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Legislation Text

File #: F2017-44, Version: 1

Department of Finance CITY OF CHICAGO June 21, 2017

Andrea M. Valencia City Clerk 121 North LaSalle Street Room 107 Chicago, Illinois 60602

RE: City of Chicago, Illinois \$180,590,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A

And

City of Chicago, Illinois \$215,485,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B

Dear Ms. Valencia:

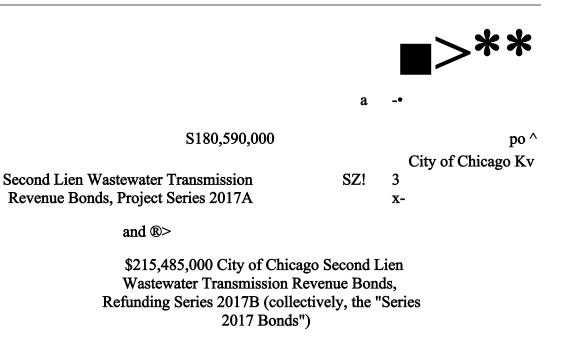
Attached is the Determination Certificate which is required to be filed with your office pursuant to Section 3.5(E) of the ordinance (pages 16417 - 16453 of Council Journal), which was passed by the City Council on January 13, 2016.

Please direct this filing to the City Council.

Carole L. Brown Chief Financial Officer

121 NORTH LASALLE STREET, SUITE 700, CHICAGO, ILLINOIS 60602 CITY OF CHICAGO

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City Council City of Chicago 121 North LaSalle Street Chicago, Illinois 60602

# **DETERMINATION CERTIFICATE**

An ordinance adopted by the City Council of the City of Chicago (the "City") on January 13, 2016 (the "2017 Bond Ordinance""), authorized the issuance of not to exceed \$400,000,000 Second Lien Wastewater Transmission Revenue Bonds of the City for project costs and/or refunding purposes. The 2017 Bond Ordinance authorized the Chief Financial Officer of the City or the City Comptroller of the City (the "Authorized Officer") to (a) determine the amount and identification of the Outstanding Bonds to be refunded and the date upon which the refunding is to be effected, (b) determine various terms and provisions of the Series 2017 Bonds within limitations established by the 2017 Bond Ordinance, (c) execute on behalf of the City a Bond Purchase Agreement for the sale by the City of the Series 2017 Bonds to the Initial Purchasers selected by the Authorized Officer pursuant to a negotiated sale on such terms as the Authorized Officer may deem to be in the best interests of the City, as provided in the 2017 Bond Ordinance, (d) approve the form and execute and deliver on behalf of the City the 2017 Bond Indenture (as defined in herein) pursuant to which the Series 2017 Bonds will be issued and a Continuing Disclosure Undertaking with respect to the Series 2017 Bonds, and (e) take such other actions as are necessary to cause the Series 2017 Bonds to be issued and delivered. The 2017 Bond Ordinance provides for the Authorized Officer to execute a Determination Certificate setting forth the various determinations made by her with respect to the Series 2017 Bonds. The Authorized Officer is to file the Determination Certificate in the Office of the City Clerk of the City, directed to the City Council.

1 am the duly qualified and serving Chief Financial Officer of the City and an Authorized Officer within the meaning of the 2017 Bond Ordinance. I make and file this Determination

Certificate in accordance with the 2017 Bond Ordinance. All terms used in this Determination Certificate and defined in the 2017 Bond Ordinance or the 2017 Bond Indenture shall have the meanings ascribed to them in the 2017 Bond Ordinance or the 2017 Bond Indenture unless otherwise defined herein.

I have determined as follows with respect to the Series 2017 Bonds authorized by the 2017 Bond Ordinance, in each case within the authority granted to me by the 2017 Bond Ordinance:

Section 1. Findings. On behalf of the City, I find and determine, as follows:

a) The City has received an offer from Siebert Cisneros Shank & Co., L.L.C., Melvin & Company, LLC, The Williams Capital Group, L.P., Blaylock Beal Van, LLC, Estrada Hinojosa & Company, Inc., Mischler Financial Group, Inc., North South Capital LLC, and Podesta & Co. (collectively, the "Underwriters") to purchase \$180,590,000 aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A (the 'Series 2017A Bonds"), and \$215,485,000 aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B (the 'Series 2017B Bonds''), of the City (collectively, the "Series 2017 Bonds"), pursuant to a Bond Purchase Agreement, dated June 6, 2017, between the City and the Underwriters, a copy of which is attached as Exhibit A to this Determination Certificate (the "Bond Purchase Agreement"). The Bond Purchase Agreement is in substantially the form previously used for similar financings of the City and is consistent with the 2017 Bond Ordinance. The purchase price of the Series 2017A Bonds specified in the Bond Purchase Agreement is \$196,940,040.55 (reflecting the aggregate par principal amount plus a net original issue premium of \$17,322,172.45 and less an underwriters' discount of \$972,131.90), and the purchase price of the Series 2017B Bonds specified in the Bond Purchase Agreement is \$242,833,975.54 (reflecting the aggregate par principal amount plus a net original premium of \$28,397,991.90 and less an underwriters' discount of \$1,049,016.36), which results in a purchase price for each series of Series 2017 Bonds that is not less than 85 percent of the original principal amount of the respective Series 2017 Bonds, plus any accrued interest on the Series 2017 Bonds from their date to the date of their delivery and less any original issue discount on the Series 2017 Bonds, which is within the limit provided in the 2017 Bond Ordinance. Selling the Series 2017 Bonds to the Underwriters upon the terms provided in the Bond Purchase Agreement is in the best interests of the City.

b) The Chairman of the Committee on Finance of the City Council has concurred in the acceptance by the City of the Bond Purchase Agreement, as being within the authority granted by the 2017 Bond Ordinance.

The terms of the Series 2017A Bonds as specified in this Determination Certificate and a Trust Indenture, dated as of June 1, 2017 (the "2017 Bond Indenture") from the City to Amalgamated Bank of Chicago, as trustee (the "Trustee"), which is attached as Exhibit B to this Determination Certificate provide funds for the purpose of (i) paying or reimbursing the City for its payment of certain Project Costs and (ii) paying Costs of Issuance of the Series 2017A Bonds. The Series 2017B Bonds are being issued for the purposes of (i) refunding certain Outstanding Second Lien Wastewater Transmission Revenue Bonds of the City (the "Refunded Bonds") and (ii) paying Costs of Issuance of the Series 2017B Bonds, all as provided in the 2017 Bond

Ordinance (such purposes collectively referred to as the "Financing Purposes"). Any changes made by this Determination Certificate to the terms of the Series 2017 Bonds thus will result in the Series 2017 Bonds having substantially the same terms as provided in the 2017 Bond Ordinance.

c) The interest rates or yields for the Series 2017 Bonds set forth in this Determination Certificate are in my judgment the best rates at which the Series 2017 Bonds can be sold in the market under current circumstances. The interest rates for the Series 2017 Bonds do not exceed 18% per year, the maximum interest rate set forth in the 2017 Bond Ordinance.

d) Prior to the issuance of the Series 2017 Bonds, the City enacted increases in the-rates of the Sewer System pursuant to an ordinance adopted by the City Council on November 2, 2011 which rate increases went into effect on January 1, 2012, January 1, 2013, January 1, 2014, January 1, 2015, and June 1, 2017. To the extent permitted by the requirements of the Series 1998 Bond Ordinance, the Series 2001 Indenture, the Series 2004B Indenture, the Series 2006 Indenture, the Series 2008A Indenture, the Series 2012 Indenture and the Series 2014 Indenture,

I have adjusted Net Revenues Available for Bonds for 2015 and 2016 to reflect such rate increases.

e) The Series 2017 Bonds will be issued pursuant to the 2017 Bond Indenture. The 2017 Bond Indenture is in substantially the form previously used for similar financings of the City. The 2017 Bond Indenture contains only such changes and revisions as are consistent with the purposes and intent of the 2017 Bond Ordinance, including such changes and revisions as are necessary to reflect the terms and provisions of the Series 2017 Bonds, and I approve such changes. The 2017 Bond Indenture includes such covenants with respect to the imposition of Sewer System rates, the issuance of Second Lien Parity Bonds, the application of funds in the Sewer Revenue Fund and the applicable Accounts and other matters relating to the Series 2017 Bonds and the security for them, including the lien status of the Series 2017 Bonds, as I deem necessary in connection with the sale of the Series 2017 Bonds. Such covenants are not inconsistent with the terms of the 2017 Bond Ordinance!

(g) The issuance of the Series 2017 Bonds with the terms set forth in this Determination Certificate will comply with the requirements of the indentures for the Outstanding Second Lien Bonds for the issuance of additional Second Lien Parity Bonds:

i) all funds required to be transferred to the principal and interest accounts and the debt service reserve accounts in the revenue funds established for the Outstanding Second Lien Bonds have been transferred in full up to the date of this Determination Certificate; and

ii) as shown on Exhibit C, (A) Net Revenues Available for Bonds for the Fiscal Year ended December 31, 2015 (as shown by the audit of an independent certified public accountant), and (B) the Net Revenues Available for Bonds for the Fiscal Year ended December 31, 2016 (as estimated by the Chief Financial Officer of the City), equal at least 100 percent of the sum of the Aggregate Senior Lien Debt Service, in each case as adjusted for any increase in the rates of the Sewer System from the rates in effect for the

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Fiscal Year ended December 31, 2016, the Aggregate Second Lien Debt Service in each Fiscal Year following the issuance of the Series 2017 Bonds, computed on a pro forma basis assuming the issuance

of the Series 2017 Bonds and the application of the proceeds of the Series 2017 Bonds as provided in the 2017 Bond Indenture and this Determination Certificate.

(h) The amount that will be needed by the City to pay the costs constituting Financing Purposes, taking into account moneys that will be available from other sources (including investment earnings on proceeds of sale of the Series 2017 Bonds during the period before they are applied to pay such costs) to pay such costs, does not exceed the amount authorized by the 2017 Bond Ordinance to be issued for Financing Purposes.

(i) The Series 2017A Bonds maturing on January 1, 2042 and January 1, 2052 (the "Insured 2017A Bonds") are insured under a policy of bond insurance (the "Insurance Policy") issued by Assured Guaranty Municipal Corp. for a premium of \$620,933.88. The purchase of such Insurance Policy is likely to facilitate the marketing and sale of the Insured 2017A Bonds and permit completion of such sale in a timely fashion and the Insurance Policy is available at an acceptable premium.

(i) This Determination Certificate is consistent with the terms of sale of the Series 2017 Bonds in the Bond Purchase Agreement.

# Section 2. Bond Terms.

a) The Series 2017 Bonds shall be Second Lien Bonds as that term is defined in the 2017 Bond Ordinance.

b) The Series 2017 Bonds shall be designated "Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A" and "Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B."

c) The Series 2017 Bonds shall be issued for the Financing Purposes.

d) The aggregate principal amount of the Series 2017A Bonds shall be \$180,590,000 and the aggregate principal amount of the Series 2017B Bonds shall be \$215,485,000.

e) The Series 2017 Bonds shall be dated as of the date they are issued and delivered. The Series 2017 Bonds shall be issued as serial bonds and term bonds subject to mandatory sinking fund redemption as set forth in subsections (i), (j) and (k) below but shall not be issued as capital appreciation bonds or variable rate bonds. The Series 2017 Bonds shall be issued initially in the form of a single fully registered Bond for each maturity of each series. The Bonds shall be in Authorized Denominations as provided in the 2017 Bond Indenture.

f) Interest on the Series 2017 Bonds shall be payable on January 1 and July 1 of each year, commencing January 1, 2018.

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g) The Series 2017 Bonds shall be numbered from RA-1 upward for the Series 2017A Bonds and

RB-1 upward for the Series 2017B Bonds.

h) The Series 2017A Bonds shall mature in the following principal amounts on January 1 of each of the following years and bear interest at the following interest rates per annum:

| Year | Principal (\$) | Interest (%) | Year | Principal (\$) | Interest (%) |
|------|----------------|--------------|------|----------------|--------------|
| 2020 | 2,255,000      | 5.00         | 2031 | 3,855,000      | 5.00         |
| 2021 | 2,365,000      | 5.00         | 2032 | 4,045,000      | 5.00         |
| 2022 | 2,485,000      | 5.00         | 2033 | 4,250,000      | 5.00         |
| 2023 | ■ 2,610,000    | 5.00         | 2034 | 4,460,000      | 5.00         |
| 2024 | 2,740,000      | 5.00         | 2035 | 4,685,000      | 5.00         |
| 2025 | 2,875,000      | 5.00         | 2036 | 4,920,000      | 5.00         |
| 2026 | 3,020,000      | 5.00         | 2037 | 5,165,000      | 5.00         |
| 2027 | 3,170,000      | 5.00         | 2042 | 30,105,000     | 5.25         |
| 2028 | , 3,330,000    | 5.00         | 2047 | 38,685,000     | 5.00         |
| 2029 | 3,495,000      | 5.00         | 2052 | 48,405,000     | 4.00         |
| 2030 | 3,670,000      | 5.00         |      |                |              |

(i) The Series 2017B Bonds shall mature in the following principal amounts on January 1 of each of the following years and bear interest at the following interest rates per annum:

| Year I | Principal (\$) | Interest ('%) | Year | Principal (\$) | Interest ('%) |
|--------|----------------|---------------|------|----------------|---------------|
| 2018 6 | 5,515,000      | 5.00          | 2029 | 14,835,000     | 5.00          |
| 2019 6 | 5,570,000      | 5.00          | 2030 | 15,585,000     | 5.00          |
| 2020 7 | 7,060,000      | 5.00 •        | 2031 | 9,140,000      | 5.00          |
| 2021 1 | 12,165,000     | 5.00          | 2032 | 9,960,000      | 5.00          |
| 2022 9 | 9,450,000      | 5.00          | 2033 | 10,085,000     | 5.00          |
| 2023 9 | 9,945,000      | 5.00          | 2034 | 10,775,000     | 5.00          |
| 2024 1 | 10,440,000     | 5.00          | 2035 | * 11,310,000   | 5.00          |
| 2025 1 | 14,070,000     | 5.00          | 2036 | 11,875,000     | 5.00          |
| 2026 9 | 9,085,000      | 5.00          | 2037 | 8,490,000      | 5.00          |
| 2027 9 | 9,545,000      | 5.00          | 2038 | 8,915,000      | 5.00          |
| 2028 1 | 10,030,000     | 5.00          |      |                |               |

(j) The Series 2017A Bonds maturing on and after January 1, 2028, are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2027, as a whole or in part, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

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(k) The Series 2017B Bonds maturing on and after January 1, 2028, are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2027, as a whole or in part, and if in part, in

such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

(1) The Series 2017A Bonds maturing on January 1, 2042 are subject to mandatory sinking fund redemption, on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

| Year  | Principal (\$) |
|-------|----------------|
| 2038  | 5,420,000      |
| 2039  | 5,705,000      |
| 2040  | 6,005,000      |
| 2041  | 6,320,000      |
| 2042* | 6,655,000      |

\*Final Maturity

(m) The Series 2017A Bonds maturing on January 1, 2047, are subject to mandatory sinking fund redemption on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

| Principal (\$) |
|----------------|
| ,000,000       |
| ,350,000       |
| ,720,000       |
| ,150,000       |
| ,510,000       |
|                |

\* Final Maturity

(n) The Series 2017A Bonds maturing on January 1, 2052, are subject to mandatory sinking fund redemption on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

|      | - • • • • •    |
|------|----------------|
| Year | Principal (\$) |
| 2048 | 8,935,000      |
| 2049 | 9,295,000      |
| 2050 | 9,665,000      |
| 2051 | 10,055,000     |
|      |                |

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2052\* 10,455,000 \* Final Maturity

# Section 3. The Refunding.

a) The proceeds of the Series 2017B Bonds will be applied to the current refunding of all of the outstanding Section Lien Wastewater Transmission Revenue Bonds, Series 2006A (the "Series 2006A Bonds"), and Second Lien Wastewater Transmission Revenue Bonds, Series 2006B (the "Series 2006B Bonds"), of the City and the advance refunding of a portion of the Second Lien Wastewater Transmission Revenue Bonds, Series 2008A (the "Series 2008A Bonds") of the City.

b) The Series 2006A Bonds and the Series 2006B Bonds are being called for redemption on July 27, 2017 at a redemption price of the principal amount thereof plus accrued interest to the date fixed for redemption. Amounts sufficient to pay the interest on and redemption price of the Series 2006A Bonds and Series 2006B Bonds are deposited with Amalgamated Bank of Chicago acting as escrow agent (the "2006 Escrow Agent") pursuant to an Escrow Agreement dated as of June 1, 2017 (the "2006 Escrow Agreement") between the City and the 2006 Escrow Agent.

c) The Series 2008A Bonds are being called for redemption on January 1, 2018 at a redemption price of the principal amount thereof plus accrued interest to the date fixed for redemption. Amounts sufficient to pay the interest on and redemption price of the Series 2008A Bonds are deposited with Amalgamated Bank of Chicago acting as escrow agent (the "2008A Escrow Agent") pursuant to an Escrow Agreement dated as of June 1, 2017 (the "2008A Escrow Agreement") between the City and the 2008A Escrow Agent.

# Section 4. Amounts to be Borrowed.

a) The amount to be borrowed through the issuance and sale of the Series 2017A Bonds to pay costs of the Financing Purposes for the Series 2017A Bonds other than Costs of Issuance of the Series 2017A Bonds, is \$ 196,000,000.00.

b) The foregoing amount does not include Costs of Issuance of the Series 2017A Bonds.

c) The amount to be borrowed through the issuance and sale of the Series 2017B Bonds to pay costs of the Financing Purposes for the Series 2017B Bonds other than Costs of Issuance of the Series 2017B Bonds, is \$242,450,617.63.

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(d) The foregoing amount does not include Costs of Issuance of the Series 2017B Bonds.

### Section 5. Selection of Trustee.

Amalgamated Bank of Chicago is selected to serve as Trustee under the 2017 Bond Indenture.

# Section 6. Selection of Book Entry Depository.

The Depository Trust Company, New York, New York, is selected to serve as book entry depository under the 2017 Bond Indenture.

## Section 7. Bond Purchase Agreement.

# The Bond Purchase Agreement is approved and executed by me on behalf of the City. Section 8.

### **Continuing Disclosure Undertaking.**

The Continuing Disclosure Undertaking is approved and executed by me on behalf of the City.

## Section 9. Preliminary Official Statement; Official Statement.

a) The distribution of the Preliminary Official Statement dated May 26, 2017, to prospective purchasers of the Series 2017 Bonds is approved and ratified.

b) The final Official Statement, dated June 6, 2017, attached to this Determination Certificate as Exhibit D, its execution on behalf of the City and its distribution to purchasers of the Series 2017 Bonds, are authorized and approved.

## Section 10. Disposition of Proceeds.

Section 1.1. As authorized by the 2017 Bond Ordinance and provided in the 2017 Bond Indenture, on behalf of the City, I determine that the proceeds received upon the sale of the Series 2017A Bonds shall be deposited in the Construction Account: 2017 Second Lien Bonds and used to pay for certain capital improvements to and extensions of the Sewer System and the Costs of Issuance of the Series 2017A Bonds as described in the Series 2017 Bond Ordinance.

As authorized by the 2017 Bond Ordinance and provided in the 2017 Bond Indenture, on behalf of the City, I determine that the proceeds received upon the sale of the Series 2017B Bonds shall be applied as follows: (i) \$112,363,763.06 of the proceeds shall be deposited with the 2006 Escrow Agent to be used to pay the redemption price of and interest on the Series 2006A Bonds and Series 2006B Bonds in accordance with the terms of the 2006 Escrow Agreement, (ii) \$130,086,854.57 of the proceeds shall be deposited with the 2008A Escrow Agent to be used (together with \$7,187,021.00 being transferred from a debt service reserve

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fund established for the benefit of the Series 2008A Bonds) to pay the redemption price of and interest on the Series 2008A Bonds in accordance with the terms of the 2008A Escrow Agreement, and (iii) \$383,357.91 of the proceeds shall be deposited into the Construction Account: 2017 Second Lien Bonds and used to pay Costs of Issuance of the Series 2017B Bonds.

# [SIGNATURE PAGE FOLLOWS]

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CITY OF CHICAGO

Chief Financial Officer

[Determination Certificate]

# <u>EXHIBIT A</u>

# BOND PURCHASE AGREEMENT BOND PURCHASE AGREEMENT

# CITY OF CHICAGO

\$180,590,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A

\$215,485,000 Second Lien Wastewater Transmission Revenue

Bonds, Refunding Series 2017B

June 6,2017

City of Chicago Office of the Chief Financial Officer 121 North LaSalle Street, Suite 700 Chicago, Illinois 60602

The undersigned Siebert Cisneros Shank & Co., L.L.C. (the "Representative"), on behalf of itself and the other Underwriters, as listed in Appendix I attached hereto (the "Underwriters"), hereby offers to enter into this Bond Purchase Agreement (the "Agreement") with the City of Chicago, a municipal corporation and a home rule unit of local government duly organized and existing under the laws of the State of Illinois (the "City"), for the purchase by the Underwriters, and sale by the City, of all but not less than all of the City's Bonds specified below. This offer is made subject to the acceptance by the City on or before 5:00 P.M., Chicago time on the date hereof, and upon such acceptance this Agreement shall be in full force and effect in accordance with its terms and shall be binding on the City and the Underwriters.

Terms used but not defined in this Agreement are defined in the Official Statement (as herein defined).

1. Agreement to Sell and Purchase. Upon the terms and conditions and based upon and in reliance upon the representations, warranties and covenants herein set forth, the Underwriters, jointly and severally, hereby agree to purchase from the City and the City hereby agrees to sell to the Underwriters \$180,590,000 aggregate principal amount of the City's Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A (the "Series 2017A Bonds"), at the purchase price of \$196,940,040.55 (reflecting the aggregate principal amount plus a net original issue premium of \$17,322,172.45 less an underwriters' discount of \$972,131.90); and \$215,485,000 aggregate principal amount of the City's Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B (the "Series 2017B Bonds," and together with the Series 2017A Bonds, the "Bonds"), at the purchase price of \$242,833,975.54 (reflecting the aggregate principal amount plus a net original issue premium of \$28,397,991.90 less an underwriters' discount of \$1,049,016.36).

The Bonds shall: (a) be dated as of their date of delivery, (b) have the maturities and shall bear interest at the rates per annum set forth in Exhibit B hereto and (c) have the redemption features and the further terms set forth in Exhibit B hereto and in the Official Statement of the City, dated the date hereof, relating to the Bonds (such Official Statement, including the cover page and all appendices included therein, is hereinafter called the "Official Statement" except that if the Official Statement shall have been amended with the approval of the Representative between the date hereof and the date upon which the Bonds are delivered for the Underwriters' account with The Depository Trust Company, New York, New York ("DTC), the term "Official Statement" shall refer to the Official Statement, as so amended).

2. The Ordinance and the Indenture. The Bonds will be issued and secured under and have such terms and conditions as are provided in the ordinance adopted by the City Council of the City on January 13, 2016 (the "Ordinance"), and a Trust Indenture dated as of June 1, 2017 (the "Indenture"), from the City to Amalgamated Bank of Chicago, Chicago, Illinois, as trustee (the "Trustee") and the Determination Certificate, dated as of June 21, 2017.

3. Public Offering Price. The Underwriters agree to make a bona fide public offering of the Bonds at a price not in excess of the initial offering price or prices or yields not less than the yields set forth in Exhibit B. It shall be a condition to the obligation of the City to sell and deliver the Bonds to the Underwriters, and to the obligation of the

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Underwriters to purchase and to pay for the Bonds, that the entire principal amount of the Bonds to be sold pursuant to Section 1 hereof shall be sold and delivered to, and purchased and paid for by the Underwriters at the Closing (hereinafter defined). Subsequent to such initial public offering, the Underwriters reserve the right to change such initial public offering prices as the Underwriters deem necessary or desirable, in their sole discretion, in connection with the marketing of the Bonds, and may offer and sell the Bonds to certain dealers, unit investment trusts and money market funds, certain of which may be sponsored or managed by one or more of the Underwriters at prices lower than the public offering prices or yields greater than the yields set forth therein. The Representative shall provide to the City a certificate setting forth the offering prices of the Bonds in substantially the form set forth on Exhibit A.

4. The Official Statement. The City ratifies and consents to the distribution and use by the Underwriters, prior to the date hereof, of the Preliminary Official Statement of the City dated May 26, 2017 relating to the Bonds (the "Preliminary Official Statement"). For purposes of Rule 15c2-12 {"Rule 15c2-12") of the Securities and Exchange Commission (the "SEC) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Preliminary Official Statement is "deemed ft'naf by the City as of its date except for the omission of such information as is permitted by Rule 15c2-12. As soon as practicable, but not more than seven (7) business days after the City's acceptance hereof, and in any event not later than two (2) business days before the Closing Date (as hereinafter defined), the City shall deliver, or cause to be delivered, to the Representative six copies of the Official Statement, signed on behalf of the City by its Chief Financial Officer, and the Official Statement so delivered shall be "final" for purposes of Rule 15c2-12. The Official Statement shall be in substantially the same form as the Preliminary Official Statement and, other than information previously permitted to have been omitted by Rule 15c2-12 and information which the City is required to include to comply with rules of the SEC, the City shall only make such other additions, deletions and revisions in the

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Official Statement which are mutually agreed upon by the City and the Representative. The City hereby agrees to deliver to the Underwriters an electronic copy of the Official Statement in a form that permits the Underwriters to satisfy their obligations under the rules and regulations of the Municipal Securities Rulemaking Board (the "MSRB") and the SEC. The City shall provide, or cause to be provided, at its expense, to the Underwriters as soon as practicable, but not more than seven (7) business days after the City's acceptance of this Agreement and in time which, in the Representative's opinion, is sufficient to accompany any confirmation that requests payment from any customer, copies of the Official Statement in such quantity which, in the Representative's opinion, is sufficient to the distribution of the Official Statement. The City authorizes the Underwriters to use and distribute the Official Statement in connection with the public offering and sale of the Bonds.

If on or prior to the Closing or within 25 days after the "end of the underwriting period" any event known to the City shall occur which would cause any statement of a material fact contained in the Official Statement to be materially incorrect or materially incomplete, the City will promptly notify the Representative in writing of the circumstances and details of such event. If, as a result of such event, it is necessary, in the joint opinion of the City and the Representative, to amend or supplement the Official Statement by stating or restating any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading, the City will forthwith prepare and furnish to the Underwriters a reasonable number of copies of an amendment of or a supplement to such Official Statement such Official Statement so that, as amended or supplemented, the Official Statement of a material fact or omit to state any material fact necessary in order to make the statement will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. For purposes of this Agreement, the term "end of the underwriting period" shall be the later of the date of Closing or the date on which an Underwriter no longer retains an unsold balance of the Bonds for sale to the public.

The Underwriters agree that the date on which the end of the underwriting period shall occur shall be the date of

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the Closing unless the Underwriters otherwise notify the City in writing prior to 25 days after the Closing that, to the best of their knowledge, the Underwriters retain for sale to the public an unsold balance of the Bonds, in which case the end of the underwriting period shall be extended for additional periods of 30 days each upon receipt of an additional written notification from the Underwriters that, to the best of their knowledge, there exists an unsold balance of the Bonds but in any event no longer than 90 days after the date of Closing.

At or prior to the Closing (hereinafter defined), the Representative shall file, or cause to be filed, the Official Statement with the MSRB through its Electronic Municipal Market Access ("EMMA") system for municipal securities disclosure or through any other electronic format or system then prescribed by the MSRB or the SEC. The Representative shall notify the City when the Underwriters are no longer obligated to deliver to potential customers the Official Statement.

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5. Representations and Warranties of the City. The City represents and warrants to the Underwriters as of the date hereof that:

a) The City is a municipal corporation and home rule unit of local government existing under the Constitution and laws of the State of Illinois.

b) The City Council of the City has: (i) duly adopted the Ordinance, which remains in full force and effect, (ii) duly authorized the use of the Preliminary Official Statement prior to the date hereof in connection with the public offering and sale of the Bonds and (iii) duly authorized and approved the execution and delivery of (A) the Bonds, (B) the Indenture, (C) the Refunding Escrow Agreements (as defined herein), (D) this Agreement, (E) the General Tax Certificate (the "Tax Certificate"), and (F) a continuing disclosure undertaking pursuant to the provisions of Section (b)(5) of Rule 15c2-12 ( the "Undertaking").

c) The City has full legal right, power and authority: (i) to adopt the Ordinance; (ii) to execute and deliver this Agreement, the Indenture, the Tax Certificate and the Undertaking;

iii) to execute and deliver the refunding escrow agreements (the "Refunding Escrow Agreements") dated as of June 1, 2017 between the City and Amalgamated Bank of Chicago as escrow agent (the "Escrow Agent") in connection with the refunding of a portion of the outstanding Second Lien Wastewater Transmission Revenue Bonds, Series 2006A, the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2006B and Second Lien Wastewater Transmission Revenue Bonds, Series 2008A (collectively, the "Refunded Bonds");

iv) to issue, sell and deliver the Bonds to the Underwriters pursuant to the Ordinance, the Indenture and this Agreement; and (v) to pay the Bonds from the sources pledged under the Ordinance and the Indenture for their payment.

d) The adoption of the Ordinance and compliance with the respective provisions thereof do not, and the execution and delivery of this Agreement, the Indenture, the Refunding Escrow Agreements, the Bonds, the Tax Certificate and the Undertaking will not, in any material manner, violate any applicable law or administrative regulation of the State of Illinois or any department, division, agency or instrumentality thereof or of the United States of America or any department, division, agency or instrumentality thereof, or any applicable judgment or decree to which the City is subject, or conflict with, in a material manner, or constitute a material breach of, or a material default under, any ordinance, agreement or other instrument to which the City is a party or is otherwise subject.

e) This Agreement, the Ordinance, the Preliminary Official Statement and the Official Statement have been, and the Indenture, the Refunding Escrow Agreements, the Tax Certificate, the Undertaking and the Bonds (when

delivered and paid for at the Closing) shall be, duly authorized, executed, delivered and (in the case of the Bonds) authenticated by the Trustee and issued by the City. When delivered and paid for at the Closing, the Bonds shall be entitled to the benefits and the security of, and shall be subject to the terms and conditions set forth in the Ordinance and the Indenture.

f) All approvals, consents and orders of, and filings (except, if any, under applicable state "blue sky" laws) with, any governmental authority, board, agency or commission having

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jurisdiction which would constitute a condition precedent to the performance by the City of its obligations under this Agreement, the Ordinance, the Indenture, the Refunding Escrow Agreements, the Tax Certificate and the Bonds have been, or will be, obtained or made.

g) Between the date of this Agreement and the Closing, the Sewer System shall not have suffered any material adverse change in its condition, financial or otherwise.

h) The financial statements contained in APPENDIX C of the Official Statement fairly present the financial position and results of operations of the City's Sewer System, including the City's Sewer Revenue Fund, as of the dates and for the periods therein stated, and the City has no reason to believe that such financial statements have not been prepared in accordance with generally accepted accounting principles, as applied to governmental units, consistently applied, except as otherwise noted therein.

(i) The Official Statement (excluding any description of the Bond Insurer and DTC, information under the captions "THE BONDS - Book-Entry Only System," "BOND INSURANCE," "TAX MATTERS," "UNDERWRITING," and APPENDIX D-Opinion of Co-Bond Counsel, thereto, and information furnished by the Underwriters relating to the Underwriters for use in the Official Statement) does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading in any material respect.

(j) The Indenture, the Refunding Escrow Agreements, this Agreement, and the Tax Certificate, when duly executed and delivered by the parties thereto, as appropriate, will constitute the legal, valid and binding obligations of the City enforceable in accordance with their terms (except to the extent that enforceability may be limited by bankruptcy, insolvency and other laws affecting creditors' rights or remedies and the availability of equitable remedies generally); and at the time of the Closing, Assured Guaranty Municipal Corp. (the "Bond Insurer") shall have issued the bond insurance policy as described in the Official Statement (collectively, the "BondInsurance Policy').

(k) When delivered to the Representative and paid for by the Underwriters at the Closing in accordance with the provisions of this Agreement, the Bonds will be duly authorized, executed and delivered and will constitute validly issued and outstanding limited obligations of the City enforceable in accordance with their terms (except to the extent that enforceability may be limited by bankruptcy, insolvency and other laws affecting creditors" rights or remedies and the availability of equitable remedies generally).

(1) Except as disclosed in the Official Statement, there is no action, suit or proceeding, at law or in equity, or before or by a court, public board or body, pending or, to the City's knowledge, threatened, against the City, wherein an unfavorable decision, ruling or finding would materially adversely affect (i) the validity or enforceability of the Bonds, the Ordinance, the Indenture, the Refunding Escrow Agreements, the Tax Certificate, this Agreement, or the

Undertaking, or (ii) the excludability from federal income taxation of the interest on the Bonds.

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(m) The City has not taken, or omitted taking, and will not take or omit to take, any action, which action or omission would adversely affect the excludability from federal income taxation of the interest on the Bonds or the Refunded Bonds under the Internal Revenue Code of 1986, as amended.

(n) Except as disclosed in the Official Statement, the City has not failed during the previous five years to comply in all material aspects with any previous continuing disclosure undertakings that it has entered into in accordance with Rule 15c2-12.

6. Continuing Disclosure. In order to assist the Underwriters in complying with Rule 15c2-12, the City will enter into the Undertaking pursuant to Rule 15c2-12, which Undertaking shall be substantially in the form described in the Official Statement, with such changes as may be reasonably approved by the Representative and the City.

7. Additional Covenants of the City. The City hereby covenants that:

a) The City will make available such information, execute such instruments and take such other action in cooperation with the Underwriters as the Representative may reasonably request to qualify the Bonds for offering and sale under the blue sky or other securities laws and regulations of such states and other jurisdictions of the United States as the Underwriters may designate in writing; provided, however, that nothing in this Section 7(a) shall require the City to consent to general service of process in any state or jurisdiction other than the State of Illinois.

b) The City shall apply the proceeds of the Bonds in accordance with the Ordinance, the Indenture and the Refunding Escrow Agreements.

8. Closing. Subject to the conditions set forth in this Agreement, the closing (the "Closing") of the sale of the Bonds by the City and the purchase of the Bonds by the Underwriters, shall take place at approximately 9:30 a.m., Chicago time, on June 21, 2017, at the offices of Schiff Hardin LLP, Chicago, Illinois (or at such other time, date and place as the City and the Representative mutually agree), and in connection therewith:

a) At the Closing, the City shall deliver or cause to be delivered to DTC, as securities depository, or to the Trustee, as DTC's FAST Agent, for the account of the Underwriters, a single certificate for each maturity of the Bonds, representing the total principal amount of such Bonds of such maturity, registered in the name of Cede & Co., as nominee for DTC.

b) Upon delivery of the Bonds to DTC or the Trustee, as FAST Agent, at the Closing, the City will deliver to the Representative the Closing Documents as set forth in Section 9(d). The Representative will accept delivery of the Bonds and pay the purchase price therefor at the Closing in accordance with Section 8(c).

c) The Underwriters agree at Closing to deliver a federal funds check or make a federal funds wire transfer or otherwise confirm deposit of federal funds to the City's account at a bank it specifies, in an amount equal to the purchase price of the Bonds.

9. Reliance and Further Conditions of the Underwriters. The Underwriters have entered into this Agreement in reliance upon the representations, warranties and agreements of the City herein and the performance by the City of its obligations hereunder, both as of the date hereof and as of the date of the Closing. The Underwriters' obligations under this Agreement are and shall be subject to the following further conditions:

a. At the time of the Closing, the Ordinance and the Indenture shall be in full force and effect and the Ordinance, the Indenture, the Refunding Escrow Agreements, and the Official Statement shall not have been amended, modified or supplemented except as may have been agreed to with respect to the Official Statement pursuant to Section 4 hereof, and the City shall have duly adopted and there shall be in full force and effect such resolutions and ordinances as, in the opinion of Schiff Hardin LLP, and Hardwick Law Firm, LLC (herein collectively "Co-Bond Counsel"), shall be necessary in connection with the transactions contemplated hereby and thereby.

b. At the time of the Closing, evidence shall be provided that, on the basis of the Bond Insurance Policy issued with respect to the Series 2017A Bonds maturing in 2042 and 2052 (the "Insured Bonds") as described in the Official Statement, the Insured Bonds have received a rating of at least "AA" from Standard & Poor's Rating Services, and a rating of at least "AA+" from Kroll Bond Rating Agency, and that Standard & Poor's Rating Services has assigned to the Bonds an underlying rating of at least "AA-," and Kroll Bond Rating Agency has assigned to the Bonds an underlying rating of at least "AA-," and Kroll Bond Rating Agency has assigned to the Bonds an underlying rating of at least "AA-," and such ratings shall not have been qualified or lowered on or prior to Closing if such qualification or lowering, in the Representative's opinion, adversely affects the market price or marketability of the Bonds.

c. The Underwriters shall have the right to cancel their obligations to purchase the Bonds and have the further right to terminate this Agreement, without liability therefor, by written notice to the City from the Representative, if, between the date hereof and the Closing:

i. legislation shall be introduced in or enacted by the Congress of the United States, or adopted by either house thereof or shall have been introduced and favorably reported for passage to either house by any committee of such house to which such legislation had been referred for consideration, or a decision shall have been rendered by or adopted by either house thereof or a decision by a court of the United States or the United States Tax Court or an order, ruling or regulation shall have been issued or proposed by or on behalf of the Treasury Department of the United States or the Internal Revenue Service, with respect to federal income taxation upon interest received on obligations of the general character of the Bonds which, in the Representative's opinion, does or will materially adversely affect the market price or marketability of the Bonds;

ii. legislation shall have been enacted by the Congress of the United States to become effective on or prior to the Closing, or a decision of a court of the United States shall be rendered, or a stop order, ruling, regulation or proposed regulation by or on behalf of the SEC or other agency having jurisdiction over the subject matter shall be

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issued or made, to the effect that the issuance, sale and delivery of the Bonds, or any similar obligations of any public body of the general character of the Bonds, is in violation of, or has the effect of requiring the contemplated offering, sale and distribution of the Bonds to be registered under the Securities Act of 1933, as amended, or would require the qualification of the Ordinance or the Indenture under the Trust Indenture Act of 1939, as amended, or with the purpose or effect of otherwise prohibiting the issuance, sale or delivery of the Bonds as contemplated hereby or by the Official Statement or of obligations of the general character of the Bonds; iii. there shall have occurred any event which in the Representative's opinion, after consultation with its legal counsel, makes the Official Statement either (A) contain an untrue statement of a material fact or (B) omit to state a material fact required to be stated therein or necessary to make the statements contained therein not misleading in any material respect, and either (1) the City fails to prepare or furnish or fails to cause to be prepared or furnished to the Underwriters an amendment or supplement to the Official Statement, pursuant to Section 4 hereof, which will amend or supplement the Official Statement so that, as amended or supplemented, the Official Statement will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements contained therein not misleading or (2) such amendment or supplement to the Official Statement materially adversely affects the market price or marketability of the Bonds;

iv. there shall have occurred, or any notice shall have been given, that the ratings of the City's sewer system obligations shall be, or will be, downgraded or suspended, or placed on Credit Watch by Standard & Poor's or Rating Watch by Fitch or Kroll, which, in the Representative's reasonable opinion, materially adversely affects the market price or marketability of the Bonds;

v. there shall have occurred or any notice shall have been given of any intended downgrading (including a review), suspension, withdrawal, or negative change in credit watch status by any national rating service to any of the City's obligations, which, in the Representative's reasonable opinion, materially adversely affects the market price or marketability of the Bonds;

vi. there shall be in force a general suspension of trading on The New York Stock Exchange, Inc. or any other national securities exchanges, or minimum or maximum prices for trading shall have been fixed and be in force, or maximum ranges for prices for securities shall have been required and be in force on The New York Stock Exchange, Inc. or any other national securities exchange, whether by virtue of a determination by such Exchange or by order of the SEC or any other governmental authority having jurisdiction;

vii. a general banking moratorium shall have been declared by either federal, Illinois or New York authorities having jurisdiction and be in force;

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viii. a material disruption in securities settlement, payment or clearance services in the United States shall have occurred or a material disruption of the municipal securities market shall have occurred;

ix. any legislation, ordinance, rule or regulation shall be enacted by, any governmental body, department or agency in the State of Illinois, or a decision by any court of competent jurisdiction within the State of Illinois shall be rendered which, in the reasonable opinion of the Representative, would have a material adverse effect on the market price or marketability of the Bonds;

x. a war involving the United States, an outbreak or escalation of or adverse development in hostilities or other national or international calamity or crisis shall have occurred which, in the reasonable opinion of the Representative, materially adversely affects the market price or marketability of the Bonds;

xi. there shall be any proceeding or threatened proceeding by the SEC against the City and such proceeding or threatened proceeding, in the reasonable opinion of the Representative, materially adversely affects the market price or marketability of the Bonds; or

xii. additional material restrictions not in force as of the date hereof shall have been imposed upon trading in securities generally by any governmental authority or by any national securities exchange.

d. At the Closing, the Underwriters shall receive each of the following documents:

i. the approving opinions, dated the date of the Closing, of Co-Bond Counsel, substantially in the form attached to the Official Statement as APPENDIX D;

ii. the supplemental opinions, dated the date of the Closing and addressed to the Representative on behalf of the Underwriters and to the City, of Co-Bond Counsel, substantially in the form attached hereto as Exhibit C;

iii. an opinion of the Corporation Counsel for the City, dated the date of the Closing and addressed to the Representative on behalf of the Underwriters substantially in the form attached hereto as Exhibit D;

iv. An opinion, dated the date of the Closing and addressed to the Underwriters of Miller, Canfield, Paddock and Stone, P.L.C., Chicago, Illinois, as Underwriters' Counsel to the Underwriters (the "Underwriters' Counsel') to the effect that: '

(A) The Bonds constitute exempted securities within the meaning of the Securities Act of 1933, as amended, and it is not necessary, in connection with the public offering and sale of the Bonds, to register any of the Bonds under said

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Securities Act or to qualify the Ordinance or the Indenture under the Trust Indenture Act of 1939, as amended;

B) The Undertaking complies with the requirements of paragraph (b)(5) of Rule 15c2-12;

C) The conditions precedent to the Underwriters' purchase and sale of the Bonds contained in this Agreement have been satisfied or waived; and

D) Based upon their participation in the preparation of the Official Statement as Underwriters' Counsel and their participation at conferences at which the Official Statement were discussed, but without having undertaken to determine independently the accuracy, completeness or fairness of the statements contained in the Official Statement, the Underwriters' Counsel have no reason to believe that the Official Statement, as of its date and as of the date of Closing, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; provided that no belief or opinion need be stated regarding (i) any economic, financial, operational, technical or statistical information contained in or omitted from the Official Statement; (ii) any forecasts, projections, estimates, assumptions or expressions of opinion contained in the Official Statement; (iv) any information incorporated or included by reference in the Official Statement; (v) any information relating to DTC, or its global book-entry systems or (vi) any information under the caption "TAX MATTERS" "BOND INSURANCE" and in the Appendices to the Official Statement;

v. The defeasance opinion of Co-Bond Counsel with respect to the Refunded Bonds dated the date of Closing and addressed to the City and the trustee(s) of the Refunded Bonds.

vi. an opinion, dated the date of the Closing and addressed to the City and to the Representative on behalf of the Underwriters of Charity & Associates and Quintairos, Prieto, Wood & Boyer, P.A., as co-disclosure counsel ("Co-Disclosure Counsel"), to the effect that (A) the Bonds are exempt from registration pursuant to the Securities Act of 1933, as amended, and it is not necessary in connection with the public offering and sale of the Bonds to register any security under the Securities Act of 1933, as amended and no ordinance or indenture in respect of the Bonds is required to be qualified under the Trust Indenture Act of 1939, as amended, (B) the Undertaking complies with the requirements of paragraph (b)(5) of Rule 15c2-12 in effect as of the date of the Closing and (C) nothing has come to their attention which would lead them to believe that the Official Statement and the Appendices thereto (excluding the financial statements and other financial and statistical data contained in the Official Statement, including Appendix C and the descriptions DTC and the DTC Book-Entry System and "BOND INSURANCE", as to which no view is expressed), contains an untrue statement of a material fact or omits

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to state a material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading;

vii. a copy, duly certified by the City, of the Ordinance, as passed by the City Council and approved by the Mayor;

viii. a certificate, dated the date of the Closing, executed on behalf of the City by its City Chief Financial Officer or its City Comptroller satisfactory to the Representative and in form and substance satisfactory to Underwriters' Counsel, to the effect that (A) the representations and warranties of the City herein are correct in all material respects as of the date of the Closing; (C) the financial statements of the Sewer System included as Appendix C to the Official Statement as of December 31, 2014 and December 31,2015 fairly represents the receipts, expenditures, assets, liabilities and cash balances of such amounts as of the dates and for the periods therein set forth; and (D) except as disclosed in the Official Statement, since December 31, 2016, no materially adverse change has occurred, or any development involving a prospective material change, in the financial position or results of operations of the Sewer System and the Sewer System has not incurred since December 31, 2016, any material liabilities other than in the ordinary course of business or as set forth in or contemplated by the Official Statement;

ix. a certificate or certificates acceptable to the City and the Representative dated the date of Closing, to the effect that Amalgamated Bank of Chicago, Chicago, Illinois, has full legal right, power and authority to act as Trustee under the Indenture and has executed and delivered the Indenture and authenticated the Bonds;

x. a copy of an agreement between the City and DTC relating to the safekeeping and book-entry form of the Bonds;

- xi. a fully executed counterpart or conformed copy of the Tax Certificate;
- xii. a fully executed counterpart or conformed copy of the Undertaking;
- xiii. a fully executed counterpart or conformed copy of the Indenture;
- xiv. a fully executed counterpart or conformed copy of the Refunding Escrow Agreements;

xv. a certificate of the Escrow Agent to the effect that the Escrow Agent has full legal right, power and

authority to act as Escrow Agent under the respective Refunding Escrow Agreement;

xvi. an opinion of counsel to the Bond Insurer, dated the date of the Closing and addressed to the City and to the Representative on behalf of the Underwriters, regarding the validity of the Bond Insurance Policy, which opinion shall be satisfactory to the City and the Representative.

