter | (262) 796-6167 |
| Financial Analyst: | Mary Zywiec | (262) 796-6171 |

The Preliminary Official Statement for this financing will be sent to the City Council at their home or email address for review prior to the sale date.

## Capital Financing Plan Sizing



\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline  \& est \& \& Project \& ed Impa \& act of Pr \& Propose \& Proj \& cts \& \& \& \& \& \& \& \& \&  \&  \&  \& <br>
\hline \multicolumn{7}{|c|}{Existing General Obligation Debt Only} \& \multicolumn{14}{|c|}{Projected Debt Service} <br>
\hline \& Equalized Value Projection \& Change in EV TID OUT \& Total Payment (P\&I) \& Total Less Non Levy Revenues \& $$
\begin{array}{|c|}
\hline \text { Net Debt } \\
\text { Service Levy }
\end{array}
$$ \& $$
\begin{array}{|c|}
\hline \text { Debt } \\
\text { Service Tax } \\
\text { Rate }
\end{array}
$$ \& \multicolumn{5}{|c|}{Obligation Bonds, Se
$\$ 6,790,000$

Dated 12/30/19} \& \multicolumn{3}{|c|}{Capital Plan Debt Service} \& \[
$$
\begin{gathered}
\text { Sewer } \\
\text { Revenues } 2019
\end{gathered}
$$

\] \& Water Revenues 2019 \& Total Projected Debt Service less abatements \& Net Debt Service Levy \& | Debt |
| :---: |
| Service Tax |
| Rate @ |
| $1.00 \%$ |
| Growth | \& <br>