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xvii. a fully executed Bond Insurance Policy.

xviii. evidence to the satisfaction of the Representative that all conditions to the issuance and delivery of the Bonds have been fulfilled.

e. All of the opinions, letters, certificates, instruments and other documents mentioned above or elsewhere in this Agreement will be deemed to be in compliance with the provisions hereof if, but only if, they are in form and substance satisfactory to the Representative, in its reasonable judgment.

f. Payment for the Bonds and acceptance of the delivery of the Bonds by the Representative on behalf of the Underwriters shall evidence conclusively compliance by the City, or the waiver thereof by the Underwriters, of all conditions required hereunder for the Closing. If the City is unable to satisfy the conditions to the Underwriters' obligations contained in this Agreement, or if the Underwriters' obligations shall be terminated for any reason permitted by this Agreement, this Agreement shall terminate and neither the City nor the Underwriters shall have any further obligation hereunder.

10. Use of Documents. The City hereby authorizes the Underwriters to use, in connection with the public offering and sale of the Bonds, this Agreement, the Preliminary Official Statement, the Official Statement, the Ordinance, the Refunding Escrow Agreements, the Indenture, and the information contained herein and therein.

11. Expenses. The Underwriters shall be under no obligation to pay, and the City shall pay, any and all expenses incident to the performance of the City's obligations hereunder, including but not limited to: (a) the cost of the preparation and printing or other reproduction of the Ordinance, the Indenture, the Refunding Escrow Agreements, the Preliminary Official Statement and the Official Statement, as well as the cost of shipping the Preliminary Official Statement; (b) the cost of the preparation and printing of the Bonds; (c) the fees and disbursements of Co-Bond Counsel, and Co-Disclosure Counsel; (d) the fees of the financial advisors (e) the fees and disbursements of any experts or consultants retained by the City, (f) the fees of the Trustee and the Escrow Agent and the Bond Insurer and (g) the fees for the municipal bond ratings on the Bonds. The Underwriters will pay the expenses incurred by them or any of them in connection with their public offering and distribution of the Bonds, including, but not limited to, the CUSIP Service Bureau charges, the fees and expenses of Underwriters' Counsel and advertising expenses directly incurred by the Underwriters.

12. Notices. Any notice or other communication to be given to the City under this Agreement shall be given by delivering the same in writing at the address set forth above, and any such notice or other communication to be given to the Underwriters shall be given by delivering the same in writing to:

Siebert Cisneros Shank & Co., L.L.C. 111 East Wacker Drive, Ste. 2605 Chicago, IL 60601 12

### Attn. Karen Walker

13. No Third Party Beneficiaries, Survival, Etc. This Agreement is made solely for the benefit of the City and the Underwriters (including the successors or assigns of any Underwriter), and no other person, partnership, association or corporation shall acquire or have any right hereunder or by virtue hereof. All of the representations and agreements by the City in this Agreement shall remain operative and in full force and effect regardless of any investigations made by or on behalf of the Underwriters and shall survive the delivery of and payment for the Bonds.

14. Approval; Representations and Warranties of the Underwriters.

a) The Representative represents and warrants to the City that the Underwriters have heretofore authorized the Representative to execute any document on behalf of, or exercise any authority of and otherwise to act for, them in all matters under or pertaining to this Agreement. Each Underwriter has warranted and confirmed to the Representative, and the Representative warrants and confirms to the City that: (i) it is duly registered under the 1934 Act as a broker/dealer or municipal securities dealer and has duly paid the fee prescribed by MSRB Rule A-12 or is exempt from such requirements; (ii) it is (A) a member in good standing of the Financial Industry Regulatory Authority ("FINRA") or (B) otherwise eligible under F1NRA rules to receive underwriting discounts and concessions available to such members with respect to underwriters of municipal securities; and (iii) it has complied with the dealer registration requirements, if any, of the various jurisdictions in which it offers the Bonds for sale. The Underwriters represent, warrant and covenant that they are and will be in compliance with all applicable laws, rules and regulations in connection with the offering, issuance and sale of the Bonds. The approval of the Underwriters when required hereunder or the determination of their satisfaction as to any document referred to herein shall be in writing signed by the Representative and delivered to the City; provided, however, that payment for the Bonds and acceptance of the Bonds by the Underwriters shall constitute acknowledgement by the Representative and the Underwriters of such approval and satisfaction.

b) Each Underwriter severally represents to the City that neither the Underwriter, nor any Affiliate thereof, is listed on any of the following lists maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the Bureau of Industry and Security of the U.S. Department of Commerce, the Directorate of Defense Trade Controls of the U.S. Department of State or their successors, or on any other list of persons or entities with which the City may not do business under any applicable law, rule, regulation, order or judgment: the Specially Designated Nationals List, the Denied Persons List, the Unverified List, the Entity List and the Debarred List.

For purposes of this representation, "Affiliate," when used to indicate a relationship with a specified person or entity, means a person or entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with such specified person or entity, and a person or entity shall be deemed to be controlled by another person or entity, if controlled in any manner whatsoever that results in control in fact by that other person or entity (or that other person or entity and any persons or entities with whom that other person

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or entity is acting jointly or in concert), whether directly or indirectly and whether through share ownership, a trust, a contract or otherwise.

Attached hereto as Exhibit E, is a form Representation Letter to be provided by each Underwriter to the City and the Representative at or before Closing.

(c) This Agreement has been duly authorized, executed and delivered by the Representative on behalf of the Underwriters and, assuming the due authorization, execution and delivery by the City, is the legal, valid and binding obligation of the Underwriters enforceable in accordance with its terms (except to the extent that enforceability may be limited by bankruptcy, insolvency and other laws affecting creditors' rights or remedies and the availability of equitable remedies generally).

15. Successors and Assigns. This Agreement will inure to the benefit of and be binding upon the parties and their successors and assigns, and will not confer any rights upon any other person. The terms "successors" and "assigns" shall not include any purchaser of any Bond or Bonds from the Underwriters merely because of such purchase.

16. Enforceability. If any provision of this Agreement shall be held or deemed to be or shall, in fact, be invalid, inoperative or unenforceable as applied in any particular case in any jurisdiction or jurisdictions, or in all jurisdictions, because it conflicts with any provisions of any constitution, statute, rule or public policy, or for any other reason, such circumstances shall not have the effect of rendering the provision invalid, inoperative or unenforceable in any other case or circumstances, or of rendering any other provision or provisions of this Agreement invalid, inoperative or unenforceable to any extent whatsoever.

17. Cooperation with City Inspector General. Each Underwriter understands and agrees that it is required to and will comply with the provisions of Chapter 2-56 of the Municipal Code of Chicago. Pursuant to Section 2-56-090 of the Municipal Code of Chicago, it shall be the duty of each Underwriter to cooperate with the City's Inspector General in any investigation or hearing undertaken pursuant to Chapter 2-56. Every Underwriter shall report, directly and without undue delay, to the City's Inspector General any and all information concerning conduct by any person which such Underwriter knows to involve corrupt activity, pursuant to Section 2-156-018(b) of the Municipal Code of Chicago. An Underwriter's knowing failure to report corrupt activity as required in subsection (b) of Section 2-156-018 of the Municipal Code of Chicago, shall constitute an event of default under this Agreement. For purposes of subsection (b) of Section 2-156-018 of the Municipal Code of Chicago, "corrupt activity" shall mean any conduct set forth in subparagraph (a)(1), (2) or (3) of Section 1-23-020 of the Municipal Code of Chicago:

(1) bribery or attempted bribery, or its equivalent under any local, state or federal law, of any public officer or employee of the City of Chicago or of any sister agency; or

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2) theft, fraud, forgery, perjury, dishonesty or deceit, or attempted theft, fraud, forgery, perjury, dishonesty or deceit, or its equivalent under any local, state or federal law, against the City of Chicago or of any sister agency; or

3) conspiring to engage in any of the acts set forth in items (1) or (2) of this subsection (a).

The Underwriters agree and covenant that no payment, gratuity or offer of employment shall be made in connection with this Agreement, by or on behalf of a subcontractor to the Underwriters or any higher-tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order related to this Agreement.

18. No Advisory or Fiduciary Role by Underwriters; Acknowledgements of the City. The City acknowledges and agrees to the following: (1) the primary role of the Representative and Underwriters is to purchase securities, for

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resale to investors, in an arm's length commercial transaction between the City and the Underwriters in which the Representative is acting solely as a principal and that the Representative and Underwriters have financial and other interests that differ from those of the City; (2) the Representative and Underwriters are not acting as a municipal advisor, financial advisor or fiduciary to the City and have not assumed any advisory or fiduciary responsibility to the City with respect to the transaction contemplated hereby and the discussions, undertakings and procedures leading thereto (irrespective of whether the Representative and Underwriters have provided other services or are currently providing other services to the City on other matters); (3) the only obligations the Representative or Underwriters have to the City with respect to the transaction contemplated hereby are expressly set forth in this Agreement and (4) the City has consulted its own financial and/or municipal, legal, accounting, tax, financial and other advisors, as applicable, to the extent it has deemed appropriate. The City engaged (a) Swap Financial Group and TKG and Associates, LLC to perform certain professional services in the capacity as financial advisor to the City for this transaction, and (b) Charity & Associates, and Quintairos, Prieto, Wood & Boyer, P.A., as Co-Disclosure Counsel to the City.

19. Qualification of Securities. The City will furnish such information, execute such instruments and take such other action in cooperation with the Underwriters as the Representative may reasonably request to qualify Bonds for offer and sale under the Blue Sky or other securities laws and regulations of such states and other jurisdictions of the United States as the Representative may designate and to provide for the continuance of such qualification; provided, however, that the City will not be required to qualify as a foreign corporation or to file any general or special consents to service of process under the laws of any state.

20. Entire Agreement. This Agreement, together with any contemporaneous written agreements (to the extent not superseded by this Agreement) that relate to the offering of the Bonds, represents the entire agreement between the City and the Underwriters with respect to the preparation of the Official Statement, and the conduct of the offering, and the purchase and sale of the Bonds.

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21. Counterparts. This Agreement may be executed in several counterparts, each of which shall be regarded as the original and all of which shall constitute one and the same document.

[The Execution Page Follows]

16 Very truly yours,

Siebert Cisneros Shank & Co., L.L.C.

Authorized Officer

The foregoing is hereby accepted as of the date first written above:

CTTY OF CHICAGO Chief Financial Officer Edward M. Burke Chairman, Committee on Finance Chicago City Council [Bond Purchase Agreement Execution Page]

i.

## APPENDIX I

### **UNDERWRITERS**

Siebert Cisneros Shank & Co., L.L.C.

Melvin & Company, L.L.C. The Williams Capital Group, L.P. Blaylock Beal Van, LLC Estrada Hinojosa & Company, Inc. Mischler Financial Group, Inc. North South Capital LLC Podesta & Co.

### EXHIBIT A

### FORM OF ISSUE PRICE CERTIFICATE

### UNDERWRITERS' CERTIFICATE

### Re: City of Chicago (the "Issuer")

396,075,000 Second Lien Wastewater Transmission Revenue Bonds, Series 2017 (the "Bonds") consisting of
\$180,590,000 Second Lien Wastewater Transmission Revenue Bonds,
Project Series 2017A
and
\$215,485,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B

Defined terms used in this certificate have the respective meanings set forth in the Issuer's General Tax

Certificate relating to the Bonds described above.

#### A. Issue Price

Siebert Cisneros Shank & Co., L.L.C, as the representative (the "Representative") of itself and Melvin & Company, LLC, The Williams Capital Group, L.P., Blaylock Beal Van, LLC, Estrada Hinojosa & Company, Inc., Mischler Financial Group, Inc., North South Capital LLC, and Podesta & Co., the Underwriters of the Bonds, certifies that:

i) Based on our assessment of the then prevailing market conditions, the Underwriters reasonably expected when they agreed to purchase the Bonds (the "Sale Date") that the first prices at which at least 10% of each maturity of the Bonds would be sold by the Underwriters to the general public would be prices not higher than, or, in the case of obligations sold on a yield basis, at yields not lower than, those listed for each maturity on the inside front cover of the Official Statement for the Bonds (the "Initial Offering Prices").

ii) All of the Bonds have actually been offered to the public in a bona fide public offering at prices not higher than, or, in the case of obligations sold on a yield basis, at yields not lower than, the Initial Offering Prices.

iii) The first price, or yield in the case of obligations sold on a yield basis, at which ten percent (10%) of each maturity of the Bonds has been sold to the public was at a price not higher than, or, in the case of obligations sold on a yield basis, at a yield not lower than, the Initial Offering Prices.

' (iv) The Underwriters had no reason to believe that any of the Initial Offering Prices of the Bonds exceeded the expected fair market value of the Bonds as of the Sale Date.

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For purposes of this certificate, the term "general public" does not include bond houses, brokers or similar persons or organizations acting in the capacity of underwriters or wholesalers.

### B. Calculations for Form 8038-G

i) We have been asked to calculate the weighted average maturity of the Bonds in the following manner: divide (a) the sum of the products determined by taking the issue price of each maturity times the number of years from the date of this certificate to the date of such maturity (treating the mandatory redemption of Bonds as a maturity), by (b) the issue price of the Bonds. Based solely on the above calculations, the weighted average maturity of the Bonds is 16.0624 years.

ii) We have been asked to calculate the weighted average maturity of the Refunded Bonds in the same manner. Based solely on the above calculations, the weighted average maturity of the Refunded Bonds is 10.9736 years.

iii) We have calculated the Bond Yield for the Bonds to be 3.408686%. The Bond Yield is equal to the discount rate that produces the same present value when used in computing (i) the present value of all the payments paid and to be paid in connection with the Bonds and (ii) the aggregate of the Initial Offering Prices of the Bonds.

In calculating the Yield on the Bonds, on the advice of Co-Bond Counsel, we applied a special rule to any Bond subject to optional redemption that was issued at an Initial Offering Price that exceeds its stated redemption price at maturity by more than an amount equal to (i) one-fourth of one percent, multiplied by (ii) the product of (A) the stated

#### File #: F2017-44, Version: 1

redemption price of such Bond at maturity and (B) the number of complete years to the first optional redemption date of the Bonds. We treated each such Bond as if it were redeemed at its stated redemption price on the optional redemption date that produces the lowest Yield on the Bonds. The following Bonds are subject to this special "yield to call'\* rule:

#### Series 2017A Bonds

| Maturity Date      | Principal Interest |               |             |
|--------------------|--------------------|---------------|-------------|
| <u>(January 1)</u> |                    | <u>Amount</u> | <u>Rate</u> |
| 2028               | \$3,330,0005.00%   |               |             |
| 2020               | \$3,495,0005.00%   |               |             |
| 2030               | \$3,670,0005.00%   |               |             |
| 2031               | \$3,855,0005.00%   |               |             |
| 2032               | \$4,045,0005.00%   |               |             |
| 2033               | \$4,250,0005.00%   |               |             |
| 2034               | \$4,460,0005.00%   |               |             |
| 2035               | \$4,685,0005.00%   |               |             |
| 2036               | \$4,920,0005.00%   |               |             |
| 2037               | \$5,165,0005.00%   |               |             |

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\$30,105,000 5.25% Term Bonds due January 1, 2042, Price 114.9471", Yield 3.40 % \$38,685,000 5.00% Term Bonds due January 1, 2047, Price 110.0201% Yield 3.74%

### Series 2017B Bonds

| Maturity Date | Principal    | Interest  |      |
|---------------|--------------|-----------|------|
| (January 1)   | Amount       |           | Rate |
| 2029          | ¢10.020.000  | 0.5 0.00/ |      |
| 2028          | \$10,030,000 | J5.00%    |      |
| 2029          | \$14,835,000 | )5.00%    |      |
| 2030          | \$15,585,000 | )5.00%    |      |
| 2031          | \$9,140,000  | 05.00%    |      |
| 2032          | \$9,600,000  | 05.00%    |      |
| 2033          | \$10,085,000 | 05.00%    |      |
| 2034          | \$10,775,000 | 05.00%    |      |
| 2035          | \$11,310,000 | 05.00%    |      |
| 2036          | \$11,875,000 | 05.00%    |      |
| 2037          | \$8,490,000  | 05.00%    |      |
| 2038          | \$8,915,000  | 05.00%    |      |

The lowest Yield on the Bonds results from treating the Bonds identified above as redeemed on January 1, 2027.

(vi) The CUSIP number for the final maturity of the Bonds is: 167727 YL4.

#### C. Yield on Escrow Accounts

The Underwriters have calculated the Yield on the investment of moneys on deposit in (i) the Series 2006 Escrow Account to be 0.671867%, and (ii) the Series 2008A Escrow Account to be 1.109322%.

#### D. Bond Insurance

The Municipal Bond Insurance Policy (the "Policy\*') issued by Assured Guaranty Municipal Corp. (the "Insurer") was essential in marketing the Series 2017A Bonds maturing on January 1, 2042 and January 1, 2052 (the "Insured Bonds") at the interest rate and price at which they were sold. The absence of the Policy would have materially affected in an adverse manner the interest rate and price at which the Insured Bonds were sold.

The present value of the aggregate premiums paid for the Policy on the date of this certificate is less than the present value of the interest reasonably expected to be saved as a result of using the Policy to secure payment of the Insured Bonds, using as a discount rate the Yield on the Bonds calculated by treating the premium for the Policy as interest on the Insured Bonds. The premium paid for the Policy does not exceed a reasonable charge for the transfer of credit risk (such reasonableness was determined by taking into account premiums charged by bond insurers in comparable transactions).

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### E. Miscellaneous

It is understood by the undersigned that the certifications contained in this certificate are made by the Representative on behalf of the Underwriters and will be relied upon by the Issuer with respect to certain representations included in the General Tax Certificate and by Co-Bond Counsel in rendering their respective opinions that the Bonds are tax-exempt under Section 103 of the Internal Revenue Code of 1986, as amended. The undersigned is certifying only as to facts in existence on the date of this certificate. Nothing in this certificate represents the undersigned's interpretation of any laws or regulations; in particular the regulations under the Internal Revenue Code of 1986, or the application of any laws or regulations to these facts. The certifications contained in this certificate are not necessarily based on personal knowledge, but may instead be based on either inquiry deemed adequate by the undersigned or institutional knowledge (or both) regarding the matters set forth in this certificate. Although certain information furnished in this certificate has been derived from other purchasers, bond houses and brokers and cannot be independently verified by us, we have no reason to believe that information to be untrue in any material respect.

Dated: June 21,2017

#### SIEBERT CISNEROS SHANK & CO., L.L.C.

By: Its:

### A-4

### EXHIBIT B

#### \$180,590,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A

Principal Amount: \$180,590,000 Dated: June 21, 2017 Maturity Schedule:

#### Maturity (January 1)

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 Principal Amount \$2,255,000 \$2,365,000 \$2,485,000 \$2,610,000 \$2,740,000 \$2,875,000 \$3,020,000 \$3,170,000 \$3,330,000 \$3,495,000 \$3,670,000 \$3,855,000 \$4,045,000 \$4,250,000 \$4,460,000 \$4,685,000 \$4,920,000 \$5,165,000 Interest Rate 5.00%

Price 108.571 111.179 113.294 115.059 116.476 117.431 117.580 117.919 116.376 t 115.391 t 114.415 t 113.625 t 113.014 t 112.407 f 111.977 f 111.548 t 111.121 t 110.780 t

#### Yield

1.53% 1.72% 1.92% 2.10% 2.27% 2.45% 2.68% 2.84% 3.01% 3.12% 3.23% 3.32% 3.39% 3.46% 3.51% 3.56% 3.61% 3.65%

#### CUSIP

167727 XQ4 167727 XR2 167727XS0 167727 XT8 167727 XU5 167727 XV3 167727 XW1 167727 XX9 167727 XY7 167727 XZ4 167727 YA8 167727 YB6 167727 YC4 167727 YD2 167727 YE0 167727YF7 167727 YG5 167727 YH3

\$30,105,000 5.25% Term Bonds due January 1, 2042\*, Price 114.9471% Yield 3.40 %, CUSIP: 167727 YJ9 \$38,685,000

5.00%) Term Bonds due January 1, 2047, Price 110.0201% Yield 3.74%, CUSIP: 167727 YK6 \$48,405,000 4.00% Term Bonds due January 1, 2052\*, Price 100.7091% Yield 3.91%, CUSIP: 167727 YL4

t Priced to the January 1, 2027 call. \* Insured.

#### B-1

OPTIONAL REDEMPTION: The Series 2017A Bonds maturing on and after January 1, 2028, are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2027, as a whole or in part, at any time, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

MANDATORY REDEMPTION: The Series 2017A Bonds due January 1, 2042, January 1, 2047 and January 1, 2052 are subject to mandatory sinking fund redemption on January 1 in each of the respective years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

Term Bond Due January 1, 2042 Term Bond Due January 1, 2047

Year 2038 2039 2040 2041 2042\*

Principal Amount \$5,420,000 \$5,705,000 \$6,005,000 \$6,320,000 \$6,655,000

Term Bond Due January 1, 2052 Year 2043 2044 2045 2046 2047\*

Principal Amount

\$7,000,000 \$7,350,000

\$7,720,000 \$8,105,000

\$8,510,000

Year

2048 2049 2050 2051 2052\* Principal Amount

\$8,935,000 \$9,295,000 \$9,665,000 \$10,055,000 \$10,455,000

\*Denotes Final Maturity

Principal Amount: \$215,485,000

Dated: June 21, 2017 Maturity Schedule:

| Maturity    | Principal    |
|-------------|--------------|
| (January 1) | Amount       |
| 2018        | \$6,515,000  |
| 2019        | \$6,570,000  |
| 2020        | \$7,060,000  |
| 2021        | \$12,165,000 |
| 2022        | \$9,450,000  |
| 2023        | \$9,945,000  |
| 2024        | \$10,440,000 |
| 2025        | \$14,070,000 |
| 2026        | \$9,085,000  |
| 2027        | \$9,545,000  |
| 2028        | \$10,030,000 |
| 2029        | \$14,835,000 |
| 2030        | \$15,585,000 |
| 2031        | \$9,140,000  |
| 2032        | \$9,600,000  |
| 2033        | \$10,085,000 |
| 2034        | \$10,775,000 |
| 2035        | \$11,310,000 |
| 2036        | \$11,875,000 |
| 2037        | \$8,490,000  |
| 2038        | \$8,915,000  |
| Interest    |              |
| 5.00%       | 102.030      |
| 5.00%       | 105.516      |
| 5.00%       | 108.571      |
| 5.00%       | 111.179      |
| 5.00%       | 113.294      |
| 5.00%       | 115.059      |
| 5.00%       | 116.476      |
| 5.00%       | 117.431      |
| 5.00%       | 117.580      |
| 5.00%       | 117.919      |
| 5.00%       | 116.376 t    |
| 5.00%       | 115.391 t    |
| 5.00%       | 114.415 t    |
| 5.00%       | 113.625 t    |
| 5.00%       | 113.014 t    |
| 5.00%       | 112.407 t    |
| 5.00%       | 111.977 f    |

Rate

Price

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|------------|----------------------------|-------|-------|--|
| 5.00%      | 111.548 f                  |       |       |  |
| 5.00%      | 111.121 t                  |       |       |  |
| 5.00%      | 110.780 t                  |       |       |  |
| 5.00%      | 110.696 t                  |       |       |  |
|            |                            | Yield | CUSIP |  |
| 1.13%      | 167727 YM2                 |       |       |  |
| 1.34%      | 167727 YN0                 |       |       |  |
| 1.53%      | 167727 YP5                 |       |       |  |
| 1.72%      | 167727 YQ3                 |       |       |  |
| 1.92%      | 167727 YR1                 |       |       |  |
| 2.10%      | 167727 YS9                 |       |       |  |
| 2.27%      | 167727 YT7                 |       |       |  |
| 2.45%      | 167727 YU4                 |       |       |  |
| 2.68%      | 167727 YV2                 |       |       |  |
| 2.84%      | 167727 YW0                 |       |       |  |
| 3.01%      | 167727 YX8                 |       |       |  |
| 3.12%      | 167727 YY6                 |       |       |  |
| 3.23%      | 167727 YZ3                 |       |       |  |
| 3.32%      | 167727 ZA7                 |       |       |  |
| 3.39%      | 167727 ZB5                 |       |       |  |
| 3.46%      | 167727 ZC3                 |       |       |  |
| 3.51%      | 167727 ZD1                 |       |       |  |
| 3.56%      | 167727 ZE9                 |       |       |  |
| 3.61%      | 167727 ZF6                 |       |       |  |
| 3.65%      | 167727 ZG4                 |       |       |  |
|            |                            |       |       |  |

t Priced to the January 1, 2027 call.

167727 ZH2

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OPTIONAL REDEMPTION: The Series 2017B Bonds maturing on and after January 1, 2028, are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2027, as a whole or in part, at any time, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

3.66%

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### EXHIBIT C

# FORM OF SUPPLEMENTAL OPINION OF CO-BOND COUNSEL

June 21,2017

City of Chicago

The Underwriters Listed

#### File #: F2017-44, Version: 1

City Hall 121 North LaSalle Street Chicago, Illinois 60602 on Annex I

Amalgamated Bank of Chicago, as trustee under the Trust Indenture defined below 30 North LaSalle St. Chicago, Illinois 60602

We have acted as co-bond counsel in connection with the issuance and delivery by the City of Chicago (the "City") of the City's (a) \$180,590,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A (the "Series 2017A Bonds"), and (b) \$215,485,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B (together with the Series 2017A Bonds, (the "Bonds"). The Bonds are authorized by an Ordinance adopted by the City Council of the City on January 13, 2016 (the "Bond Ordinance") and are being issued today under and pursuant to the Bond Ordinance, a Determination Certificate of the Chief Financial Officer of the City pursuant to the Bond Ordinance (the "Determination Certificate"), and a Trust Indenture, dated as of June 1. 2017 (the "Trust Indenture"), from the City to Amalgamated Bank of Chicago, as trustee (the "Trustee"), providing for the issuance of the Bonds. We rendered our separate approving opinion today as co-bond counsel as to the validity of the Bonds. Capitalized terms used but not defined in this letter have the meanings ascribed to them in our separate approving opinion as co-bond counsel.

The following opinion is based upon the same examination of the record of proceedings and accompanying certificates, and is subject to the same limitations, as described in our separate approving opinion as cobond counsel described above. In addition to the items described in our separate approving opinion as co-bond counsel, the record of proceedings also includes executed copies of the Bond Purchase Agreement, dated June 6, 2017 (the "Bond Purchase Agreement"), between the City and the underwriters listed on Exhibit A (the "Underwriters"), and of the Official Statement, dated June 6, 2017, of the City relating to the Bonds (the "Official Statement"). We are furnishing this opinion pursuant to Section 9(d)(ii) of the Bond Purchase Agreement.

Based upon our examination as described in our separate opinion as co-bond counsel, we are further of the opinion as follows:

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1. The Bonds are exempt from registration under the Securities Act of 1933, as amended, and the Trust Indenture is exempt from qualification under the Trust Indenture Act of 1939, as amended. It is not necessary, in connection with the initial public offering and sale of the Bonds in the manner contemplated in the Bond Purchase Agreement, to register any securities under the Securities Act or to qualify the Bond Ordinance or the Trust Indenture under the Trust Indenture Act.

2. We have reviewed the statements in the Official Statement on its covers, under the captions "INTRODUCTION," "DESCRIPTION OF THE BONDS<sup>1</sup>' (other than information under the subcaption "Book-Entry Only System"), and "Security for the Bonds," and in Appendices A and B and, insofar as those statements purport to summarize certain provisions of the Bonds, the Bond Ordinance, the Determination Certificate and the Trust Indenture, such statements present a fair and accurate summary of those provisions. The statements in the Official Statement in the first paragraph on its cover, under the caption "Tax Matters," and in Appendix D, present a fair and accurate summary of the Bonds discussed in such portions of the Official Statement.

3. The execution and delivery on behalf of the City of the Bond Purchase Agreement has been'duly

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authorized by the City. The Bond Purchase Agreement is a binding contractual obligation of the City in accordance with its terms if it is a valid and binding obligation of the Underwriters (as to which we express no opinion). The Continuing Disclosure Undertaking has been duly authorized, executed and delivered by the City and is a binding contractual obligation of the City in accordance with its terms.

Except as stated in paragraph 2 of this letter, we have not undertaken to determine independently the accuracy or completeness of the Official Statement. However, we state that during our participation in the authorization and issuance of the Bonds as co-bond counsel (which included participation in conferences with the City and the Underwriters and their respective counsel concerning the Official Statement), nothing has come to our attention which has caused us to believe that the Official Statement (except for statements under the captions "Introduction-City of Chicago Sewer System," the second paragraph under the caption "Introduction-Sewer System," "Bond Insurance," "Outstanding Debt and Annual Debt Service," "Department of Water Management," "Sewer System," "Financial Operations," "Litigation," "Co-Financial Advisors and Independent Registered Municipal Advisor," Secondary Market Disclosure- Corrective Action Related to Certain Bond Disclosure Requirements" and in Appendix C - "City of Chicago, Illinois Sewer Fund Basic Financial Statements as of and for the Years Ended December 31, 2015 and 2014, and Independent Auditors' Report," Appendix E - Specimen Municipal Bond Insurance Policy and the financial and statistical data in the Official Statement, as to which we express no view), as of its date or as of the date of this letter, contained or contains an untrue statement of a material fact or omitted or omits a material fact necessary to make the statements in it, in light of the circumstances under which they were made, not misleading.

The enforceability of provisions of the Bond Purchase Agreement and- the Continuing Disclosure Undertaking may be subject to bankruptcy, insolvency, reorganization,

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moratorium and other similar laws affecting creditors' rights. Enforcement of provisions of the Bond Purchase Agreement or the Continuing Disclosure Undertaking by an equitable or similar remedy is subject to general principles of law or equity governing such a remedy, including the exercise of judicial discretion whether to grant any particular form of relief. The enforceability of the indemnification provisions of the Bond Purchase Agreement may be limited by federal or state securities laws.

This opinion is based upon facts known or certified to us and laws in effect on its date and speaks as of that date. The opinions stated in this letter are expressions of professional judgment based upon such facts and law and are not a guaranty of a result. We have not undertaken any obligation to revise or supplement this opinion to reflect any facts or circumstances that may come to our attention after the date of this opinion or any changes in law that may occur after that date.

The opinions rendered and assurances given in this letter are solely for the benefit of the persons to whom this letter is addressed in connection with the issuance and delivery of the Bonds and may not be relied upon by other persons or for any other puipose without our express prior written consent.

Very respectfully yours,

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Annex I

Siebert Cisneros Shank & Co., L.L.C, 111 East Wacker Drive, Suite 2605 Chicago, Illinois 60611

The Williams Capital Group, L.P. 650 Fifth Avenue, 9th Floor New York, New York 10019

Estrada Hinojosa & Company, Inc. 161 North Clark Street, Suite 4700 Chicago, Illinois 60601

North South Capital LLC 200 West Adams, Suite 2230 Chicago, Illinois 60606 Melvin & Company, 455 Cityfront Plaza Drive, 31st floor Chicago, Illinois 60611

Blaylock Beal Van, LLC 180 North La Salle Street, Suite 3145 Chicago, Illinois 60601

Mischler Financial Group, Inc. 1111 Bayside Drive, Suite 100 Newport Beach, California 92625

Podesta & Co. 208 South LaSalle Street, Suite 1460 Chicago, Illinois 60604 C-4

## EXHIBIT D

#### FORM OF OPINION OF CORPORATION COUNSEL

[Date of Closing]

Amalgamated Bank of Chicago, as Trustee One West Monroe Street Chicago, Illinois 60603

Siebert Cisneros Shank & Co., L.L.C. 111 East Wacker Drive, Suite 2605 Chicago, IL 60601 on behalf of the Underwriters named in the Bond Purchase Agreement (as defined herein)

Ladies and Gentlemen:

I am the Corporation Counsel of the City of Chicago (the "City"). In connection with the issuance by the City of \$180,590,000 aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A, and \$215,485,000 aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B (together, the "Bonds"), I have caused to be examined a certified copy of the record of proceedings of the City Council of the City (the "City CounciF') pertaining to the adoption by the City Council on January 13, 2016, of an ordinance pursuant to which the Bonds are being issued (the "Ordinance"). Unless otherwise defined herein, capitalized terms defined in the Bond Purchase Agreement are used with the same meaning herein.

In addition to the Ordinance, I have caused to be examined final and/or executed copies of the following documents:

i) the Official Statement;

ii) that certain Trust Indenture dated as of June 1, 2017, from the City to Amalgamated Bank of Chicago, as trustee (the "Trustee") in connection with the Bonds (the "Indenture");

iii) that certain Bond Purchase Agreement dated June 6, 2017 (the "Bond Purchase Agreement"), between the City and the Underwriters referred to therein (the "Underwriters");

- iv) the Undertaking;
- v) the Refunding Escrow Agreements;
- vi) the Tax Certificate; and
- (vi) such other documents and records as were deemed necessary to enable me to render this opinion.

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Based on the foregoing, I am of the opinion that:

1. The City is a municipal corporation and home rule unit of local government, organized and existing under the laws of the State of Illinois.

2. The City has duly authorized, approved and executed the Official Statement.

3. The City Council has (a) duly passed the Ordinance, which has not been amended, modified, supplemented or repealed and is in full force and effect; and (b) duly authorized and approved the execution and delivery of the Bonds, the Official Statement, the Bond Purchase Agreement, the Indenture, the Refunding Escrow Agreements, the Undertaking, and the Tax Certificate. Assuming due execution and delivery by the other parties thereto, as applicable, the Bond Purchase Agreement, the Indenture, the Refunding Escrow Agreements, the Undertaking and the Tax Certificate (collectively, the "City Documents") constitute valid and legal obligations of the City enforceable in accordance with their respective terms, except as enforcement may be limited by (i) applicable bankruptcy, insolvency or other laws affecting the rights or remedies of creditors generally of entities similar to the City, and (ii) the discretion of the courts in granting equitable or similar remedies.

4. The City has full legal right, power and authority to: (a) enter into and to execute the City Documents; and (b) issue, sell and deliver the Bonds to the Underwriters pursuant to the Ordinance and the Indenture. To my knowledge, the passage of the Ordinance and compliance with its provisions do not violate any applicable law or administrative regulation of the State of Illinois or of any department, division, agency or instrumentality thereof or of the United States of America, or any applicable judgment or decree to which the City is subject and do not conflict in a material manner with or constitute a material breach of or a material default under any agreement or other instrument to which the City is a party or is otherwise subject.

5. To my knowledge, the City has obtained all approvals, consents and orders (except, if any, with respect to state "blue sky" laws) of any governmental authority, board, agency or commission having jurisdiction which would constitute a condition precedent to the performance by the City of its obligations under the City Documents which the

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City could reasonably obtain as of the date hereof.

6. No litigation is pending or, to my knowledge, threatened, seeking to restrain or enjoin the issuance or delivery of the Bonds, or contesting (a) the validity or enforceability of the City Documents, (b) the completeness or accuracy of the Official Statement or (c) the power of the City or its authority with respect to the City Documents.

7. Nothing has come to my attention which would lead me to believe that the Official Statement contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that I express no opinion or belief regarding information under the captions "THE BONDS - Book-Entry Only System," "BOND INSUANCE," "TAX MATTERS." "UNDERWRITING." APPENDIX D - PROPOSED FORM OF OPINIONS OF CO-BOND COUNSEL, any information in or omitted from the Official

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Statement relating to DTC, the Bond Insurer, any information furnished by the Underwriters for use in the Official Statement, the financial statements in APPENDIX C - CITY OF CHICAGO, ILLINOIS SEWER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014, AND INDEPENDENT AUDITORS' REPORT and all other financial and statistical data contained in the Official Statement, including the Appendices thereto.

No opinion is expressed as to any "blue sky" or other securities laws or as to the laws regarding taxation of any state, or the United States, or any disclosure or compliance related thereto.

The statements contained herein are made in an official capacity and not personally and no personal responsibility shall derive from them. Further, the only opinions that are expressed are the opinions specifically set forth herein, and no opinion is implied or should be inferred as to any other matter or transaction.

No one other than you shall be entitled to rely on this opinion.

Very truly yours,

Edward N. Siskel Corporation Counsel

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## EXHIBIT E

#### FORM REPRESENTATION LETTER FROM UNDERWRITERS

June\_, 2017

City of Chicago Office of Chief Financial Officer 121 North LaSalle Street, Suite 700 Chicago, Illinois 60602 Attn: Chief Financial Officer

Siebert Cisneros Shank & Co., L.L.C. 111 East Wacker Drive, Suite 2605 Chicago, IL 60601

As a member of the Group of Underwriters expected to be named in a Bond Purchase Agreement (the "Purchase Agreement") between the City of Chicago (the "City") and Siebert Cisneros Shank & Co., L.L.C, as representative (the "Representative") of the underwriters named therein (each an "Underwriter") relating to the City of Chicago Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A and Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B (together, the "Bonds"), the undersigned Underwriter severally represents to the City and the Representative with respect to itself that:

1) Neither the Underwriter, nor any Affiliate thereof is listed on any of the following lists maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the Bureau of Industry and Security of the U.S. Department of Commerce, the Directorate of Defense Trade Controls of the U.S. Department of State or their successors, or on any other list of persons or entities with which the City may not do business under any applicable law, rule, regulation, order or judgment: the Specially Designated Nationals List, the Denied Persons List, the Unverified List, the Entity List and the Debarred List.

For purposes of this representation, "A ffiliate," when used to indicate a relationship with a specified person or entity, means a person or entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with such specified person or entity, and a person or entity shall be deemed to be controlled by another person or entity, if controlled in any manner whatsoever that results in control in fact by that other person or entity (or that other person or entity and any persons or entities with whom that other person or entity is acting jointly or in concert, whether directly or indirectly and whether through share ownership, a trust, a contract or otherwise.

2) The undersigned Underwriter agrees that in the event that any Underwriter or any of its Affiliates appears on any of the lists described in paragraph 1 above, at any time prior to the issuance of the Bonds, that Underwriter shall be deemed to have withdrawn from the Group of Underwriters under the Negotiated AAU Wire related to the Bonds. E-1

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(3) The undersigned Underwriter hereby represents (i) it is duly registered under the 1934 Act (as defined in the Purchase Agreement) as a broker/dealer or municipal securities

dealer and has duly paid the fee prescribed by MSRB Rule A-12 or is exempt from such requirements; (ii) it is (a) a member in good standing of the Financial Industry Regulatory Authority ("FINRA") or (b) otherwise eligible under FINRA rules to receive underwriting discounts and concessions available to such members with respect to underwriters of municipal securities; and (iii) it has complied with the dealer registration requirements, if any, of the various jurisdictions in which it offers the Bonds for sale. The undersigned Underwriter further understands and agrees that it is required to and will comply with the provisions of Chapter 2-56 and 2-156 of the Municipal Code of Chicago as described under Section 17 of the Purchase Agreement.

(4) The undersigned Underwriter (except for the Representative) has and does authorize the Representative to act as Representative of the Underwriter and to execute any document on behalf of, or exercise any authority of and otherwise to act for, it in all matters under or pertaining to the Purchase Agreement.

## [REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the undersigned has caused this Representation Letter in connection with the City of Chicago Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A and Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B to be executed by its duly authorized representative as of the date written above.

## SIEBERT CISNEROS SHANK & CO., L.L.C.

By:

Its: Authorized Officer

[Representation Letter From Underwriters - Signature Page]

## EXHIBIT B SERIES 2017 TRUST INDENTURE Trust Indenture

dated as of June 1, 2017 from

City of Chicago to

Amalgamated Bank of Chicago, as Trustee

## Securing

\$396,075,000 City of Chicago Second Lien Wastewater Transmission Revenue Bonds, Series 2017

comprised of

\$180,590,000 City of Chicago Second Lien Wastewater Transmission Revenue Bonds, Project Series

## 2017A

#### and

# \$215,485,000 City of Chicago Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B

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#### Trust Indenture

This Trust Indenture, dated as of June 1, 2017 (this "Indenture"), is from the City of Chicago (the "City"), a municipal corporation and home rule unit of local government organized and existing under the Constitution and laws of the State of Illinois, to Amalgamated Bank of Chicago, an Illinois banking corporation with trust powers having its Principal Office (as defined below) in the City of Chicago, Illinois, as trustee (said corporation, and any successor or successors as trustee under this Indenture, are referred to in this Indenture as the "Trustee").

#### RECITALS

The City is a duly constituted and existing municipality within the meaning of Section 1 of Article VII of the 1970 Constitution of the State of Illinois (the "Constitution"), and is a "home rule unit" under Section 6 (a) of Article VII of the Constitution.

The City has constructed and is maintaining and operating the Sewer System (as defined below) to meet the needs of the City's inhabitants and other users of the Sewer System. The Sewer System is operated under the supervision and control of the Department of Water Management of the City.

Pursuant to such authority, the City has previously issued and may in the future issue its Senior Lien Bonds (as defined below) for any lawful purpose of the Sewer System, including refunding Outstanding Senior Lien Bonds (as defined below) or obligations payable from revenues of the Sewer System on a basis subordinate to the Senior Lien Bonds (including Second Lien Bonds (as defined below) and Subordinate Lien Obligations (as defined below)) or for paying costs of issuance. The City has previously issued its Outstanding Series 1998 Senior Lien Bonds (as defined below, the "Outstanding Senior Lien Bonds"). Pursuant to such authority, the City has previously issued and may in the future issue its Second Lien Bonds for any lawful purpose of the Sewer System, including refunding Outstanding Senior Lien Bonds and Outstanding Second Lien Bonds (as defined below) or obligations payable from revenues of the Sewer System on a basis subordinate to the Second Lien Bonds (including Subordinate Lien Obligations) or for paying costs of issuance. The City has previously issued its Outstanding Series 2001 Second Lien Bonds, Outstanding Series 2006 Second Lien Bonds, Outstanding Series 2008 Second Lien Bonds, Outstanding Series 2010 Second Lien Bonds, Outstanding Series 2012 Second Lien Bonds, Outstanding Series 2014 Second Lien Bonds and Outstanding Series 2015 Second Lien Bonds (each as defined below) with a claim for payment solely from Second Lien Bond Revenues (as defined below) of the Sewer System.

Pursuant to an ordinance duly adopted by the City Council on January 13, 2016 (the "Series 2017 Bond Ordinance"), the City has determined to authorize the issuance of its Second Lien Wastewater Transmission Revenue Bonds, Series 2017 (the "2017 Second Lien Bonds"). The 2017 Second Lien Bonds are comprised of the Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A (the "2017A Second Lien Bonds"), and the Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B (the "2017B Second Lien Bonds"). The 2017A Second Lien Bonds"). The 2017A Second Lien Bonds are being issued for the purposes of (i) financing or reimbursing the City for its payment of certain Project Costs and (ii) paying Costs of Issuance of

the 2017A Second Lien Bonds. The 2017B Second Lien Bonds are being issued for the purposes of (i) refunding the Refunded Bonds (as defined below) and (ii) paying Costs of Issuance of the 2017B Second Lien Bonds.

The estimated amount of Project Costs is in excess of \$180,590,000. The City does not have available funds sufficient to finance the Project Costs or to refund the Refunded Bonds.

Pursuant to the Series 2017 Bond Ordinance, the City has authorized the issuance and sale of the 2017 Second Lien Bonds in an aggregate principal amount of not to exceed \$400,000,000. The aggregate principal amount of the 2017 Second Lien Bonds does not exceed the aggregate principal amount authorized by the Series 2017 Bond Ordinance.

The 2017 Second Lien Bonds will have a claim for payment solely from Second Lien Bond Revenues and the other sources pledged under this Indenture and shall be valid claims of their registered owners only against the funds and assets and other money held by the Trustee with respect to the 2017 Second Lien Bonds and, together with other Second Lien Bonds, against Second Lien Bond Revenues and amounts on deposit in the Second Lien Construction Accounts (as defined below).

The execution and delivery of the 2017 Second Lien Bonds and this Indenture have in all respects been duly authorized. All things necessary to make the 2017 Second Lien Bonds, when executed by the City and authenticated by the Trustee, the valid and binding legal obligations of the City and to make this Indenture a valid and binding agreement, have been done.

## Granting Clause

The City, in consideration of the premises and the acceptance by the Trustee of the trusts created by this Indenture and of the purchase and acceptance of the 2017 Second Lien Bonds by their Owners, and of the sum of one dollar lawful money of the United States of America, duly paid by the Trustee to the City at or before

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the execution and delivery of these presents, and for other good and valuable consideration, the receipt of which is acknowledged, in order to secure the payment of the principal of and interest on the 2017 Second Lien Bonds according to their tenor and effect, and to secure the performance and observance by the City of all the covenants expressed or implied in this Indenture and in the 2017 Second Lien Bonds, assigns and grants a security interest in and to the following (the "Trust Estate") to the Trustee, and its successors in trust and assigns forever, for the securing of the performance of the obligations of the City set forth in this Indenture:

### Granting Clause First

All right, title and interest of the City in and to the Second Lien Bond Revenues and the amounts on deposit in the Second Lien Construction Accounts; provided that the pledge and assignment of such Second Lien Bond Revenues and amounts on deposit in the Second Lien Construction Accounts shall rank pari passu with any pledge and assignment made by the City to secure the Outstanding Series 2001 Second Lien Bonds, the Outstanding Series 2010 Second Lien Bonds, the Outstanding Series 2012 Second Lien Bonds, the Outstanding Series 2012 Second Lien Bonds, the Outstanding Series 2012 Second Lien Bonds, the Outstanding Series 2014 Second Lien Bonds and the Outstanding Series

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2015 Second Lien Bonds and any Second Lien Parity Bonds (as defined below), in the manner and to the extent described in Section 2.2.

## Granting Clause Second

All moneys and securities from time to time held by the Trustee under the terms of this Indenture, except for moneys deposited with or paid to the Trustee and held in trust under this Indenture for the redemption of 2017 Second Lien Bonds, notice of the redemption of which, or irrevocable instruction to give such notice, has been duly given, moneys and securities held in the Escrow Accounts established under the Escrow Agreements (as defined below), and moneys held in a rebate account.

## Granting Clause Third

Any and all other property, rights and interest of every kind and nature from time to time hereafter by delivery or by writing of any kind granted, bargained, sold, alienated, demised, released, conveyed, assigned, transferred, mortgaged, pledged, hypothecated or otherwise subjected hereto, as and for additional security hereunder by the City or by any other person on its behalf or with its written consent to the Trustee, and the Trustee is authorized to receive any and all property, rights and interests at any time and all times and to hold and apply the same subject to the terms of this Indenture.

To Have and to Hold all and singular the Trust Estate, whether now owned or hereafter acquired, unto the Trustee and its successors in said trust and assigns forever;

In Trust Nevertheless, upon the terms and trusts set forth in this Indenture for the equal and proportionate benefit, security and protection of all present and future owners of the 2017 Second Lien Bonds without privilege, priority or distinction as to the lien or otherwise of any of the foregoing over any other of the foregoing except to the extent otherwise specifically provided in the 2017 Second Lien Bonds and this Indenture;

Provided that if the City, its successors or assigns, shall well and truly pay, or cause to be paid, the principal of, redemption premium, if any, and interest due or to become due on the 2017 Second Lien Bonds, at the times and in the manner set forth in the 2017 Second Lien Bonds, according to the true intent and meaning of this Indenture, and shall cause the payments to be made on the 2017 Second Lien Bonds as required under Article IV of this Indenture, or shall provide, as permitted by this Indenture, for the payment of the 2017 Second Lien Bonds and shall well and truly cause to be kept, performed and observed all of its covenants and conditions pursuant to the terms of this Indenture, and shall pay or cause to be paid to the Trustee all sums of money due or to become due to it in accordance with the terms and provisions of this Indenture, then upon the final payment thereof this Indenture and the rights granted by this Indenture shall cease, determine and be void; otherwise this Indenture shall remain in full force and effect; and it is expressly declared, that all 2017 Second Lien Bonds issued and secured hereunder are to be issued, authenticated and delivered and all said property, rights and interests and any other amounts assigned and pledged by this Indenture are to be dealt with and disposed of under, upon and subject to the terms, conditions, stipulations, covenants, agreements, trusts, uses and purposes as expressed in this Indenture, and the City has agreed and covenanted, and

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(ii) Net Revenues Available for Bonds for the last completed Fiscal Year prior to the issuance of the Second Lien Parity Bonds (as shown by the audit of an independent certified public accountant), or Net Revenues Available for Bonds for such last completed Fiscal Year, adjusted as described below, shall equal at least 100 percent of the sum of the Aggregate Senior Lien Debt Service and the Aggregate Second Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a pro forma basis assuming the issuance of the proposed Second Lien Parity Bonds and the application of the proceeds of any Second Lien Parity Bonds as provided in the ordinance or trust indenture authorizing their issuance, sale and delivery. Net Revenues Available for Bonds may be adjusted as follows for purposes of this paragraph (ii):

1) if prior to the issuance of such Second Lien Parity Bonds, the City shall have enacted an increase in the rates of the Sewer System from the rates in effect for such last completed Fiscal Year, Net Revenues Available for Bonds may be adjusted to reflect the Net Revenues Available for Bonds for such last completed Fiscal Year as they would have been had the increased rates been in effect during all of that last completed Fiscal Year; and

2) any such adjustment shall be evidenced by a certificate of the Authorized Officer.

For purposes of calculating the adjustment described in this paragraph (ii), any rate , increase enacted by the City and scheduled to take effect in a future Fiscal Year may be reflected in Net Revenues Available for Bonds for purposes of calculating debt service coverage for that and each succeeding Fiscal Year.

If during the first six months of a Fiscal Year, an audit of the Sewer System for the preceding Fiscal Year by an independent certified public accountant is not available, the conditions of paragraph (ii) above shall be deemed to have been satisfied if both (A) Net Revenues Available for Bonds for the second preceding Fiscal Year (as shown by the audit of an independent certified public accountant), adjusted as described in this paragraph (ii) above, and (B) Net Revenues Available for Bonds for the preceding Fiscal Year (as estimated by the Authorized Officer), adjusted as described in this paragraph

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(ii) above, shall equal at least 100 percent of the sum of the Aggregate Senior Lien Debt Service and the Aggregate Second Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a pro forma basis assuming the issuance of the proposed Second Lien Parity Bonds and the application of the proceeds of any Second Lien Parity Bonds as provided in the ordinance or trust indenture authorizing their issuance, sale and delivery.

(b) The City may issue Second Lien Parity Bonds without complying with either of the requirements of paragraph (a)(ii) of this Section 5.5:

(i) to pay, redeem or refund Senior Lien Bonds or Second Lien Bonds if in the judgment of the City there will be no money available to make payments of interest on or principal of those Senior Lien Bonds or Second Lien Bonds (at maturity or on Sinking Fund Payment dates) as such amounts become due; and

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Section 5.4. Rate Covenant. The City will establish, maintain and collect at all times fees, charges and rates for the use and service of the Sewer System sufficient at all times to (a) pay Operation and Maintenance Costs and (b) produce (i) Net Revenues Available for Bonds sufficient to pay the principal (at maturity or pursuant to mandatory sinking fund redemption) of and interest on all Senior Lien Bonds then Outstanding from time to time and to establish and maintain the Bond Principal and Interest Account and the Bond Debt Service Reserve Account as may be covenanted in ordinances authorizing the issuance of Senior Lien Bonds, which Net Revenues Available for Bonds shall each Fiscal Year at least equal one hundred fifteen percent (115%) of the sum required to pay promptly when due the debt service for the Fiscal Year on all Senior Lien Bonds then Outstanding, (ii) Second Lien Bond Revenues sufficient to pay the principal (at maturity or pursuant to mandatory sinking fund redemption) of and interest on all Second Lien Bonds then Outstanding from time to time and to establish and maintain the Second Lien Bonds Account as may be covenanted in the ordinances authorizing the issuance of Second Lien Bonds, (iii) amounts sufficient to pay the principal (at maturity or pursuant to mandatory sinking fund redemption) of and interest on all Subordinate Lien Obligations then Outstanding from time to time and to establish and maintain the debt service account for the Subordinate Lien Obligations as may be covenanted in the ordinances authorizing the issuance of Subordinate Lien Obligations, which amounts shall each Fiscal Year at least equal one hundred fifteen percent of the sum required to pay promptly when due debt service for the Fiscal Year on all Subordinate Lien Obligations Outstanding, and (iv) amounts sufficient to pay the principal (at maturity or pursuant to mandatory sinking fund redemption) of and interest on all Line of Credit Notes and all Commercial Paper Notes then Outstanding from time to time and to establish and maintain the debt service account for the Line of Credit Notes and/or Commercial Paper Notes as may be covenanted in the contracts governing the issuance of Line of Credit Notes and/or Commercial Paper Notes. The fees, charges and rates shall not be reduced while any 2017 Second Lien Bonds are Outstanding below the level necessary to ensure compliance with the covenants of this Section 5.4.

The City will, prior to the end of each Fiscal Year, conduct a review to determine if it has been and will be in compliance with the rate covenant set forth above. Whenever the annual review indicates that projected Gross Revenues will not be sufficient to comply with the rate covenant, the City shall prepare or cause to be prepared a rate study for the Sewer System identifying the rate changes necessary to comply with the rate covenant and the Budget Director and the Authorized Officer shall recommend appropriate action to the City Council to comply with this rate covenant.

## Section 5.5. Issuance of Second Lien Parity Bonds.

(a) As long as there are any Outstanding 2017 Second Lien Bonds, the City may issue Second Lien Parity Bonds for any lawful purpose of the Sewer System, including to refund Outstanding Senior Lien Bonds, Second Lien Bonds or obligations payable from revenues of the Sewer System on a basis subordinate to the Second Lien Bonds, upon compliance with the following conditions:

(i) the funds required to be transferred to the Principal and Interest Accounts shall have been transferred in full up to the date of delivery of such Second Lien Parity Bonds; and

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agrees and covenants, with the Trustee and with the respective Owners of the 2017 Second Lien Bonds, as follows:

#### ARTICLE I DEFINITIONS;

#### CONSTRUCTION

Section 1.1. Definitions. Terms defined in the Series 2017 Bond Ordinance and not otherwise defined herein are used with the same meanings in this Indenture, unless the context clearly requires otherwise. The terms defined in this Section shall, for all purposes of this Indenture, have the meanings specified in this Section, unless the context clearly requires otherwise.

"Aggregate Second Lien Debt Service" means, as of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period, an amount of money equal to the aggregate of the amounts of Annual Second Lien Debt Service with respect to such Fiscal Year or other specified 12-month period for the Second Lien Bonds of all series.

"Aggregate Senior Lien Debt Service" means, as of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period, an amount of money equal to the aggregate of the amounts of Annual Senior Lien Debt Service with respect to such Fiscal Year or other specified 12-month period for the Senior Lien Bonds of all series.

"Annual Second Lien Debt Service" means, as of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period for Second Lien Bonds of a particular series, an amount of money equal to the sum of (a) all interest payable during such Fiscal Year or other specified 12-month period on all Second Lien Bonds of said series Outstanding on said date of computation and (b) all Principal Installments payable during such Fiscal Year or other specified 12-month period with respect to all Second Lien Bonds of said series Outstanding on said date of computation, all calculated on the assumption that such Second Lien Bonds will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the ordinances and trust indentures creating such series of Second Lien Bonds of Principal Installments payable at or after said date of computation. For purposes of computing the interest payable on any Variable Rate Bonds constituting Second Lien Bonds in any future Fiscal Year or other specified future 12-month period, the rate of interest shall be assumed to equal the highest monthly average rate of interest paid with respect to such Variable Rate Bonds during the 12 months preceding the date of such calculation, plus 0.5 percent, or if such Variable Rate Bonds were not Outstanding during the entire 12-month period preceding the date of calculation, the highest monthly

average rate of interest paid with respect to comparable debt obligations having a comparable interest rate determination method, interest rate period and rating during such 12-month period, plus 0.5 percent. If the City has entered into an Interest Rate Hedge Agreement with respect to any Second Lien Bonds, the interest payable on such Second Lien Bonds shall be deemed to be the sum of (i) the amount payable under the Interest Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is in effect, plus (ii) the difference between the amount paid as interest on such Second Lien Bonds and the amount received by the City

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pursuant to the Interest Rate Hedge Agreement (but not less than zero). If the City is to pay a variable rate pursuant to the Interest Rate Hedge Agreement, the variable rate calculation shall be made in the same manner as for Variable Rate Bonds. Amounts deposited in the Principal and Interest Accounts pursuant to Section 4.5 of this Indenture, or similar provisions in any trust indenture or ordinance securing Second Lien Bonds, and capitalized or funded interest from proceeds of Second Lien Bonds and used only to pay interest on such Second Lien Bonds, shall be credited against Annual Second Lien Debt Service.

"Annual Senior Lien Debt Service" means, as of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period for Senior Lien Bonds of a particular series, an amount of money equal to the sum of (a) all interest payable during such Fiscal Year or other specified 12-month period on all Senior Lien Bonds of said series Outstanding on said date of computation and (b) all Principal Installments payable during such Fiscal Year or other specified 12-month period with respect to all Senior Lien Bonds of said series Outstanding on said date of computation, all calculated on the assumption that Senior Lien Bonds will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Senior Lien Bond Ordinances of Principal Installments payable at or after said date of computation. For purposes of computing the interest payable on any Variable Rate Bonds constituting Senior Lien Bonds in any future Fiscal Year or other specified future 12-month period, the rate of interest shall be assumed to equal the highest monthly average rate of interest paid with respect to such Variable Rate Bonds during the 12 months preceding the date of such calculation, plus 0.5 percent, or if such Variable Rate Bonds were not Outstanding during the entire 12-month period preceding the date of calculation, the highest monthly average rate of interest paid with respect to comparable debt obligations having a comparable interest rate determination method, interest rate period and rating during such 12-month period, plus 0.5 percent. If the City has entered into an Interest Rate Hedge Agreement with respect to any Senior Lien Bonds, the interest payable on such Senior Lien Bonds shall be deemed to be the sum of (i) the amount payable under the Interest Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is in effect, plus (ii) the difference between the amount paid as interest on such Senior Lien Bonds and the amount received by the City pursuant to the Interest Rate Hedge Agreement (but not less than zero). If the City is to pay a variable rate pursuant to the Interest Rate Hedge Agreement, the variable rate calculation shall be made in the same manner as for Variable Rate Bonds.

"Authorized Denomination" means \$5,000 and any integral multiple of \$5,000.

"Authorized Officer" means the Chief Financial Officer of the City, or if the Chief Financial Officer so determines and designates, the City Comptroller.

"Beneficial Owner" means the owner of a beneficial interest in 2017 Second Lien Bonds registered in the name of Cede & Co., as nominee of DTC (or a successor securities depository or nominee for either of them).

"Bond Counsel" means one or more firms of nationally recognized bond counsel designated by the Corporation Counsel of the City.

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"Bond Debt Service Reserve Account" means the separate account of that name previously established for the Senior Lien Bonds in the Sewer Revenue Fund and described in the Series 2017 Bond Ordinance.

"Bondholder" or "Owner" means the person in whose name any 2017 Second Lien Bond is registered on the registration books of the City kept by the Trustee.

"Business Day" means any day of the year on which banks located in the city in which is located the Principal Office of the Trustee are not required or authorized to remain closed and on which The New York Stock Exchange is not closed.

"Chief Financial Officer" means the person designated by the Mayor as the City's Chief Financial Officer, or if no such designation has been made or if such position is vacant, the City Comptroller of the City.

"City" means the City of Chicago.

"City Comptroller" means the City Comptroller of the City.

"City Council" means the City Council of the City, the governing body of the

City.

"Code" means the Internal Revenue Code of 1986, as amended. References to any section, subsection or other subdivision of the Code include regulations promulgated under the Code and in force with respect to such section, subsection or other subdivision.

"Construction Account: 2017 Second Lien Bonds" means the "Construction Account: 2016 Second Lien Bonds" in the Sewer Revenue Fund established pursuant to Section 4.1 of the Series 2017 Bond Ordinance.

"Construction Accounts" means the Second Lien Construction Accounts and any similar accounts established for Outstanding Senior Lien Bonds.

"Costs of Issuance" means all fees and costs incurred by the City relating to the issuance of the 2017 Second Lien Bonds, including, without limitation, printing costs, the Trustee's initial fees and charges, financial advisory fees, engineering fees, legal fees, accounting fees, the cost of any premiums for financial guaranty insurance to insure the Insured Series 2017 Second Lien Bonds and the cost of any related services with respect to the 2017 Second Lien Bonds.

"Defeasance Obligations" means (i) cash, (ii) certificates, notes, and bonds (including State and Local Government Series) issued by the Treasury, (iii) direct obligations of the Treasury which have been stripped by the Treasury itself, CATS, TIGRS and similar securities, (iv) pre-refunded municipal bonds rated "AAA" by Kroll and "AA+" by S&P; provided, that if the issue is only rated by S&P, then the pre-refunded bonds must have been pre-refunded with cash, direct U.S. or U.S. guaranteed obligations, or "AA+" rated pre-refunded municipals, (v) the interest component of REFCORP strips which have been stripped by request to the Federal Reserve Bank of New York in book entry form, (vi) obligations issued by the

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following agencies which are backed by the full faith and credit of the U.S.: U.S. Export- Import Bank (Eximbank) (direct obligations or fully guaranteed certificates of beneficial ownership), Farmers Home Administration (FmHA) (certificates of beneficial ownership), Federal Financing Bank, General Services Administration (participation certificates), U.S. Maritime Administration (guaranteed Title XI financings), U.S. Department of Housing and Urban Development (HUD) (Project Notes, Local Authority Bonds, New Communities Debentures-U.S. government guaranteed debentures), and U.S. Public Housing Notes and Bonds-U.S. government guaranteed public housing notes and bonds, or (vii) obligations issued by the following agencies that are not backed by the full faith and credit of the U.S.: Federal Home Loan Mortgage Corp. (FHLMC) debt obligations, Farm Credit System (formerly: Federal Land Banks, Federal Intermediate Credit Banks, and Banks for Cooperatives) debt obligations, Federal Home Loan Banks (FHL Banks) debt obligations, Fannie Mae debt obligations, Financing Corp. (FICO) debt obligations, Resolution Funding Corp. (REFCORP) debt obligations, and U.S. Agency for International Development (U.S. A.I.D.) Guaranteed notes; provided that Defeasance Obligations described in (iii) and (vi) above shall not be used without the consent of S&P if the City seeks to have the defeasance escrow rated by S&P.

"Determination Certificate" means the Certificate of the Authorized Officer with respect to the 2017 Second Lien Bonds of one or more series filed with the office of the City Clerk, addressed to the City Council as provided in Section 3.5(e) of the Series 2017 Bond Ordinance.

"DTC" means The Depository Trust Company, New York, New York, its successors and assigns.

"Escrow Accounts" means the 2006 Escrow Account and the 2008A Escrow Account established under the 2006 Escrow Agreement and the 2008A Escrow Agreement, respectively.

"Escrow Agreements" means the 2006 Escrow Agreement and the 2008A Escrow Agreement.

"Federal Subsidies" means (a) the direct payments by the Treasury to the City of a portion of the interest payable by the City on the Series 2010B Second Lien Bonds and (b) to the extent hereafter available to the City, payments by the Treasury to the City resulting from subsidies, tax credits or other incentives or benefits to state and local governments in connection with the issuance of debt obligations by such governments.

"Fiscal Year" means the period beginning January 1 and ending December 31 of

any year.

"Gross Revenues" means all income and receipts from any source which under generally

accepted accounting principles are properly recognized as being derived from the operation of the Sewer System, including without limitation (a) charges imposed for sewer service and usage, (b) charges imposed for inspections and permits for connection to the Sewer System, (c) grants (excluding grants received for capital projects) and (d) Investment Earnings. Gross Revenues do not include Federal Subsidies.

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"IEPA" means the Illinois Environmental Protection Agency, and its successors and assigns, or in the case of IEPA Loans made pursuant to the IEPA Program, the authorized lender under such Program.

"IEPA Loan" means, collectively, the borrowing or borrowings by the City from IEPA under the IEPA Program and evidenced by one or more IEPA Loan Agreements.

"IEPA Program" means the Water Pollution Control Loan Program or any successor program administered by the State, and any similar program through which funds are authorized by the federal Government, including the United States Environmental Protection Agency, and administered by the State or any federally authorized agency.

"Indenture" means this Trust Indenture as amended or supplemented in accordance with the terms of this Indenture.

"Insurance Policy" means the insurance policy issued by the Insurer guaranteeing the scheduled payment of principal of and interest on the Insured Series 2017 Second Lien Bonds when due.

"Insured Series 2017 Second Lien Bonds" means the 2017A Second Lien Bonds maturing on January 1, 2042 and January 1, 2052, certain special provisions with respect to which are set forth in Exhibit B to this Indenture.

"Insurer" means Assured Guaranty Municipal Corp., a New York stock insurance company, or any successor thereto or assignee thereof.

"Interest Payment Date" means January 1 and July 1 of each year, commencing January 1, 2018.

"Interest Rate Hedge Agreement" means an interest rate exchange, hedge or similar agreement entered into in order to hedge or manage the interest payable on all or a portion of any series of Outstanding Senior Lien Bonds or of Outstanding Second Lien Bonds, which agreement may include, without limitation, an interest rate swap, a forward or futures contract or an option {e.g., a call, put, cap, floor or collar) and which agreement does not constitute an obligation to repay money borrowed, credit extended or the equivalent thereof. Obligations of the City under an Interest- Rate Hedge Agreement shall not constitute indebtedness of the City for which its full faith and credit are pledged or for any other purpose.

"Investment Earnings" means interest plus net profits and less net losses derived from investments made with any portion of the Gross Revenues or with any money in the accounts in the Sewer Revenue Fund (other than the rebate accounts established and held for the Senior Lien Bonds and Second Lien Bonds) described in Section 2.2 of the Series 2017 Bond Ordinance. Investment Earnings do not include interest or earnings on investments of moneys on deposit in any Senior Lien Construction Account, Second Lien Construction Account or Subordinate Lien Construction Account.

"Kroll" means Kroll Bond Rating Agency, Inc., a corporation organized and existing under the laws of the State of Delaware, its successors and assigns, and, if such

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corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, the term "Kroll" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City by notice to the Trustee.

"Net Revenues" means that portion of the Gross Revenues remaining in any period after providing sufficient funds for Operation and Maintenance Costs.

"Net Revenues Available for Bonds" means that portion of the Net Revenues remaining in any period, minus any amounts deposited during that period in the Sewer Rate Stabilization Account as provided in Section 2.2 of the Series 2017 Bond Ordinance (other than amounts transferred to that Account upon the issuance of any Senior Lien Parity Bonds) and plus the amounts withdrawn during that period from that Account.

"Notice by Mail" means a written notice mailed by first class mail, postage prepaid, to Bondholders at their addresses as shown on the registration books kept pursuant to Section 2.10 of this Indenture.

"Operation and Maintenance Costs" means all expenses reasonably incurred by the City in connection with the operation, maintenance, renewal, replacement and repair of the Sewer System that under generally accepted accounting principles are properly chargeable to the Sewer System and not capitalized including, without limitation, salaries, wages, taxes, contracts for services, costs of materials and supplies, purchase of power, fuel, insurance, reasonable repairs and extensions necessary to render efficient service, the costs related to any Interest Rate Hedge Agreements, trustee's and paying agents' fees and all incidental expenses, but excluding any provision for depreciation or for interest on Senior Lien Bonds, Second Lien Bonds or other obligations for borrowed money payable from the Net Revenues Available for Bonds.

"Opinion of Bond Counsel" means a written opinion of Bond Counsel.

"Outstanding" means, when used with reference to the Second Lien Bonds or any series or subseries of Second Lien Bonds, all of such obligations that are outstanding and unpaid, provided that such term does not include:

a) Second Lien Bonds canceled at or prior to such date or delivered to or acquired by the trustee or paying agent for such Second Lien Bonds at or prior to such date for cancellation;

b) matured or redeemed Second Lien Bonds which have not been presented for payment in accordance with the provisions of the trust indenture or ordinance authorizing such series of Second Lien Bonds and for the payment of which the City has deposited funds with the trustee or paying agent for such Second Lien Bonds;

c) Second Lien Bonds for which the City has provided for payment by depositing in an

irrevocable trust or escrow, cash or Defeasance Obligations, in each case, the maturing principal of and interest on which will be sufficient to pay at maturity, or if called for redemption on the applicable redemption date, the principal of, redemption premium, if any, and interest on such Second Lien Bonds;

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d) Second Lien Bonds in lieu of or in exchange or substitution for which other Second Lien Bonds shall have been authenticated and delivered pursuant to the trust indenture or ordinance authorizing such series of Second Lien Bonds; and

e) Second Lien Bonds owned by the City.

When used with respect to Senior Lien Bonds, "Outstanding" shall have the meaning ascribed to such term in the respective Senior Lien Bond Ordinances.

"Permitted Investments" means any of the following:

a) direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America;

b) trust receipts or other certificates of ownership evidencing an ownership interest in the principal of or interest on, or both principal of and interest on, obligations described in clause (a) of this definition, which obligations are held in trust by a bank, trust company, national banking association or savings and loan association that has capital of not less than \$100,000,000 (each, a "Bank"), provided that such Bank holds such obligations separate and segregated from all other funds and accounts of the City and of such Bank and that a perfected first security interest under the Illinois Uniform Commercial Code, or under book entry procedures prescribed at 31 C.F.R. 306.0 et seq. or 31 C.F.R. 357.0 et seq. (or other similar book entry procedures similarly prescribed by federal law or regulations adopted after the date of this Indenture), has been created in such obligations for the benefit of the applicable account in the Sewer Revenue Fund or, to the extent permitted, in any irrevocable trust or escrow established to make provision for the payment and discharge of the indebtedness on any 2017 Second Lien Bonds or other obligations that are payable from Net Revenues Available for Bonds; and

c) shares of a money market fund registered under the Investment Company Act of 1940, whose shares are registered under the Securities Act of 1933.

"Principal and Interest Accounts" mean the "City of Chicago Wastewater Transmission Revenue Bonds Project Series 2017A Second Lien Bonds Principal and Interest Account" and the "City of Chicago Wastewater Transmission Revenue Bonds Refunding Series 2017B Second Lien Bonds Principal and Interest Account" in the 2017 Second Lien Bonds Revenue Fund as described in Section 4.3(b) of this Indenture.

"Principal Installment" means:

(a) as of any particular date of computation and with respect to Senior Lien Bonds of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Senior Lien Bonds of said series which mature on a single future date, reduced by the aggregate principal amount of such Outstanding Senior Lien Bonds which would at or before said future date be

retired by reason of the payment when due and application in accordance with the Senior Lien Bond Ordinance authorizing the issuance of each series of Senior Lien Bonds of Sinking Fund Payments payable at or before said future date for the retirement of such Outstanding Senior Lien

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Bonds, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of any Outstanding Senior Lien Bonds of such series, and for all purposes of this Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment; and

(b) as of any particular date of computation and with respect to Second Lien Bonds of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Second Lien Bonds of said series which mature on a single future date, reduced by the aggregate principal amount of such Outstanding Second Lien Bonds which would at or before said future date be retired by reason of the payment when due and the application in accordance with this Indenture, with respect to the 2017 Second Lien Bonds, or the ordinance or trust indenture creating any other series of Second Lien Bonds, of Sinking Fund Payments payable at or before said future date for the retirement of such Outstanding Second Lien Bonds, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of such Outstanding Second Lien Bonds, and for all purposes of this Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment.

"Principal Office" means, with respect to the Trustee, its principal office in Chicago, Illinois.

"Project Costs" means the costs of acquiring, constructing and equipping the Projects, including without limitation, acquisition of necessary interests in property, engineering fees or costs of the City, restoration costs, legal fees or costs of the City.

"Projects" means the program of improvement, extension and rehabilitation of the Sewer System consisting of the construction and acquisition of flood relief sewers, the rehabilitation and replacement of existing sewers, the expansion of operational facilities, services and equipment to protect and enhance the safety, integrity and security of the Sewer System, and any project eligible for funding by the IEPA through the IEPA Program.

"Rating Agency" means any nationally recognized securities rating agency.

"Record Date" means June 15 and December 15 of each year.

"Refunded Bonds" means certain Series 2008A Second Lien Bonds and Series 2006 Second Lien Bonds to be refunded with the proceeds of the 2017B Second Lien Bonds.

"S&P" means S&P Global Ratings, a business unit of Standard & Poor's Financial Services LLC, a corporation organized and existing under the laws of the State of New York, its successors and assigns, and, if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, "S&P" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City by notice to the Trustee.

"Second Lien Bond Revenues" means any Net Revenues Available for Bonds deposited into the Second Lien Bonds Account pursuant to (i) the ordinances authorizing the

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Outstanding Second Lien Bonds, (ii) the Series 2017 Bond Ordinance, and (iii) the ordinances authorizing any Second Lien Parity Bonds.

"Second Lien Bonds" means the Series 2001 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds, the Series 2014 Second Lien Bonds, the Series 2015 Second Lien Bonds, the 2017 Second Lien Bonds and all Second Lien Parity Bonds.

"Second Lien Bonds Account" means the separate account of that name established in the Sewer Revenue Fund as provided in Section 2.2 of the Series 2017 Bond Ordinance.

"Second Lien Construction Accounts" means (i) the Construction Account: 2017 Second Lien Bonds and the various accounts established for construction purposes by the Series 2001 Bond Ordinance, the Series 2008 Bond Ordinance, the Series 2010 Bond Ordinance, the Series 2012 Bond Ordinance, the Series 2014 Bond Ordinance, the Series 2015 Bond Ordinance or the ordinances authorizing any Second Lien Parity Bonds and (ii) any account established to pay costs of issuance of Second Lien Bonds.

"Second Lien Parity Bonds" means obligations, other than the Series 2001 Second Lien Bonds, the Series 2006 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds, the Series 2014 Second Lien Bonds, the Series 2015 Second Lien Bonds and the 2017 Second Lien Bonds which are payable from Second Lien Bond Revenues on an equal and ratable basis with all other Outstanding Second Lien Bonds.

"Senior Lien Bond Ordinances" means, to the extent applicable, Parts A and D of the Series 1998 Bond Ordinance and the ordinances of the City authorizing the issuance of Senior Lien Parity Bonds.

"Senior Lien Bonds" means the Series 1998 Senior Lien Bonds, and all Senior Lien Parity Bonds issued and outstanding pursuant to the Senior Lien Bond Ordinances.

"Senior Lien Parity Bonds" means obligations, other than the Series 1998 Senior Lien Bonds, that are payable from Net Revenues Available for Bonds on an equal and ratable basis with all other Outstanding Senior Lien Bonds.

"Series 1998 Bond Ordinance" means the ordinance passed by the City Council on December 10, 1997, as amended by the City Council on February 5, 1998, authorizing the issuance of the Series 1998 Senior Lien Bonds.

"Series 1998 Senior Lien Bonds" means the Wastewater Transmission Revenue Bonds, Refunding Series 1998A, of the City authorized by and issued pursuant to the Series 1998 Bond Ordinance.

"Series 2001 Bond Ordinance" means the ordinance passed by the City Council on March 7, 2001, authorizing the issuance of the Series 2001 Second Lien Bonds.

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"Series 2001 Indenture" means the Trust Indenture dated as of December 1, 2001 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2001 Second Lien Bonds.

"Series 2001 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2001, of the City authorized pursuant to the Series 2001 Bond Ordinance and issued pursuant to the Series 2001 Indenture.

"Series 2006 Bond Ordinance" means the ordinance passed by the City Council on October 4, 2006, authorizing the issuance of the Series 2006 Second Lien Bonds.

"Series 2006 Indenture" means the Trust Indenture dated as of November 1, 2006 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2006 Second Lien Bonds.

"Series 2006 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2006, of the City authorized pursuant to the Series 2006 Bond Ordinance and issued pursuant to the Series 2006 Indenture, consisting of the \$60,000,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2006A, and \$95,030,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2006B.

"Series 2008 Bond Ordinance" means the ordinance passed by the City Council on May 14, 2008, authorizing the issuance of the Series 2008 Second Lien Bonds.

"Series 2008A Indenture" means the Trust Indenture dated as of November 1, 2008 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2008A Second Lien Bonds.

"Series 2008C Indenture" means the Amended and Restated Trust Indenture from the City to Amalgamated Bank of Chicago, as trustee, dated as of December 1, 2011, amending and restating the original Trust Indenture, dated as of October 1, 2008, from the City to Amalgamated Bank of Chicago, as trustee, as such Amended and Restated Trust Indenture has been amended by the First Amendment dated as of March 1, 2012, the Second Amendment dated as of December 1, 2014, the Third Amendment dated as of August 19, 2015, the Fourth Amendment dated as of September 1, 2015, and the Fifth Amendment dated as of October 1, 2015, providing for the issuance of the Series 2008C Bonds.

"Series 2008 Second Lien Bonds" means the Series 2008A Second Lien Bonds and the Series 2008C Second Lien Bonds.

"Series 2008A Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2008A, of the City authorized pursuant to the Series 2008 Bond Ordinance and issued pursuant to the Series 2008A Indenture, consisting of the \$167,635,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2008A. - 13 -

"Series 2008C Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2008C, of the City authorized pursuant to the Series 2008 Bond Ordinance and issued pursuant to the Series 2008C Indenture, consisting of the \$332,230,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2008C.

"Series 2010 Bond Ordinance" means the ordinance passed by the City Council on July 28, 2010, authorizing the issuance of the Series 2010 Second Lien Bonds.

"Series 2010 Indenture" means the Trust Indenture dated as of November 1, 2010 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2010 Second Lien Bonds.

"Series 2010 Second Lien Bonds" means the Series 201 OA Second Lien Bonds and the Series 2010B Second Lien Bonds.

"Series 2010A Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 201 OA (Tax-Exempt), of the City authorized pursuant to the Series 2010 Bond Ordinance and issued pursuant to the Series 2010 Indenture, consisting of the \$25,865,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 201 OA (Tax-Exempt).'

"Series 2010B Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Project Bonds, Taxable Series 2010B (Build America Bonds-Direct Payment), of the City authorized pursuant to the Series 2010 Bond Ordinance and issued pursuant to the Series 2010 Indenture, consisting of the \$250,000,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Taxable Series 2010B (Build America Bonds-Direct Payment).

"Series 2012 Bond Ordinance" means the ordinance passed by the City Council on May 9, 2012, authorizing the issuance of the Series 2012 Second Lien Bonds.

"Series 2012 Indenture" means the Trust Indenture dated as of September 1, 2012 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2012 Second Lien Bonds.

"Series 2012 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Project Bonds, Series 2012, of the City authorized pursuant to the Series 2012 Bond Ordinance and issued pursuant to the Series 2012 Indenture, consisting of the \$276,470,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Series 2012.

"Series 2014 Bond Ordinance" means the ordinance passed by the City Council on April 30, 2014, authorizing the issuance of the Series 2014 Second Lien Bonds.

"Series 2014 Indenture" means the Trust Indenture dated as of September 1, 2014 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2014 Second Lien Bonds.

"Series 2014 Second Lien Bonds" means the Wastewater Transmission Revenue Project Bonds, Series 2014 of the City authorized pursuant to the Series 2014 Bond Ordinance and issued pursuant to the Series 2014 Indenture, consisting of the \$292,405,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014.

"Series 2015 Bond Ordinance" means the ordinance passed by the City Council on September 24, 2015, authorizing the issuance of the Series 2015 Second Lien Bonds.

"Series 2015 Indenture" means the Trust Indenture dated as of October 1, 2015 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2015 Second Lien Bonds.

"Series 2015 Second Lien Bonds" means the Wastewater Transmission Revenue Bonds, Series 2015 (Taxable) of the City authorized pursuant to the Series 2015 Bond Ordinance and issued pursuant to the Series 2015 Indenture, consisting of the \$87,080,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2015 (Taxable).

"Sewer Rate Stabilization Account" means the separate account of that name previously established by the City in the Sewer Revenue Fund and described in Section 2.2 of the Series 2017 Bond Ordinance.

"Sewer Revenue Fund" means the separate fund designated the "Sewer Revenue Fund of the City of Chicago" previously established by the City pursuant to the Municipal Code and described in Section 2.1 of the Series 2017 Bond Ordinance.

"Sewer System" means all property, real, personal or otherwise, owned or to be owned by the City or under the control of the City and used for sewer and wastewater transmissions and any and all further extensions, improvements and additions to the Sewer System.

"Sinking Fund Payment" means:

a) as of any particular date of determination and with respect to the Outstanding Senior Lien Bonds of any series, the amount required by a Senior Lien Bond Ordinance to be paid in any event by the City on a single future date for the retirement of Senior Lien Bonds of such series which mature after said future date, but does not include any amount payable by the City by reason only of the maturity on such future date of a Senior Lien Bond; and

b) as of any particular date of determination and with respect to the Outstanding Second Lien Bonds of any series, the amount required by this Indenture with respect to 2017 Second Lien Bonds, or the amounts required by any ordinance or trust indenture creating any other series of Second Lien Bonds, to be paid in any event by the City on a single future date for the retirement of such Second Lien Bonds which mature after said future date, but does not include any amount payable by the City by reason only of the maturity on such future date of a Second Lien Bond.

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"State" means the State of Illinois.

"Subordinate Lien Obligations" means obligations that are payable from sums, amounts, funds

or monies which are deposited to the Subordinate Lien Obligations Account or Subaccounts pursuant to Section 2.2(e) of the Series 2017 Bond Ordinance.

"Supplemental Indenture" means any indenture modifying, altering, amending, supplementing or confirming this Indenture duly entered into in accordance with the terms of this Indenture.

"Treasury" means the United States Treasury Department.

"Trustee" means Amalgamated Bank of Chicago, as Trustee under this Indenture, and its successors and assigns.

"2006 Escrow Agent" means Amalgamated Bank of Chicago, as escrow agent under the 2006 Escrow Agreement, and its successors and assigns.

"2006 Escrow Agreement" means the Escrow Agreement with respect to the refunded Series 2006 Second Lien Bonds, dated as of June 1, 2017, between the City and the 2006 Escrow Agent, as authorized by Section 4.2 of the Series 2017 Bond Ordinance.

"2008A Escrow Agent" means Amalgamated Bank of Chicago, as escrow agent under the 2008A Escrow Agreement, and its successors and assigns.

"2008A Escrow Agreement" means the Escrow Agreement with respect to the refunded Series 2008A Second Lien Bonds, dated as of June 1, 2017, between the City and the 2008A Escrow Agent, as authorized by Section 4.2 of the Series 2017 Bond Ordinance.

"2017A Principal and Interest Account" means the "City of Chicago Wastewater Transmission Revenue Bonds Project Series 2017A Second Lien Bonds Principal and Interest Account" created by Section 4.3(a).

"2017B Principal and Interest Account" means the "City of Chicago Wastewater Transmission Revenue Bonds Refunding Series 2017B Second Lien Bonds Principal and Interest Account" created by Section 4.3(a).

"2017 Second Lien Bonds Revenue Fund" means the "City of Chicago Wastewater Transmission Revenue Bonds Series 2017 Second Lien Bond Revenue Fund" created by Section 4.3(a).

"2017 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2017, comprised of the 2017A Second Lien Bonds and the 2017B Second Lien Bonds, authorized by the Series 2017 Bond Ordinance and issued under this Indenture.

"2017 Second Lien Bonds Subaccount" means the 2016 Second Lien Bonds Subaccount established in the Second Lien Bonds Account by Section 2.2(d) of the Series 2017 Bond Ordinance.

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"Undertaking" means the City's Continuing Disclosure Undertaking related to the 2017 Second Lien Bonds, as amended from time to time, if required by law.

"Variable Rate Bonds" means any Second Lien Bonds or Senior Lien Bonds the interest rate on

which is not established at the time they are issued at a single numerical rate for their entire term.

Section 1.2. Construction. This Indenture, except when the context by clear implication shall otherwise require, shall be construed and applied as follows:

a) All words and terms importing the singular number shall where the context requires, import the plural number and vice versa.

b) Pronouns include both singular and plural and cover all genders.

c) Headings of sections and other subdivisions in this Indenture are solely for convenience of reference, do not constitute a part of this Indenture and shall not affect the meaning, construction or effect of this Indenture.

d) Unless expressly indicated otherwise, references to articles, sections or other subdivisions of this Indenture shall be construed as references to articles, sections or other subdivisions of this Indenture as originally executed.

e) References to articles, sections or other subdivisions refer to the articles, sections or other subdivisions of this Indenture unless a different document is specifically identified.

## ARTICLE II

## THE 2017 SECOND LIEN BONDS

#### Section 2.1. Authorization of 2017 Second Lien Bonds; Purposes.

a) No 2017 Second Lien Bonds may be issued under the provisions of this Indenture except in accordance with this Article. The 2017 Second Lien Bonds are being issued in the aggregate principal amount of \$396,075,000.

b) The 2017A Second Lien Bonds are being issued for the purposes of (i) financing or reimbursing the City for its payment of certain Project Costs and (ii) paying Costs of Issuance of the 2017A Second Lien Bonds.

c) The 2017B Second Lien Bonds are being issued for the purposes of (i) refunding the Refunded Bonds and (ii) paying Costs of Issuance of the 2017B Second Lien Bonds.

## Section 2.2. Nature of Obligations; Source of Payment; Pledge of Second Lien Bond Revenues and Certain Other Moneys; Subordination to Senior Lien Bonds.

(a) The 2017 Second Lien Bonds are legal, valid and binding limited obligations of the City having a claim for payment of principal and interest solely from the moneys and securities held by the Trustee under the provisions of this Indenture and,

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together with any other Second Lien Bonds Outstanding, from Second Lien Bond Revenues and from

amounts on deposit in the Second Lien Construction Accounts. The 2017 Second Lien Bonds and the interest on them do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness and shall have no claim to be paid from taxes of the City.

b) To secure the payment of the principal of and interest on the 2017 Second Lien Bonds, the City pledges, assigns and grants to the Trustee a lien on and security interest in all funds and accounts held by the Trustee under this Indenture, and, together with any other Second Lien Bonds Outstanding, in the Second Lien Bond Revenues and the amounts on deposit in the Second Lien Construction Accounts, subject to the provisions of this Indenture requiring or permitting the payment, setting apart or appropriation of such amounts or to the purposes and on the terms, conditions, priorities and order set forth in or provided under this Indenture. This pledge, assignment and grant of a lien and security interest is valid and binding from and after the date of issuance of any 2017 Second Lien Bonds under this Indenture without any further physical delivery or further act; and is valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the City, irrespective of whether such parties have notice of such pledge, assignment and grant of a lien.

c) The claim of the 2017 Second Lien Bonds to Net Revenues Available for Bonds is junior and subordinate to the claim of the City's Outstanding Senior Lien Bonds.

Section 2.3. General Terms of 2017 Second Lien Bonds. The 2017 Second Lien Bonds shall be designated "City of Chicago Second Lien Wastewater Transmission Revenue Bonds, Series 2017". The 2017A Second Lien Bonds shall be designated "City of Chicago Second Lien Wastewater Transmission Bonds, Project Series 2017A". The 2017B Second Lien Bonds shall be designated "City of Chicago Second Lien Wastewater Transmission Bonds, Refunding Series 2017B".