\hline \multicolumn{7}{|l|}{YEAR} \& YEAR \& Prin (4/1) \& Rate \& Interest \& Total \& Principal \& Interest \& Total \& \& \& \& \& \& YEAR <br>
\hline 2019 \& 3,720,590,900 \& 2.47\% \& 11,196,310 \& (7,168,131) \& 4,028,178 \& 1.08 \& 2019 \& \& \& \& \& \& \& \& \& \& \& 4,028,178 \& 1.08 \& 2019 <br>
\hline 2020 \& 3,846,563,800 \& 3.39\% \& 10,906,277 \& (7,256,597) \& 3,649,680 \& 0.95 \& 2020 \& 515,000 \& 1.650\% \& 96,809 \& 611,809 \& 515,000 \& 96,809 \& 611,809 \& $(192,292)$ \& $(117,989)$ \& 301,528 \& 3,951,208 \& 1.03 \& 2020 <br>
\hline 2021 \& 3,885,029,438 \& 1.00\% \& 10,409,289 \& (7,053,861) \& 3,355,429 \& 0.86 \& 2021 \& 490,000 \& 1.670\% \& 121,657 \& 611,657 \& 490,000 \& 121,657 \& 611,657 \& $(192,469)$ \& $(119,262)$ \& 299,926 \& 3,655,355 \& 0.94 \& 2021 <br>
\hline 2022 \& 3,923,879,732 \& 1.00\% \& 9,827,194 \& $(6,756,806)$ \& 3,070,388 \& 0.78 \& 2022 \& 500,000 \& 1.690\% \& 113,341 \& 613,341 \& 500,000 \& 113,341 \& 613,341 \& $(194,991)$ \& $(117,750)$ \& 300,600 \& 3,370,988 \& 0.86 \& 2022 <br>
\hline 2023 \& 3,963,118,530 \& 1.00\% \& 9,358,401 \& (6,578,844) \& 2,779,556 \& 0.70 \& 2023 \& 510,000 \& 1.740\% \& 104,679 \& 614,679 \& 510,000 \& 104,679 \& 614,679 \& $(192,419)$ \& $(121,163)$ \& 301,098 \& 3,080,654 \& 0.78 \& 2023 <br>
\hline 2024 \& 4,002,749,715 \& 1.00\% \& 7,980,039 \& $(6,334,214)$ \& 1,645,825 \& 0.41 \& 2024 \& 520,000 \& 1.780\% \& 95,614 \& 615,614 \& 520,000 \& 95,614 \& 615,614 \& $(194,734)$ \& $(119,491)$ \& 301,389 \& 1,947,214 \& 0.49 \& 2024 <br>
\hline 2025 \& 4,042,777, 212 \& 1.00\% \& 6,077,395 \& $(4,780,557)$ \& 1,296,838 \& 0.32 \& 2025 \& 530,000 \& 1.840\% \& 86,110 \& 616,110 \& 530,000 \& 86,110 \& 616,110 \& $(196,883)$ \& $(117,771)$ \& 301,456 \& 1,598,294 \& 0.40 \& 2025 <br>
\hline 2026 \& 4,083,204,984 \& 1.00\% \& 5,574,448 \& $(4,561,298)$ \& 1,013,150 \& 0.25 \& 2026 \& 540,000 \& 1.930\% \& 76,023 \& 616,023 \& 540,000 \& 76,023 \& 616,023 \& $(193,867)$ \& $(120,932)$ \& 301,224 \& 1,314,374 \& 0.32 \& 2026 <br>
\hline 2027 \& 4,124,037,034 \& 1.00\% \& 4,807,411 \& $(4,084,223)$ \& 723,187 \& 0.18 \& 2027 \& 550,000 \& 2.020\% \& 65,257 \& 615,257 \& 550,000 \& 65,257 \& 615,257 \& $(195,656)$ \& $(118,957)$ \& 300,644 \& 1,023,831 \& 0.25 \& 2027 <br>
\hline 2028 \& 4,165,277,404 \& 1.00\% \& 4,020,947 \& $(3,572,647)$ \& 448,300 \& 0.11 \& 2028 \& 570,000 \& 2.100\% \& 53,717 \& 623,717 \& 570,000 \& 53,717 \& 623,717 \& $(197,205)$ \& $(121,845)$ \& 304,668 \& 752,968 \& 0.18 \& 2028 <br>
\hline 2029 \& 4,206,930,179 \& 1.00\% \& 2,881,781 \& $(2,750,906)$ \& 130,875 \& 0.03 \& 2029 \& 575,000 \& 2.190\% \& 41,435 \& 616,435 \& 575,000 \& 41,435 \& 616,435 \& $(193,558)$ \& $(119,592)$ \& 303,285 \& 434,160 \& 0.10 \& 2029 <br>
\hline 2030 \& 4,248,999,480 \& 1.00\% \& 2,364,158 \& $(2,236,208)$ \& 127,950 \& 0.03 \& 2030 \& 285,000 \& 2.250\% \& 31,933 \& 316,933 \& 285,000 \& 31,933 \& 316,933 \& $(194,728)$ \& $(122,205)$ \& \& 127,950 \& 0.03 \& 2030 <br>
\hline 2031 \& 4,291,489,475 \& 1.00\% \& 1,896,170 \& $(1,771,295)$ \& 124,875 \& 0.03 \& 2031 \& 290,000 \& 2.300\% \& 25,392 \& 315,392 \& 290,000 \& 25,392 \& 315,392 \& $(195,689)$ \& $(119,703)$ \& \& 124,875 \& 0.03 \& 2031 <br>
\hline 2032 \& 4,334,404,370 \& 1.00\% \& 1,656,552 \& $(1,534,902)$ \& 121,650 \& 0.03 \& 2032 \& 300,000 \& 2.360\% \& 18,517 \& 318,517 \& 300,000 \& 18,517 \& 318,517 \& $(196,436)$ \& $(122,081)$ \& \& 121,650 \& 0.03 \& 2032 <br>
\hline 2033 \& 4,377,748,414 \& 1.00\% \& 1,297,608 \& $(1,297,608)$ \& \& 0.00 \& 2033 \& 305,000 \& 2.410\% \& 11,301 \& 316,301 \& 305,000 \& 11,301 \& 316,301 \& $(196,964)$ \& $(119,338)$ \& \& 0 \& 0.00 \& 2033 <br>
\hline 2034 \& 4,421,525,898 \& 1.00\% \& 1,007,733 \& $(1,007,733)$ \& \& 0.00 \& 2034 \& 310,000 \& 2.460\% \& 3,813 \& 313,813 \& 310,000 \& 3,813 \& 313,813 \& $(192,337)$ \& $(121,476)$ \& \& 0 \& 0.00 \& 2034 <br>
\hline 2035 \& 4,465,741,157 \& 1.00\% \& 1,012,133 \& $(1,012,133)$ \& \& 0.00 \& 2035 \& \& \& \& \& \& \& \& \& \& \& \& 0.00 \& 2035 <br>
\hline 2036 \& 4,510,398,568 \& 1.00\% \& 1,015,791 \& $(1,015,791)$ \& \& 0.00 \& 2036 \& \& \& \& \& \& \& \& \& \& \& \& 0.00 \& 2036 <br>
\hline 2037 \& 4,555,502,554 \& 1.00\% \& 668,533 \& $(668,533)$ \& \& 0.00 \& 2037 \& \& \& \& \& \& \& \& \& \& \& \& 0.00 \& 2037 <br>
\hline 2038 \& 4,601,057,579 \& 1.00\% \& 564,533 \& $(564,533)$ \& \& 0.00 \& 2038 \& \& \& \& \& \& \& \& \& \& \& \& 0.00 \& 2038 <br>
\hline 2039 \& 4,647,068,155 \& 1.00\% \& \& \& \& \& 2039 \& \& \& \& \& \& \& \& \& \& \& \& 0.00 \& 2039 <br>
\hline 2040 \& 4,693,538,837 \& 1.00\% \& \& \& \& \& 2040 \& \& \& \& \& \& \& \& \& \& \& \& 0.00 \& 2040 <br>
\hline totals \& \& \& 94,522,702 \& (72,006,821) \& 22,515,881 \& \& TOTALS \& 6,790,000 \& \& 945,593 \& 7,735,593 \& 6,790,000 \& 945,593 \& 7,735,593 \& (2,920,225) \& (1,799,552) \& 3,015,816 \& 25,531,697 \& \& totals <br>
\hline \multicolumn{21}{|l|}{Notes Pre Sale Estimates} <br>
\hline
\end{tabular}