The 2017A Second Lien Bonds shall mature on January 1 of each of the following years and bear interest at the following interest rates per annum:

Principal Amount

Interest Rate

Principal Amount

Interest Rate

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

\$2,255,000 2,365,000 2,485,000 2,610,000 2,740,000 2,875,000 3,020,000 3,170,000 3,330,000 3,495,000 3,670,000

5.00 5.00 5.00 2031 2032 2033 2034 2035 2036 2037 2042 2047 2052

\$3,855,000 4,045,000 4,250,000 4,460,000 4,685,000 4,920,000 5,165,000 30,105,000 38,685,000 48,405,000

| 5.00%<br>5.00 |  |  |
|---------------|--|--|
| 5.00          |  |  |
| 5.00          |  |  |
| 5.00          |  |  |
| 5.00          |  |  |
| 5.00          |  |  |
| 5.25          |  |  |
| 5.00          |  |  |
| 4.00          |  |  |

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The 2017B Second Lien Bonds shall mature on January 1 of each of the following years and bear interest at the following interest rates per annum:

Principal Amount Interest Rate Principal Amount Interest Rate 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 \$6,515,000 6,570,000 7,060,000 12,165,000 9,450,000 9,945,000 10,440,000 14,070,000 9,085,000 9,545,000 10,030,000 5.00% 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 \$14,835,000 15,585,000 9,140,000 9,600,000 10,085,000 10,775,000 11,310,000 11,875,000 8,490,000 8,915,000 5.00% 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00

Interest on the 2017 Second Lien Bonds shall be payable on January 1 and July 1 of each year, commencing January 1, 2018.

Section 2.4. Conditions Precedent to Issuance and Delivery of the 2017 Second Lien Bonds. Upon the execution and delivery of this Indenture, 2017 Second Lien Bonds shall be executed by the City and delivered to the Trustee and thereupon shall be authenticated by the Trustee and delivered to the Initial Purchasers, but only following the receipt by the Trustee of:

a) A copy of the Series 2017 Bond Ordinance certified by the City Clerk of the City;

b) an executed original of the Determination Certificate authorizing the execution and delivery of this Indenture and the issuance and sale of the 2017 Second Lien Bonds;

c) an original executed counterpart of this Indenture;

d) a certificate signed by the Authorized Officer delivered pursuant to Section 2.2(d) of the Series 2017 Bond Ordinance specifying the amounts of Net Revenues Available for Bonds to be deposited by the City in the Second Lien Bonds Account and transferred to the 2017 Second Lien Bonds Revenue Fund on the Business Day preceding each January 1 and July 1, commencing on the Business Day preceding January 1, 2018, which amounts shall be sufficient to pay the principal of and interest on the'2017 Second Lien Bonds coming due on each such January 1 and July 1;

e) an Opinion of Counsel to the effect that (i) this Indenture has been duly and lawfully authorized by all necessary action on the part of the City, has been duly and lawfully executed by authorized officers of the City, is in full force and effect and is valid and binding upon the City and enforceable in accordance with its terms; (ii) this Indenture creates the valid pledge of Second Lien Bond Revenues and moneys and securities which it purports to create; and (iii) upon the execution, authentication and delivery of the 2017 Second Lien Bonds, the

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2017 Second Lien Bonds will have been duly and validly authorized and issued in accordance with the Constitution and laws of the State, the Series 2017 Bond Ordinance and this Indenture;

f) a written authorization as to the authentication and delivery of the 2017 Second Lien Bonds, signed by the Authorized Officer;

g) executed counterparts of the 2006 Escrow Agreement and the 2008A Escrow Agreement; and

h) such further documents and moneys as are required by the terms of this Indenture and the Series 2017 Bond Ordinance.

Section 2.5. Application of Proceeds of 2017 Second Lien Bonds. The proceeds of the sale of the 2017A Second Lien Bonds (in the amount of \$196,319,106.67) shall be deposited in the Construction Account: 2017 Second Lien Bonds and used to pay for certain capital improvements to and extensions of the Sewer System and the Costs of Issuance of the 2017A Second Lien Bonds as described in the Series 2017 Bond Ordinance.

b) The proceeds of the sale of the 2017B Second Lien Bonds shall be used and deposited as follows: (i) \$112,363,763.06 of the proceeds shall be deposited with the 2006 Escrow Agent to be used to pay interest on and the redemption price of the refunded Series 2006 Second Lien Bonds in accordance with the terms of the 2006 Escrow Agreement, (ii) \$130,086,854.57 of the proceeds shall be deposited with the 2008A Escrow Agent to be used to pay interest on and the redemption price of the refunded Series 2008A Second Lien Bonds in accordance with the terms of the 2008A Escrow Agreement and (iii) \$383,357.91 of the proceeds shall be deposited in the Construction Account: 2017 Second Lien Bonds and used to pay for the Costs of Issuance of the 2017B Second Lien Bonds as described in the Series 2017 Bond Ordinance.

c) In addition, \$7,187,021.00 on deposit in the Debt Service Reserve Account for the Series 2008A Second Lien Bonds in excess of the applicable reserve requirement shall be transferred to the 2008A Escrow Agent and held under the 2008A Escrow Agreement and applied in accordance with its terms.

## Section 2.6. Form, Payment and Dating of 2017 Second Lien Bonds; Authorized Denominations.

a) The 2017 Second Lien Bonds and the certificate of authentication to be executed on the 2017 Second Lien Bonds by the Trustee shall be in substantially the applicable form set forth in Exhibit A to this Indenture, with necessary or appropriate variations, omissions and insertions as permitted or required by this Indenture.

b) The 2017A Second Lien Bonds shall be issuable only as fully registered bonds in Authorized Denominations. The 2017A Second Lien Bonds shall be numbered RA-1 consecutively upwards and shall contain an appropriate prefix to such numbers to identify the series of such 2017A Second Lien Bonds. The 2017B Second Lien Bonds shall be issuable only as fully registered bonds in Authorized Denominations. The 2017B Second Lien Bonds shall be numbered RB-1 consecutively upwards and shall contain an appropriate prefix to such numbered RB-1 consecutively upwards and shall contain an appropriate prefix to such numbered RB-1 consecutively upwards.

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c) The principal and redemption price of each 2017 Second Lien Bond shall be payable upon surrender of such 2017 Second Lien Bond at the Principal Office of the Trustee. Payments of principal of the 2017 Second Lien Bonds shall be payable in clearinghouse funds except as provided in Section 2.13 below. Such payments shall be made to the Owner of the 2017 Second Lien Bond so surrendered, as shown on the registration books maintained by the Trustee on the applicable Record Date.

d) Each 2017 Second Lien Bond shall bear interest, be payable as to interest and be dated as follows:

i) Each 2017 Second Lien Bond shall bear interest (at the applicable rate per year set forth in Section 2.3 of this Indenture) from its date or from and including the most recent Interest Payment Date with respect to which interest has been paid or duly provided for. The 2017 Second Lien Bonds shall be dated as of the Interest Payment Date next preceding their date of authentication, unless such date of authentication is an Interest Payment Date, in which case the 2017 Second Lien Bonds shall be dated as of such Interest Payment Date, or unless such 2017 Second Lien Bonds are authenticated prior to the first Interest Payment Date, in which event the 2017 Second Lien Bonds shall be dated as of their date of issue. ii) Subject to the provisions of subparagraph (iii) below, the interest due on any such 2017 Second Lien Bond on any Interest Payment Date shall be paid to the Owner of such 2017 Second Lien Bond as shown on the registration books kept by the Trustee on the applicable Record Date. The amount of interest so payable on any Interest Payment Date shall be computed by the Trustee on the basis of a 360-day year of twelve 30-day months.

iii) If the available funds under this Indenture are insufficient on any Interest Payment Date to pay the interest then due, the regular applicable Record Date shall no longer be applicable with respect to such 2017 Second Lien Bonds. If sufficient funds for the payment of such overdue interest shall thereafter become available, the Trustee immediately shall establish a special interest payment date for the payment of the overdue interest and a special record date (which shall be a Business Day) for determining the Bondholders entitled to such payments. Notice of each date so established shall be mailed by the Trustee to each such Bondholder at least 10 days prior to the special record date, but not more than 30 days prior to the special interest payment date. The overdue interest shall be paid on the special interest payment date to such Bondholders as shown on the registration books kept by the Trustee as of the close of business on the special record date.

iv) All payments of interest on the 2017 Second Lien Bonds shall be paid to the persons entitled to such payments pursuant to Section 2.6(d)(ii) or (iii) above by the Trustee on the Interest Payment Date or special interest payment date, as applicable, (A) upon request of any Owner of such 2017 Second Lien Bonds in the principal amount of \$1,000,000 or more, by federal funds wire on the Interest Payment Date to any address in the continental United States, if such Owner provides the Trustee with written notice of such wire transfer address at least 15 days prior to the applicable Record Date (which notice may provide that it will remain in effect with respect to subsequent Interest

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Payment Dates unless or until changed or revoked by subsequent notice), or (B) if no instructions are given as aforesaid, by clearinghouse funds check or draft mailed on the Interest Payment Date to the persons entitled to such payment at such address appearing on the registration books of the Trustee or such other address as has been furnished to the Trustee in writing by such person.

Section 2.7. Execution of 2017 Second Lien Bonds. Each of the 2017 Second Lien Bonds shall be executed on behalf of the City by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of its City Clerk or Deputy City Clerk, and the corporate seal of the City shall be impressed, printed or lithographed on each 2017 Second Lien Bond. The 2017 Second Lien Bonds bearing the manual or facsimile signatures of individuals who were at the time of the execution of this Indenture the proper officers of the City shall bind the City notwithstanding that such individuals shall cease to hold such offices prior to the registration, authentication or delivery of such 2017 Second Lien Bonds or shall not have held such offices at the dated date of such 2017 Second Lien Bonds.

Section 2.8. Delivery and Registration. No 2017 Second Lien Bond shall be entitled to any right or benefit under this Indenture, or be valid or obligatory for any purpose, unless there appears on such 2017 Second Lien Bond a certificate of authentication substantially in the applicable form provided in Exhibit A to this Indenture, executed by the Trustee by manual signature, and such certificate upon any such 2017 Second Lien Bond shall be conclusive evidence that such 2017 Second Lien Bond has been duly authenticated, registered and delivered.

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Section 2.9. Lost, Destroyed, Improperly Canceled or Undelivered 2017 Second Lien Bonds. If any 2017 Second Lien Bond, whether in temporary or definitive form, is lost (whether by reason of theft or otherwise), destroyed (whether by mutilation, damage or otherwise) or improperly canceled, the Trustee may authenticate a new 2017 Second Lien Bond of the same series, date and denomination and bearing a number not contemporaneously outstanding; provided that (a) in the case of any mutilated 2017 Second Lien Bond, such mutilated 2017 Second Lien Bond shall first be surrendered to the Trustee and (b) in the case of any lost 2017 Second Lien Bond or 2017 Second Lien Bond destroyed in whole, there shall be first furnished to the Trustee evidence of such loss or destruction, together with indemnification of the City and the Trustee, satisfactory to each of them. If any lost, destroyed or improperly canceled 2017 Second Lien Bond shall have matured or is about to mature, instead of issuing a substitute 2017 Second Lien Bond, the Trustee shall pay the same without surrender of such 2017 Second Lien Bond if there shall be first furnished to the Trustee evidence of such loss, destruction or cancellation, together with indemnification of the City and the Trustee, satisfactory to each of them. Upon the issuance of any substitute 2017 Second Lien Bond, the Trustee may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation to such issuance. The Trustee may charge the Bondholder reasonable fees and expenses in connection with any transaction described in this Section 2.9, except for improper cancellation by the Trustee.

All 2017 Second Lien Bonds shall be owned upon the express condition that, to the extent permitted by law, the foregoing provisions are exclusive with respect to the replacement or payment of lost, destroyed or improperly canceled 2017 Second Lien Bonds, notwithstanding any law or statute now existing or enacted after the date of this Indenture.

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Section 2.10. Transfer, Registration and Exchange of 2017 Second Lien Bonds. The Trustee shall maintain and keep, at its Principal Office, books for the registration and transfer of 2017 Second Lien Bonds, which at all reasonable times shall be open for inspection by the City.

The transfer of any 2017 Second Lien Bond shall be registered upon the books of the Trustee at the written request of the Bondholder or its attorney duly authorized in writing, upon surrender of such 2017 Second Lien Bond at the Principal Office of the Trustee, together with a written instrument of transfer satisfactory to the Trustee duly executed by the Bondholder or its attorney duly authorized in writing.

The City and the Trustee may deem and treat the Bondholder as the absolute owner of such 2017 Second Lien Bond, whether such 2017 Second Lien Bond shall be overdue or not, for the purpose of receiving payment of, or on account of, the principal of and interest on, such 2017 Second Lien Bond and for all other purposes, and neither the City nor the Trustee shall be affected by any notice to the contrary. All such payments so made to any such Bondholder shall be valid and effectual to satisfy and discharge the liability upon such 2017 Second Lien Bond to the extent of the sum or sums so paid.

Any 2017 Second Lien Bond, upon surrender of such 2017 Second Lien Bond at the Principal Office of the Trustee, together with an assignment executed by the Owner or its duly authorized agent, may, at the option of the Bondholder, be exchanged for an equal aggregate principal amount of 2017 Second Lien Bond or 2017 Second Lien Bonds of any Authorized Denomination of the same series, interest rate and maturity as the 2017 Second Lien Bond being surrendered.

In all cases in which the privilege of exchanging 2017 Second Lien Bonds or registering the transfer of

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2017 Second Lien Bonds is exercised, the City shall execute and the Trustee shall authenticate and deliver 2017 Second Lien Bonds in accordance with the provisions of this Indenture. For every such exchange or registration of transfer of 2017 Second Lien Bonds, whether temporary or definitive, the Trustee may make a charge in an amount sufficient to reimburse it for any tax or other governmental charge required to be paid with respect to such exchange or registration of transfer, which sum or sums shall be paid by the person requesting such exchange or registration of transfer as a condition precedent to the exercise of the privilege of making such exchange or registration of transfer.

Neither the Trustee nor the City shall be required to register the transfer of any 2017 Second Lien Bond during the 15 days next preceding an Interest Payment Date or, in the case of a proposed redemption of 2017 Second Lien Bonds, 2017 Second Lien Bonds after they have been selected by the Trustee for redemption.

Section 2.11. Temporary 2017 Second Lien Bonds. Pending the preparation of definitive 2017 Second Lien Bonds, the City may execute and the Trustee shall authenticate and deliver temporary 2017 Second Lien Bonds. Temporary 2017 Second Lien Bonds may be issuable as 2017 Second Lien Bonds of the applicable series and of any Authorized Denomination and substantially in the form of the definitive 2017 Second Lien Bonds of such series, all as may be approved by the City, as evidenced by the execution and delivery of such 2017 Second Lien Bonds. Temporary 2017 Second Lien Bonds.

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may contain such reference to any provisions of this Indenture as may be appropriate. Every temporary 2017 Second Lien Bond shall be executed by the City and be authenticated by the Trustee upon the same conditions and in substantially the same manner, and with like effect, as the definitive 2017 Second Lien Bonds. As promptly as practicable the City shall execute and shall furnish definitive 2017 Second Lien Bonds and thereupon temporary 2017 Second Lien Bonds may be surrendered in exchange therefor without charge at the Principal Office of the Trustee, and the Trustee shall authenticate and deliver in exchange for such temporary 2017 Second Lien Bonds of the applicable series and in Authorized Denominations. Until so exchanged the temporary 2017 Second Lien Bonds.

Section 2.12. Cancellation of 2017 Second Lien Bonds. All 2017 Second Lien Bonds which shall have been surrendered to the Trustee for payment and all 2017 Second Lien Bonds which shall have been surrendered to the Trustee for exchange or registration of transfer, shall be canceled by the Trustee and cremated or otherwise destroyed, and counterparts of a certificate of destruction evidencing such cremation or other destruction shall be furnished by the Trustee to the City. The Trustee shall furnish to the City a certificate evidencing any such cancellation and specifying such 2017 Second Lien Bonds by series and number.

#### Section 2.13. Book-Entry Provisions.

a) Except as provided in paragraph (c) below, the Owner of all of the 2017 Second Lien Bonds shall be DTC, and the 2017 Second Lien Bonds shall be registered in the name of Cede & Co., as nominee for DTC. Payment of interest for any 2017 Second Lien Bond registered in the name of Cede & Co. shall be made by wire transfer of immediately available funds to the account of Cede & Co. on the applicable Interest Payment Date for the 2017 Second Lien Bonds at the address indicated for Cede & Co. in the registration books of the City kept by the Trustee.

b) The Trustee and the City may treat DTC (or its nominee) as the sole and exclusive Owner of such 2017 Second Lien Bonds registered in its name for the purposes of payment of the principal or redemption price of or interest on such 2017 Second Lien Bonds, selecting such 2017 Second Lien Bonds or portions of such 2017 Second Lien Bonds to be redeemed, giving any notice permitted or required to be given to Bondholders under this Indenture, registering the transfer of such 2017 Second Lien Bonds, obtaining any consent or other action to be taken by Bondholders and for all other purposes whatsoever, and neither the Trustee nor the City shall be affected by any notice to the contrary. Except as otherwise provided in paragraph (c) below, no Beneficial Owner shall receive an authenticated 2017 Second Lien Bond certificate. Upon delivery by DTC to the Trustee of written notice to the effect that DTC has determined to substitute a new nominee in place of Cede & Co., and subject to the provisions of this Indenture with respect to transfers of 2017 Second Lien Bonds, the words "Cede & Co." in this Indenture shall refer to such new nominee of DTC.

c) If the Owner of all the 2017 Second Lien Bonds shall be DTC and the City determines to discontinue DTC's book-entry system, the City may notify DTC and the Trustee, whereupon DTC will notify its participating organizations (the "Participants") of the availability through DTC of certificated 2017 Second Lien Bonds and such Participants may utilize DTC's withdrawal procedure to withdraw the 2017 Second Lien Bonds from DTC. If a

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Participant utilizes this process, the Trustee shall issue, transfer and exchange such 2017 Second Lien Bond certificates as requested by DTC in the appropriate series and amounts in accordance with the provisions of this Indenture. DTC may determine to discontinue providing its services with respect to all, but not less than all, of the 2017 Second Lien Bonds at any time by giving written notice to the City and the Trustee and discharging its responsibilities with respect to this Indenture under applicable law. Under such circumstances (if there is no successor securities depository), the City and the Trustee shall be obligated (at the sole cost and expense of the City) to make available for delivery 2017 Second Lien Bond certificates as described in this Indenture. Whenever DTC requests the City and the Trustee to do so, the City will direct the Trustee (at the sole cost and expense of the City) to cooperate with DTC in taking appropriate action after reasonable notice (i) to make available one or more separate certificates evidencing 2017 Second Lien Bonds to any Participant having 2017 Second Lien Bonds credited to its DTC account or (ii) to arrange for another securities depository to maintain custody of certificates evidencing such 2017 Second Lien Bonds.

d) So long as any 2017 Second Lien Bond is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to the principal or redemption price of and interest on such 2017 Second Lien Bond and all notices with respect to such 2017 Second Lien Bond shall be made and given, respectively, to DTC or its nominee as provided in the City's representation letter to DTC.

e) In connection with any notice or other communication to be provided to Bondholders pursuant to this Indenture by the City or the Trustee, or by the Trustee with respect to any consent or other action to be taken by Bondholders, the City or the Trustee, as the case may be, shall establish a record date for such consent or other action and give DTC notice of such record date not less than 15 calendar days in advance of such record date to the extent possible. Such notice to DTC or its nominee shall be given only when DTC is the sole Bondholder.

f) Neither the City nor the Trustee shall have any responsibility or obligation to the Participants or the Beneficial Owners with respect to (i) the accuracy of any records maintained by DTC or any Participant;

(ii) the payment by DTC or any Participant of any amount due to any Beneficial Owner in respect of the principal or redemption price of or interest on the 2017 Second Lien Bonds; (iii) the delivery by DTC or any Participant of any notice to any Beneficial Owner which is required or permitted under the terms of this Indenture to be given to Bondholders; (iv) the selection of the Beneficial Owners to receive payment in the event of any partial redemption of the 2017 Second Lien Bonds; or (v) any consent given or other action taken by DTC as Bondholder.

g) As long as Cede & Co. is the registered owner of the 2017 Second Lien Bonds, as nominee of DTC, references in this Indenture to the Bondholders of the 2017 Second Lien Bonds or Owners of the 2017 Second Lien Bonds shall mean Cede & Co. and shall not mean the Beneficial Owners of the 2017 Second Lien Bonds.

h) So long as DTC is the registered owner of the 2017 Second Lien Bonds:

(i) selection of 2017 Second Lien Bonds of a series to be redeemed upon partial redemption and presentation of 2017 Second Lien Bonds of such series to the

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Trustee upon partial redemption, shall be deemed made when the right to exercise ownership rights in such 2017 Second Lien Bonds through DTC or DTC's Participants is transferred by DTC on its books; and

(ii) DTC may present notices, approvals, waivers or other communications required or permitted to be made by Bondholders under this Indenture on a fractionalized basis on behalf of some or all of those persons entitled to exercise ownership rights in the 2017 Second Lien Bonds through DTC or its Participants.

# ARTICLE III

## REDEMPTION OF THE 2017 SECOND LIEN BONDS

Section 3.1. Terms of Redemption. The 2017 Second Lien Bonds shall be subject to redemption in advance of their maturity as provided in this Article.

a) Optional Redemption. The 2017A Second Lien Bonds maturing on and after January 1, 2028 are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2027, as a whole or in part, at any time, and if in part, in such order of maturity as the City shall determine and within any maturity in the manner described in Section 3.4, in Authorized Denominations, at a price of par plus accrued interest to the redemption date. The 2017B Second Lien Bonds maturing on and after January 1, 2028 are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2028 are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2027, as a whole or in part, at any time, and if in part, in such order of maturity as the City shall determine and within any maturity in the manner described in Section 3.4, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

b) Mandatory Sinking Fund Redemption, (i) The 2017A Second Lien Bonds maturing on January 1, 2042, January 1, 2047 and January 1, 2052 are subject to mandatory redemption in the manner

described in Section 3.4, from mandatory Sinking Fund Payments, on January 1 in each of the respective years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

|      | Term Bond Due<br>January 1,2042 | Term Bond Due<br>January 1,2047 |
|------|---------------------------------|---------------------------------|
| Year | Principal Amount                | Year Principal Amount           |
| 2038 | \$5,420,000                     | 2043\$7,000,000                 |
| 2039 | \$5,705,000                     | 2044\$7,350,000                 |
| 2040 | \$6,005,000                     | 2045\$7,720,000                 |
| 2041 | \$6,320,0002046                 | \$8,105,000                     |
| 2041 | 2042*\$6,655,000                | 2047*\$8,510,000                |

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Term Bond Due January 1,2052

Year Principal Amount

| 2048 | \$8,935,000       |
|------|-------------------|
| 2049 | \$9,295,000       |
| 2050 | \$9,665,000       |
| 2051 | \$10,055,000      |
| 2051 | 2052*\$10,455,000 |

\*Denotes Final Maturity

(ii)No 2017B Second Lien Bonds are subject to mandatory sinking fund

redemption.

Section 3.2. Redemption at the Election or Direction of the City. In the case of any redemption of 2017 Second Lien Bonds at the election or direction of the City, the City shall give written notice to the Trustee of its election or direction so to redeem, of the date fixed for such redemption, of the series, and of the principal amounts of the 2017 Second Lien Bonds of each maturity of such series to be redeemed. Such notice shall be given at least 45 days prior to the specified redemption date (or such shorter period as shall be acceptable to the Trustee). If notice of redemption has been given as provided in Section 3.5, there shall be paid on or prior to the specified redemption date to the Trustee an amount in cash or Permitted Investments maturing on or before the specified redemption date which, together with other moneys, if any, available for the purpose and held by the Trustee, will be sufficient to redeem all of the 2017 Second Lien Bonds to be redeemed on the specified redemption date at their redemption price plus interest accrued and unpaid to the date fixed for redemption. Such cash and Permitted Investments shall be held in a separate, segregated account for the benefit of the

Owners of the 2017 Second Lien Bonds so called for redemption.

Section 3.3. Redemption Otherwise than at City's Election or Direction. Whenever by the terms of this Indenture the Trustee is required or authorized to redeem 2017 Second Lien Bonds otherwise than at the election or direction of the City, the Trustee shall select the 2017 Second Lien Bonds to be redeemed, give the notice of redemption and pay the redemption price, plus interest accrued and unpaid to the date fixed for redemption, in accordance with the terms of this Article III.

Section 3.4. Selection of 2017 Second Lien Bonds to Be Redeemed. If less than all of the 2017 Second Lien Bonds of like maturity of any series shall be called for prior redemption, the particular 2017 Second Lien Bonds or portion of 2017 Second Lien Bonds to be redeemed shall be selected at random by the Trustee in such manner as the Trustee in its discretion may deem fair and appropriate; provided, that the portion of any 2017 Second Lien Bond of a denomination of more than the minimum Authorized Denomination shall be in the principal amount of an Authorized Denomination and that, in selecting portions of such 2017 Second Lien Bonds for redemption, the Trustee shall treat each such 2017 Second Lien Bond as representing that number of 2017 Second Lien Bonds of the minimum Authorized Denomination which is obtained by dividing the principal amount of such 2017 Second Lien Bond to be

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redeemed in part by the minimum Authorized Denomination. If all 2017 Second Lien Bonds of any series are held in book-entry only form, the particular 2017 Second Lien Bonds or portions of 2017 Second Lien Bonds of such series to be redeemed shall be selected by the securities depository for such series of 2017 Second Lien Bonds in such manner as such securities depository shall determine.

Section 3.5. Notice of Redemption. When the Trustee shall receive notice from the City of its election or direction to redeem 2017 Second Lien Bonds pursuant to Section 3.2, and when redemption of 2017 Second Lien Bonds is authorized or required pursuant to Section 3.3, the Trustee shall give notice, in the name of the City, of the redemption of such 2017 Second Lien Bonds. Notice of redemption shall specify the series, maturities and CUSIP numbers of the 2017 Second Lien Bonds to be redeemed, the date fixed for redemption and the place or places where amounts due upon such date fixed for redemption will be payable (which shall be the Principal Office of the Trustee) and, if less than all of the 2017 Second Lien Bonds of any like series and maturity are to be redeemed, the letters and numbers or other distinguishing marks of such 2017 Second Lien Bonds so to be redeemed. In the case of 2017 Second Lien Bonds to be redeemed in part only, such notice shall also specify the respective portions of the principal amount of such 2017 Second Lien Bonds to be redeemed. Such notice shall further state that on such date there shall become due and payable the redemption price of each 2017 Second Lien Bond to be redeemed, or the redemption price of the specified portions of the principal of such 2017 Second Lien Bonds in the case of 2017 Second Lien Bonds to be redeemed in part only, together with interest accrued to the date fixed for redemption, and that from and after such date interest shall cease to accrue and be payable. Such notice shall either (i) state that the redemption is conditioned on there being on deposit in the applicable Principal and Interest Account on the date fixed for redemption sufficient moneys to pay the redemption price of the 2017 Second Lien Bonds to be redeemed or (ii) in the case of notices provided in connection with optional redemption, be sent only if sufficient moneys to pay the redemption price of the 2017 Second Lien Bonds to be redeemed is on deposit in the applicable Principal and Interest Account on the date fixed for redemption. The Trustee shall mail copies of such notice by first-class mail, postage prepaid, not more than 60 and not less than 30 days before the date fixed for redemption, to the Owners of the 2017 Second Lien Bonds to be redeemed at their addresses as shown on the registration books of the City maintained by the Trustee. Failure to give notice of redemption by mail to any particular Owner, or any defect in such notice, shall

not affect the validity of any proceedings for the redemption of 2017 Second Lien Bonds for which such notice has been properly given.

Section 3.6. Payment of Redeemed 2017 Second Lien Bonds. Notice having been given in the manner provided in Section 3.5, the 2017 Second Lien Bonds or portions of 2017 Second Lien Bonds so called for redemption shall become due and payable on the date fixed for redemption at the redemption price, plus interest accrued and unpaid to such date, and, upon presentation and surrender of such 2017 Second Lien Bonds at any place specified in such notice, such 2017 Second Lien Bonds, or portions of 2017 Second Lien Bonds, shall be paid at the redemption price, plus interest accrued and unpaid to such date. If there shall be called for redemption less than all of a 2017 Second Lien Bond, the City shall execute and the Trustee shall authenticate and deliver, upon the surrender of such 2017 Second Lien Bond, without charge to the Owner, for the unredeemed balance of the principal amount of the 2017 Second Lien Bond so surrendered, fully registered 2017 Second Lien Bonds of like series and maturity in any

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Authorized Denominations. If, on the date fixed for redemption, moneys for the redemption of all the 2017 Second Lien Bonds or portions of 2017 Second Lien Bonds of any like series and maturity to be redeemed, together with interest to such date, shall be held by the Trustee so as to be available on said date and if notice of redemption shall have been given as provided in Section 3.5, then, from and after the date fixed for redemption, interest on the 2017 Second Lien Bonds or portions of 2017 Second Lien Bonds of such series and maturity so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the date fixed for redemption, such 2017 Second Lien Bonds or portions of 2017 Second Lien Bonds shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

Section 3.7. Adjustment of Sinking Fund Payments. If through optional redemption the City redeems less than all the 2017 Second Lien Bonds of like maturity with respect to which Sinking Fund Payments have been established, the principal amount so redeemed shall be credited against the unsatisfied balance of future Sinking Fund Payments or the final maturity amount established with respect to such 2017 Second Lien Bonds, in such amount and against such Sinking Fund Payments or final maturity amount as shall be determined by the City in a Certificate of an Authorized Officer filed with the Trustee prior to the mailing of the notice of redemption of such 2017 Second Lien Bonds or, in the absence of such determination, shall be credited against the unsatisfied balance of the applicable Sinking Fund Payments in inverse order of their payment dates.

## ARTICLE IV REVENUES AND

## FUNDS

Section 4.1. Source of Payment of 2017 Second Lien Bonds. The 2017 Second Lien Bonds are not general obligations of the City but are limited obligations as described in Section 2.2 and as provided in the Series 2017 Bond Ordinance and this Indenture.

## Section 4.2. Amounts on Deposit to be Held in Trust.

a) The amounts on deposit in the funds and accounts created by this Indenture shall be held by

the Trustee for the sole and exclusive benefit of the 2017 Second Lien Bonds and shall be applied, used and withdrawn only for the purposes authorized in this Indenture.

b) The City will cause all moneys and securities held in the funds and accounts • created by the Senior Lien Bond Ordinances to be applied, used and withdrawn solely for the purposes authorized in those ordinances.

Section 4.3. Creation of the 2017 Second Lien Bonds Revenue Fund and the Accounts in It.

(a) There is by this Indenture created by the City and established with the Trustee a separate and segregated trust fund to be designated as the "City of Chicago Wastewater Transmission Revenue Bonds Series 2017 Second Lien Bonds Revenue Fund" (the "2017 Second Lien Bonds Revenue Fund").

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(b) Within the 2017 Second Lien Bonds Revenue Fund, there is by this Indenture created by the City and established with the Trustee two separate and segregated trust funds to be designated as the "City of Chicago Wastewater Transmission Revenue Bonds Project Series 2017A Second Lien Bonds Principal and Interest Account" (the "2017A Principal and Interest Account") and the "City of Chicago Wastewater Transmission Revenue Bonds Refunding Series 2017B Second Lien Bonds Principal and Interest Account" (the "2017B Principal and Interest Account" and together with the Series 2017A Principal and Interest Account, the "Principal and Interest Account").

Section 4.4. Deposit of 2017 Second Lien Bond Revenues. On the Business Day immediately preceding each January 1 and July 1, commencing January 1, 2018, the Authorized Officer shall withdraw from the 2017 Second Lien Bonds Subaccount of the Second Lien Bonds Account, and transfer to the Trustee for deposit into the 2017 Second Lien Bonds Revenue Fund, the amounts required to be on deposit in each of the 2017A Principal and Interest Account and the 2017B Principal and Interest Account as specified in the certificate delivered pursuant to Section 2.4(d). Upon receipt of such amounts, the Trustee shall deposit the same in the accounts of the 2017 Second Lien Bonds Revenue Fund. The Trustee shall be accountable only for moneys actually so received. Such certificate of the Authorized Officer, or any subsequent or supplemental certificate, shall be revised or supplemented from time to time whenever necessary to reflect changes in the deposit requirements relating to the 2017 Second Lien Bonds Revenue Fund as a result of the prepayment of 2017 Second Lien Bonds.

## Section 4.5. Administration of the Accounts in the 2017 Second Lien Bonds Revenue Fund.

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a) Administration of the Principal and Interest Accounts. Moneys on deposit in the 2017A Principal and Interest Account shall be held by the Trustee for the sole and exclusive benefit of the 2017A Second Lien Bonds and shall be used for the purpose of paying the principal of and interest on such 2017A Second Lien Bonds as it becomes due. Moneys on deposit in the 2017B Principal and Interest Account shall be held by the Trustee for the sole and exclusive benefit of the 2017B Second Lien Bonds as it becomes due. Moneys on deposit in the 2017B Second Lien Bonds and shall be used for the purpose of paying the principal of and interest on such 2017B Second Lien Bonds as it becomes due. Any earnings on amounts held in either Principal and Interest Account shall be credited to such account.

b) Investment of Moneys in the 2017 Second Lien Bonds Revenue Fund. Pending the use of

moneys held in an account of the 2017 Second Lien Bonds Revenue Fund, the Trustee shall invest such moneys in Permitted Investments upon the written direction of the Authorized Officer or any person designated to sign on behalf of the Authorized Officer. Moneys in the 2017A Principal and Interest Account and the 2017B Principal and Interest Account shall not be commingled for investment purposes.

### Section 4.6. 2017 Second Lien Bonds Not Presented for Payment.

(a) If any 2017 Second Lien Bonds shall not be presented for payment when the principal of such 2017 Second Lien Bonds becomes due under this Indenture or otherwise, if moneys sufficient to pay such 2017 Second Lien Bonds are held by the Trustee for the benefit of the Owners of such 2017 Second Lien Bonds, the Trustee shall segregate and hold such moneys in a trust account separate and apart from the other funds and accounts held under this Indenture,

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without liability for interest on such moneys, for the benefit of such Bondholders who shall (except as provided in the following paragraph) thereafter be restricted exclusively to such fund or funds for the satisfaction of any claim of whatever nature under such 2017 Second Lien Bond and this Indenture. Any such moneys shall be invested in general obligations of, or obligations the principal of and interest on which are fully guaranteed as to timely payment by, the United States of America, which obligations shall mature not later that the date or dates on which such funds will be needed for the purposes for which such funds were deposited, and in any event, not later than 31 days from the date of such investment.

(b) Any moneys which the Trustee shall segregate and hold in trust for the payment of the principal of or interest on any 2017 Second Lien Bond and which shall remain unclaimed for two years after such principal or interest has become due and payable shall, upon the City's written request to the Trustee, be paid to the City. After the payment of such unclaimed moneys to the City, the Owner of such 2017 Second Lien Bond shall thereafter look only to the City for the payment of such 2017 Second Lien Bonds, unless an abandoned property law designates another person, and all liability of the Trustee with respect to such moneys shall thereupon cease.

# ARTICLE V GENERAL

## COVENANTS OF THE CITY

Section 5.1. Equality of 2017 Second Lien Bonds. Each 2017 Second Lien Bond authorized under this Indenture shall be on a parity and rank equally without preference, priority or distinction over any other 2017 Second Lien Bond as to security, regardless of the time or times of their issue, and the provisions, covenants and agreements set forth in this Indenture to be performed by and on behalf of the City shall be for the equal benefit, protection and security of the Owners of any and all 2017 Second Lien Bonds. The City covenants that it will not issue any obligations with a claim for payment or secured by the Second Lien Bond Revenues or, except as otherwise provided in Section 5.5 of this Indenture, any other moneys pledged under this Indenture having priority over or, except for Second Lien Parity Bonds, being on a parity with the 2017 Second Lien Bonds.

Section 5.2. Punctual Payment. The City covenants that it will duly and punctually pay or cause to be paid the principal of, premium, if any, and interest on all 2017 Second Lien Bonds in strict conformity with the terms of such 2017 Second Lien Bonds and of this Indenture, and that it will faithfully observe and perform all

the conditions, covenants and requirements of the Series 2017 Bond Ordinance, this Indenture, and of the 2017 Second Lien Bonds issued under them.

Section 5.3. Maintenance and Continued Operation of Sewer System. The City will maintain the Sewer System in good repair and working order, will continuously operate it on a Fiscal Year basis, and will punctually perform all duties with respect to the Sewer System required by the Constitution and laws of the State.

So long as the 2017 Second Lien Bonds are Outstanding, the City will continue to operate the Sewer System as a revenue-producing system so as to produce Gross Revenues sufficient to satisfy the covenants of this Indenture.

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(ii) to pay, redeem or refund any Senior Lien Bonds or Second Lien Bonds if the sum of the Aggregate Senior Lien Debt Service and the Aggregate Second Lien Debt Service after the issuance of the Second Lien Parity Bonds and the payment, redemption or refunding of such Senior Lien Bonds or Second Lien Bonds will not be in excess of the sum of the Aggregate Senior Lien Debt Service or Aggregate Second Lien Debt Service prior to the issuance of the Second Lien Parity Bonds in each Fiscal Year in which there was to be any Aggregate Senior Lien Debt Service or Aggregate Second Lien Debt Service or Aggregate Senior Lien Debt Service or Aggregate Second Lien Bonds.

(c) Other obligations, including Subordinate Lien Obligations, may be issued payable from Net Revenues Available for Bonds on a basis subordinate to the Second Lien Bonds.

Section 5.6. Covenant Against Pledge of Second Lien Bond Revenues. The City shall not hereafter issue any bonds, notes, or other evidences of indebtedness secured by the pledge contained in Section 2.2 of this Indenture, other than Second Lien Parity Bonds, and shall not create or cause to be created any lien or charge on Net Revenues Available for Bonds, or on any amounts pledged for the benefit of Owners of 2017 Second Lien Bonds under this Indenture, other than the pledge contained in Section 2.2 of this Indenture, provided that neither this Section nor any other provision of this Indenture shall prevent the City from (a) issuing Senior Lien Bonds, (b) issuing bonds, notes or other evidences of indebtedness payable out of, or secured by a pledge of, Net Revenues Available for Bonds to be derived on and after such date as the pledge contained in Section 2.2 of this Indenture shall be discharged and satisfied as provided in Section 8.1, or (c) issuing bonds, notes or other evidences of indebtedness which are payable out of, or secured by, or to which are pledged amounts which may be withdrawn from or secured by the Second Lien Bonds Account so long as such pledge is expressly junior and subordinate to the pledge contained in Section 2.2 of this Indenture.

Section 5.7. Repairs, Replacements, Additions, Betterments. The City from time to time will make all necessary and proper repairs, replacements, additions and betterments to the Sewer System so that the Sewer System may at all times be operated efficiently, economically and properly. When any necessary equipment or facility shall have been worn out, destroyed or otherwise is insufficient for proper use, it shall be promptly replaced so that the value and efficiency of the Sewer System shall be at all times fully maintained.

Section 5.8. Control and Operation of Sewer System. The City will establish such rules and regulations for the control and operation of the Sewer System as are necessary for the safe, lawful, efficient and economical operation of the Sewer System.

Section 5.9. Indenture to Constitute Contract. In consideration of the purchase and acceptance of the 2017 Second Lien Bonds by the Owners from time to time of such 2017 Second Lien Bonds, the provisions of this Indenture shall constitute a contract among the City, the Trustee and the Owners from time to time of the 2017 Second Lien Bonds.

Section 5.10. Performance of Covenants; Authority. The City shall faithfully perform at all times to the extent applicable to the City any and all covenants, undertakings, stipulations and provisions contained in the Series 2017 Bond Ordinance, this Indenture, in any and every 2017 Second Lien Bond executed, authenticated and delivered under this Indenture, and in all proceedings pertaining to this Indenture.

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# Section 5.11. Arbitrage and Tax Exemption Covenants.

a) The City will not direct or permit any action which (or fail to take any action the failure of which) would cause any 2017 Second Lien Bond to be an "arbitrage bond" within the meaning of the Code, as amended from time to time and as applicable to the 2017 Second Lien Bonds.

b) The covenants and agreements of the City set forth in this Section 5.11 shall apply as long as any of the 2017 Second Lien Bonds continue to bear interest (whether or not they are Outstanding within the meaning of this Indenture) and shall also apply after the 2017 Second Lien Bonds cease to bear interest but only within such subsequent period as shall be required for the City to comply with the covenants of this Section 5.11.

c) The City (i) will take all actions that are necessary to be taken (and avoid taking any action that it is necessary to avoid being taken) so that interest on the 2017 Second Lien Bonds will not be or become subject to federal income taxation under present law, and (ii) will take all actions reasonably within its power to take that are necessary to be taken (and avoid taking any actions that are reasonably within its power to avoid taking and that it is necessary to avoid) so that interest on the 2017 Second Lien Bonds will not be or become includable in gross income for federal income tax purposes under the federal income tax laws as in effect from time to time.

d) The City will, without limitation, (i) to the extent required by the Code, restrict the yield on investments of amounts received upon the sale of the 2017 Second Lien Bonds and other amounts, and (ii) timely rebate to the United States of America certain amounts that may be received as interest or other investment earnings on accounts of the Sewer Revenue Fund, all as shall be necessary to comply with this Section. The City shall also make or cause to be made identifiable investments of amounts allocable to the 2017 Second Lien Bonds as shall be necessary or appropriate to be able to ascertain the amounts that may be required so to be rebated to the United States of America. The City shall from time to time determine the amounts in accounts of the Sewer Revenue Fund that shall be subject so to be rebated and those amounts from time to time shall be held by the City in a rebate account for the 2017 Second Lien Bonds and shall be rebated to the United States of America in the amounts and at the times as required. Such amounts so subject from time to time so to be rebated shall not be available for the other purposes for which the Sewer Revenue Fund and its accounts and sub-accounts established by this Indenture may be applied, and, for purposes of computing the balance in the Sewer Revenue Fund and such various accounts shall be disregarded.

e) The City will not take any of the following actions without in each such event obtaining the

Opinion of Bond Counsel (which may represent the City from time to time in other matters) that such action will not contravene any covenant of this Indenture and will not make compliance with those covenants impossible: (i) defease any 2017 Second Lien Bonds; (ii) sell, lease or otherwise dispose of any material portion of the Sewer System; (iii) enter into or amend any short-term or long-term contract for sewer service by the City other than pursuant to general rates charged to the general public; or (iv) enter into or amend any contract or arrangement for persons other than its employees to manage the Sewer System.

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(f) The provisions of this Section 5.11 shall not be interpreted to impose upon the City any obligation to redeem or to purchase any 2017 Second Lien Bonds other than with proceeds or other amounts available under this Indenture.

Section 5.12. Registered Owner Remedy. Subject to the assignment of rights with respect to Insured Series 2017 Second Lien Bonds as set forth in Exhibit B, any Owner of a 2017 Second Lien Bond may proceed by civil action to compel performance of all duties required by this Indenture, including the establishment and collection of sufficient fees, charges and rates for services supplied by the Sewer System, and the application of Gross Revenues as provided by this Indenture.

## ARTICLE VI APPOINTMENT AND

## DUTIES OF TRUSTEE

Section 6.1. Appointment of Trustee. The City appoints Amalgamated Bank of Chicago, Chicago, Illinois, as Trustee, for the purposes and upon the express terms and conditions set forth in this Indenture. The acceptance by the Trustee of its appointment shall be evidenced by its execution and delivery of this Indenture, which shall constitute a representation and warranty by the Trustee that the Trustee is duly authorized to accept its appointment as Trustee and perform its duties as Trustee under this Indenture. The City by its delivery and the Bondholders by their acceptance of delivery of any of the 2017 Second Lien Bonds agree to the terms set forth in this Indenture.

Section 6.2. No Responsibility for Recitals. The recitals, statements and representations contained in this Indenture or in the 2017 Second Lien Bonds, except for the Trustee's authentication upon the 2017 Second Lien Bonds, shall be taken and construed as made by and on the part of the City, and not by the Trustee, and the Trustee does not assume, and shall not have, any responsibility or obligation for the correctness of this Indenture. Nothing contained in this Section 6.2 shall limit the responsibilities of the Trustee expressly set forth in this Indenture.

## Section 6.3. Limitations on Liability of Trustee.

a) The Trustee may execute any of the trusts or powers of this Indenture and perform the duties required under this Indenture by or through attorneys, agents or receivers, and shall be entitled to, and may rely upon, written advice of counsel concerning all matters of trust and duty under this Indenture, and the Trustee shall not be answerable for the negligence or misconduct of any such attorney or agent selected by it with reasonable care.

b) The Trustee need perform only those duties that are specifically set forth in this Indenture and no others.

c) The Trustee shall not be answerable for the exercise of any discretion or power under this Indenture or for anything whatsoever in connection with the trust created by this Indenture, except only for its own negligence or bad faith.

d) The Trustee shall not be accountable for the use or application of the proceeds of any of the 2017 Second Lien Bonds issued under this Indenture.

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Section 6.4. Compensation, Expenses and Advances. The Trustee shall be entitled to reasonable compensation for its services rendered under this Indenture (not limited by any provision of law in regard to the compensation of the Trustee of an express trust) and to reimbursement for its actual out-of-pocket expenses (including the reasonable compensation and the expenses and disbursements of its agents and counsel) reasonably incurred in connection therewith except for such expenses incurred as a result of its negligence or bad faith. The City shall have the right to contest in good faith any fees or expenses of the Trustee without creating a default under this Indenture.

Section 6.5. Good Faith Reliance. The Trustee in the absence of bad faith on its part shall be protected and shall incur no liability in acting upon any resolution, notice, request, consent, waiver, certificate, statement, affidavit, voucher, bond, requisition or other paper or document or telephonic notice (where authorized by this Indenture) which it shall believe to be genuine and to have been passed or signed by the proper board, body or person or to have been prepared and furnished pursuant to any of the provisions of this Indenture, or upon the written opinion of any attorney, engineer, accountant or other expert, and the Trustee shall be under no duty to make any investigation or inquiry as to any statements contained or matters referred to in any such instrument, but may accept and rely upon the same as conclusive evidence of the truth and accuracy of such statements; provided that the Trustee shall not be so protected if the Trustee has actual knowledge with respect to such matters to the contrary.

The Trustee shall not be bound to recognize any person as an Owner of 2017 Second Lien Bonds or to take any action at the request of such person unless satisfactory evidence of the ownership of such 2017 Second Lien Bond shall be furnished to the Trustee.

Any request or direction of the City as provided in this Indenture shall be sufficiently evidenced by, and the Trustee may conclusively rely upon, a written instrument from the City signed by the Authorized Officer or any person designated to sign on behalf of the Authorized Officer. As to any fact or circumstance concerning which the Trustee requests verification, the Trustee may conclusively rely upon a certificate signed by the Authorized Officer.

Section 6.6. Dealings in 2017 Second Lien Bonds and with City. The Trustee may buy, sell, own, hold and deal in any of the 2017 Second Lien Bonds issued under this Indenture for its own account or that of any other person, and may join in any action which any Bondholder may be entitled to take with like effect as if it did not act in any capacity under this Indenture. The Trustee, either as principal or agent, also may engage in or be interested in any financial or other transaction with the City and may act as depository, trustee or agent for any committee or body of Bondholders secured by this Indenture or other obligations of the City as freely as if

it did not act in any capacity under this Indenture.

Section 6.7. Resignation of Trustee. The Trustee may resign and be discharged of the trusts created by this Indenture by executing an instrument in writing resigning such trusts and specifying the date when such resignation shall take effect, and filing the same with the City, not fewer than 45 days before the date specified in such instrument when such resignation shall take effect, and by giving Notice by Mail of such resignation, not fewer than 21 days prior to such resignation date, to the Owners of Outstanding 2017 Second Lien Bonds. Such resignation shall take effect on the day specified in such instrument and notice, but only if a successor Trustee

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shall have been appointed and shall have accepted the duties of the Trustee set forth as in this Indenture. After any such resignation, the City shall cause Notice by Mail of such resignation to be given to the Insurer. If the successor Trustee shall not have been appointed within a period of 90 days following the giving of such notice, then the Trustee shall be authorized to petition any court of competent jurisdiction to appoint a successor Trustee as provided in Section 6.11 of this Indenture.

Section 6.8. Removal of Trustee. The Trustee may be removed by the City at any time by filing with the Trustee an instrument or instruments in writing executed by the City, appointing a successor. Such removal shall be effective 30 days (or such longer period as may be set forth in such instrument) after delivery of the instrument; provided that no such removal shall be effective until the successor Trustee appointed under this Indenture shall execute, acknowledge and deliver to the City an instrument accepting such appointment under this Indenture. After any such removal, the City shall cause Notice by Mail of such removal to be given to the Insurer.

Section 6.9. Appointment of Successor Trustee. If at any time the Trustee shall be removed, or be dissolved, or if its property or affairs shall be taken under the control of any state or federal court or administrative body because of insolvency or bankruptcy, or for any other reason, and if the Trustee shall resign, then a vacancy shall immediately and ipso facto exist in the office of the Trustee and a successor may be appointed by the City. After any appointment by the City, it shall cause notice of such appointment to be given to the predecessor Trustee and the successor Trustee, and shall cause Notice by Mail to be given to all Bondholders and the Insurer. No such appointment shall be effective until the successor Trustee shall have accepted such appointment.

Section 6.10. Qualifications of Successor Trustee. Every successor Trustee shall be a commercial bank with trust powers or a trust company (a) duly organized under the laws of the United States or any state or territory of the United States, (b) authorized under such laws to perform all the duties imposed upon it by this Indenture and the laws of the State, (c) capable of meeting its obligations under this Indenture, (d) subject to supervision or examination by Federal or state authority, and (e) with combined capital and surplus of at least \$50,000,000. If the Trustee publishes reports of condition at least annually pursuant to law or the requirements of such authority, then for the purposes of this Section 6.10 the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

Section 6.11. Judicial Appointment of Successor Trustee. If the Trustee resigns and no appointment of a successor Trustee is made pursuant to the foregoing provisions of this Indenture prior to the date specified in the notice of resignation as the date when such resignation is to take effect, the retiring Trustee may

immediately apply to a court of competent jurisdiction for the appointment of a successor Trustee. Such court may thereupon, after such notice, if any, as it may deem proper and prescribe, appoint a successor Trustee meeting the qualifications set forth in Section 6.10 of this Indenture.

Section 6.12. Acceptance of Trusts by Successor Trustee. In order to evidence the acceptance of the position of Trustee under this Indenture, any successor Trustee appointed under this Indenture shall execute, acknowledge and deliver to the City an instrument accepting

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such appointment under this Indenture, and thereupon such successor Trustee, without any further act, deed or conveyance, shall become duly vested with all the estates, property, rights, powers, trusts, duties and obligations of its predecessor in the trust under this Indenture, with like effect as if originally named Trustee in this Indenture. Upon request of such Trustee, such predecessor Trustee and the City shall execute and deliver an instrument transferring to such successor Trustee all the estates, property, rights, powers and trusts under this Indenture of such predecessor Trustee and, subject to the provisions of Section 6.4 of this Indenture, such predecessor Trustee shall pay over and deliver to the successor Trustee all moneys and other assets at the time held by it under this Indenture.

Section 6.13. Successor by Merger or Consolidation. Any corporation into which any Trustee under this Indenture may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which any Trustee under this Indenture shall be a party, or any company to which all or substantially all of the corporate trust business of the Trustee may be sold or transferred, shall be the successor Trustee under this Indenture, without the execution or filing of any paper or any further act on the part of the parties to this Indenture, anything in this Indenture to the contrary notwithstanding.

Section 6.14. Standard of Care; Action by Trustee. Notwithstanding any other provisions of this Indenture, the Trustee shall exercise such of the rights and powers vested in it by this Indenture and use the same degree of skill and care in its exercise as a prudent person would use and exercise under the circumstances in the conduct of his or her own affairs; provided that the Trustee shall be under no obligation to take any action in respect of the execution or enforcement of any of the trusts created by this Indenture, or to institute, appear in or defend any suit or other proceeding in connection with such execution or enforcement, unless requested in writing so to do by Bondholders of at least a majority in aggregate principal amount of the 2017 Second Lien Bonds then Outstanding, and, if in its opinion such action may tend to involve it in expense or liability, unless furnished from time to time as often as it may require, with security and indemnity satisfactory to it; but the foregoing provision is intended only for the protection of the Trustee.

Except as otherwise provided in this Indenture, the Trustee need perform only those duties that are specifically set forth in this Indenture and no others. Nothing in this Section 6.14 shall permit the Trustee to delay the exercise of any mandatory power or direction under this Indenture.

Section 6.15. Duties of the Trustee. The Trustee covenants and agrees:

a) to keep such books and records as shall be consistent with prudent industry practice, and to make such books and records available for inspection by the City at all reasonable times; and

b) to provide such information and reports to the Authorized Officer as shall be reasonably requested by the Authorized Officer.

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## ARTICLE VII

#### AMENDMENTS TO THIS INDENTURE

Section 7.1. Limitations on Amendments to this Indenture. This Indenture shall not be modified or amended in any respect subsequent to the issuance of the 2017 Second Lien Bonds except as provided in and in accordance with and subject to the provisions of this Article VII.

#### Section 7.2. Amendments Without Bondholder Consent.

(a) The City and the Trustee may, from time to time and at any time, without the consent of or notice to the Bondholders, amend this Indenture as follows:

i) to cure any formal defect, omission, inconsistency or ambiguity in this Indenture;

ii) to provide limitations and restrictions in addition to the limitations and restrictions contained in this Indenture on, the issuance of Second Lien Parity Bonds or other evidences of indebtedness;

iii) to grant to or confer or impose upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers, authority, security, liabilities or duties which may lawfully be granted, conferred or imposed and which are not contrary to or inconsistent with this Indenture as heretofore in effect, provided that no such additional liabilities or duties shall be imposed upon the Trustee without its consent;

iv) to add to the covenants and agreements of, and limitations and restrictions upon the City in this Indenture, other covenants, agreements, limitations and restrictions to be observed by the City which are not contrary to or inconsistent with this Indenture;

v) to confirm, as further assurance, any pledge under, and the subjection to any claim, lien or pledge created or to be created by, this Indenture, or of any moneys, securities or funds;

vi) to authorize a different denomination or denominations of the 2017 Second Lien Bonds and to make correlative amendments and modifications to this Indenture regarding exchangeability of 2017 Second Lien Bonds of different denominations and similar amendments and modifications of a technical nature;

vii) to comply with any applicable requirements of the Trust Indenture Act of 1939, as from time to time amended; or

viii) to modify, alter, amend or supplement this Indenture in any other respect which is not

materially adverse to the Bondholders and which does not involve a change described in clause (i), (ii) or (iii) of Section 7.3(a) of this Indenture and which, in the judgment of the Trustee (which may rely upon an Opinion of Bond Counsel), is not to the material prejudice of the Trustee.

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(b) Before the City and the Trustee shall amend this Indenture pursuant to this Section 7.2, there shall have been delivered to the Trustee an Opinion of Bond Counsel stating that such amendment is authorized or permitted by this Indenture, complies with the terms of this Indenture, will, upon the adoption of this Indenture, be valid and binding upon the City in accordance with its terms and will not adversely affect the exclusion of interest on any 2017 Second Lien Bonds from the gross income of the owners of 2017 Second Lien Bonds for federal income tax purposes under the Code, and the Trustee may rely conclusively upon such opinion as to such matters.

## Section 7.3. Amendments with Bondholder Consent.

a) Except for any amendment adopted pursuant to Section 7.2 of this Indenture, subject to the terms and provisions contained in this Section and not otherwise, the City and the Trustee may, from time to time, with the written consent of the Insurer and the Bondholders of more than 50 percent in aggregate principal amount of the 2017 Second Lien Bonds then Outstanding (excluding therefrom any 2017 Second Lien Bonds then owned by the City), enter into any Supplemental Indenture deemed necessary or desirable by the City for the purposes of modifying, altering, amending, supplementing or rescinding, in any particular, any of the terms or provisions contained in this Indenture; provided that, unless approved in writing by the Owners of all the 2017 Second Lien Bonds then Outstanding, nothing in this Indenture shall permit, or be construed as permitting: (i) a change in the times, amounts or currency of payment of the principal of or interest on any Outstanding 2017 Second Lien Bond, or a reduction in the principal amount of any Outstanding 2017 Second Lien Bonds over any other 2017 Second Lien Bond or 2017 Second Lien Bonds over any other 2017 Second Lien Bond or 2017 Second Lien Bonds, or (ii) a reduction in the aggregate principal amount of 2017 Second Lien Bonds, the consent of the Owners of which is required for any such amendment.

b) If at any time the City shall propose to enter into any Supplemental Indenture for any of the purposes of the Section, the Trustee shall cause Notice by Mail of the proposed Supplemental Indenture to be given to all Bondholders owning Outstanding 2017 Second Lien Bonds. Such notice shall briefly set forth the nature of the proposed Supplemental Indenture and shall state that a copy of this Indenture is on file at the Principal Office of the Trustee for inspection by all Bondholders.

c) Within six months after the date of the first mailing of such notice, the City and the Trustee may enter into such Supplemental Indenture in substantially the form described in such notice, but only if there shall have first been delivered to the Trustee (i) the required consents, in writing, of the Bondholders and the Insurer, and (ii) an Opinion, of Bond Counsel stating that such Supplemental Indenture is authorized or permitted by this Indenture, complies with the terms of this Indenture and, upon the execution and delivery of this Indenture, will be valid and binding upon the City in accordance with its terms and will not adversely affect the exclusion of interest on any 2017 Second Lien Bonds entitled to such exclusion from the gross income of the owners of the 2017 Second Lien Bonds for federal income tax purposes under the Code. The Trustee may rely conclusively upon such opinion as to such matters.

d) If Owners of not less than the percentage of 2017 Second Lien Bonds required by this Section shall have consented to and approved the execution and delivery of a Supplemental

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Indenture as provided in this Indenture, no Bondholder shall have any right to object to the execution and delivery of such Supplemental Indenture, or to object to any of the terms and provisions contained in such Supplemental Indenture or the operation of such Supplemental Indenture, or in any manner question the propriety of the execution and delivery of such Supplemental Indenture, or to enjoin or restrain the City or the Trustee from executing and delivering the same or from taking any action pursuant to the provisions of such Supplemental Indenture.

e) The Trustee shall give notice of any proposed amendment or supplement entered into pursuant to this Section 7.3 at least 15 days in advance of the effectiveness of such amendment or supplement directly to any Rating Agency having a rating in effect with respect to the 2017 Second Lien Bonds at an address as shall be provided to the City for such notice.

f) The Insurer shall be provided with a transcript of all proceedings relating to the execution of any amendment or supplement entered into pursuant to this Section 7.3.

Section 7.4. Effect of Supplemental Indenture. Upon the execution and delivery of any Supplemental Indenture pursuant to the provisions of this Indenture, this Indenture shall be and be deemed to be, modified and amended in accordance therewith, and the respective rights, duties and obligations under this Indenture of the City, the Trustee and all Bondholders owning 2017 Second Lien Bonds then Outstanding shall thereafter be determined, exercised and enforced under this Indenture subject in all respects to such modifications and amendments.

## ARTICLE VIII

## MISCELLANEOUS

#### Section 8.1. Defeasance.

a) If the City shall pay or cause to be paid to the Owners of all Outstanding 2017 Second Lien Bonds, the principal or and interest to become due on the 2017 Second Lien Bonds, at the times and in the manner stipulated in the 2017 Second Lien Bonds and in this Indenture, then the pledge of any moneys, securities, funds and property pledged by this Indenture and all other rights granted by this Indenture shall be discharged and satisfied. In such event, the Trustee shall, upon the request of the City, execute and deliver to the City all such instruments as may be desirable to evidence such discharge and satisfaction, and the Trustee shall pay over or deliver all moneys or securities held by it pursuant to this Indenture which are not required for the payment or redemption of 2017 Second Lien Bonds theretofore surrendered for such payment or redemption. If the City shall pay or cause to be paid, or there shall otherwise be paid, to the Owners of any Outstanding 2017 Second Lien Bonds, at the times and in the manner stipulated in the 2017 Second Lien Bonds and in this Indenture, such 2017 Second Lien Bonds shall cease to be entitled to any benefit or security under this Indenture and all covenants, agreements and obligations of the City to the Owners of such 2017 Second Lien Bonds shall thereupon cease, terminate and become void and be discharged and satisfied. b) Outstanding 2017 Second Lien Bonds shall, prior to the maturity or redemption date of such 2017 Second Lien Bonds, be deemed to have been paid as meant and with the effect

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expressed in paragraph (a) of this Section if: (i) in case any of said 2017 Second Lien Bonds are to be redeemed on any date prior to their maturity, the City shall have given to the Trustee or an escrow agent in form satisfactory to it irrevocable instructions to give as provided in Article III notice of redemption on said date of such notice, (ii) there shall have been deposited with or held by the Trustee or any escrow agent either moneys in an amount which shall be sufficient, or noncallable, nonprepayable Defeasance Obligations the principal of and the interest on which when due will provide moneys which, together with the moneys, if any, deposited with or held by the Trustee or escrow agent at the same time, shall be sufficient to pay when due the principal of, redemption premium, if any, and interest due and to become due on said 2017 Second Lien Bonds on and prior to the maturity date or redemption date of such 2017 Second Lien Bonds, as the case may be, as certified by an independent certified public accountant acceptable to the Trustee, provided that such certification may be made by the Trustee, escrow agent or an investment banking firm in connection with a current refunding, and (iii) if any 2017 Second Lien Bonds do not mature and are not by their terms subject to redemption within the next succeeding 60 days, the City shall have given the Trustee or escrow agent in form satisfactory to it irrevocable instructions to provide Notice by Mail, as soon as practicable, to the Owners of such 2017 Second Lien Bonds that the deposit required by clause (ii) above has been made with the Trustee or escrow agent and that said 2017 Second Lien Bonds are deemed to have been paid in accordance with this Section and stating such maturity or redemption date upon which moneys are to be available for the payment of the principal of, redemption premium, if any, and interest on said 2017 Second Lien Bonds. Neither Defeasance Obligations nor moneys deposited with the Trustee or escrow agent pursuant to this Section nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of, redemption premium, if any, and interest on said 2017 Second Lien Bonds, and such 2017 Second Lien Bonds not so defeased shall have no right to such moneys and Defeasance Obligations; but any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Trustee or escrow agent, if not then needed for such purpose, shall to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal of, redemption premium, if any, and interest to become due on said 2017 Second Lien Bonds on and prior to such redemption date or maturity date of such 2017 Second Lien Bonds, as the case may be, and interest earned from such reinvestments shall be paid over to the City free and clear of any trust, lien or pledge.

(c) Nothing in this Indenture shall prohibit any deposit of Defeasance Obligations, as provided in paragraph (b) above, from being subject to a subsequent sale of such Defeasance Obligations and reinvestment of all or a portion of the proceeds of that sale in Defeasance Obligations which, together with money to remain so held in trust with the Trustee or escrow agent, shall be sufficient to provide for the payment of the principal of and interest on any 2017 Second Lien Bonds deemed to have been paid as provided in paragraph (b) above. Amounts held by the Trustee or escrow agent in excess of the amounts needed so to provide for the payment of such 2017 Second Lien Bonds may be subject to withdrawal by the City for deposit in the Sewer Revenue Fund.

Section 8.2. Parties in Interest. Except as otherwise specifically provided in this Indenture, nothing in this Indenture expressed or implied is intended or shall be construed to confer upon or to give or grant to any person, or entity other than the City, the Trustee, and the

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Bondholders any right, remedy or claim under or by reason of this Indenture, or as any covenant, condition or stipulation of this Indenture, and all covenants, stipulations, promises, and agreements in this Indenture contained by and on behalf of the City shall be for the sole and exclusive benefit of the City, the Trustee and the Bondholders.

Section 8.3. Severability. If any one or more of the provisions of this Indenture or of the 2017 Second Lien Bonds issued under this Indenture shall, for any reason be held to be illegal or invalid, such illegality or invalidity shall not affect any other provisions of this Indenture or such 2017 Second Lien Bonds, and this Indenture and such 2017 Second Lien Bonds shall be construed and enforced as if such illegal or invalid provision or provisions had not been contained in this Indenture or such 2017 Second Lien Bonds.

Section 8.4. No Personal Liability of Officials of City. No covenant or agreement contained in the 2017 Second Lien Bonds or in this Indenture shall be deemed to be the covenant or agreement of any official, officer, agent or employee of the City in his or her individual capacity, and neither the members of the City Council nor any official executing the 2017 Second Lien Bonds shall be liable personally on the 2017 Second Lien Bonds or this Indenture, or be subject to any personal liability or accountability by reason of the issuance of the 2017 Second Lien Bonds or the execution and delivery of the 2017 Second Lien Bonds or this Indenture.

Section 8.5. Counterparts. This Indenture may be executed in any number of counterparts, each of which, when so executed and delivered, shall be an original; but such counterparts shall together constitute but one and the same Indenture.

Section 8.6. Governing Law. The laws of the State shall govern the construction and enforcement of this Indenture and of all 2017 Second Lien Bonds issued under this Indenture.

Section 8.7. Notices. Except as otherwise provided in this Indenture, all notices, certificates, requests, requisitions or other communications by the City, the Trustee or the Insurer pursuant to this Indenture shall be in writing and shall be sufficiently given and shall be deemed given when sent by facsimile, followed by hard copy mailed by first class mail, postage prepaid, addressed as follows: if to the City, at the City Hall, Department of Finance, 121 North LaSalle Street, 7th Floor, Chicago, Illinois 60602, Attention: Chief Financial Officer; if to the Trustee, at 30 North LaSalle Street, 38th Floor, Chicago, Illinois 60602, Attention: Corporate Trust Department; and if to the Insurer, at the address specified in Exhibit B hereto. Any of the foregoing may, by notice given under this Indenture to each of the others, designate any further or different addresses to which subsequent notices, certificates, requests or other communications shall be sent under this Indenture, including without limitation, telephonic, facsimile or other similar forms of notice.

Section 8.8. Business Days and Times. If the date for making any payment or the last date for performance of any act or the exercising of any right, as provided in this Indenture, shall not be a Business Day, such payment may be made or act performed or right exercised on the next succeeding Business Day, with the same force and effect as if done on the nominal date provided in this Indenture, and no interest shall accrue for the period after such nominal date.

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Section 8.9. Partial Validity. If any section, paragraph, clause or provision of this Indenture shall be held invalid, the invalidity of such section, paragraph, clause or provisions shall not affect any of the other provisions of this Indenture.

Section 8.10. Subject to Bond Ordinance. Each trust indenture for each series of the Outstanding Second Lien Bonds is subject to the bond ordinance authorizing such series. This Indenture is subject to the Series 2017 Bond Ordinance.

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In Witness Whereof, the City of Chicago has caused this Indenture to be executed by its Chief Financial Officer, attested by its City Clerk or its Deputy City Clerk and its corporate seal to be affixed to this Indenture; and the Trustee has caused this Indenture to be executed by one of its Authorized Officers, all as of the day and year first above written.

Cyw of Chicago

V Carole L. Brown Chief Financial Officer

[Seal]

Andrea M. Valencia City Clerk

Amalgamated Bank of Chicago, as Trustee

*Title:* r < jP

[Indenture]

# EXHIBIT A

## Forms of 2017 Second Lien Bonds

A. Forms Generally. The 2017 Second Lien Bonds, the Certificate of Authentication and the Form of Assignment to be printed on each of the 2017 Second Lien Bonds shall be substantially in the respective form for either the 2017A Second Lien Bonds or the 2017B Second Lien Bonds, as appropriate, set forth in this Exhibit A with such appropriate insertions, omissions, substitutions, series designations, and other variations as are permitted or required by this Indenture and may have such letters, numbers or other marks of identification (including identifying numbers and letters of the Committee on Uniform Securities Identification Procedures of the American Bankers Association) and such legends and endorsements (including any reproduction of an Opinion of Bond Counsel) thereon as may, consistently herewith, be established by the City or determined by the officers executing such 2017 Second Lien Bonds as evidenced by their execution of this Indenture.

The definitive 2017 Second Lien Bonds shall be printed, lithographed, typewritten or engraved, produced by any combination of these methods, or produced in any other similar manner, all as determined by the officers executing such 2017 Second Lien Bonds as evidenced by their execution of this Indenture, but any temporary 2017 Second Lien Bond may be typewritten or photocopied or otherwise reproduced.

B. Form of 2017A Second Lien Bonds. The Form of the 2017A Second Lien Bonds shall be substantially as follows:

Unless this certificate is presented by an authorized representative of The Depository Trust Company, a New York corporation ("DTC"), to the issuer or its agent for registration of transfer, exchange, or payment, and ANY certificate issued is registered in the name of Cede & Co. or in such other name as is requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of dtc), any transfer, pledge, or other use of this certificate for value or otherwise by or to any person is wrongful inasmuch as the registered owner of this certificate, cede & co., has an interest in this certificate.

## Registered Principal Amount

No. RA- \$

CUSIP NO.

## United States of America State of Illinois City of Chicago Second Lien Wastewater Transmission Revenue Bond, Project Series 2017A

Maturity Date: January 1,20

Dated: June 21, 2017

Interest Rate: %

Owner: Cede & Co.

The City of Chicago (the "City") by this bond acknowledges itself to owe and, for value received, by this bond promises to pay to the Owner (named above) or registered assigns (such Owner or assigns being referred to in this 2017A Second Lien Bond as the Bondholder), on the Maturity Date (identified above), upon the presentation and surrender of this bond as set forth below, the Principal Amount (stated above) and interest on said Principal Amount from and including the most recent Interest Payment Date (as

described below) with respect to which interest has been paid or duly provided for, until payment of said Principal Amount has been made or duly provided for, at the interest rate specified above, computed on the basis of a 360-day year consisting of twelve 30-day months, payable on January 1 and July 1 of each year, commencing January 1, 2018. The principal and redemption price of this bond is payable at the principal corporate trust office of Amalgamated Bank of Chicago, in the City of Chicago, Illinois, or its successors or assigns, as Trustee (the "Trustee"). The interest so payable on any Interest Payment Date will, subject to certain exceptions provided in the Indenture (as defined herein), be paid to the person in whose name this bond is registered at the close of business on the applicable Record Date (the December 15 preceding each January 1 and the June 15 preceding each July 1) preceding such Interest Payment Date. Interest on this bond is payable by the Trustee in the manner provided in the Indenture.

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This bond is one of the duly authorized series of Second Lien Wastewater Transmission Revenue Bonds of the City of Chicago designated as the "Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A" (the "2017A Second Lien Bonds"), issued under and pursuant to the City's powers as a home rule unit under Article VII of the Illinois Constitution of 1970, an ordinance duly adopted by the City Council of the City on January 13, 2016, and a Trust Indenture, dated as of June 1, 2017, from the City to the Trustee (the "Indenture"), for the purposes of (i) financing or reimbursing the City for its payment of certain Project Costs, and (ii) paying Costs of Issuance of the 2017A Second Lien Bonds.

Any term used but not defined in this 2017A Second Lien Bond shall be defined as provided in the Indenture.

The 2017A Second Lien Bonds are legal, valid and binding limited obligations of the City having a claim for payment of principal and interest solely from certain moneys and securities held by the Trustee under the provisions of the Indenture and, together with any other Second Lien Bonds Outstanding, from Second Lien Bond Revenues and from amounts on deposit in the Second Lien Construction Accounts, and are valid claims of their owners only against the moneys and securities held by the Trustee with respect to the 2017A Second Lien Bonds and against Second Lien Bond Revenues and amounts on deposit in the Second Lien Bonds which may be issued and Outstanding from time to time. The 2017A Second Lien Bonds and the interest on them do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness and shall have no claim to be paid from taxes of the City.

Bondholders must surrender 2017A Second Lien Bonds to the Trustee to collect principal. All payments of interest on the 2017A Second Lien Bonds shall be paid by the Trustee to Bondholders of record as shown on the registration books kept by the Trustee on the applicable Record Date. Such interest shall be paid on the Interest Payment Date or special interest payment date, as applicable, by clearinghouse funds check or draft mailed (or under certain circumstances, by wire transfer of immediately available funds made) on the Interest Payment Date to the persons entitled to such payment at such address appearing on the registration books of the Trustee or at such other address as has been furnished to the Trustee in writing by such person. Principal and interest will be paid in money of the United States that at the time of payment is legal tender for payment of public and private debts. If any payment on any 2017A Second Lien Bonds is due on a day other than a Business Day, it will be made on the next Business Day, and no interest will accrue as a result. Business

Day means any day of the year on which banks located in the city in which is located the Principal Office of the Trustee are not required or authorized to remain closed and on which The New York Stock Exchange is not closed.

The 2017A Second Lien Bonds are issuable in fully registered form without coupons in Authorized Denominations. A Bondholder may transfer or exchange 2017A Second Lien Bonds in accordance with the Indenture. The Trustee may exchange 2017A Second Lien Bonds in accordance with the Indenture. The Trustee may require a Bondholder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes and fees required by law or permitted by the Indenture. The 2017A Second Lien Bonds may be

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exchanged for other 2017A Second Lien Bonds at the Principal Office of the Trustee upon the terms set forth in the Indenture.

The registered Bondholder of this 2017A Second Lien Bond shall be treated as the owner of this 2017 A Second Lien Bond for all purposes.

The 2017A Second Lien Bonds maturing on and after January 1, 2028 are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2027, as a whole or in part and, if in part, in such order of maturity as the City shall determine and within any maturity shall be selected at random by the Trustee in such manner as the Trustee in its discretion may deem fair and appropriate, in Authorized Denominations, at a price of par plus accrued interest to the redemption date. The 2017A Second Lien Bonds maturing on January 1, 2042, January 1, 2047 and January 1, 2052 are subject to mandatory sinking fund redemption on January 1 of the years and in the amounts provided in the Indenture.

Under the Indenture, the Trustee is required to mail copies of notice of any redemption, containing the information specified in the Indenture, by first-class mail, postage prepaid, not more than 60 and not less than 30 days before the date fixed for redemption, to the owners of the 2017A Second Lien Bonds to be redeemed at their addresses as shown on the registration books of the City maintained by the Trustee. Failure to give notice of redemption by mail to any particular owner, or any defect in such notice, shall not affect the validity of any proceedings for the redemption of 2017A Second Lien Bonds for which such notice has been properly given.

If, on the date fixed for redemption, moneys for the redemption of all the 2017A Second Lien Bonds or portions of 2017A Second Lien Bonds to be redeemed, together with interest to the redemption date, are held by the Trustee so as to be available on said date and if notice of redemption has been given as provided in the Indenture, then, from and after the date fixed for redemption, interest on the 2017A Second Lien Bonds or portions of 2017A Second Lien Bonds to be redeemed so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the date fixed for redemption, such 2017A Second Lien Bonds or portions of 2017A Second Lien Bonds shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

If moneys for the payment of principal or interest remains unclaimed for two years, the Trustee will, upon the request of the City, pay such moneys to or for the account of the City. Thereafter, Bondholders entitled to such moneys must look only to the City and not to the Trustee for payment.

Subject to certain exceptions, the Indenture may be amended or supplemented, with the consent

of the holders of more than 50 percent in aggregate principal amount of the 2017A Second Lien Bonds Outstanding. Without the consent of any Bondholder, the City and the Trustee may enter into amendments or supplements to the Indenture as provided in the Indenture to, among other purposes, cure any ambiguity, omission, formal defect or inconsistency, or to make any change that does not materially adversely affect the rights of any Bondholder.

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Provision for payment of all or any portion of the 2017A Second Lien Bonds may be made, and the Indenture may be discharged, prior to payment of the 2017A Second Lien Bonds in the manner provided in the Indenture.

Any registered owner of a 2017A Second Lien Bond may proceed by civil action to compel performance of all duties required by the Indenture. The Trustee may refuse to enforce the Indenture or the 2017A Second Lien Bonds unless it receives indemnity satisfactory to it.

An official, officer, agent or employee, as such, of the City shall not have any liability for any obligations of the City under the 2017A Second Lien Bonds or the Indenture or for any claim based on such obligations or their creation. Each Bondholder by accepting a 2017A Second Lien Bond waives and releases all such liability. The waiver and release are part of the consideration for the issue of the 2017A Second Lien Bonds.

This 2017A Second Lien Bond shall not be valid until the Trustee executes the certificate of authentication on this 2017A Second Lien Bond.

It is certified, recited and declared that all acts, conditions and things required by the Constitution and laws of the State to exist, to have happened and to have been performed, precedent to and in the execution and delivery of the Indenture and the issuance of this bond, do exist, have happened and have been performed in regular and due form and time as required by law.

In Witness Whereof, the City of Chicago has caused the seal of the City to be impressed or reproduced on this Bond and this Bond to be signed by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the City Clerk or the Deputy City Clerk.

City of Chicago

Rahm Emanuel Mayor

[Seal]

Attest:

Andrea M. Valencia City Clerk

Dated: June ,2017

# CERTIFICATE OF AUTHENTICATION

This is to certify that this 2017A Second Lien Bond is one of the 2017A Second Lien Bonds described in the within-mentioned Indenture.

# Amalgamated Bank of Chicago,

as Trustee

By:

Authorized Officer

Date:

Assignment

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

### UNIF GIFT MTN ACT-

TEN COM TENANT

JT TEN

as tenants in common Custodian

as tenants by the entireties

(Cust) (Minor)

under Uniform Gifts to Minors

as joint tenants with right of survivorship and not as tenants in Act common

(State)

Additional abbreviations may also be used though not in the above list.

For Value Received, the undersigned sells, assigns and transfers unto

(Name and Address of Assignee) this Bond of the City of

Chicago and irrevocably constitutes and appoints

to transfer said 2017A Second Lien Bond on the books kept for registration thereof with full power of substitution in the premises.

Dated: Signature: Signature Guaranteed:

Notice: The signature to this assignment must correspond with the name as it appears upon the face of this Bond in every particular, without alteration or enlargement or any change whatever.

#### STATEMENT OF INSURANCE

#### [TO BE INCLUDED ON INSURED BONDS ONLY]

Assured Guaranty Municipal Corp. ("AGM"), New York, New York, has delivered its municipal bond insurance policy (the "Policy") with respect to the scheduled payments due of principal of and interest on the Bonds maturing on January 1, 2042 and January 1, 2052 inclusive (the "Insured Series 2017 Second Lien Bonds"), to Amalgamated Bank of Chicago, Chicago, Illinois, or its successor, as paying agent for the Insured Series 2017 Second Lien Bonds (the "Paying Agent"). Said Policy is on file and available for inspection at the principal office of the Paying Agent and a copy thereof may be obtained from AGM or the Paying Agent. All payments required to be made under the Policy shall be made in accordance with the provisions thereof. The owner of this Bond acknowledges and consents to the subrogation and other rights of AGM as more fully set forth in the Policy and the Indenture.

C. Form of 2017B Second Lien Bonds. The Form of the 2017B Second Lien Bonds shall be substantially as follows:

Unless this certificate is presented by an authorized representative of the depository trust company, a new york corporation ("dtc"), to the issuer or its agent for registration of transfer, exchange, or payment, and any certificate issued is registered in the name of cede & co. or in such other name as is requested by an authorized representative of dtc (and any payment is made to cede & co. or to such other entity as is requested by an authorized representative of dtc), any transfer, pledge, or other use of this certificate for value or otherwise by or to any person is wrongful inasmuch as the registered owner of this certificate, cede & co., has an interest in this certificate.

Registered No. RB-\_ CUSIP No. Principal Amount \$

## United States of America State of Illinois City of Chicago Second Lien Wastewater Transmission Revenue Bond, Refunding Series 2017B

#### Maturity Date: Interest Rate:

January 1,20 % Dated: June 21, 2017 Owner: Cede & Co. The City of Chicago (the "City") by this bond acknowledges itself to owe and, for value received, by this bond promises to pay to the Owner (named above) or registered assigns (such Owner or assigns being referred to in this 2017B Second Lien Bond as the Bondholder), on the Maturity Date (identified above), upon the presentation and surrender of this bond as set forth below, the Principal Amount (stated above) and interest on said Principal Amount from and including the most recent Interest Payment Date (as described below) with respect to which interest has been paid or duly provided for, until payment of said Principal Amount has been made or duly provided for, at the interest rate specified above, computed on the basis of a 360-day year consisting of twelve 30-day months, payable on January 1 and July 1 of each year, commencing January 1, 2018. The principal and redemption price of this bond is payable at the principal corporate trust office of Amalgamated Bank of Chicago, in the City of Chicago, Illinois, or its successors or assigns, as Trustee (the "Trustee"). The interest so payable on any Interest Payment Date will, subject to certain exceptions provided in the Indenture (as defined herein), be paid to the person in whose name this bond is registered at the close of business on the applicable Record Date (the December 15 preceding each January 1 and the June 15 preceding each July 1) preceding such Interest Payment Date. Interest on this bond is payable by the Trustee in the manner provided in the Indenture.

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This bond is one of the duly authorized series of Second Lien Wastewater Transmission Revenue Bonds of the City of Chicago designated as the "Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B" (the "2017B Second Lien Bonds"), issued under and pursuant to the City's powers as a home rule unit under Article VII of the Illinois Constitution of 1970, an ordinance duly adopted by the City Council of the City on January 13, 2016, and a Trust Indenture, dated as of June 1, 2017, from the City to the Trustee (the "Indenture"), for the purposes of (i) refunding certain Outstanding Second Lien Wastewater Transmission Revenue Bonds of the City (the "Refunded Bonds") and (ii) paying Costs of Issuance of the 2017B Second Lien Bonds.

Any term used but not defined in this 2017B Second Lien Bond shall be defined as provided in the Indenture.

The 2017B Second Lien Bonds are legal, valid and binding limited obligations of the City having a claim for payment of principal and interest solely from certain moneys and securities held by the Trustee under the provisions of the Indenture and, together with any other Second Lien Bonds Outstanding, from Second Lien Bond Revenues and from amounts on deposit in the Second Lien Construction Accounts, and are valid claims of their owners only against the moneys and securities held by the Trustee with respect to the 2017B Second Lien Bonds and against Second Lien Bond Revenues and amounts on deposit in the Second Lien Bonds which may be issued and Outstanding from time to time. The 2017B Second Lien Bonds and the interest on them do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness and shall have no claim to be paid from taxes of the City.

Bondholders must surrender 2017B Second Lien Bonds to the Trustee to collect principal. All payments of interest on the 2017B Second Lien Bonds shall be paid by the Trustee to Bondholders of record as shown on the registration books kept by the Trustee" on the applicable Record Date. Such interest shall be paid on the Interest Payment Date or special interest payment date, as applicable, by clearinghouse funds check or draft mailed (or under certain circumstances, by wire transfer of immediately available funds made) on the Interest Payment Date to the persons entitled to such payment at such address appearing on the registration

books of the Trustee or at such other address as has been furnished to the Trustee in writing by such person. Principal and interest will be paid in money of the United States that at the time of payment is legal tender for payment of public and private debts. If any payment on any 2017B Second Lien Bonds is due on a day other than a Business Day, it will be made on the next Business Day, and no interest will accrue as a result. Business Day means any day of the year on which banks located in the city in which is located the Principal Office of the Trustee are not required or authorized to remain closed and on which The New York Stock Exchange is not closed.

The 2017B Second Lien Bonds are issuable in fully registered form without coupons in Authorized Denominations. A Bondholder may transfer or exchange 2017B Second Lien Bonds in accordance with the Indenture. The Trustee may exchange 2017B Second Lien Bonds in accordance with the Indenture. The Trustee may require a Bondholder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes and fees

#### A-ll

required by law or permitted by the Indenture. The 2017B Second Lien Bonds may be exchanged for other 2017B Second Lien Bonds at the Principal Office of the Trustee upon the terms set forth in the Indenture.

The registered Bondholder of this 2017B Second Lien Bond shall be treated as the owner of this 2017B Second Lien Bond for all purposes.

The 2017B Second Lien Bonds maturing on and after January 1, 2028 are subject to redemption prior to maturity at the option of the City, at any time on or after January 1, 2027, as a whole or in part and, if in part, in such order of maturity as the City shall determine and within any maturity shall be selected at random by the Trustee in such manner as the Trustee in its discretion may deem fair and appropriate, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

Under the Indenture, the Trustee is required to mail copies of notice of any redemption, containing the information specified in the Indenture, by first-class mail, postage prepaid, not more than 60 and not less than 30 days before the date fixed for redemption, to the owners of the 2017B Second Lien Bonds to be redeemed at their addresses as shown on the registration books of the City maintained by the Trustee. Failure to give notice of redemption by mail to any particular owner, or any defect in such notice, shall not affect the validity of any proceedings for the redemption of 2017B' Second Lien Bonds for which such notice has been properly given.

If, on the date fixed for redemption, moneys for the redemption of all the 2017B Second Lien Bonds or portions of 2017B Second Lien Bonds to be redeemed, together with interest to the redemption date, are held by the Trustee so as to be available on said date and if notice of redemption has been given as provided in the Indenture, then, from and after the date fixed for redemption, interest on the 2017B Second Lien Bonds or portions of 2017B Second Lien Bonds to be redeemed so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the date fixed for redemption, such 2017B Second Lien Bonds or portions of 2017B Second Lien Bonds shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

If moneys for the payment of principal or interest remains unclaimed for two years, the Trustee will, upon the request of the City, pay such moneys to or for the account of the City. Thereafter, Bondholders entitled to such moneys must look only to the City and not to the Trustee for payment.

Subject to certain exceptions, the Indenture may be amended or supplemented, with the consent of the holders of more than 50 percent in aggregate principal amount of the 2017B Second Lien Bonds Outstanding. Without the consent of any Bondholder, the City and the Trustee may enter into amendments or supplements to the Indenture as provided in the Indenture to, among other purposes, cure any ambiguity, omission, formal defect or inconsistency, or to make any change that does not materially adversely affect the rights of any Bondholder.

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Provision for payment of all or any portion of the 2017B Second Lien Bonds may be made, and the Indenture may be discharged, prior to payment of the 2017B Second Lien Bonds in the manner provided in the Indenture.

Any registered owner of a 2017B Second Lien Bond may proceed by civil action to compel performance of all duties required by the Indenture. The Trustee may refuse to enforce the Indenture or the 2017B Second Lien Bonds unless it receives indemnity satisfactory to it.

An official, officer, agent or employee, as such, of the City shall not have any liability for any obligations of the City under the 2017B Second Lien Bonds or the Indenture or for any claim based on such obligations or their creation. Each Bondholder by accepting a 2017B Second Lien Bond waives and releases all such liability. The waiver and release are part of the consideration for the issue of the 2017B Second Lien Bonds.

This 2017B Second Lien Bond shall not be valid until the Trustee executes the certificate of authentication on this 2017B Second Lien Bond.

It is certified, recited and declared that all acts, conditions and things required by the Constitution and laws of the State to exist, to have happened and to have been performed, precedent to and in the execution and delivery of the Indenture and the issuance of this bond, do exist, have happened and have been performed in regular and due form and time as required by law.

In Witness Whereof, the City of Chicago has caused the seal of the City to be impressed or reproduced on this Bond and this Bond to be signed by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the City Clerk or the Deputy City Clerk.

# City of Chicago

Rahm Emanuel Mayor

[Seal] <sup>J</sup>

Attest:

Andrea M. Valenica City Clerk

,2017

Dated:

## CERTIFICATE OF AUTHENTICATION

This is to certify that this 2017B Second Lien Bond is one of the 2017B Second Lien Bonds described in the within-mentioned Indenture.

# Amalgamated Bank of Chicago,

as Trustee

By:

2

Authorized Officer

Date:

#### Assignment

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

## UNIF GIFT MIN ACT-

| TEN COM                                       | $\sim$ | as tenants in common Custodian |   |  |
|---|--------|--------------------------------|---|--|
| TENANT  | -      | as tenants by the entireties   |   |  |
| JT TEN  | 2      | as joint tenants with right of | (Cust) (Minor)<br>under Uniform Gifts to Minors |  |
| survivorship and not as tenants in Act common |        |                                |   |  |
|   |        |                                |   |  |

(State)

Additional abbreviations may also be used though not in the above list. For Value Received, the undersigned sells, assigns and transfers unto

(Name and Address of Assignee) this Bond of the City of

Chicago and irrevocably constitutes and appoints

to transfer said 2017B Second Lien Bond on the books kept for registration thereof with full power of substitution in the premises.

Dated:

Signature:

Signature Guaranteed:

NOTICE: The signature to this assignment must correspond with the name as it appears upon the face of this Bond in every

particular, without alteration or enlargement or any change whatever.