## CR 2008 \$6600

Dated December 30, 2019
Debt Service Comparison -- Accrual Basis

|  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Calendar <br> Year | Total P+I | Net New |  |  |
| 2019 | - | D/S | - | Old Net D/S |

PV Analysis Summary (Net to Net)

| Net PV Cashflow Savings @ $2.007 \%$ (Bond Yield) | $32,994.06$ |
| :--- | ---: |
| Net Present Value Benefit | $\$ 32,994.06$ |
| Net PV Benefit / | $\$ 940,000$ Refunded Principal |
| Net PV Benefit/ $\$ 960,000$ Refunding Principal | $3.510 \%$ |
| Refunding Bond Information | $3.437 \%$ |
| Refunding Dated Date | $12 / 30 / 2019$ |
| Refunding Delivery Date | $12 / 30 / 2019$ |

\$1,050,000 General Obligation Corporate Purpose Bonds, Series 2019A
CR 2009 \$2945
Dated December 30, 2019
Debt Service Comparison -- Accrual Basis

| Calendar <br> Year | Total P+I | - |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 2019 | $234,916.15$ | Net New DIS | - | Old Net D/S |

## PV Analysis Summary (Net to Net)

Net PV Cashflow Savings @ 2.007\%(Bond Yield) 46,659.42

| Net Present Value Benefit | \$46,659.42 |
| :--- | :--- |


| Net PV Benefit / $\$ 1,025,000$ Refunded Principal | $4.552 \%$ |
| :--- | :--- |
| Net PV Benefit / \$1,050,000 Refunding Principal | $4.444 \%$ |

## Refunding Bond Information

| Refunding Dated Date | $12 / 30 / 2019$ |
| :--- | :--- |
| Refunding Delivery Date | $12 / 30 / 2019$ |

\$1,910,000 General Obligation Corporate Purpose Bonds, Series 2019A CR 2011\$5635
Dated December 30, 2019
Debt Service Comparison -- Accrual Basis

| Calendar <br> Year | Total P+I | Net New D/S | - | Old Net D/S |
| ---: | ---: | ---: | ---: | ---: |

PV Analysis Summary (Net to Net)

| Net PV Cashflow Savings @ $2.007 \%($ Bond Yield) | $61,107.60$ |
| :--- | :--- |


| Net Present Value Benefit | $\$ 61,107.60$ |
| :--- | ---: |
| Net PV Benefit / $\$ 1,880,000$ Refunded Principal | $3.250 \%$ |
| Net PV Benefit / $\$ 1,910,000$ Refunding Principal | $3.199 \%$ |

## Refunding Bond Information

| Refunding Dated Date | $12 / 30 / 2019$ |
| :--- | :--- |
| Refunding Delivery Date | $12 / 30 / 2019$ |

\$2,740,000 General Obligation Corporate Purpose Bonds, Series 2019A
CR 2012\$6205
Dated December 30, 2019
Debt Service Comparison -- Accrual Basis

| Calendar <br> Year | Total P+I | Net New D/S | Old Net D/S | Savings |
| ---: | ---: | ---: | ---: | ---: |
| 2019 | - | - | - | - |
| 2020 | $557,336.81$ | $557,336.81$ | $565,243.75$ | $7,906.94$ |
| 2021 | $550,131.00$ | $550,131.00$ | $553,881.25$ | $3,750.25$ |
| 2022 | $542,695.00$ | $542,695.00$ | $547,462.50$ | $4,767.50$ |
| 2023 | $257,163.00$ | $257,163.00$ | $263,934.38$ | $6,771.38$ |
| 2024 | $248,577.25$ | $248,577.25$ | $258,206.26$ | $9,629.01$ |
| 2025 | $244,911.25$ | $244,911.25$ | $252,184.38$ | $7,273.13$ |
| 2026 | $241,069.00$ | $241,069.00$ | $245,575.00$ | $4,506.00$ |
| 2027 | $227,047.50$ | $227,047.50$ | $238,525.00$ | $11,477.50$ |
| - | $\mathbf{\$ 2 , 8 6 8 , 9 3 0 . 8 1}$ | $\mathbf{2 , 8 6 8 , 9 3 0 . 8 1}$ | $\mathbf{2 , 9 2 5 , 0 1 2 . 5 2}$ | $\mathbf{\$ 5 6 , 0 8 1 . 7 1}$ |

PV Analysis Summary (Net to Net)

| Net PV Cashflow Savings @ 2.007\%(Bond Yield) | $51,354.43$ |
| :--- | ---: |
| Net Present Value Benefit | $\$ 51,354.43$ |
| Net PV Benefit / $\$ 2,695,000$ Refunded Principal | $1.906 \%$ |
| Net PV Benefit / \$2,740,000 Refunding Principal | $1.874 \%$ |

## Refunding Bond Information

| Refunding Dated Date | $12 / 30 / 2019$ |
| :--- | :--- |
| Refunding Delivery Date | $12 / 30 / 2019$ |

1 YEAR TREND IN MUNICIPAL BOND INDICES

Weekly Rates October, 2018 - October, 2019