## A-16

# EXHIBIT B

## PROVISIONS APPLICABLE TO INSURED SERIES 2017 SECOND LIEN BONDS

Notwithstanding anything to the contrary set forth in this Indenture, the following provisions shall apply to the Insured Series 2017 Second Lien Bonds for so long as the Insured Series 2017 Second Lien Bonds are "Outstanding" within the meaning established by (i) below, subject, however, to the provisions of the last paragraph of this Exhibit B.

a) The Insurer shall be deemed to be the sole holder of the Insured Series 2017 Second Lien Bonds for the purpose of exercising any voting right or privilege or giving any consent or direction or taking any other action that the holders of the Insured Series 2017 Second Lien Bonds (the "Insured Bondholders") are entitled to take pursuant to the Indenture pertaining to (i) defaults and remedies and (ii) the duties and obligations of the Trustee (with respect to the Insured Series 2017 Second Lien Bonds). In furtherance thereof and as a term of the Indenture and each Insured Series 2017 Second Lien Bond, each Insured Bondholder appoints the Insurer as its agent and attorney-in-fact with respect to the Insured Series 2017 Second Lien Bonds and agrees that the Insurer may at any time during the continuation of any proceeding by or against the City under the United States Bankruptcy Code or any other applicable bankruptcy, insolvency, receivership, rehabilitation or similar law (an "Insolvency Proceeding") direct all matters relating to such Insolvency Proceeding, including without limitation (A) all matters relating to any claim or enforcement proceeding in connection with an Insolvency Proceeding (a "Claim"), (B) the direction of any appeal of any order relating to any Claim, (C) the posting of any surety, supersedeas or performance bond pending any such appeal, and (D) the right to vote to accept or reject any plan of adjustment. In addition, each Insured Bondholder delegates and assigns to the Insurer, to the fullest extent permitted by law, the rights of each Insured Bondholder in the conduct of any Insolvency Proceeding, including, without limitation, all rights of any party

• to an adversary proceeding or action with respect to any court order issued in connection with any such Insolvency Proceeding. The Trustee acknowledges such appointment, delegation and assignment by each Insured Bondholder for the Insurer's benefit, and agrees to cooperate with the Insurer in taking any action reasonably necessary or appropriate in connection with such appointment, delegation and assignment. Remedies granted to the Insured Bondholders shall expressly include mandamus, but these provisions shall not create any remedy not otherwise expressly granted by the Indenture.

b) The maturity of Insured Series 2017 Second Lien Bonds shall not be accelerated without the consent of

the Insurer and in the event the maturity of the Insured Series 2017 Second Lien Bonds is accelerated, the Insurer may elect, in its sole discretion, to pay accelerated principal and interest accrued, on such principal to the date of acceleration (to the extent unpaid by the City) and the Trustee shall be required to accept such amounts. Upon payment of such accelerated principal and interest accrued to the acceleration date as provided above, the Insurer's obligations under the Insurance Policy with respect to such Insured Series 2017 Second Lien Bonds shall be fully discharged.

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- c) No grace period for a covenant default shall exceed 30 days or be extended for more than 60 days, without the prior written consent of the Insurer. No grace period shall be permitted for payment defaults.
- d) The Insurer is a third party beneficiary to the Indenture.
- e) The exercise of any provision of the Indenture which permits the purchase of Insured Series 2017 Second Lien Bonds in lieu of redemption shall require the prior written approval of the Insurer if any Insured Series 2017 Second Lien Bond so purchased is not cancelled upon purchase.
- f) Any amendment, supplement, modification to, or waiver of, the Indenture that requires the consent of Insured Bondholders or adversely affects the rights and interests of the Insurer shall be subject to the prior written consent of the Insurer.
- g) Unless the Insurer otherwise directs, upon the occurrence and continuance of an event of default or an event which with notice or lapse of time would constitute an event of default, amounts on deposit in the Construction Account: 2017 Second Lien Bonds (as applicable) shall not be disbursed, but shall instead be applied to the payment of debt service or redemption price of the Insured Series 2017 Second Lien Bonds.

(h) The rights granted to the Insurer under the Indenture to request, consent to or direct any action are rights granted to the Insurer in consideration of its issuance of the Insurance Policy. Any exercise by the Insurer of such rights is merely an exercise of the Insurer's contractual rights and shall not be construed or deemed to be taken for the benefit, or on behalf, of the Insured Bondholders and such action does not evidence any position of the Insurer, affirmative or negative, as to whether the consent of the Insured Bondholders or any other person is required in addition to the consent of the Insurer.

(i) Only (1) cash, (2) non-callable direct obligations of the United States of America ("Treasuries"), (3) evidences of ownership of proportionate interests in future interest and principal payments on Treasuries held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor and the underlying Treasuries are not available to any person claiming through the custodian or to whom the custodian may be obligated, (4) subject to the prior written consent of the Insurer, pre-refunded municipal obligations

rated "AAA" and "Aaa" by S&P and Moody's, respectively, or (5) subject to the prior written consent of the Insurer, securities eligible for "AAA" defeasance under then existing criteria of S & P or any combination thereof, shall be used to effect defeasance of the Insured Series 2017 Second Lien Bonds unless the Insurer otherwise approves.

To accomplish defeasance, the City shall cause to be delivered (i) a report of an independent firm of nationally recognized certified public accountants or such other accountant as shall be acceptable to the Insurer ("Accountant") verifying the sufficiency of the escrow established to pay the Insured Series 2017 Second Lien Bonds in full on the maturity or redemption date ("Verification"), (ii) an Escrow Deposit Agreement (which

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shall be acceptable in form and substance to the Insurer), (iii) an opinion of nationally recognized bond counsel to the effect that the Insured Series 2017 Second Lien Bonds are no longer "Outstanding" under the Indenture and (iv) a certificate of discharge of the Trustee with respect to the Insured Series 2017 Second Lien Bonds; each Verification and defeasance opinion shall be acceptable in form and substance, and addressed, to the City, the Trustee and the Insurer. The Insurer shall be provided with final drafts of the above-referenced documentation not less than five business days prior to the funding of the escrow.

Insured Series 2017 Second Lien Bonds shall be deemed "Outstanding" under the Indenture, and the rights granted to the Insurer shall remain in effect (subject to the absence of the occurrence and continuance of a default by the Insurer of its obligations as set forth in the introduction to this section) unless and until the City has paid the Insurer in full for any payment of principal of or interest on the Insured Series 2017 Second Lien Bonds made by the Insurer, and there are no other amounts due or owing to the Insurer.

- (J) Amounts paid by the Insurer under the Insurance Policy shall not be deemed paid for purposes of the Indenture and the Insured Series 2017 Second Lien Bonds relating to such payments shall remain Outstanding and continue to be due and owing until paid by the City in accordance with the Indenture. The Indenture shall not be discharged unless all amounts due or to become due to the Insurer have been paid in full or duly provided for.
- (k) Each of the City and the Trustee covenant and agree to take such action (including, as applicable, filing of UCC financing statements and continuations thereof) as is necessary from time to time to preserve the priority of the pledge of the Trust Estate under applicable law.
- (1) Claims Upon the Insurance Policy and Payments by and to the Insurer.

If, on the Business Day prior to the related scheduled interest payment date or principal payment date ("Payment Date") there is not on deposit with the Trustee, after making all transfers and deposits required under the Indenture, moneys sufficient to pay the principal of and interest on the Insured Series 2017 Second Lien Bonds due on such Payment Date, the Trustee shall give notice to the Insurer and to its designated agent (if any) (the "Insurer's Fiscal Agent") by telephone or telecopy of the

amount of such deficiency by 12:00 noon, New York City time, on such Business Day. If, on the Business Day prior to the related Payment Date, there continues to be a deficiency in the amount available to pay the principal of and interest on the Insured Series 2017 Second Lien Bonds due on such Payment Date, the Trustee shall make a claim under the Insurance Policy and give notice to the Insurer and the Insurer's Fiscal Agent (if any) by telephone of the amount of such deficiency, and the allocation of such deficiency between the amount required to pay interest on the Insured Series 2017 Second Lien Bonds and the amount required to pay principal of the Insured Series 2017 Second Lien Bonds, confirmed in writing to the Insurer and the Insurer's Fiscal Agent by 12:00 noon, New York City time, on such Business Day by filling in the form of Notice of Claim and Certificate delivered with the Insurance Policy.

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The Trustee shall designate any portion of payment of principal on Insured Series 2017 Second Lien Bonds paid by the Insurer, whether by virtue of mandatory sinking fund redemption, maturity or other advancement of maturity, on its books as a reduction in the principal amount of Insured Series 2017 Second Lien Bonds registered to the then current Insured Bondholder, whether DTC or its nominee or otherwise, and shall issue a replacement Insured Series 2017 Second Lien Bond to the Insurer, registered in the name of Assured Guaranty Municipal Corp., in a principal amount equal to the amount of principal so paid (without regard to authorized denominations); provided that the Trustee's failure to so designate any payment or issue any replacement Insured Series 2017 Second Lien Bond shall have no effect on the amount of principal or interest payable by the City on any Insured Series 2017 Second Lien Bond or the subrogation rights of the Insurer.

The Trustee shall keep a complete and accurate record of all funds deposited by the Insurer into the Policy Payments Account (defined below) and the allocation of such funds to payment of interest on and principal of any Insured Series 2017 Second Lien Bond. The Insurer shall have the right to inspect such records at reasonable times upon reasonable notice to the Trustee.

Upon payment of a claim under the Insurance Policy, the Trustee shall establish a separate special purpose trust account for the benefit of Insured Bondholders referred to herein as the "Policy Payments Account" and over which the Trustee shall have exclusive control and sole right of withdrawal. The Trustee shall receive any amount paid under the Insurance Policy in trust on behalf of Insured Bondholders and shall deposit any such amount in the Policy Payments Account and distribute such amount only for purposes of making the payments for which a claim was made. Such amounts shall be disbursed by the Trustee to Insured Bondholders in the same manner as principal and interest payments are to be made with respect to the Insured Series 2017 Second Lien Bonds under the sections hereof regarding payment of Insured Series 2017 Second Lien Bonds. It shall not be necessary for such payments to be made by checks or wire transfers separate from the check or wire transfer used to pay debt service with other funds available to make such payments. Notwithstanding anything herein to the contrary, the City agrees to pay to the Insurer (i) a sum equal to the total of all amounts paid by the Insurer under the Insurance Policy (the "Insurer Advances"); and (ii) interest on such Insurer Advances from the date paid by the Insurer until payment thereof in full, payable to the Insurer at the Late Payment Rate per annum (collectively, the "Insurer Reimbursement Amounts"). "Late Payment Rate" means the lesser of (a) the greater of (i) the per annum rate of interest, publicly announced from time to time by JPMorgan Chase Bank at its principal office in The City of New York, as its prime or base lending rate (any change in such rate of interest to be effective on the date such change is announced by JPMorgan Chase Bank) plus 3%, and (ii) the then applicable highest rate of interest on the Insured Series 2017 Second Lien Bonds and (b) the maximum

rate permissible under applicable usury or similar laws limiting interest rates. The Late Payment Rate shall be computed on the basis of the actual number of days elapsed over a year of 360 days. The City hereby covenants and agrees that the Insurer Reimbursement

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Amounts are secured by a lien on and pledge of the Second Lien Bond Revenues and payable from such Second Lien Bond Revenues on a parity with debt service due on the Insured Series 2017 Second Lien Bonds.

Funds held in the Policy Payments Account shall not be invested by the Trustee and may not be applied to satisfy any costs, expenses or liabilities of the Trustee. Any funds remaining in the Policy Payments Account following an Insured Series 2017 Second Lien Bond payment date shall promptly be remitted to the Insurer.

- (m) The Insurer shall, to the extent it makes any payment of principal of or interest on the Insured Series 2017 Second Lien Bonds, become subrogated to the rights of the recipients of such payments in accordance with the terms of the Insurance Policy. Each obligation of the City to the Insurer under the Indenture shall survive discharge or termination of the Indenture.
- (n) The City shall pay or reimburse the Insurer any and all charges, fees, costs and expenses that the Insurer may reasonably pay or incur in connection with (i) the administration, enforcement, defense or preservation of any rights or security in the Indenture; (ii) the pursuit of any remedies under the Indenture or otherwise afforded by law or equity, (iii) any amendment, waiver or other action with respect to, or related to, the Indenture whether or not executed or completed, or (iv) any litigation or other dispute in connection with the Indenture or the transactions contemplated thereby, other than costs resulting from the failure of the Insurer to honor its obligations under the Insurance Policy. The Insurer reserves the right to charge a reasonable fee as a condition to executing any amendment, waiver or consent proposed in respect of the Indenture.
- (o) After payment of reasonable expenses of the Trustee, the application of funds realized upon default shall be applied to the payment of expenses of the City or rebate only after the payment of past due and current debt service on the Insured Series 2017<sup>1</sup> Second Lien Bonds.
- (p) The Insurer shall be entitled to pay principal or interest on the Insured Series 2017 Second Lien Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by the City (as such terms are defined in the Insurance Policy) and any amounts due on the Insured Series 2017 Second Lien Bonds as a result of acceleration of the maturity thereof in accordance with the Indenture, whether or not the Insurer has received a Notice of Nonpayment (as such terms are defined in the Insurance Policy) or a claim upon the Insurance Policy.
- (q) The notice address of the Insurer is: Assured Guaranty Municipal Corp., 1633 Broadway, New York, New York 10019, Attention: Managing Director Surveillance, Re: Policy No. 218277-N, Telephone: (212) 826-0100; Telecopier: (212) 339-3556. In each case in which notice or other communication refers to an event of default, then a copy of such notice or other communication shall also be sent to the attention of the General Counsel and shall be marked to indicate "URGENT MATERIAL ENCLOSED."

- (r) The Insurer shall be provided with the following information by the City:
  - i) Annual audited financial statements within 210 days after the end of the City's fiscal year (together with, if specifically requested by the Insurer in writing, a certification of the City that it is not aware of any breach of any covenants under the Indenture), and the City's annual budget within 30 days after the approval thereof together with such other information, data or reports as the Insurer shall reasonably request from time to time (the provisions of this paragraph (i) with respect to annual audited financial statements shall be deemed satisfied if such financial statements, budget and other information, data or reports shall have been posted electronically on a website that the Insurer has access to);
  - ii) Notice of any default known to the City within five Business Days after knowledge thereof;
  - iii) Prior notice of the advance refunding or redemption of any of the Insured Series 2017 Second Lien Bonds, including the principal amount, maturities and CUSIP numbers thereof;
  - iv) Notice of the resignation or removal of the Trustee and the Bond Registrar and the appointment of, and acceptance of duties by, any successor thereto;
  - v) Notice of the commencement of any proceeding by or against the City commenced under the United States Bankruptcy Code or any other applicable bankruptcy, insolvency, receivership, rehabilitation or similar law (an "Insolvency Proceeding");
  - vi) Notice of the making of any claim in connection with any Insolvency Proceeding seeking the avoidance as a preferential transfer of any payment of principal of, or interest on, the Insured Series 2017 Second Lien Bonds;
  - vii) An executed copy of any amendment, supplement, or waiver to the Indenture; and
  - viii) All reports, notices and correspondence to be delivered to Insured Bondholders under the terms of the Indenture (the requirements of this sentence shall be deemed satisfied if the City has posted such information electronically on a website that the Insurer has access to).

In addition, to the extent that the City has entered into a continuing disclosure agreement, covenant or undertaking with respect to the Insured Series 2017 Second Lien Bonds, all information furnished pursuant to such agreements shall also be provided to the Insurer, simultaneously with the furnishing of such information (the requirements of this sentence shall

be deemed satisfied if the City has posted such information electronically on a website that the Insurer has access to).

- (s) The Insurer shall have the right to receive such additional information as it may reasonably request.
- (t) The City will permit the Insurer to discuss the affairs, finances and accounts of the City or any information the Insurer may reasonably request regarding the security for the Insured Series 2017 Second Lien Bonds with appropriate officers of the City and will use commercially reasonable efforts to enable the Insurer to have access to the facilities, books and records of the City on any Business Day upon reasonable prior notice.
- (u) The Trustee shall notify the Insurer of any failure of the City to provide notices, certificates and other information under the transaction documents.
- (v) Notwithstanding satisfaction of the other conditions to the issuance of Second Lien Parity Bonds set forth in the Indenture, no such issuance may occur if an event of default (or any event which, once all notice or grace periods have passed, would constitute an event of default) exists unless such default shall be cured upon such issuance.
- (w) In determining whether any amendment, consent, waiver or other action to be taken, or any failure to take action, under the Indenture would adversely affect the security for the Insured Series 2017 Second Lien Bonds or the rights of the Insured Bondholders, the Trustee shall consider the effect of any such amendment, consent, waiver, action or inaction as if there were no Insurance Policy.
- (x) No contract shall be entered into or any action taken by which the rights of the Insurer or security for or sources of payment of the Insured Series 2017 Second Lien Bonds may be impaired or prejudiced in any material respect except upon obtaining the prior written consent of the Insurer.
- (y) Anything contained in this Indenture or in the Insured Series 2017 Second Lien Bonds to the contrary notwithstanding, the existence of all rights given to the Insured Series 2017 Second Lien Insurer hereunder with respect to the giving of consents or approvals, or the direction of proceedings, are expressly conditioned upon its timely and full performance of the Insurance Policy. Any such rights shall not apply if at any time:
  - i) there are no Insured Series 2017 Second Lien Bonds Outstanding;

ii) if the Insurer has failed to perform any of its obligations under the Insurance Policy or has been declared insolvent or bankrupt by a court of competent jurisdiction;

iii) an order or decree shall have been entered appointing a receiver, receivers, custodian or custodians for any of its assets or revenues, or any proceeding shall be instituted with the consent or acquiescence of the Insurer or any plan shall be entered into

by the Insurer for the purpose of effecting a composition between the Insurer and its creditors or for the purpose of adjusting the claims of such creditors;

- iv) the Insurer is dissolved;
- v) the Insurer makes any assignment for the benefit of its creditors;

vi) the Insurer is generally not paying its debts as such debts become due or the Insurer files a petition in bankruptcy or under Title II of the United States Code, as amended;

vii) the Insurance Policy has been determined to be void or unenforceable by final nonappealable judgment of a court of competent jurisdiction; or

viii) the Insurer contests the validity or enforceability of the Insurance Policy;

provided that this Section shall not in any way limit or affect the rights of the Insurer as an Insured Bondholder, as subrogee of an Insured Bondholder or as assignee of an Insured Bondholder, or otherwise, to be reimbursed and indemnified for its costs and expenses and other payment on or in connection with the Insured Series 2017 Second Lien Bonds or the Insurance Policy either by operation of law or at equity or by contract.

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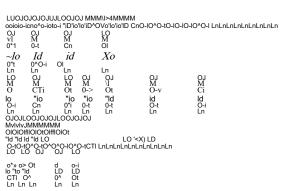
#### EXHIBIT C PARITY BOND ISSUANCE TEST



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#### EXHIBIT D

#### OFFICIAL STATEMENT

RATINGS: See "RATINGS" herein.

Subject to the accuracy of certain representations and continuing compliance by the City of Chicago with certain covenants, in the respective opinions of SchiffHardin LLP and Hardwick Law Firm LLC, Co-Bond Counsel, under present law, interest on the Bonds is excludable from the gross income of their owners for federal income tax puiposes and thus will be exempt from present federal income taxes based upon gross income. Such interest is not included as an item of tax preference in computing the federal alternative minimum tax on individuals and corporations, but will be taken into account in computing an adjustment used in determining the federal alternative minimum tax imposed for certain corporations. Interest on the Bonds is not exempt from present Illinois income taxes. See 'Tax Matters" in this Official Statement for a more complete discussion of these matters.

#### \$396,075,000 CITY OF **CHICAGO**

\$180,590,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A

#### \$215,485,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B

Delivery

Date As Shown on the Inside Cover Pages

This Official Statement contains information relating to the City of Chicago (the "City") Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A (the "Series 2017A Bonds") and Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B (the "Series 2017B Bonds" and, together with the Series 2017A Bonds, the "Bonds") which will be issued pursuant to a Trust Indenture dated as of June 1, 2017 (the "Indenture") from the City to Amalgamated Bank of Chicago, Chicago, Illinois, as trustee (the "Trustee"). The Bonds will be issuable as

of

Dated:

Due:

fully registered bonds in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company, New York, New York ("DTC"). DTC will act as securities depository for the Bonds. Purchasers of the Bonds will not receive certificates representing their interests in the Bonds purchased. The Bonds will be issued in denominations of \$5,000 or any integral multiple thereof. Interest on the Bonds is payable on each January 1 and July 1, with the first interest payment date being January 1,2018. Principal of the Bonds is payable at maturity. Principal of and interest on the Bonds will be paid by the Trustee to DTC, which in turn will remit such principal and interest payments to its participants for subsequent disbursement to the beneficial owners of the Bonds. As long as Cede & Co. is the registered owner as nominee of DTC, payments on the Bonds will be made to such registered owner, and disbursement of such payments to beneficial owners will be the responsibility of DTC and its participants. See "DESCRIPTION OF THE BONDS-Book-Entry Only System" herein.

The Bonds are subject to redemption prior to maturity as described in this Official Statement. See "DESCRIPTION OF THE BONDS-Redemption" herein.

The Bonds are limited obligations of the City having a claim for payment of principal and interest solely from Second Lien Bond Revenues on an equal and ratable basis with all other Second lien Bonds that are Outstoding from time to time. The Bonds are secured by and payable from certain moneys and securities held by the Trustee under the Indenture. The Bonds, together with any other Outstanding Second Lien Bonds, are also secured by and payable from any amounts on deposit in Second Lien Construction Accounts. The claim of the Bonds, together with any other Outstanding Second lien Bonds, to Net Revenues Available for Bonds is junior and subordinate to the claim of the City's Outstoding Senior lien Bonds and any future Senior Lien Parity Bonds as described herein.

The scheduled payment of principal of and interest on the Series 2017A Bonds maturing on January 1 of the years 2042 and 2052 (the "Series 2017A Insured Bonds") when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Series 2017A Insured Bonds by Assured Guaranty Municipal Corp.

## Assured guaranty\*

MUNICIPAL

The City will use the proceeds from the sale of the Series 2017A Bonds to (i) finance or reimburse the City for certain capital improvements to and extensions of the wastewater transmission system of the City, and (ii) pay Costs of Issuance of the Series 2017A Bonds. The City will use the proceeds from the sale of the Series 2017B Bonds to (i) refund certain Outstanding Second Lien Wastewater Transmission Revenue Bonds of the City, and (ii) pay Costs of Issuance of the Series 2017B Bonds. See "ESTIMATED SOURCES AND USES OF FUNDS" herein.

TILE BONDS DO NOT CONSTITUTE AN INDEBTEDNESS OF THE CITY WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY PROVISION OR LIMITATION AS TO INDEBTEDNESS. THE BONDS DO NOT HAVE A CLAIM FOR PAYMENT FROM ANY TAXES OF THE CITY. THE BONDS ARE NOT SECURED BY A LIEN ON OR A SECURITY INTEREST IN THE PHYSICAL ASSETS OF THE SEWER SYSTEM. THE CITY SHALL NOT BE OBLIGATED TO PAY THE BONDS EXCEPT FROM THE REVENUES PLEDGED TO THEIR PAYMENT. NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE CITY, THE STATE OF ILLINOIS OR ANY POLITICAL SUBDIVISION OF THE STATE OF ILLINOIS IS PLEDGED TO THE PAYMENT OF THE BONDS.

Maturities, Principal Amounts, Interest Rates, Prices, Yields and CUSIP Numbers are set forth on the inside cover pages.

The Bonds are offered when, as and if issued, and accepted by the Underwriters, subject to delivery of separate approving legal opinions by SchiffHardin LLP, Chicago, Illinois, and Hardwick Laxo Firm, LLC, Chicago, Illinois, Co-Bond Counsel, and to certain other conditions. Certain legal matters will be passed upon for the City by (i) its Corporation Counsel, and (ii) in connection with the pi-eparation of this Official Statement, Charity & Associates, PC, Chicago, Illinois, and Quintains, Prieto, Wood & Boyer, P.A., Chicago, Illinois, Co-Disclosure Counsel to the City. Certain legal matters will be passed on for the Underwriters by Miller, Canfwld, Paddock a?id Stone, P.L. C., Chicago, Illinois. It is expected that the Bonds will be available for delivery through the facilities of DTC on or about June 21, 2017.

#### Siebert Cisneros Shank & Co., L.L.C.

Blaylock Van, LLC North South Capital LLC

Melvin Securities, LLC Estrada Hinojosa The Williams Capital Group, L.P. Mischler Financial Group, Inc. Podesta & Co.

Dated: June 6, 2017

MATURITIES, PRINCIPAL AMOUNTS, INTEREST RATES, PRICES, YIELDS AND CUSIP NUMBERS <sup>(1</sup>>

\$180,590,000

Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A

 Maturity
 Principal

 (January 1)
 Amount

 2020
 \$2,255,000

 2021
 \$2,365,000

| 2022           | \$2,485,000              |             |
|----------------|--------------------------|-------------|
| 2022           | \$2,610,000              |             |
| 2024           | \$2,740,000              |             |
| 2025           | \$2,875,000              |             |
| 2026           | \$3,020,000              |             |
| 2027           | \$3,170,000              |             |
| 2027           | \$3,330,000              |             |
| 2028           | \$3,495,000              |             |
| 2029           | \$3,670,000              |             |
| 2030           | \$3,855,000              |             |
| 2031           | \$4,045,000              |             |
| 2032           | \$4,250,000              |             |
| 2033<br>2034   | \$4,460,000              |             |
| 2034           | \$4,685,000              |             |
| 2035           | \$4,920,000              |             |
| 2030<br>2037   |                          |             |
|                | \$5,165,000              |             |
| nterest        |                          | Rate Price  |
| 5.00%          | 108.571                  |             |
| 5.00%          | 111.179                  |             |
| 5.00%          | 113.294                  |             |
| 5.00%          | 115.059                  |             |
| 5.00%          | 116.476                  |             |
| 5.00%          | 117.431                  |             |
| 5.00%          | 117.580                  |             |
| 5.00%          | 117.919                  |             |
| 5.00%          | 116.376 f                |             |
| 5.00%          | 115.3911                 |             |
| 5.00%          | 114.415 f                |             |
| 5.00%          | 113.6251                 |             |
| 5.00%          | 113.014 f                |             |
| 5.00%          | 112.407                  |             |
| 5.00%          | 111.9771                 |             |
| 5.00%          | 111.548 t                |             |
| 5.00%          | 111.121 t                |             |
| 5.00%          | 110.780                  |             |
| 5.0070         | 110.700                  |             |
|                |                          | Yield CUSIP |
| 1.53%          | 167727 XQ4               |             |
| 1.72%          | 167727 XR2               |             |
| .92%           | 167727 XS0               |             |
| .10%           | 167727 XT8               |             |
|                | 167727 XU5               |             |
|                | 167727 XV3               |             |
| 2.45%          | 10//2/2005               |             |
| 2.45%<br>2.68% |                          |             |
|                | 167727 XW1<br>167727 XX9 |             |

| 3.12% | 167727 XZ4 |
|-------|------------|
| 3.23% | 167727 YA8 |
| 3.32% | 167727 YB6 |
| 3.39% | 167727 YC4 |
| 3.46% | 167727 YD2 |
| 3.51% | 167727 YE0 |
| 3.56% | 167727 YF7 |
| 3.61% | 167727 YG5 |
| 3.65% | 167727 YH3 |

\$30,105,000 5.25% Term Bonds due January 1, 2042\*, Price 114.947-f, Yield 3.40 %, CUSIP: 167727 YJ9 \$38,685,000 5.00% Term Bonds due January 1, 2047, Price 110.020 <sub>T</sub>, Yield 3.74%, CUSIP: 167727 YK6 \$48,405,000 4.00% Term Bonds due January 1, 2052\*, Price 100.709t, Yield 3.91%, CUSIP: 167727 YL4

| f     | Priced | to | the | January | 1, | 2027 | first | optional | redemption | date. | * |
|-------|--------|----|-----|---------|----|------|-------|----------|------------|-------|---|
| Insur | red.   |    |     |         |    |      |       |          |            |       |   |

<sup>1</sup> Copyright 2017, American Hankers Association. CUSIP data used herein is provided by CUSIP Global Services, managed on behalf of the American Bankers Association by S&P Global Market Intelligence, a Division of The McGraw-Hill Companies. Inc. The CUSIP numbers listed arc being provided solely for the convenience of the bondholders only at the time of sale of the Bonds and the City does not make any representation with respect to such numbers or undertake any responsibility for their accuracy now or at any time in the future. The CUSIP number for a specific maturity is subject to being changed after the sale of the Bonds as a result of various subsequent actions, including, but not limited to. a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Bonds.

### CITY OF CHICAGO

#### MAYOR

Rahm Emanuel

#### CITY TREASURER

Kurt A. Summers, Jr.

#### CITY CLERK

Andrea M. Valencia

#### CITY COUNCIL COMMITTEE ON FINANCE Edward M. Burke, Chairman

### CHIEF FINANCIAL OFFICER

Carole L. Brown

#### CITY COMPTROLLER

Erin Keane

#### **BUDGET DIRECTOR**

Alexandra Holt

#### CORPORATION COUNSEL

Edward N. Siskel, Esq. '

#### DEPARTMENT OF WATER MANAGEMENT

Alfonzo Conner, Acting Commissioner

CO-BOND COUNSEL '

" Schiff Hardin LLP -• ' Chicago, Illinois

Hardwick Law Firm, LLC **II**. **II** Chicago,'Illinois

#### CO-DISCLOSURE COUNSEL

Charity & Associates, P.C. Chicago, Illinois

Quintairos, Prieto, Wood & Boyer, P.A. Chicago, Illinois

#### CO-FINANCIAL ADVISORS

Swap Financial Group LLC New York, New York

TKG & Associates LLC Chicago, Illinois

#### \$215,485,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B

Maturity (January 1)

2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038

#### Principal Amount

\$6,515,000 \$6,570,000 \$7,060,000 \$12,165,000 ' <sup>1</sup> \$9,450,000 <sup>;</sup> \$9,945.,00Q<sub>:</sub>., \$10,440,000 \$14,070,000 \$9,085,000 ; \$9,545,000 \$10,030,000^., \$14,835,000<sup>'''</sup> \$15,585,000 \$9,140,0.QP,y,-\$9,600,000 .. \$10,085,000 <sup>J</sup>\$10,775;000<sup>'^</sup> ' \$n,3l'b;o6b<sup>;?r</sup>

#### \$11,875,000 ...<sub>k</sub> \$8,490,000 " ' \$8,915,000

#### Interest Rate

5.00%' 5.00% 5:0()% 5.00% ' 5.00% 5,00% 5.00% : 5.00% 5'.00% '1 5.00% 5.00% Wtiti 5.00% J 5,09;%/; \5.00%, 5.00% 5.60% ' 5.00%', 5-00%; 5.0\*0%, .5:00%,

Price

> .102.030 105.516 " ' 
108.571

#### ;'; ∎fii:i79

# 113.294 ; 1.15.059 . . 116.476 117.431 117.580 117.919 116.376 t ,, 115.391 t 114.415 t / >.( >lit3'.62;5 t iw/1.13.014 t 112.407 f <sup>r</sup>H<sup>·</sup>f 11977^<sup>!1</sup> 111.548 f J.11-121 t

#### . i\* Vl6.780 t 110.696 t

#### Yield

1.13% 1.34% 1.53% 1.72% 1.92% 2.10% 2.27% 2.45% 2.68% 2.84% 3.01% 3.12% 3.23% 3.32% 3.39% 3.46% '• 3:51% 3.56%-3.61% 3.65% 3.66%

CUSIP

167727 YM2 167727 YNO 167727 YP5 167727 YQ3 167727 YR1 167727 YS9 167727 YT7 167727 YU4 167727 YV2 167727 YW0 167727 YX8 167727 YY6 167727 YZ3 167727 ZA7 167727 ZB5 167727 ZC3 167727 ZD 1 167727 ZE9 167727 ZF6 167727 ZG4 167727 ZH2

t Priced to the January 1, 2027 first optional redemption date.

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|               |  | \$39                                    | 6,075,000 CITY O                     | F                                      |
|               |  |   | CHICAGO                              |  |
|               |  |   | emende                               |  |
|               | \$180,590,000 \$215,485                      | ,000                                    |                                      |  |
|               | SECOND LIEN WAST                             | EWATER TRANSMISSIO                      | N SECOND LIEN WA                     | ASTEWATER                              |
| TRANSMISS     |  |   |                                      |  |
|               |  |   |                                      |  |
| 20176         | KEVENUE BONDS, PI                            | ROJECT SERIES 2017A                     | KEVENUE BONDS,                       | REFUNDING SERIES                       |
| 20176         |  |   |                                      |  |

#### **INTRODUCTION**

This Official Statement, including the cover page, inside cover pages, and the Appendices, sets forth certain information in connection with the sale of \$180,590,000 Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A (the "Series 2017A.,Bonds") and \$215,485,000 Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B (the "Series 2017B Bonds" and, together with the Series 2017A Bonds, the "Bonds"), of the City of Chicago (the "City"), which are to be issued pursuant to the Series 2017 Bond Ordinance. All capitalized terms used in this Official Statement and not otherwise defined herein have the meanings provided in APPENDIX A-"GLOSSARY OF CERTAIN TERMS."

#### Purposes

The proceeds from the sale of the Series 2017A Bonds will be used to (i) finance or reimburse the City for certain capital improvements to and extensions of the wastewater transmission system of the City (the "Sewer System"), and (ii) pay Costs of Issuance of the Series 2017A Bonds. The proceeds from the sale of the Series 2017B Bonds will be used to (i) refund certain Outstanding Second Lien Wastewater Transmission Revenue Bonds of the City, and (ii) pay Costs of Issuance of the Series 2017B Bonds. See "ESTIMATED SOURCES AND USES OF FUNDS." \.

#### Authorization

The Bonds are being issued; pursuant to the constitutional home rule powers of the.City. The Bonds were authorized under an ordinance adopted by the City Council on January 13, .2016 (the "Series 2017 Bond Ordinance"). The Bonds are being issued under a Trust Indenture, dated as of June 1, 2017 (the "Indenture"), from the City to Amalgamated Bank of Chicago, Chicago, Illinois, as trustee (the "Trustee").'<sup>1</sup> <.

#### Security for the Bonds

The Bonds are limited obligations of the City having a claim for payment of principal and interest solely from the Second Lien Bond Revenues derived by the City from its ownership and operation of the Sewer System, all on an equal and ratable basis with any other Second Lien Bonds. The Bonds are secured by and payable from certain moneys and securities held by the Trustee under the Indenture.-The Bonds, together with any other Second Lien Bonds, are also secured by and payable from any amounts on deposit in the Second Lien Construction Accounts. The claim of the Bonds to the Net Revenues Available for Bonds is junior and subordinate to the claim of the City's Senior Lien Bonds and any Senior Lien Parity Bonds. See "SECURITY FOR THE BONDS - General" and "-Flow of Funds," "OUTSTANDING DEBT AND ANNUAL DEBT SERVICE" and APPENDIX B- "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE - Source of Payment; Pledge of Second Lien Bond Revenues."

The Bonds are not secured by "a ;lie"h oh .or security interest-in the physical assets of the Sewer System. The Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness, and neither the full faith and credit nor taxing power of the City, the^State ;o.f Illinois or any political subdivision of the State of Illinois is pledged to the payment of the Bonds.

Redemption' ;>;∎;∎"

l''

■:.∎.><i

The Bonds are subject to redemption prior to maturity as described under the caption "DESCRIPTION OF THE BONDS-Redemption."

Rate Covenant ;•'

• **•**-.**•**!• : **•** Ih'<thei Series 201-7 Bond Ordinance and the: Indenture-the. City covenanted'to establish, maintain and collect atallitimes; fees,<sup>2</sup> charges;andiratesifor4he services^providedi by the;Sewer System'sufficient at all times to (a) pay .Operation and Maintenance Cost's and (b)/to"pfoduce::.;;;j^i --i :: J on' .("<:.'-.-AIL.'j-Ai ...ur.t.:.-•' !•;\_

(i) Net Revenues! Available^for'Bonds.'sufficient to pay; the principal :of.and interest son; all \* Senior Lien Bonds then Outstanding from time to time and to establish and maintain the Bond

|.-.t|'.--'):

Principal and Interest Account and the Bond Debt Service Reserve Account asi'may; b'e covenanted in ordinances authorizing the issuance of Senior Lien Bonds, which Net Revenues
 i,<sup>1</sup> Available Tor Bonds must ie'ach Fiscal\* Year -at least'equalion'e hundred 'fifteen^perceht (115%) percent^ofthe'sumrequired-'toipay promptly'when' due the debt'service for the'Fiscal Year on all
 i=<; Senior Lien Bonds then Outstanding;' J" v'-? • " "- ^"-\* \*; ;== ;== ;-..."<] =:.':= hn. : uvy. ti.</li>

i i-i<sup>1</sup> -' (ii)'< •!" Secondbh-ien B6ndiRevenues"sufficientito-pay the.principal! of and-interest on aUitSecond'L'ieti Bonds then Outstanding from time to time and to establish' and 'maintain tfhtfS'ecbrid Lieri<sup>1</sup> Bonds Account as may be covenanted in the ordinances authorizing the issuance of Second Lien Bonds, j = wi = =! =: \*\*\*

(iii) (."amounts sufficientito pay thei principal of and interest ore all-Subordinate Lien Obligations then >'''<■■ Outstanding from time•■ to time and to establish, and maintain the Subordinate Lien Obligations iiAccbunt for the Subordinate Lien-Obligations; as may be covenanted < in the ordinances authorizing-the'issuance of Subordinate</li>

LieniObligations<sup>^</sup> which amounts must each Fiscal Year at least equal one hundred fifteen percent (115%) of the sum required to pay promptly when due debt service for the Fiscal Year on all Subordinate Lien Obligations Outstanding, and

.\_•=;:>..= i (iv)-- amounts sufficient'to ;pay the<sup>;</sup> principal Of<sup>1</sup> and "interest"6n'<sup>;</sup> all Short Term'= Obligations then

' <>> -Outstanding from time'to'time and the establish-and'maintain 'the <sup>1</sup> debt service' "account !for' th'e

.

'Short-Term Obligations as may be covenanted in the contracts governing the issuance of Short

•.Term Obligations.

The Indenture: provides that these fees, charges and rates shall not be reduced while any Bonds are Outstanding below the level necessary to ensure compliance with the foregoing covenant (the "Rate Covenant"). See "SECURITY FOR THE BONDS - Second Lien Rate Covenant;" "FINANCIAL OPERATIONS Annual<sup>1</sup> Budget' Review and Implementation of Annual Budget",' and APPENDIX B - "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE - Additional Second Lien Parity Bonds." The City will, prior to the end of each Fiscal Year, conduct a review to determine if it has been and will be in compliance with the Rate Covenant. Whenever the annual review indicates that projected Gross Revenues will not be sufficient to comply with the rate covenant, the City will prepare or cause to be prepared a rate study for the Sewer System identifying the rate changes necessary to comply with the rate covenant and the Director of the Office of Budget and Management of the City (the "Budget Director") and the Authorized Officer shall recommend appropriate

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action to the City Council to comply with this rate covenant, which may include rate increases or expenditure reductions.

#### Bond Insurance

Concurrently with the issuance of the Bonds, Assured Guaranty Municipal Corp. ("AGM") will issue its Municipal Bond Insurance Policy (the "Policy") for the Series 2017A Bonds maturing on January 1 of the years 2042 and 2052 (the "Series 2017A Insured Bonds"). The Policy guarantees scheduled payment of principal of and interest on the Series 2017A Insured Bonds when due as set forth in the form of the Policy included as APPENDIX E to this Official Statement. The Series 2017A Bonds maturing on January 1 of the years 2020 through 2037 and 2047 and the Series 2017B Bonds will not be insured by the Policy. For additional information on AGM and the Policy, see "BOND INSURANCE" and "APPENDIX E - SPECIMEN MUNICIPAL BOND INSURANCE POLICY."

#### City of Chicago Sewer System

The Sewer System consists Of approximately 4,400 miles of sewers, ranging in size from six inches to over 21.5 feet in diameter, and one sewage lift station. The City's Department of Water Management (the "Department") does not operate any sewage treatment facilities. The Sewer System collects and transmits wastewater to the treatment facilities of an independent governmental body, the Metropolitan Water Reclamation District of Greater Chicago (the "Water Reclamation District"). See "DEPARTMENT OF WATER MANAGEMENT" and "SEWER SYSTEM."

#### Sewer System Rates

The City Council has authority to make adjustments to sewer service rates. No regulation by any administrative agency applies to the Sewer System rates. Under certain conditions, the Authorized Officer shall recommend appropriate action to the City Council to comply with the Rate Covenant. See "INTRODUCTION -Rate Covenant."

The Sewer System rates for all accounts located within the City are a percentage of the Water System rates. Metered water rates are based on a dollar rate per thousand cubic feet. The assessment of non-metered users is based on a formula related to the size of the relevant property and other use-related factors. Because the Sewer System rates are calculated as a percentage of the Water System rates, Sewer System rates also increase when Water System rates increase. In 2011, Chicago City Council passed an ordinance raising rates for four consecutive years and then tying rates to the rate of inflation. In 2012, the Water System rates represented a 25% increase over the rates for the previous year and Sewer System rates increased to 89% of 2012 Water System rates from 86% the previous year. In 2013, Water System rates represented a 15% increase over the previous year and Sewer System rates increased to 92% of 2013 Water System rates. In 2014, Water System rates represented a 15% increase over the previous year and Sewer System rates increased to 96% of 2014 Water System rates. In 2015, Water System rates represented a 15% increase over the previous year and Sewer System rates increased to 100% of the 2015 Water System rates, and are scheduled to remain at 100% of Water System rates. Beginning June 1, 2016, and every year thereafter, annual Water System rates are required to be adjusted, if applicable, by applying to the previous year's rates the rate of inflation, calculated based on the Consumer Price Index -Urban Wage Earners and Clerical Workers (Chicago All Items) published by the United States Bureau of Labor Statistics for the 365-day period ending on the most recent January I. Any such annual increase, however, shall be capped at 5% of the previous year's rate. The City Council may take action at any time to alter the then-current schedule of water or sewer rates. Under certain conditions, the Authorized Officer shall recommend appropriate action to the City Council to comply with the Rate Covenant. See "INTRODUCTION - Rate Covenant." There was no increase in Water System or Sewer System rates for 2016. Effective June 1, 2017, the City's water and sewer rates increased by 1.83% or \$0.07 per 1,000 gallons, making the rate \$3.88 per 1,000 gallons of water. See "FINANCIAL OPERATIONS."

Chicago Water and Sewer Tax . '

On September 14, 2016, the Chicago City Council approved a tax on the use or consumption of water in the City, and on the transfer of wastewater to the Sewer System from properties located in theGity. (subject.fb certain exceptions) (the "Chicago Water and Sewer Tax") to fund pension contributions by the City. The Chicago IWateri and- Sewer Tax^revenues/are mot ,Gross Revenue's of the Sewer- System'andjwill mot-be utilized for the loperations of, the Seweri System,"and'Chicago .Water and Sewer Tax- revenues will mot be; pledged: to ithe repayrhent'pTithe Bonds. bThe>Ghic 201:7;at a rate bf<\$!295:per 4',000:gallons of water.and;\$.295; per ^000'gallons of wastewater. '.TheiSO18irate will be'\$.64iper 1'000i gallons'of ;andf \$.64Lper )1,000'gallons of:wastewater^: water (The:20sli9;ratewill:be'\$al.005^peer l>.000i gallons iof water; and \$1^005iper. 1:000 gallons o'fr wastewater. :The --2020 rate will:be)\$'1.255):pen.;1,000 gallons'bf(water and-\$ri255i per 1,000 galloris'bf wastewatericiThe.Chicago Water and Sewer, Tax appearsiasra separately stated item on the unified bill for City-provided water, sewer!and femse collectidfl/s'ervic'e's:! Pursuant to the Municipal Code, payments on the unified bill are allocated pro rata among the charges shown on the bill, with oldest unpaid amounts being paid first. See "INVESTMENT

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CONSIDERATIONS i<sup>\</sup>UOdier Considerations - Unified Billing" for a discussion of certain risks related to the inclusion of the Chicago Water and SeweF'Tax; (tdgether>with>the-other charges, on.tfie'-unified-bill/-' ><•••;;• !<sup>,;</sup>• !• •'•••>• ■)-. r>n-j ■..>■•"!'

!**!**'::**!** i .-lio;...':•••!/ :**!**>•**!** •• i .-••,•;::!: / i **ESTIMATED** SOURCES bur: :'::=>•.=.===: AND USES OF FUNDS .->∎!: ■■ ,-. .-ryu,^ : ■ '.-■■ii;<V 1\nU\(}i}!!'\:r^ .'.'is: A '•i\'.:v.rwi'r; :-.;■: :/ • '**=**<: ,< :\*l*;; '•;:**=!**  $T.-Uy:ry, \geq;$ •.:>.'**=**'.= -ii :.>ri: >" ≪∎ Project Costs!: ,i; v." ∎:**■**.<**■**•'■ : rr **==•**.]

The proceeds from the sale of the Series 2017A Bonds will be used to (i) finance or reimburse the City for certain programs and projects for the Sewer System (the "Project Costs"), and (ii) pay,Costs of-Issuance of the Series 2017A Bonds. Such programs and projects, and the amounts allocated to each, are estimates and are subject tachanges See "DEPARTMENT OF WATERMANAGEMENT-CapitaliImprovement Program."

Refunding of Refunded Bonds: ; "•  $\blacksquare$ , [•  $\blacksquare$ .' 'bi.-v  $\blacksquare r^{A-^{+}}$  [.  $\blacksquare$   $\blacksquare$   $\blacksquare$ !; <;  $\blacksquare$ ; ..., ..., ..., ..., ... i :•; ... Li

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Certain information contained in, or incorporated by reference in, this Official Statement has been obtained by the City of Chicago (the "City") from The Depository Trust Company and other sources that are deemed reliable. No representation or warranty is made, however, as to the accuracy or completeness of such information by the Underwriters or the City. The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information. This Official Statement is being used in connection with the sale of securities as referred to herein and may not be used, in whole or in part, for any other purpose... The delivery, of this. Official Statement.at any time does .not imply.that. information.herein is correct.as of any .time subsequent to its date.

No dealer, broker, salesperson or any other person has been authorized by the City or the Underwriters to give any information or to make any

representation other than as contained in this Official Statement in connection with the offering described herein and, if given or made, such other information or representation must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than those described on the cover page, nor shall there be any offer to sell, solicitation of an offer to buy or sale of such securities in any jurisdiction in which it is unlawful to make such offer, solicitation or sale. Neither this Official Statement nor any statement that may have been made verbally or in writing is to be construed as a contract with the registered or beneficial owners of the Bonds.

This Official Statement, including the Appendices, contains certain opinions, estimates and forward-looking statements and information that are based on the City's beliefs as well as assumptions made by and information currently available to the City. Such opinions, estimates, projections and forward-looking statements set forth in this Official Statement were not prepared with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information, but, in the view of the City, were prepared on a reasonable basis, reflect the best currently available estimates and judgments, and present, to the best of the City's knowledge and belief, the expected course of action and the expected future financial performance of the City. However, this information is not fact and should not be relied upon as being necessarily indicative of future results, and readers of this Official Statement are cautioned not to place undue reliance on such opinions, statements or prospective financial information.

The prospective financial information set forth in this Official Statement, except for certain information sourced to parties other than the City, is solely the product of the City. Neither the City's independent auditors, nor any other independent auditors, have compiled, examined, or performed any procedures with respect to, or been consulted in connection with the preparation of, the prospective financial information and forward-looking statements contained herein. The City's independent auditors assume no responsibility for the content of the prospective financial information set forth in this Official Statement,'iricluding any estimates, disclaim any association with such prospective financial information, and have not, nor have any other independent auditors, expressed any opinion or any other form of assurance on such information or its achievability.

Assured Guaranty Municipal Corp. ("AGM") makes no representation regarding the Series 2017A Insured Bonds or the advisability of investing in the Series 2017A Insured Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading "BOND INSURANCE" and "APPENDIX E - SPECIMEN MUNICIPAL BOND INSURANCE POLICY."

References to web site addresses presented in this Official Statement are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such web sites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement.

# THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

THE BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OK 1933, AS AMENDED, NOR HAS THE INDENTURE BEEN QUALIFIED UNDER THE TRUST INDENTURE ACT OF 1939, AS AMENDED, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACTS. THE REGISTRATION OR QUALIFICATION OF THE BONDS IN ACCORDANCE WITH APPLICABLE PROVISIONS OF LAW OF THE STATES IN WHICH THE BONDS HAVE BEEN REGISTERED OR QUALIFIED AND THE EXEMPTION FROM REGISTRATION OR QUALIFICATION IN OTHER STATES CANNOT BE REGARDED AS A RECOMMENDATION THEREOF.

IN CONNECTION WITH THE OFFERING OF THE BONDS, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN'THE MARKET PRICES OF THE BONDS AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME. THE PRICES AND OTHER TERMS RESPECTING THE OFFERING AND SALE OF THE BONDS MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS AFTER THE BONDS ARE RELEASED FOR SALE, AND THE BONDS MAY BE OFFERED AND SOLD AT PRICES OTHER THAN THE INITIAL OFFERING PRICES, INCLUDING SALES TO DEALERS WHO MAY SELL THE BONDS INTO INVESTMENT ACCOUNTS.

The following table sets forth the maturity, interest rate, principal amount, redemption date and price for each maturity of the Refunded Bonds.

Prior Bond Issue

Series 2006A Scries 2006A Series 2006A Series 2006A Series 2006A Scries 2006A Series 2006A Series 2006A Series 2006B Series 2006B Series 2006B Series 2006B Series 2008A Serie

<sup>&#</sup>x27; Series 2008A Series 2008A Series 2008A Series 2008A Series 2008A Series 2008A

<sup>♦</sup>Term Bonds; Final

|         |                                   |   |                   |                |                                | Interest                                     |
|---------|-----------------------------------|---|-------------------|----------------|--------------------------------|--|
|         | 2010                              | 5.0000/                                 | Maturi            | ty (January 1) | Rate                           |  |
|         | 2018                              | 5.000%                                  |                   |                |                                |  |
|         | 2019                              | 5.000%                                  |                   |                |                                |  |
|         | 2020<br>2021                      | 5.000%<br>5.000%                        |                   |                |                                |  |
|         | 2021                              | 5.000%                                  |                   |                |                                |  |
|         | 2022                              | 5.000%                                  |                   |                |                                |  |
|         | 2023                              | 2026*5.000%                             |                   |                |                                |  |
|         | 2030*                             | . 5.000%                                |                   |                |                                |  |
|         | 2036*                             | 5.000%                                  |                   |                |                                |  |
|         | 2018                              | 5.000%                                  |                   |                |                                |  |
|         | 2019                              | 5.000%                                  |                   |                |                                |  |
|         | 2020                              | 5.000%                                  |                   |                |                                |  |
|         | 2021                              | 5.000%                                  |                   |                |                                |  |
|         | 2021                              | 2023*5.000%                             |                   |                |                                |  |
|         | 2021                              | 2025*5.000%                             |                   |                |                                |  |
|         | 2021                              | ,2030*5.000%                            |                   |                |                                |  |
|         | 2021                              | 5.000%                                  |                   |                |                                |  |
|         | 2022                              | 5:000%                                  |                   |                |                                |  |
|         | 2023                              | 5.000%                                  |                   |                |                                |  |
|         | 2024                              | 5.125% 2025' ' "                        | 5.250% 2026       | 5.250%         |                                |  |
| ;       | 2027 ,.                           | 5.250%                                  |                   |                |                                |  |
|         | 2028                              | 5.250%                                  | 5 2500/           |                |                                |  |
|         | 2029                              | 5.250% ,2030                            | .,. 5.250%        |                |                                |  |
|         | 2031                              | 5.375%                                  |                   |                |                                |  |
|         | 2032<br>2033                      | 5.375%<br>5.500%                        |                   |                |                                |  |
|         | 2033                              | 2038*5.500%                             |                   |                |                                |  |
| Maturi  |                                   | 2038 5.50070                            |                   |                |                                |  |
|         | •                                 |   | Principal A       | mount of Prior | Bonds Refunded                 |  |
|         | 540,000                           |   |                   |                |                                |  |
|         | 520,000                           |   |                   |                |                                |  |
|         | 705,000                           |   |                   |                |                                |  |
|         | • 90,000                          |   |                   |                |                                |  |
|         | 80,000                            |   |                   |                |                                |  |
|         | 980,000                           |   |                   |                |                                |  |
|         |                                   | 30,000 \$20,135,000                     |                   |                |                                |  |
|         | 70,000<br>515,000                 |   |                   |                |                                |  |
|         | 15,000<br>55,000                  |   |                   |                |                                |  |
|         | 55,000<br>75,000                  |   |                   |                |                                |  |
|         |                                   | 25,000 \$19,545,000                     |                   |                |                                |  |
|         | 35,000                            |   |                   |                |                                |  |
|         | /60,000                           |   |                   |                |                                |  |
|         | 000;000                           |   |                   |                |                                |  |
|         | 250,000                           |   |                   |                |                                |  |
|         |                                   | 10,000 . \$6,115,000                    |                   |                |                                |  |
|         | 35,000                            |   |                   |                |                                |  |
| \$6,7   | 70,000                            |   |                   |                |                                |  |
| \$7,1   | 25,000                            |   |                   |                |                                |  |
|         | 00,000<br>05,000                  |   |                   |                |                                |  |
|         | 30,000 \$50,00                    | 00.000                                  |                   |                |                                |  |
| φ0,2    |                                   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                   |                |                                |  |
|         |                                   |   |                   |                |                                |  |
| Redempt | <u>ion Date</u><br>1 2017 July 21 | 2017' July 21 2017 July 21 201          | 7 July 21 2017 Ju | v 21 2017 Iuly | 21 2017 July 21 2017 July 21 2 | 017 July 21, 2017 July 21,2017 July 21, 2017 |
| sury 2  | .,_01, July 21                    | , outy1,201 / outy_1,201                | ,,,,, Ju          | .,,,_,_,, ouly |                                | 51, 5mg 21, 201, 5mg 21,201, 5mg 21, 201/    |

July 21,2017 July 21,2017 July 21,2017 July 21,2017 July 21, 2017 July 21,2017 July 1,2018 January 1,2018 January 1,2018 January 1,2018' January 1, 2018 January 1,2018 January 1,2018 January 1,2018

' 106%  $100\%\ 100\%\ 100\%\ 100\%\ 100\%\ 100\%\ 100\%\ 100\%\ .\ 100\%\ 100\%$ 100%

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 $100\% \dots 100\% \ 100\% \ 100\%$ 

#### Estimated Sources and Uses of Funds

The following table sets forth the estimated application of the proceeds of the Bonds:

|  | Series 2017A Bor                      | nds Series     | 2017B Bonds Total  |
|--|---------------------------------------|----------------|--|
| Source of Funds  |                                       |                |  |
| Principal Amount of Bonds<br>Original Issue Premium<br>Series 2008A Second Lien Bonds Debt | \$180,590,000.00<br>17,322,172        |                | 85,000.00 \$396,075,000.00<br>3,397,991.90 45,720,164.35 |
| Service Reserve Cash Deposit<br>Total Sources of Funds' '.'                                |                                       |                | $\frac{7.187.021.00}{7.187.021.00}$                      |
|  | \$197.912.172.45                      | \$251.070.012. | 90 \$448.982.185.35                                      |
| Use of Funds   |                                       |                |  |
| Project Costs<br>Deposit for Refunding<br>Costs of Issuance (including Underwriters'       |                                       |                | 0,000.00^ \$196,000,000.00<br>,637,638.63 249,637,638.63 |
| discount)  | 1,291,238.                            | ,              | 432,374.27 2,723,612.84                                  |
| Bond Insurance Premium<br>Total Uses of Funds  | <u>620.933.88</u><br>\$197.912.172.45 |                | <u>20.933.88</u><br>.012.90 \$448.982,185.35             |

#### 5 DESCRIPTION OF THE BONDS

#### General

The Bonds will be dated the date of their delivery and will bear interest from that date until paid, payable semiannually on each January 1 andJuly 1, commencing January 1, 2018. The Bonds will bear interest at the rates per year, and mature in the principal amounts on January 1 in. each year, as set forth on the inside cover pages of this Official. Statement. Interest on the Bonds is computed on the basis of a 360-day year consisting-of twelve 30-day months. The Bonds will be issued in denominations of \$5;000 or integral multiples thereof. The Bonds are subject to redemption prior to maturity, as described below under the heading "-Redemption." '!!**••**": ; *Principal of and interest on the Bonds will be paid by the Trustee. If any payment on any Bonds is due on a day .other than a Business Day, it will .be. made on the next Business Day, and no interest will accrue as a result.* **•**"...! '!<**•**"...!

The Bonds initially will be issued through a book-entityCbnly system operated by The Deppsitotyl Trust CompanyvfNew York, New York ("DTC"): " Details of payments of the Bonds whenin the book-entry form and the

book<sup>^</sup>etttry only system are described Below under the heading "-Book-Entry; Only System." Except as described sunder the heading :;"-Book-Entry Only System" below, beneficial owners of the Bonds ..will not receive or 'have the rightto'receive physical'delivery of Bonds; and will not be or be considered to<sup>1</sup> be the Owners'thereof. AccprSrjgly', each beneficial Owner must rely upon (i) the procedures of DTC<sup>and^</sup>rf such beneficial)owner is not: a.DTC "Participant" (as: defined below), the Participant who will act on behalf of such beneficial';bwner to receive'notices and payments of principal of and interest oh the Bonds, and to exercise voting rights and (ii) the records of DTC jand, if such beneficial owner is not a. Participant, such: beneficial owner's-Participant, to <sup>^</sup>evidence, its beneficial ownership of the Bonds. So long as-DTC or its nominee-is the registerea<sup>^</sup>Owner of the'Bbnds,<sup>1</sup> references Hefeiri';to Bondholders :or Owners of such Bonds mean'DTC'or its nominee and do not mean the beneficial owners ofsuch Bonds.

#### Redemption

**Optional Redemption.** 

The Series 2017A Bonds maturing on and after January 1, 2028 are subject to redemption prior to

maturity at the option of the\* City, at anytime on or after January > 1, '2027,' as a whole or in part, and if in part,

in

such order of maturity as the City shall determine and within any maturity shall be selected at random by the

Trustee<sup>1</sup> in such mannerl'as the Trustee in its'discretion<sup>^</sup> may 'deem fair and appropriate, in Authorized

Denominations, at a price of par plus accrued interest to the redemption date. ,, - . <sub>ac</sub> -

The Series,201'7B'Bonds maturing on and after'January 1, 2028 are subject to'redemption'prior<sup>1</sup> to maturity at the option of the City, at any time on of after-January 1, 2027, as a whole or in part, arid if in part, in such order of maturity as the City shall determine and within any maturity shall be selected at random by the Trustee in such manner 'as the Trustee in its discretion may deem fair and appropriate,, in Authorized Denominations, at a price of par plus'accrued interest to'the redemption date.

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#### Mandatory Sinking Fund Redemption.

The Series 2017A Bonds maturing on January 1, 2042 are subject to mandatory redemption, in part by lot from mandatory Sinking Fund Payments, on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

| YearPrincipal Amount |             |
|----------------------|-------------|
| 2038                 | \$5,420,000 |
| 2039                 | \$5,705,000 |
| 2040                 | \$6,005,000 |
| 2041                 | \$6,320,000 |

#### 2041 2042\*\$6,655,000 \* Final Maturity

The Series 2017A Bonds maturing on January 1, 2047 are subject to mandatory redemption, in part by lot from mandatory Sinking Fund Payments, on January 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

| YearPrincipal Amount |                  |
|----------------------|------------------|
| 2043                 | \$7,000,000      |
| 2044                 | \$7,350,000      |
| 2045                 | \$7,720,000      |
| 2046                 | \$8,105,000      |
| 2046                 | 2047*\$8,510,000 |
| * Final Maturity     |                  |

The Series 2017A Bonds maturing on January 1, 2052 are subject to mandatory redemption, in part by lot from mandatory Sinking Fund Payments, on January 1 in each of the years and in the respective amounts set forth below; at a redemption price equal to the principal amount to be redeemed:

| Year.   | Principal Amount  |
|---------|-------------------|
| 2048    | \$8,935,000       |
| 2049    | \$9,295,000       |
| 2050    | \$9,665,000       |
| 2051    | \$10,055,000      |
| 2051    | 2052*\$10,455,000 |
| * Final | Maturity          |

If the City redeems Bonds of a Series and maturity, identified above as subject to mandatory redemption, pursuant to optional redemption or purchases such Bonds and cancels the same, then an amount equal to the principal amount of the Bonds of such Series and maturity so redeemed or purchased shall be deducted from the mandatory redemption requirements as provided for such Bonds of such Series and maturity in such order as the Authorized Officer shall determine or, in the absence of such determination, shall be credited against the unsatisfied balance of the applicable Sinking Fund Payments in inverse order of their payment dates.

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#### General Redemption Procedures

Notice of redemption shall be given by the Trustee by mail, not fewer than 30 days nor more than 60 days prior to the date fixed for redemption, to the Owner of each Bond to be redeemed at the address shown on the registration books of the City kept by the Trustee. Each such' redemption notice shall specify: (i) the Bonds to be redeemed by Series, maturity and CUSIP number; (ii) the redemption date; (iii) the place where amounts due upon such redemption will be payable (which shall be the Principal Office of the Trustee); (iv) if fewer than all of the Bonds of any like Series and maturity are to be redeemed, the specific Bonds to be redeemed, identified by letters, numbers or other distinguishing

marks, and the principal amounts of such Bonds to be redeemed; and (v) that from and after the redemption date, such Bonds shall cease to bear interest. A redemption notice provided in connection with optional redemption may state that the redemption is conditioned on there being on deposit in the Principal and interest Accounts on the date fixed for redemption sufficient moneys to pay the redemption price of the Bonds to be redeemed. Such notice may set forth any additional information relating to such redemption as shall be deemed necessary or appropriate by the Trustee.

Failure to duly give notice of redemption by mail to any particular Bondholder, or any defect in' such notice, shall not affect the validity of any proceedings for the redemption Of Bonds for which such notice has been properly given.

Any Bonds, or portions of Bonds, which have been duly selected for redemption shall be deemed to be paid and shall cease to bear interest on the specified redemption date, if moneys sufficient to pay such Bonds are held by the Trustee for the benefit of the Bondholders.

#### Selection of Bonds for Redemption

In the event of the redemption of fewer than all of the Bonds of the same Series and maturity, the particular Bonds or portion of Bonds to'be redeemed shall be selected at random by the Trustee in such manner as the Trustee in its discretion may deem fair and appropriate; provided; that the portion of any Bond of a denomination of more than the minimum Authorized Denomination shall be in the principal amount of an Authorized Denomination and that, in selecting portions of such Bonds for redemption, the Trustee shall treat each such Bond as representing that number of Bonds of the minimum Authorized Denomination which is obtained by dividing the principal amount<sup>1</sup> Of such Bond to be redeemed in part by the minimum Authorized Denomination. So long as DTC or its nominee is the registered owner of the Bonds of a Series, if fewer than all of the Bonds of such Series are called for redemption, the particular Bonds or portions of Bonds of such Series to be redeemed will be selected by lot by DTC in such manner as DTC may determine. See "DESCRIPTION OF THE BONDS - Book-Entry Only System."

#### Bond Registration and Transfers

#### Book-Entry Only System

## The following information has. been furnished by The Depository Trust Company for use in this Official Statement, and neither the City, nor any of the Underwriters takes any responsibility for its accuracy or completeness.

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The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the Bonds. The Bonds will be issued as fully registered securities registered in, the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered Bond certificate will be issued for each maturity of each Series of the Bonds, each in the aggregate principal amount thereof set forth herein, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member pf the Federal Reserve.System, a "clearing corporation" within the meaning of.the.New York-Uniform Commercial Code, and a ."clearing agency", registered, pursuant to the provisions ;of .Section 17A of the Securities. Exchange Act of .1934, as amended (the "Exchange Act"). DTC holds and provides asset servicing for oy,er,3.5 million issues of U.S. and non-U.S. equityjssue.s, corporate and municipal debt issues, and. money market instruments (from over 100 countries) that.DTC's

participants ("Direct Participants") deposit with DTC-DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-.entry transfers and pledges between Direct Participants' accounts. This eliminates the need for. physical. movement of securities certificates. Direct Participants. include both ,U.S. and non7U.S. securities brokers and, dealers, banks, trust companies, clearing corporations, and .certain other organizations, DTC is a, wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"), DTCC is the holding company for DTC, National Securities owned by the users of its regulated subsidiaries. Access to the DTC system is also available to; others such as both U.S. and non-U.S. securities brokers and.dealers, hanks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has an S&P Global Ratings rating pf AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission (the "SEC"). More information about DTC can be found at www.dtcc.com <hr/>

Purchases of the Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Bonds, except in the event that use of the book entry system for the Bonds is discontinued.;

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by. Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be goverhed-by'arrangerhents'among them, subject 'to-any statutory or regulatory requirements as may be in effect from time to time;<sup>1</sup> 'Beneficial Owners of theBonds'may'wish'to take'certain steps to'aUgm'enf the transmissibri to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults,: and proposed amendments to the Bond documents. For example, Beneficial Owners of the Bonds may wish to ascertain' tKaVHh'e nominee holding' the' Bonds for;' their 'benefit has' agreed ' to' obtain arid' 'transmit notices

to

Beneficial Owners.<sup>3</sup>In'tHe'alternative',^ may<sup>1</sup> wish' to"pr6vide<sup>v</sup>their names arid 'addresses 'tb'ihe Trustee 'and request^

"; <sup>1</sup> Neither' DTC<sup>r</sup>ridr' Gede '&; Co. (nor any bther'DTC; ribfriiriee)" will consent or vote with respect to the

Bonds u'rileW authpTized by a Direct Participant Under 'its 'usual pr6dedufes;"DTC"marl's" an Omnibus Proxy to the City as sobri as'pb'ssible 'after the record date.<sup>1</sup> The'Omriibus Proxy<sup>1</sup> assigns'<sup>1</sup> Cede"c^.' Coi'si<sup>;</sup> consenting<sup>4</sup> or"∎ Voting'-rights^ ¥6"those<sup>1</sup> "Direct<sup>1</sup> Participants tb<sup>;</sup> whosie<sup>;</sup> accounts' the Bbn'ds' are'credited or?uie^re'cSfid'dafe'<sup>f</sup>(i&eViriri&l'ih' a listing<sup>1</sup> attachVtfWme^O^nibus^bxyi.'; '**•••**) \*j'i;;qirr/irt 1 gf urine ;no,'i!';\;b;;;: ;**••**<.-.: -..n; finoij'.iKiJfnnJ tvhrm-yjy. isrlkj hnr. ') i'(! Rederriptiori^proceeds, distributiorisi'and interest payments'on'ffi^^ rijade<sup>;</sup>tb Cede &'Go:, of such^bmePnbmin'e'e as<sup>J</sup>rriay<sup>i</sup>be requeste^o"by-an'-auWo¥izSd representativ'e'<sup>i</sup>bf DTC;<sup>in</sup>DTC's<sup>,</sup>pfactice'is'/tb'ciedit Dire'cfParti'ci'pari^^ informationfrbhi'm^'City <sup>!</sup>bf irie'Tfuste'e^'o'ni the -payable' d'ate-iri' accordance" with ftheir 'respective<sup>1</sup> hbldirigs <sup>1</sup>'shbwri<sup>1</sup>-on"DTC's<sup>>!</sup> records: Pa^^nte; BynPaHcip"a¥t^'-tb Beneficial Owners1 willi-b'efgbverh'ed^by 'standing' iristriictioris1 arid cus'tbmary practices'; as-'is'tKeicase With\*securities held for th'e a'ccoun'ts'bf customers' in'-beafef' 'form 'of 'fegis'fere'd' in 'Street name^'-^'df will'-bS^ City, subject to'any sfamtor^ 'Paymerif of redemption proceeds^ di's'tfibutibris"-and'inter"est'payrherits'to Cede'cS'Cb: (or<sup>1</sup>s'ufcW other nbmMriee 'as'iria'y-be requested by ari<sup>3</sup> authorized repfesen'tative'<sup>l</sup>bf<sup>J</sup>DTC)',is^ of the City' or'Hh'e' Trustee; disbursement" Of such payments tb Direct Participahfs' will'be the're's'pbrisibility' of DTC, and'disbufsernerit of siicH'payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

'-•' DTC may discontinue providing its services as securities'depository with respect to the Bbnds at any time by giving\* reasonable notice to the City or the Trustee. Under such' circumstance's, in the event that 'a successor securities depository is not obtained, certificate's! for the Bonds ' are' required to be printed and delivered/"" ^.!;" ',""", ',"", ',"", ',"", ',"", ',"", ',"", ',",'

The City may; decide the discontinue Use of the system of bbbk-erifryonly transfers'through DTC (or a successor seciintie's depositbry)?' In<sup>1</sup> that event', <sup>1</sup> certificates''for'tHe 'Bonds' wi 11 b'e<sup>3</sup> printed<sup>3</sup> and 'delivered'tb<sup>4</sup>DTC' '

'The-information ih-this'section concerning-DTG'and'bTG's-<sup>i</sup>bbbk-e'ritfy<sup>v</sup>brily'system-has been obtained from sources that the City believes to be reliable, but the City takes no responsibility for tlVe'accuracy thereof. '<sup>1</sup>"

....

Additional Information '

For every transfer and exchange of the Bbnds,'DTC, the Trustee and the Participants may charge 'the' Beneficial"Owner a 'sum-'sufficient'to cover any tax, fee brother charge that may<sup>J</sup> Be imposed in relation thereto.

'\_''**=** :

NEITHER<sup>;</sup> THE CITY NOR THE' TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO ANY PARTICIPANTS, OR TO THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE BONDS, OR TO ANY BENEFICIAL OWNER IN RESPECT OF

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THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT IN RESPECT OF THE PRINCIPAL OF OR INTEREST ON THE BONDS, OR ANY NOTICE WHICH IS PERMITTED OR REQUIRED TO BE GIVEN WITH RESPECT TO THE BONDS, INCLUDING ANY NOTICE OF REDEMPTION OR OTHER ACTION TAKEN, BY DTC AS REGISTERED OWNER OF THE BONDS.

The City is entitled to treat Owners as absolute owners of the Bonds for the purpose of paying principal, interest and redemption price.

In reading this Official Statement it should be understood that while the Bonds are in the Book-Entry Only System, references in other sections of this Official Statement to registered owners should be read to include the person

for which a Participant acquires an interest in the Bonds, but (a) all rights of ownership must be exercised through DTC and the Book-Entry Only System and (b) notices that are to be given to registered owners will be given only to DTC.

#### General Provisions of the Bonds When Not in Book-Entry Only System

During any period in which the Bonds are .not registered in the name of DTC or its nominee\* the principal of all Bonds and the Redemption Price, if any, of all Bonds (and the interest payable on any date of redemption other than on an Interest. Payment Date) shall be payable at the Principal Office of the .Trustee, which is the paying agent for the Bonds. Interest on the Bonds payable on any Interest Payment Date shall be payable by check mailed by the Trustee to the registered owners of the Bonds at their addresses as shown on the registration books of the City maintained by the Trustee. The interest payable on the Bonds on each Interest Payment Date will be paid to the persons in whose names the Bonds are registered as of the applicable Record Date.. Upon request of a registered owner of at least \$1,000,000 outstanding principal amount-of the Bonds, all payments of interest on all Bonds shall be paid by wire transfer in federal funds to an account win the continental United States designated by such registered owner. The principal and Redemption Price of each Bond shall be payable in clearinghouse funds upon surrender of such Bond at the Principal Office of the Trustee. 'The Bonds may be transferred or exchanged for the same total principal amount of Bonds of the same maturity of other Authorized Denominations upon surrender at the Principal Office of the Trustee, together with an assignment executed by the registered owner or by the registered owner's duly authorized agent. Payment of any tax, fee or other governmental charge, other than one imposed by the City, arising from any transfer or exchange of Bonds may be required to be paid by the registered owner as a condition for exercising that privilege. Neither the City nor the Trustee will be required to transfer any Bond during the 15 days next preceding ah Interest Payment Date or, in the case of a proposed redemption of the Bonds, after the selection by the Trustee of such Bonds for redemption. In the event any Bond is mutilated, lost, stolen or destroyed, the City shall execute and the Trustee shall authenticate a new Bond upon satisfaction of the provisions of the Indenture.

#### SECURITY FOR THE BONDS

#### General

The Bonds are limited obligations of the City and do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provisions or limitations as to indebtedness, and have no claim to be paid from taxes of the City. As described below, the Bonds, together with the Outstanding Second Lien Bonds, including any Second Lien Parity Bonds issued from time to time in the future, are secured by a pledge of Second Lien Bond Revenues that are derived from the Net Revenues Available for Bonds (as defined below) in the City's Sewer Revenue Fund, which claim is junior and subordinate to the claim of the Outstanding Senior Lien Bonds and any Senior Lien Parity Bonds. See "Flow of Funds -4. The Second Lien Bonds Account," below.

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' i - "Net'Revenues Available: for Bonds" means that'portion of Net Revenues remaining in any period, minus any amount's deposited'during that-period in the Sewer Rate Stabilization Account<sup>1</sup> as provided in the Series 201-7: ;Bohd Ordinance (OtherUhah amounts<sup>1</sup> transferred to that Account'from amounts-received upon the issuance<sup>1</sup> of any! Senior'Lieri.'Parity 'Bonds)} arid: pliis'.the amounts, withdrawn- during that' period from: that Account. "Net Revenues" means that portion of the Gross Revenues remaining in any period after providing sufficient funds for Operation and Maintenance Costs. The terms "Gross Revenues" and "Operation and Maintenance Costs" have trie meanings set forth in APPENDIX A-"GLOSSARY OF CERTAIN TERMS."

#### Pledge of Second Lien Bond Revenues

' or;-.! The Bonds- are; payable johi a; parity-basis tas -to Second-Lien Bond Revenues! with iall other (Outstanding

Second Lien Bonds, Including,any Second Lien Parity Bonds issued from time to time in< the future. Second Lien Bond Revenues\* consist of all.Net Revenues i Available for-; Bonds 'deposited into: the 'Second! Lien Bonds Account pursuant to the Series 2017 Bond Ordinance and the ordinances authorizing each; prior series of Outstanding Second Lien Bonds and each series of Outstanding Second Lien Parity Bonds. On the Business Day immediately preceding each January.?! (and) Julyil{- the Authorized'iOffic'er-'isi required: to-transfeVto ithe Trustee for deposit into the Second Lien Bonds Account the amounts required by the Indenture and any ordiriarice"authOnzing>tKe issuance! of 'Secorid"Lien.'-Bonds;' <sup>i</sup> Pursuarit to' the-IridentureV'sUch Secorid Lien Bond Revenues'! are pledged'Uo the'ip^ Outstanding Second Lien Bonds,: without priority or distirictioriLdfbhe'series Of Second Lien Bonds over any other series of SecondLienIBbhds'.' 'Sete"Tidw-df'Fmds<sup>f,^,</sup> fsT^e'iSefcoild'Lien-Bo'iids Account,<sup>1</sup>?'bel'oW:-':'> ' !''•'<sup>1</sup>- ''</sub>

 $Pledge of. Amounts; iriiSecond Lien'Construction Accounts - jiM ; b::i | <--: <|i.^; /.:') => =.; , -a$ 

 $\label{eq:linear} $$ $$ $$ TherBbndsi together?with anyi.omernOutstanding^S.econd>-iLiem8onds;>areialscsecured;.by and payable fromiany;amountstonfdepositin theSecondrLien-Construction Accounts: -on...) t. io ;-:-.;r:':i '; .-sn^fn/;/;$ 

 $\label{eq:spinor} FJPW.ofJFunds,, \quad ;, \blacksquare_{Jj}; \ (\ rr;r.::. 'e' v.; u, In-H 'bn- .-.-v.-\_\_\_\_ ^nii, -or-...- \blacksquare -.. riM'-<-i -ji^/i--; \\ out the provisions, of, die.p^ Senior. Lien-B.onds, the Second Lien Bonds, any Subordinate Lien ^Obligations, any Commercial P^per Notes pr.any Line of ^Credit Notes. All Gross. Revenues .pf the, Sewer System.are, {credited,as; they are collected to_{I(the,Sewer-.Revenue Fund,.which. js.held by a depository, bank which is, currently.not, the depository for, the...City|'s, General; Fundi.: Net Revenues., Ayailab]e for:Bonds are required pursuant to the Seriesti 2Q17. Bond Ordinance-; to, be^ deposited, in the following accounts .in the following order of priority: /:, ..., --';, - ...';; - ...';; - ...';; - ...';; - ...';; - ...';; - ...';; - ...';; - ...';; - ...';; - ...';; - ...';;$ 

1. The Bond Principal and Interest Account is used to pay principal of, redemption premium, if any, and interest on thejOutstanding-S.enioriLiensBpnds and amounts owed on Interest Rate Hedge Agreements for Outstanding Senior Lien Bonds. At least 10 days before each date that such debt service payments are due with respect to Senior Lien Bonds, sufficient amounts to make such payments shall be deposited into this Account.

2. "" The"Bond 'Debt" Service' Reserve 'Account is used 'to' pay" principal of, redemption premium,'if any, and interest oh the Outstanding Senior Lien Bonds as the same become dUe at any time when there are insufficient funds available 'for such' purpose in the Bond Principal and Interest Account (after any available amounts in the' Sewer Rate Stabilization Account have first been applied to that purpose,- excluding amounts in'excess of the'Bond-Debt Service Reserve Requirement for Outstanding SeniorLien Bonds),' except to the'extent required to be credited to the Senior Lien Rebate Accounts'. The Bond Debt Service Reserve Requirement for Outstanding SeniorLien Bonds is currently met by a municipal bond debt service reserve fund policy. The City is required to deposit funds from the Sewer Revenue Fund into the Bond Debt Service Reserve Account to repay any draws made under that policy.

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3. The Senior Lien Rebate Accounts are used to make required rebates of arbitrage to the United States with respect to any Senior Lien Bonds.

- 4. The Second Lien Bonds Account is used to pay the principal of and interest on the
- 4. Bonds and any other Outstanding Second Lien Bonds. The City also is required to make deposits in the
- 4. Second Lien Bonds Account to meet other payment obligations under the Indenture and any ordinance
- 4. or indenmre authorizing Outstanding Second Lien Bonds. The City will make debt service and other

4. deposits as required ^ ordinance:'6r:3n'dentire.^auth"6nzing Outstanding Second 4. Lien Bonds. Moneys deposited in trie Second Lien Bonds Account shall be transferred by the 4. Authorized Officer on the date .s^ and the trustee or paying agent for each series 4 of Second Lien Bonds in'order'to satisfy^ thef'debf service and other-payment obligations, including with 4. respect to Interest Rate Hedge .:. Agreements; under- /the Indenture and any ordinance or indenmre 4. authorizing such Outstaridirigi Secbrid^ on deposit in the Second Lien Bonds 4. Account shall be applied withoutpriority; as to, any particular series of Outstanding Second Lien Bonds. The City < has established DebtiService Reserve Accounts for certain Series of Outstanding Second Lien Bonds. I<sup>h</sup>\$E)ep' Service ••'R<sup>erve--Account</sup> secures only the Series of Outstanding Second Lien Bonds for which if was established. The Debt Service Reserve Requirement for certain Series of Outstanding Secpnd<sup>^</sup>LiemBp<sup>^</sup> met by separate municipal bond debt service reserve fund policies and by cash- depbsit's. 5. The Subordinate.^ is used to make debt service payments 5. and other required deposits with respect to any outstanding Subordinate Lien Obligations. As of the 5. date of this Official Statemerit; the; b^ Obligations outstanding are certain loans by 5. the Illinois Environmen<sup>fi</sup>>7<sup>^</sup> See--"OUTSTANDING DEBT AND 5. ANNUAL DEBT SERVICE^ubordmate: Obligations;" The City is obligated to make required debt 5. service and other deposits' in ' the ^ Subordinate"-"L-ien Obligations ^ Account on the Business Day 5. immediately preceding each;..;January, k:and.rjuly.lj.iy. Moneys on deposit in the Subordinate Lien

5. Obligations Account shall be applied without priority to any subaccounts established in the Subordinate

5. Lien Obligations Account, as directed by a certificate of the Authorized Officer.

6. The Commercial Paper and Line of Credit Account is used for the purpose of paying such amounts as may be required to be paid by the related trust indentures governing Commercial Paper Notes', and for the purpose of paying such amounts as may be required to be paid by the related line bf credit agreement governing such Line of Credit Notes.

7. The Sewer Rate; Stabilization Account is used at the City's discretion, in any year, to pay any expenses of or obligations of the Sewer System, including, without limitation, Operation and Maintenance Costs, deposits in the Bond Principal and Interest Account, deposits in the Bond Debt Service Reserve Account, deposits when due in the Second Lien Bonds Accourt (but only if and to the extent no amounts are required to be deposited in the Bond Principal and Interest Account (but only if and to the extent no amounts are required to be deposited in the Subordinate Lien Obligations Account (but only if and to the extent no amounts are required to be deposited in the Commercial Paper and Line of Credit Account (but only if and to the extent no amounts are required to be deposited in the Bond Principal and Interest Account, the Bond Debt Service Reserve Account, the Second Lien Bonds Account), deposits when due in the Commercial Paper and Line of Credit Account (but only if and to the extent no amounts are required to be deposited in the Bond Principal and Interest Account, the Bond Debt Service Reserve Account, the Second Lien Bonds Account, deposite of the Bond Principal and Interest Account (but only if and to the extent no amounts are required to be deposited in the Bond Principal and Interest Account (but only if and to the extent no amounts are required to be deposited in the Bond Principal and Interest Account (but only if and to the extent no amounts are required to be deposited in the Bond Principal and Interest Account (but only if and to the extent no amounts are required to be deposited in the Bond Principal and Interest Account (but only if and to the extent no amounts are required to be deposited in the Bond Principal and Interest Account (but only if and to the extent no amounts are required to be deposited in the Bond Principal and Interest Account, the Bond Debt Service Reserve Account, the Second Lien Bonds Account, or the Subordinate Lien

Obligations Account), the costs of any Interest Rate Hedge Agreements or other similar arrangement or any costs of repairs, replacements, renewals, improvements, equipment or extensions to the Sewer System. The Sewer Rate Stabilization Account must be used to make all required deposits to the Bond Principal and Interest Account and the Bond Debt Service Reserve Account when no other funds are available for that purpose. Any Net Revenues remaining in any period and not required to be deposited in the Bond Principal and Interest Account, the Bond Debt Service Reserve Account, any Senior Lien Rebate Account, the Second Lien

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Bonds Account;:the Subordinate Lien Obligations Account^or.the Commercial Paper and Line of Credit Account may be transferred to the Sewer Rate Stabilization-Account'-at any time upon the direction of the Authorized Officer. For more information concerning the Sewer Rate Stabilization Account, see "FINANCIAL OPERATIONS - HistoricaPand Projected Operations!" ''<sup>r;</sup>

'>nvv; rttw miw.

Thefollowing chart demonstrates the flow of funds from the; Sewer Revenue Fund as described above.

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Ordinance Flow of Funds

CttyHeW<sup>;</sup> Accounts"

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Trustee jf Accounts-

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#### .COrHeM: Accounts

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-, lAny/^funds^ayaiJa^Ieiin\_itheijS.ewertR£yenue Fund«after die'require have been satisfied or which are -not,-necessary; tOfSatisfy;S<sup>ch</sup> requirements may-be used for any- lawfuljpurppse of the S,ewer, System. Funds; in the Accounts; in the, Sewer^Reyenue(Funds.established. m-Tthe.-|Series 2Q.17 Bond Ordinance'must be invested in Permitted Investments. All amounts .blithe Bond, Debti,Service Reserve Account and each Senior Lien Rebate Account must be invested in Permitted Investments that are held separate and distinct from those of any<: other, < Funds; or- Accounts..; Investments; shalkbe'. scheduled to 'mature: before, heeded for the respective purposes of each of such<sup>1</sup> accounts. All investment Learnings on a hy such Accounts so invested must be credited tbthe SewerjRevenue Fund and shall be considerediGros's'Revenues,; except that iearnings on-the-investment of amounts! on depositin ;the SeniorLien Rebate Accounts'shall-not /be.considered Gross: Revenues- and-: shall be retained.iniithe' respective .Senior, Lien :Rebate . Accounts'.except ;to-the: extent :noi.longer required, for rebate purposes. -.'. = ;;' . :: :..:':. **•**:}**•**/•. ':**••••••**.**•**;. "-'∎T.::i ' ::**•**'! :)' i.:"..:!}.'-/- :/. i. .- ::!U-..-:iii: wii I HH<sup>•</sup> 01:' i !)::• < i './iii \)ti!\-• ill 🔳 •

 $ji_{t<}$ . The..Series, 20.1 OB..Second Lien Bonds are, qu,aljfied."B^jld^-^America...Bonds" for purposes of the American, Recovery. and; -Reinvestment Act: of ,2009.. (the. "Recovery Act"), which allowed-, the City..tp receive Federal; Subsidies, frpm^thej United. States Treasury .in connection...with, such bonds. ^Because.Build, America Bonds did not

exist at:the time of,the priginal flow of funds structure, such .Federal Subsidies were not contemplated and, have never been included in .the flow of funds. Thus, Gross Revenues-of the Sewer System in the table above do not-include any such Federal Subsidy, payments, so the Federal Subsidies that, may be received .by the City are not required to be. deposited by the City into the Sewer-Revenue Fund. Accordingly, such Federal. Subsidies ;do not constitute security for, arid are not available for payment of, the Bonds or any other Second Lien,Bonds, nor any Senior Lien Bonds, Subordinate Lien Obligations, or Short Term Obligations.

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#### Payment of Debt Service on the Bonds

The Indenture establishes the 2017 Second Lien Bonds Revenue Fund to be held and administered by the Trustee. Under the Indenture, the Authorized Officer is required on the Business Day preceding each January 1 and July 1 to transfer to the Trustee for deposit in the 2017 Second Lien Bonds Revenue Fund the amounts required to be deposited in such account from amounts on deposit in the Second Lien Bonds Account: The Indenture establishes Principal and Interest Accounts within the 2017 Second Lien Bonds Revenue Fund. Moneys on deposit in the Principal and Interest Accounts will be held by the Trustee for the sole and exclusive benefit of the Bonds and: used for the purpose of paying the principal of and interest on such Bonds as it becomes due.

#### Second Lien Rate Covenant

In the Series 2017 Bond Ordinance and the Indenture, the City covenanted for the benefit of the Owners of the Bonds, to establish, maintain and collect at all times fees, charges and rates for the services provided by the Sewer System sufficient at all times to (a) pay Operation and Maintenance Costs and (b) produce (i).Net Revenues Available for Bonds sufficient to pay the principal of and' interest on all Senior Lien Bonds then Outstanding from time to time and to establish and maintain the Bond Principal and Interest Account and the Bond Debt Service Reserve Account as may be covenanted in ordinances authorizing the issuance of Senior Lien Bonds, which Net Revenues Available for Bonds must each Fiscal Year at least equal one hundred fifteen percent (115%) of the sum required to pay promptly when due the debt service for the Fiscal Year on all Senior Lien Bonds' then Outstanding,- (ii) Second Lien Bond Revenues sufficient to pay the principal of and interest on all Second LieniBorids theri Outstanding from time to time and to establish and maintain the Second Lien Bonds Account as may be covenanted in the ordinances authorizing the issuance of Second Lien Bonds, (iii) amounts sufficient to pay the principal of and interest on all Subordinate Lien Obligations then Outstanding from time to time and to establish and maintain'the Subordinate Lien Obligations Account for the Subordinate' Lien Obligations as may be covenanted in the ordinances authorizing the issuance of Subordinate Lien. Obligations, which amounts must each Fiscal Year afleast equal one, hundred fifteen percent (115%) of the sum' required<sup>1</sup> to pay promptly when due debt service for the Fiscal Year on all Subordinate Lien Obligations Outstanding, and (iv) amounts sufficient to pay the principal of and interest on all Short Term Obligations then Outstanding from time to time and to establish and maintain the debt service account for the Short Term Obligations as may be covenanted in the contracts governing the issuance of Short Term Obligations. The Indenture provides that these fees, charges and rates may not be reduced while any Bonds are Outstanding below the level necessary to ensure compliance with the foregoing covenant.

The City will, prior to the end of each Fiscal Year, conduct a review to determine if it has been and will be in compliance with the rate covenant set forth above. Whenever the annual review indicates that projected Gross Revenues will hot be sufficient to comply with the rate covenant, the City will prepare or cause to be prepared a rate study for the Sewer System identifying the rate changes necessary to comply with the rate covenant and the Budget Director and the Authorized Officer shall recommend appropriate action to the City Council to comply with this rate covenant, which may include rate increases or expenditure reductions.

#### Additional Second Lien Parity Bonds

Additional Second Lien Parity Bonds may be issued, as provided in the Indenture, for any lawful purpose of the

Sewer System, including to refund Outstanding Senior Lien Bonds, Second Lien Bonds, Subordinate Lien Obligations, Commercial Paper Notes, or Line of Credit Notes, in each case upon compliance with certain conditions set forth in the Indenture. See APPENDIX B - "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE - Additional Second Lien Parity Bonds."

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#### Subordinate Obligations

The City has entered into loan agreements with the IEPA as shown in the following table, to fund Sewer System projects. Each loan constitutes a Subordinate Lien Obligation. It is anticipated that the City will enter into additional IEPA loans in the future. Subordinate Lien Obligations, including the IEPA loans, have a claim to payments from amounts in the Sewer Revenue Fund that is subordinate to the claim of the Bonds.

IEPA Sewer Revenue Fund Loans Outstanding<sup>0</sup> '

|                                      |                   |       | <u>Loan</u> | Final Maturity Date | Interest Rate (%) |  |
|--------------------------------------|-------------------|-------|-------------|---------------------|-------------------|--|
| LI7-2509                             | August 28,2027    | 2.500 |             |                     |                   |  |
| LI7-3629                             | June 21,2031      | 0.000 |             |                     |                   |  |
| L17-4565                             | December 30, 2032 | 1.250 |             |                     |                   |  |
| LI 7-4682                            | March 20,2033     | 1.250 |             |                     |                   |  |
| L17-4863                             | March 4,2034      | 2.295 |             |                     |                   |  |
| L17-5006                             | July 21,2035      | 1.930 |             |                     |                   |  |
| L17-5230 <sup>(2)</sup>              | June 9,2036       | 1.995 |             |                     |                   |  |
| L17-5224 <sup>(2)</sup>              | August 18,2036    | 1.860 |             |                     |                   |  |
| Total Outstanding Principal Balance^ |                   |       |             |                     |                   |  |

#### Amount of Loan Outstanding (Dollars in Thousands) \$ 913 11,093 14,925 14,717 13,475 51,906 49,639 3.715

#### <u>\$160.383</u>

- 1) Outstanding principal amounts as of June 6, 2017.
- 2) Loan L17-5230 has additional disbursements in process that will bring the total loan amount to \$56,178,269.91. Loan L17-5224 has additional disbursements in process that will bring the total loan amount to \$4,775,222.40.
- 3) This total does not include three IEPA loans. They are the following loans, LI7-5328 for 63,000,000.00 with an interest rate of 1.860% and an estimated maturity date of 2039, is expected to close prior to January 1, 2019, L17-5323 for \$8,112,157.81 with ah interest rate of 1.750% and an estimated maturity date of 2038, is expected to close prior'to December 31, 2017, L17-5396, pending loan agreement from IEPA, for \$30;823,244!69 with a projected interest rate of 1.975% and an estimated maturity date of 2039, is expected to close prior to December 31, 2017, L17-5396, pending loan agreement from IEPA, for \$30;823,244!69 with a projected interest rate of 1.975% and an estimated maturity date of 2039, is expected to close prior to December 31, 2018. Until disbursements of these loans are finalized, the exact principal amounts of the loans, the debt service schedules and the maturity dates are not set. •

The Series 2012 Bond Ordinance authorized the issuance from time to time of Commercial Paper Notes and Line of Credit Notes for the purposes of financing or. refinancing capital improvements to the Sewer System or providing funds to meet the cash flow needs of the Sewer System, among others. The maximum, aggregate principal amount of all Commercial Paper Notes and Line of Credit Notes outstanding at any one time may not exceed \$150,000,000, without further authorization from the City Council. The claim of any Commercial Paper Notes or Line of Credit Notes for payment from moneys in the Sewer Revenue Fund is subordinate to the claim of the Bonds. The City has no Commercial Paper Notes nor Line of Credit Notes outstanding pursuant to this authorization, however the City reserves its rights to

issue Commercial Paper Notes and Line of Credit Notes in the future.

All interest rate swaps associated with the City's Second Lien Bonds have been terminated, however the City reserves its rights to enter into interest rate swaps in connection with Second Lien Bonds in the future.

#### DEPARTMENT OF WATER MANAGEMENT

The Department is an executive department of the City with responsibility for the operation, maintenance, repair, improvement and extension of the Water System and the Sewer System. Separate water and sewer funds are maintained to comply with legal requirements.

The budgeted employment level of the Department as of December 31, 2016 for Sewer System employees was 591 (this represents the total number of Sewer System employees on the City's payroll and excludes leaves of absence and duty disability). The Department includes employees with professional

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qualifications in the fields of engineering, law, science, construction management, public sector management and financial management, as well as skilled technical personnel. Substantially all of the Department's employees^are covered by collective bargaining agreements that expire in 2017. The Department has worked to increase use of seasonal employees,-lower the hourly rates for apprentice workers; lengthen probationary periods and reduce overtime rates for certain trades. The Department believes these efforts will create greater flexibility in managing its work force and make it more competitive with private construction companies.

The Department is building efficiencies' and cost savings- for the-City by coordinating the activities of the Sewer System with, the .work of other City agencies, the Office of the Mayor, other City departments and private utility providers. For example, the Department and other City agencies participate in regularly scheduled coordination meetings to review critical infrastructure requirements, share in., the costs of administration, set. program deadlines, work with tax-increment financing capital planning and ensure the Chicago Department of Transportation manages rights of way scheduling and construction. The Department has increased its use of mapping and technology. Some of the key beriefits, fromNthese programs include but are not limited to: (i) the ability to update existing systems like 311 from the field; (ii). the ease of integrating the Geographic Information System with other systems, such as the Department's workprder management system,... metering system, and scheduling software; (iii) trie ability to coordinate with"field crews and off-site contractors directly; and (iv) haying live data presented in a, visual format that provides, a full operational picture ; and true status updates. The Department pushes information out into the field using mobile devices so that the construction and maintenance crews can quickly and easily follow the plan and report back live information and progress of their work.

#### Organization and Staffing :i-

The chiefadministrator of the Department is the Commissioner, who is appbinted by the Mayor with the approval ' of the City 'Council.;,. '1\$\May\ffilJ2(\$J-, -'.f^ft^Rv.'^M^y..'i&\flp\$!?\$z' -^CSip.missijcuier of the Department, effective ..as of . June 2, 2017. i, Alfonzo. Conner has been appointed by the Mayor as Acting Commissioner,<sup>1</sup> effective-tas/of June 3,; 2017..-Under the (direction of ithe-Commissioner;; the Department is organized into five bureaus and the Commissioner's office as follows:'<sup>1</sup>" •'''

Commissioner's-' Office: ' TKe^'office 'isresponsible'<sup>y</sup>fbF-tfie^ovefsigHt\* arid!'mahagement<sup>1</sup> of general and project-specific initiatives for the Other bureaus. This official so^'includes security ahtfsafetyi •'• !

• Operations and Distribution: This bureauis'responsible fon the maintenance, <sup>J</sup>'repair and installation of water and sewer mains and appurtenances, including valves, fire hydrants, manholes, catch basins arid' valve basins.

Water Supply: - This bureau-is responsible for the treatment, purification, pumping and monitoring the quality and purity of the water supply.

Engineering Services: This bureau is responsible for providing engineering and inspection support for the planning, design, expansion, rehabilitation, operating, monitoring and inspection of the Water and Sewer Systems. '.....

Meter Service: This bureau is responsible for water meter installation, reading and repair.

The City maintains a self-insurance program, including casualty coverage, general liability coverage and workers' compensation for the Department. The City also maintains replacement-cost property insurance that covers the major facilities of the Sewer System.

#### **Description of Physical Facilities**

The Sewer System consists of approximately 4,400 miles of sewers, ranging in size from six inches to over 21 feet in diameter. The tables below provide a profile of the transmission facilities of the Sewer System by size, age and length: •

#### Wastewater Transmission and Collection Facilities

|        | <u>Size (in inches)</u> | <u>Length (in</u> | <u>miles)</u> | Percent of System |
|--------|-------------------------|-------------------|---------------|-------------------|
| ,6-36; | • 3,730.v; .            | ':                | 83.8% -       |                   |
| 42-84  | 525 11.8                |                   |               |                   |
|        | Total:'                 | "                 | 4             | 4.452' 100.0%     |

| Years Placed in<br><u>Service</u> | Approximate Approxin<br><u>Length (in miles)</u> | nate<br>Percent of System |
|-----------------------------------|--|---------------------------|
| 2011-2020                         | 942.1%   |                           |
| 2001-2010                         | 1152.6   |                           |
| 1991-2000                         | 1814.1   |                           |
| 1981-1990                         |  | .151.                     |
|                                   | 3.4  |                           |
| 1961-1980                         | 3738.4   |                           |
| 1941-1960                         | 3988^9   |                           |
| 1921-1940                         | 889\ <b>9.9</b>                                  |                           |
| 1901-1920                         | 1,06023.8  |                           |
| Prior to 1900                     | 1.19126.8 '                                      |                           |
| Total                             | 4,452  | 100.0%                    |

These wastewater collection and transmission facilities primarily operate as a gravity system.

#### Capital Improvement Program

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The City, through the Department, continually improves and rehabilitates the Sewer System. To provide for future additions to the Sewer System, replacement of facilities and rehabilitation of existing facilities, the Department has prepared a projected capital improvement program covering a ten-year period from 2012 to 2021 (the "Capital Improvement Program"). The Capital Improvement Program is currently on schedule and within budget. Over its ten-year period, the Capital Improvement Program is projected to rehabilitate 699 miles of sewer main (220 miles of sewer main construction and 479 miles of sewer main lining), line 95,000 sewer structures, and create approximately 14,000 direct jobs. These figures, which are approximate and subject to change, reflect the Department's proposed expenditures for capital improvements over the course of the Capital Improvement Program. Actual expenditures are subject to annual approval of the City of Chicago Office of Budget and Management.

The City rehabilitated 380 miles of sewer mains and lined 70,000 structures between 2012 and 2016. T hrough the end of the Capital Program (2021), the City is on schedule to rehabilitate an additional 319 miles of sewer mains and line an additional 25,000 structures. The ongoing projects of the Department will ensure continued economical and reliable delivery of sewer services. The Department may revise the list of specific improvements and revise cost allocations among improvements, as well as make substitutions to meet current needs and to provide for the efficient operation of the Sewer System. Under the Capital Improvement Program,

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it is expected that approximately 30 percent of the 2017 projects-will be funded from net revenues of the Sewer System with the remainder funded from IEPA'State Revolving LoanFunds, grants, and the:sale of indebtedness of the Sewer System.

The Sewer System's expenditures for 2012 through 2016 and projected expenditures for 2017 through 2019 of the Capital Improvement Program are summarized in the table below. The information presented in the table; reflects the; Department's i expected -allocations :of resources; to various. projects,< but does not.necessarily represent an-expectation<sup>5</sup> of:actual;cash expenditures'ifor?these>projects, iwhich-are subjectitorannual approval of the City of Chicago Office of Budget and Management. The primary sources of fundsnto undertake these projects are expected to be proceeds from contemplated debt issuances, including IEPA loans, as well as funding from current sewer revenue (also referred^ asf'jpay-go").<sup>1</sup> jSee "FINANCIAL.OPERATIONS - Historical and Projected Operations."

|                    | Historical and                | d Projected | Capital | Improvemen       | <u>nt Progran</u> | n Funding by Sourc | <u>e*</u> |       |
|--------------------|-------------------------------|-------------|---------|------------------|-------------------|--------------------|-----------|-------|
| Funding<br>sources | 20i2 iu1\y                    | ∼. zul<*    |         | r [ ··<br>zuiS : | ^uio              | ;•<br>2ui7 ^u      | io iviy   |       |
| Bonds              | \$150                         | \$150       | \$165   | \$143'           | \$15              | \$102              | \$93      | \$107 |
| Pay-Go             | 24                            | 30          | 38      | 45               | 107               | 58                 | 47        | 38    |
| Grants             | -                             | .,,,,4.,    | 2       | ,                | 29                | .5                 |           |       |
| IEPA Loans         | 20.                           | '3 .        | 54.' "  | ;.65 f           | 76'               | .'. ' 30           | 98        | 101   |
| Total              | XI94                          | '• S199     |         | ' \$252 : " '    | '                 | \$253.'''          | ' \$22    | 2 ''' |
| \$195              |                               | \$238       |         | \$246            |                   |                    |           |       |
| ♦Amounts s         | hown are in millions $<>$ "'' | '           | <∎>     | J                |                   | '                  |           |       |

#### USEPA

In 1975, the Water Reclamation District began the construction.Of its Tunnel^and Reservoir Plan

("TARP") project<sup>1</sup> to<sup>;</sup> address-combined sewer overflows ("CSOs") in the metropolitan- Chicago<sup>5</sup> area! Tunnel

systems have been'completedi'-The project will be'Completed<sup>j</sup>upon the final completion of the reservoirs,<sup>5</sup> which

"•=="='•='

is expected to be -in 2029.<sup>2</sup>

. In 2004; the United' States Environmental ^Protection -Agency ("USEPA") requested information from the ;Department concerning .the-City's compliance- with regulatory requirements under-the Clean Water Act pertaining to CSOs in Chicago! area waterway's:"Overflows-may occurwheri the combined'flow of storm water run-off and sanitary sewage exceeds the capacity of the Sewer System and the sewage collection and treatment facilities of the Water Reclamation District.

The Department receives requests for information frorh USEPA regarding CSOs and related issues from

time to time, to which it responds.' The NPDES permit for City CSO outflows is currently being renewed.

Various environmental groups have submitted comments to the-IEPA objecting to the proposed permit^ but have

not'filed'any citizen'suit 60-day notice: letter-or litigation. According to'the USEPA-MWRD CSO settlement,

approved by federal district and circuit courts, the currently projected completion date for the<sup>1</sup> TARP project is

now 2029.

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#### SEWER SYSTEM

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#### General

The Sewer System provides sewage and drainage collection and conveyance for a service area of roughly 230 square miles inhabited by approximately 2.7 million people.

The Sewer System was designed, constructed and continues to be a combined system to provide for collection and conveyance of both sanitary sewage and storm water run-off in common sewer conduits. The Sewer System is not responsible for, and does not include any facilities for, the treatment or disposal of sewage. It is limited to collecting and conveying wastewater to the interceptor sewers of the Water Reclamation District, an independent government entity with exclusive responsibility for sewage treatment, sewage disposal and flood control in the City and neighboring suburbs. The Water Reclamation District is charged with providing and managing the facilities for the collection (through a network of approximately 536 miles of intercepting sewers and force mains), treatment and subsequent disposal of sewage from the City and surrounding areas. The Water Reclamation District finances its operations primarily through the imposition of an ad valorem tax in the area that it serves.

The City is solely responsible for the Sewer System except with respect to direct connections to rivers and waterways, in which case approval must be obtained from the Water Reclamation District or the U.S. Army Corps of Engineers, and direct connections to the Water Reclamation District, in which case approval must be obtained from the Water Reclamation District.

There are no significant areas of the City without sewer service and, except for a very limited number of industrial users who have direct connections to the Water Reclamation District's interceptors, connection to the Sewer System is the only feasible means of wastewater disposal for nearly all City users. By regulation of the Department, all sewer work performed within the City or connecting to the Sewer System or to the City's waterways, whether on public or private property; is subject to approval by the Department.

The following table shows the population of the City for the past five decades:

|      | Sewer System Service Area Population |
|------|--------------------------------------|
| Year | Population                           |
| 1970 | 3,369,357                            |
| 1980 | 3,005,072                            |
| 1990 | 2,783,726                            |
| 2000 | 2,896,016                            |
| 2010 | 2,695,598                            |

Source: U.S. Census Bureau.

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#### FINANCIAL OPERATIONS

Recent Sewer Service Rates

Revenues from sewer service charges ;provide funds for the operation, maintenance and debt service;of the Sewer System. The Sewer Revenue Fund receives no share of any state or local property or income taxes.

<sup>1</sup> Sewer service rates are set by ordinance. ? The-sewer service chargers .established.in anramount designed to pay the-costS iof.Sewer-System.operations and capital, iniprovements,\* including- any related-.debtiservice.. The current i charge for. sewer .service, is: an;amount equal to .100 .percent-of <the,gross .amount.charged\*, for .water service, whether such water service is metered or norimetered...**=**, • :i;.<sup>1</sup>>

. .Historical'rates are:shown; in;the following tables The.;sewer rate.,is.noW;equal.tO;the!.water.rat.e. .:By

ordinance, annual Water iSystem, rates ;are now automatically adjusted by applying to<\_the,previous,,year's rates

the rate: of inflation,, 'calculated: based ion the Consumer Price Index-Urban,; Wage Earners: and Clerical.

\Workers <file:///Workers>(Chicago All Items) published by the United States Bureau of Labor Statistics for the

365-day period ending on

the most recent January 1. Such increases do not require further action by the City Council. Any such automatic annual increase, however, shall be capped at 5% of the previous.y.ear<sup>2</sup>srate. Becausethe sewer rate is now equal to the water rate, sewer rates would also, increase based on any increase -in. the consumer price index beginning June; 1, 2016; arid every; year thereafter. The City Council may take action .at any time<sub>1</sub>tO"alter the then-current schedule of water or sewer rates. Under certain conditions, the Authorized Officer shall recommend appropriate action to the City Council to comply with the Rate Covenant. See "INTRODUCTION - Rate Covenant."

i i Historical Sewer Rates

| Effective Date  | <u>Gallons</u> | Water Rite Gross Water Increases Rate Per 1,000<br><u>City Council</u> |              |                | , Approved by |
|-----------------|----------------|--|--------------|----------------|---------------|
|                 |                | Percentage of  | Per 1,000 Pe | rcentage       |               |
|                 |                | Water Bill   | Gallons      | $^{Chan}S^{e}$ |               |
| January 1,2007  | \$1.33         | ;  |              |                |               |
| January 1,2008  | 1.53           | - 15%  |              |                |               |
| January 1,2009  | 1.76           | 15%  |              |                |               |
| January 1,2010  | 2.01           | 14%  |              |                |               |
| January 1, 2011 | 2.01           |  |              |                |               |
| January 1,2012  | 2.51           | 25%  |              |                |               |
| January 1,2013  | 2.88           | 15%  |              |                |               |
| January 1,2014  | 3.31           | 15%  |              |                |               |
| January 1,2015  | 3.81           | 15%  |              |                |               |
| June 1,2016     | 3.81           |  |              |                |               |
| June 1,2017     | 3.88           | 1.83%  |              |                |               |
| 83%             | 1.10           |  |              |                |               |
| 84%             | 1.28           | 16%  |              |                |               |
| 85%'            | 1.50           | 16%  |              |                |               |
| 86%             | 1.72           | 15%  |              |                |               |
| 86%             | 1.72           |  |              |                |               |
| 89%             | 2.23           | 29%  |              |                |               |
| 92%"2.65        |                | 19%  |              |                |               |
| 96%             | 3.18           | 20%  |              |                |               |
| 100%            | 3.81           | 20%  |              |                |               |
| 100%            | 3.81           |  |              |                |               |
| 100%            | 3.88           | 1.83%  |              |                |               |

#### Sewer Rate Comparisons

The following chart compares the Sewer System's single family cost per 7,500 gallons of water to the rates charged for the same level of water usage by the water systems serving other selected U.S. cities. The amounts shown are intended to reflect comparable charges for similar service for comparison purposes only and are not intended to reflect all components of the rates and charges for the cities listed. The Sewer System rates for all accounts located within the City are a percentage of the Water System rates. Metered water rates are based on a dollar rate per thousand cubic feet. The assessment of non-metered users is based on a formula related to the size of the relevant property and other use-related factors. Because the Sewer System rates are calculated as a percentage of the Water System rates, Sewer System rates also increase when Water System rates increase.

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#### Sewer Rate Comparisons (as of June 6,2017)\*

Source: City of Chicago, Department of Water Management

\*The City's Department of Water Management does not operate any sewage treatment facilities. The rates shown for the City and Milwaukee reflect sewer charges that include wastewater transmission only. The rates shown for the other cities reflect sewer charges that include wastewater transmission and wastewater treatment.

#### Sewer Accounts

As of December 31, 2016, the Sewer System supplied 494,264 accounts. As shown in the table below, of these 494,264 accounts, 67,130 were exempt accounts for a total of 427,134 revenue paying sewer accounts. Pursuant to an ordinance adopted in 1982, all new water accounts, regardless of character, and all new services to existing water accounts are required to be metered. Since 2009, the Department's MeterSave Program has installed approximately 15,000 new meters annually. Senior citizens age 65 and older who reside in their own single-family residences with a separate water meter or water charge may apply for an exemption from payment of the sewer service charge. Senior citizens age 65 and older living in condominiums are eligible to apply for an annual rebate of \$50 on sewer service charges.

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The following table reflects the total accounts of the Sewer System, nonmetered and metered, net of exempt accounts, for the years 2012 through 2016.

#### Water System and Sewer System Accounts

#### Water Accounts

Year Ended December 31

#### Nonmetered

| 2012 | 290,863 | 205,097 | 495,960 | 61,502 | 434,458 |
|------|---------|---------|---------|--------|---------|
| 2013 | 273,426 | 220,759 | 494,185 | 62,393 | 431,792 |
| 2014 | 250,304 | 241,304 | 491,608 | 62,856 | 428,752 |
| 2015 | 227,801 | 266,284 | 494,085 | 64,781 | 429,304 |
| 2016 | 206,913 | 287,351 | 494,264 | 67,130 | 427,134 |

During 2016, residential accounts represented approximately 68 percent of Sewer System revenues and industrial and commercial accounts represented approximately 21 percent ofsuch revenues. The remaining 11 percent of revenues were derived from governmental and not-for-profit organizations. During the same period, residential non-metered accounts were approximately 30 percent of Sewer System revenues and residential metered accounts were approximately 70 percent of such revenues. All industrial and commercial accounts are metered. There are no large industrial or commercial users that account for more than five percent of Sewer System revenues. The five largest accounts of the Sewer System are shown on the following table.

| Fiscal Year 2016 Five Largest Sewer            | r Accounts by Revenue<br>Revenue |
|--|----------------------------------|
| Customer                                       | (dollars in thousands)           |
| City of Chicago Department of Aviation \$4,498 |                                  |
| Chicago Park District - Lincoln Park           | 1,267                            |
| Ford Motor Co. 912 Cook County Sheriff 846     |                                  |
| City of Hometown, IL                           | 54(3                             |
| Total of Top 5                                 | \$8,069                          |
| % of Sewer Sales 2.2                           |                                  |
| Total Billed Sewer Fees <sup>(1)</sup>         | <u>\$374,210</u>                 |

Source: City of Chicago, Department of Water Management

(1) Actual amounts billed during calendar year; differs from Sewer Fund Basic Financial Statements which include charges accrued for calendar year regardless of year in which billed.

#### Collections and Delinquencies

The Department of Finance follows the same collection strategy for collecting sewer accounts as it does for water accounts, as described below. The Department of Finance bills most large industrial accounts each month, with a few exceptions that are billed quarterly. Metered commercial and residential accounts are billed once every two months. Nonmetered accounts are billed once every six months. Chicago residents receiving both water and sewer service from the City, as well as refuse collection services provided by the City's Department of Streets and Sanitation, are sent a unified utility bill which details the charges for each service. Pursuant to the Municipal Code, payments on the unified bills are allocated pro rata among the charges shown

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on the bills, with oldest unpaid amounts being paid first. The first unified bills which included refuse collection services were sent between April and September 2016 to residents. Beginning March 1, 2107, unified bills include the Chicago Water and Sewer Tax. To date, the allocation of partial payments on the unified bills to water accounts and refuse collection services have not had; a material adverse effect on the collection by the City of sewer charges. See

"INVESTMENT CONSIDERATIONS - Other. Considerations - Unified Billing" for a discussion of certain risks related to the inclusion of the refuse collection services fee, together with the water and sewer charges, on a unified bill.

Payments on both metered and non-metered accounts are due 21 days after the bills are issued. A late payment penalty assessed at a monthly rate of one and one-fourth percent is imposed on all sewer charges in excess of \$10.00 for which payment in full is not received within 30 calendar days from the date the bill was issued.

Delinquency; notices, which were generated at an average rate of 24,319 per week in 2016, are sent to delinquent account holders when their balances are 30 days past due. A second delinquency notice is sent after 60 days. A third delinquency notice is sent after 90 days: After an active account reaches 210 days past due with , a balance greater than \$300, the account is referred to an outside law firm for collections. Inactive accounts (those that do not currently have water or sewer service) that are 91 days past due with balances of \$200 or greater are referred to an outside law firm for collection. The outside law firm may pursue collection by obtaining a judgment at the City of Chicago Department of Administrative Hearings, recording a lien against the property, or by additional legal collection actions.

Additionally, active accounts are eligible to be posted for shutoff by the Department where account balances have not been paid for 60 days or longer and the account balance is \$350 or greater. Properties which have been posted are eligible for water service to be shut off by the Department if the accounts remain past due 12 days after posting and the balance requirement is met. Due to the concern for public health, the Department of Finance makes every effort to collect delinquent accounts prior to the Department terminating water service. It is not possible to terminate use of the sewer system by an individual user unless water'service is terminated. Further, by ordinance, when a property is transferred, a deed cannot be recorded with the Cook County Recorder of Deeds unless the Department of Finance certifies that all water and sewer service charges and penalties due and owing for service to that property have been paid in full.

The amount of annual net sewer charges and cash collected from current and prior years' billings are included in the table below.

|      | Annual Net Sewer Charges |                           |                                       |  |  |  |
|------|--------------------------|---------------------------|---------------------------------------|--|--|--|
|      | Cash Collected           | 1                         |                                       |  |  |  |
|      | During Year fo           | <u>or</u>                 |                                       |  |  |  |
|      | Net Sewer                | Current and Pri           | or Percentage of Charges              |  |  |  |
|      | <u>Year</u>              | Charges <sup>(1)(2)</sup> | Years'Charges* <u>1)(3)</u> Collected |  |  |  |
| 2012 |                          | 260,417240                | ,55692.37                             |  |  |  |
| 2013 |                          | 276,339269                | ,73297.61                             |  |  |  |
| 2014 |                          | 331,774                   | 310,17893.49                          |  |  |  |
| 2015 |                          | 386,333361                | ,46593.56                             |  |  |  |
| 2016 |                          | 374,210366                | ,86798.04                             |  |  |  |

Dollars in thousands. 1)

Actual amounts billed during calendar year; differs from Sewer Fund Basic Financial Statements which include charges accrued tor 2) calendar year regardless of year in which billed.

Includes collections for sewer fees and other revenue related to sewer fees. 3)

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#### Sewer System Revenues Not Connected to the State of Illinois

The State of Illinois js;obligated to,make;payments itoithe City in instances where it is a user, of; the Sewer System, except in situations and to the extent that the: applicable State of Illinois property, qualifies, for an exemption.

The revenue from. the. State as user accounts.-for less than one percenti(1%) of the Sewer System's annual.operating: revenues.; No.operating-revenues from ariy usersiofithe'Sewer:System flow.through the State of Illinois. All such revenues are paid directly to the City.

#### Annual Budget Review and Implementation of Annual Budget

a IfinThe Department's annualnbudget is developed and implemented fasspart of the 'Gity's annual budget and it is based upon an analysis of its historical Operation and Maintenance Costs. If projected Gross Revenues are not sufficient to satisfy the rate covenants contained in the ordinances authorizing the Bonds and Senior Lien Bonds and Second'Lien Bonds'/as determined by the Gityjpursuantito its annual review of the, Sewer System, the Department is > required,- after iconsultationj!with; the-,?Budget ^Director -and,<• when ! appropriate, ; a qualified independent consulting-engineerj-ito recommend appropriate'action itoj.the Gity.Gounciktoic6mply.with.the!:rate covenants. See "SECURITY IFOR THEi BONDS:-^Second'Liendlate Covenant.":.■ 1 f necessary; proposed.rate increases will be included in the Department's proposed.annual budget. ::; ::.-. ! .-; ' '.<>: v- ∎' ;∎.!;∎∎ '.>< ; K'', -ii'! y/ii ∎;',:,∎:..j, in; u! \*.y,-'.-:.; si-.io. . . ;.>∎.-. ,. .. -r. 00 considers the Department's proposed budget along with the .: proposed annual-budgets: , recommended .and

submitted by all of the other departments and agencies whose budgets become part of the City's proposed annualibudget. Following the Budget: Director's approval, the.budg'etS'.must be approved by. the Mayor, the City Gbuncil:'.s!Committee;on;Budgef.and Governmental.Operations. andjthe)GityGouneilbiAfter:the(Gity.Council!:has approved the proposed annual! budget-iasithe City's annuabappropriation' ordinance/jtiis: forwardedto. thejMayor for:approval..:: ,:;:!;;,'.:- .iauq •«.'• htj.wj  $\$  i r:r;' -r,- ,.'v;;;::-.:,::':::// i.m;' :::,<';, .;:[, '.:'

The City Council may also; refuse;tP; approve<sub>t</sub>the Mayor's, proposed annual budget. In such a case,ithe appropriate process for passage of the City budget may have to be judicially determined. By law, the City's budget.must be, approved:by December,3;li.of.the.year,preceding;the.budget yean ,The City<sup>2</sup>s 2017 budget was approved by the City Council on November 16, 2016.

During each year, the City allocates:-certain funds to meet debt service requirements and central services and General Fund reimbursements. The Budget-Director uses an allotment system to manage each department's expenditures against its respective annual'appropriation. The Budget Director requires departments to submit quarterly allotment budgets which .the^Budget' Director, in^turn, .monitors. Should any department's expenditures exceed itsfrecei'pY bf reve'nues".'thV Budget Director^ 'thrpugh the quarterly budget allotment procedure, has the authority to institute-economy' measures against such department to ensure that its expenditures do not exceed or outpace its revenue collection. During 2016, there were no such restrictions in the Department's quarterly expenditures.

#### Historical and Projected Operations

Following are the Sewer Revenue Fund's Statements of Operations, including debt service requirements, as summarized from the audited financial statements of the Sewer Revenue Fund for the years ended December 31, 2011 through December 31, 2015, together with projected financial operations and projected debt service requirements for the years ending December 31, 2016 through December 31, 2019. Projected operating revenues for 2016 are derived from preliminary unaudited results and are subject to revision.

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The Sewer Revenue Fund's operating revenues for 2015 increased by \$53,649 million compared to prior year operating revenues. This increase of 16.6 percent is primarily due to an increase in Water System rates and Sewer System rates.

The Sewer Revenue Fund's operating expenses before depreciation and amortization for 2015 increased \$191,410 million from the year ended 2014 due to increases in pension expenses due to implementation of GASB 68 and increased General Fund reimbursements. Depreciation and amortization increased due to an increase in utility plant.

For 2016, projected operating revenues are estimated to increase by 2.6%. Because the Sewer System rates are calculated as a percentage of the Water System rates, Sewer System rates also increase when Water System rates increase. The projections include a rate increase of 1.83% on June 1, 2017 (which occurred on such date) based on 2016 growth in the Consumer Price Index. Rates are conservatively projected to increase by 1.5% on June 1 of 2018 and 2019, based on Consumer Price Index growth. Rate increases are projected to be offset by decreases in water consumption due to water conservation efforts. Therefore, operating revenues are projected to decrease from 2017 through 2019.

Projected operating expenses (excluding General Fund reimbursements and pension contributions) in 2016 through 2019 are reflective of an expected 2.5% increase in expenses based on historical trends. Projected operating expenses also reflect an increase in each year based on growth in indirect costs being charged to the Sewer Revenue Fund as reimbursements to the General Fund, including public safety departments. The methodology for charging these indirect costs to the Sewer Revenue Fund is consistent with generally accepted accounting principles. The Sewer Revenue Fund has historically been charged for indirect costs properly allocable to that Fund. For 2016 and 2017, General Fund reimbursements are based on the budgeted amount and projected to grow at 2.5% therafter.

Indirect pension contributions allocable to the Sewer Revenue Fund are projected to be \$3.6 million in 2016, \$9.3 million in 2017, and to grow by 10% yearly thereafter. Direct pension contributions are budgeted at \$4.4 million and \$9.5 million in 2016 and 2017, respectively, and are projected to be \$12.2 million and \$15.0 million in 2018 and 2019, respectively.

Water usage in the City, upon which sewer charges are based, is assumed to decrease slightly throughout the projection period due to water conservation efforts. In addition to rate increases, the City could achieve compliance with its Rate Covenant in some other manner, including any combination of rate increases, decreases in operating expenses, changes in its capital improvement program or in the timing and amounts of future borrowings or changes in net transfers to or from the Sewer Rate Stabilization Account.

The City has prepared the projections discussed herein and summarized in the table below. The City believes that the underlying assumptions provide a reasonable basis for the projections, and that the projections present, to the best of the City's knowledge and belief, the City's expected course of action. However, some of the assumptions upon which the projections are based inevitably will not materialize and unanticipated events and circumstances may occur. The management of the City has prepared the projected financial information set forth below to present the expected financial performance of the Sewer System.

The accompanying projected financial information was not prepared with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to projected financial information, but, in the view of the City's management, was prepared on a reasonable basis, reflects the best currently available estimates and judgments, and presents, to the best of management's knowledge and belief, the expected course of action and the expected future financial performance of the Sewer System. Accordingly, these projections are not fact and should not be relied on as being necessarily indicative of future results, and readers of this Official Statement are cautioned not to place undue reliance on the projected operations of the Sewer System which are contained herein.

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Neither the City's independent \* auditors, nor any other independent accountants, have compiled, examined,:or performed.anysprocedures with respect to the projected financial;infbrmation:contained,herein; nor have they expressed any opinion or any other form of assurance on such information or its achievability, and assume no responsibility for, and disclaim any association with, the projected financial information.

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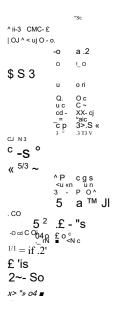
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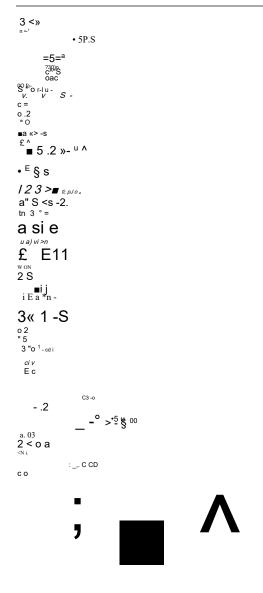
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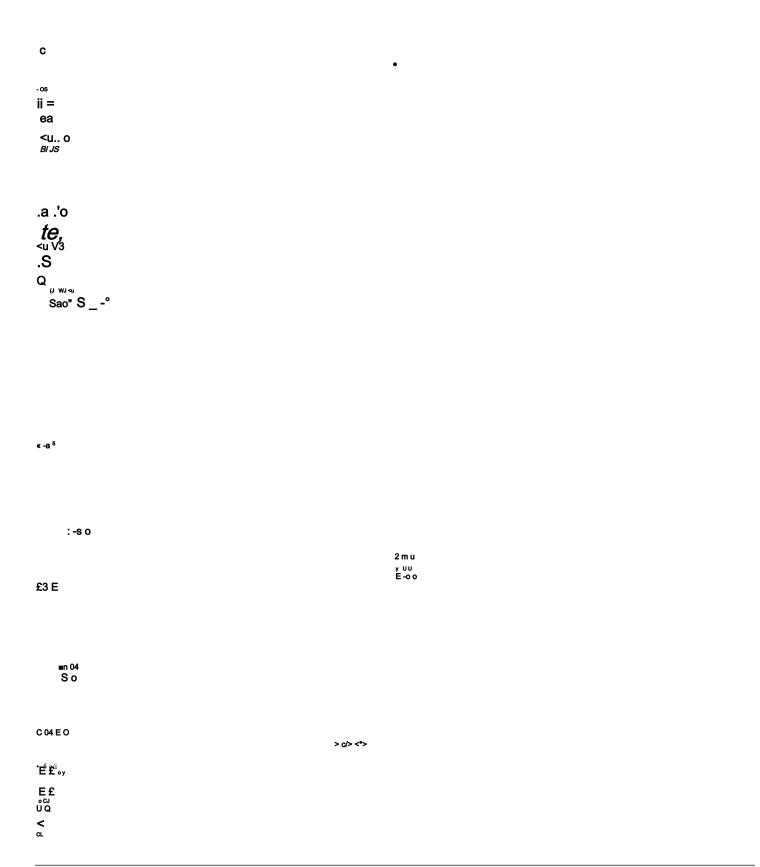
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#### Pension Costs

#### Determination of Pension Contributions

Pension costs paid out of the Sewer Revenue Fund constitute Operation and Maintenance Costs for purposes of determining Net Revenues Available for Bonds and for the City's compliance with its covenants (including'; the Rate Covenant) under the Series 2017 Bond Ordinance and the Indenture. See "INTRODUCTION ^ Rate Covenant." . . .

The City participates in four single-employer defined-benefit pension plans for City employees: the Municipal Employees' Annuity and Benefit Fund of Chicago ("MEABF"), the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("LABF," and together with: MEABF, the "Municipal and Laborers' Funds'?), the Policemen's Annuity<sup>1</sup> and Benefit Fund ("PABF"), or the Firemen's Annuity and Benefit Fund ("FABF," and together with PABF, the "Public Safety Funds," which;: together with the: Municipal and Laborers' Funds, are referred to herein as the "Retirement Funds"). Sewer System employees participate in the Municipal and Laborers'Funds. ...<sup>1</sup>.

Certain of the comprehensive annual financial reports of the Retirement Funds and certain of the actuarial valuations of the. Retirement; Funds may be, obtained by contacting, the Retirement Funds. Certain of these reports may also be available on the Retirement Funds' websites (www.meabf.org <a href="http://www.meabf.org">http://www.meabf.org</a>; www.labfchicago.org</a>; www.labfchicago.org</a>; www.chipabf.org <a href="http://www.fabf.org">http://www.fabf.org</a>; www.labfchicago.org</a>; provided, however, that: the contents of these reports and of the Retirement Funds' websites are not incorporated herein by such reference.

Members of each Retirement Fund are eligible (individually, an "Eligible Member," and collectively, "Eligible Members") for an annual annuity payment (the "Annuity Benefits") if they meet certain age, years of service and prior service credit requirements (the "Eligibility Factors"). Benefits to each Eligible Member<sup>1</sup> are statutorily established based on a combination of the, Eligibility Factors and the Eligible Member's average annual salary for certain years prior to, retirement (the "Annuity Factors").

Annuity Benefits for each of the Retirement Funds are funded, from three sources: (i) contributions from the City (the "City Contributions") which are funded from the proceeds of a property tax levy on all taxable property located within the City or other available funds, including payments from the Department on behalf of Sewer System employees, (ii) contributions from Eligible Members (the "Employee Contributions," and together with the City Contributions, the "Contributions"), and (iii) investment returns. The Department has historically contributed its pro rata<sup>1</sup> share of City-Contributions-to-the Retirement Systems (the "Department Portion") based on the Annuity Factors for the number of Sewer System employees who are Eligible Members. See APPENDIX C-"CITY OF CHICAGO, ILLINOIS SEWER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31,2015 AND 2014, AND INDEPENDENT AUDITORS' REPORT-Notes to Basic Financial Statements - 6. Pension Plans." Pension liabilities are not recorded at the fund level for the Sewer Revenue Fund.

The City Contributions and Employee Contributions are each established by the Illinois Pension Code (the "Pension Code"). Except as described below, under "-Public Safety Funds," the Contributions required under the Pension Code do not relate to, and in recent years have been substantially less than, the contribution amounts that would have been required if the Retirement Funds were funded based on actuarial determinations of the contribution amounts necessary to fully fund the Annuity Benefits to Eligible Members of each Retirement Fund over an extended period. See "INVESTMENT CONSIDERATIONS-Unfunded Pensions" herein. In an effort to improve the funded status of the Public Safety Funds, the Illinois General Assembly passed Public Act 96-1495 ("Act 1495"), which modified provisions of the Pension Code with respect to PABF and FABF.

The City's 2017 budget includes the following contributions to the Retirement Funds (as indicated by total annual contribution and the Sewer Revenue Fund's proportional share): (i) \$267 million for-MEABF,' of which \$5.45 million, or less than two percent, is the Sewer Revenue Fund's proportional share; and (ii) \$36 million for LABF, of which \$4.04 million, or eleven percent, is the Sewer Revenue Fund's proportional share.

The Pension Code establishes the Employee Contributions to PABF at 9.0:.percent of the salary of each

employee on an annual basis and Employee Contributions to FABF af 9:125. percent! of the salary <sup>1</sup> of each

employee on an annual basis and establishes Annuity Benefits for Eligible Members of the Public Safety Funds

hired prion to January 1;. 201 ;1 ' based' on the' Annuity factors,<sup>1</sup> 'subjecUto'>3.0f percent automatic annual increases

after each member's first full year of retirement. Prior to 'theieffectiveriess-'-ofAct 1495, the'! Pension Code

established 'the City Contribution to iPABF=at an amount basedmpbri a\* fixed multiplier of 2:00 .times theannual

#### employee contributions'to PABF and'the City\* Contribution to FABF at»an amount based upon a fixed multiplier

 $of 2.26 / times the employee contributions tb'FA < BF. ^j!i;f' > fi. ' = :M, 'i i!;i-v <:>i \ u! / = ·' >> ·.' < ·' = :.', 'i = :.', '$ 

■ BeginnirigJwith the cdhtributi6nitoibe; inade t6 the) Retirement Funds in 2016, > the > 'City's 'eontributions.t6

PABF'!and"FABP...wlll:be.determ^ned<sup>></sup>pursuant'to"P.Al.:^ funding approach fori unfunded! liabilities<sup>1</sup> set forth in'Act-'1495)/ rather than (the multiplier 'funding-formula^ Act'506'(i) extends the period by which the unfunded liabilities of the Public Safety Funds->are amortized; on a level percentage of payroll basis, to a 90 percent funded ratio from 2040 to 2055 and (ii) institutes a phase-in period during 2016-2020 to<sup>:</sup> allow Tor a more gradual Mhcrease-ih the City\* Contribution's to "the'Public Safety Funds than' originally required by Act 1495. • "<sup>f</sup>;iii >'**u**'='**u**'='**u**'=''**u**'-**u**=''**u**'='**u**'=**u**-**u**=^{[,i<sup>T</sup>u-']}**u**=**u**=<**u**: ...; · ...

Municipal and Laborer's Funds  $> \blacksquare$  ' ;><\\:-.J-<sup>r</sup>  $\blacksquare \blacksquare - \bullet i$   $\bullet \blacksquare \blacksquare$  • :••••'•;'.! > $\blacksquare \bullet .-.. > j < \blacksquare \blacksquare$  <<  $\blacksquare$ 

<sup>;</sup> rs. iThe current Pension Code establishes Annuity; Benefits for .Eligible: Members.-of the Municipal and Laborers' Funds hired prior-:to.-January ;l',w201 l-ibased;on-the Annuityi Factors, subject to'3<percentiautomatic annual .increases after the members first'full year'of retirement! and Annuity Benefits for Eligible Members hired, on or after January 1, 201 \ based ori'the Annuity'Factors,'but with the .average<sup>1</sup> annual salary'capped at/a certain amount, and the annual increases:to" the Annuity. Benefits tare tied to.the consumer price indexv Further, the Pension Code establishes the Employee Contribution'\*at<sup>:</sup>8.5'-percent of- th'e.,salaryiof each ^employeeton an annual basis and the City Contribution is established at an amount based on a fixed multiplier of 1.25 times the annual employee contributions'-for-'MEAB'F':and' »l .00-for LA'BF.'j Without significantly higher/c'ontrib'utions or investment returns, MEABF and LABF'are currently estimated to:become insolvent in 2025 and 2027, respectively. On May 23, 2016, the City ' announced. an' agreement in principle with unions for: employees participating in LABI-' (the "LABF Plan") pursuant to which the City would begin contributing to LABF on ah actuarial basis and certain employees participating in LABF would: contribute an increased percentage of their salaries to LABF. Similarly, on August-3, 2016, the.City announced an agreement.in principle with unions for employees participating in MEABF (the "MEABF Plan" and, together with the LABF Plan, the "Stabilization

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Plans") pursuant to which the City would begin contributing to MEABF on an actuarial basis and certain employees participating in MEABF would contribute an increased percentage of their salaries to MEABF.

Pursuant to the Stabilization Plans, Eligible Members of the Municipal and Laborers' Funds hired on or after January 1, 2017 ("New Members") would contribute an additional three percent of their salaries to their respective Retirement Funds and would be eligible for benefits at age 65 (as opposed to age 67 for Eligible Members hired between January 1, 2011 and January 1, 2017 ("Tier II Members")). In addition, Tier II Members of the Municipal and Laborers' Funds would be eligible to receive benefits at age 65 provided that such . Tier II Members agree to contribute an additional three percent of their salaries to their respective Retirement Funds.

The Stabilization Plans further provide, for the City to contribute the actuarially determined amounts required to achieve a 90 percent funded ratio in the Municipal and Laborers' Funds by 2057, following a phase-in of certain increased City Contributions ending in 2022.

The implementation of the provisions of the Stabilization Plans require amendments to the Pension Code, which require action by the Illinois General Assembly. Senate Bill 2437 ("SB 2437"), introduced in the 99<sup>th</sup> General Assembly, contained provisions implementing the MEABF Plan and the LABF Plan and was passed by the Illinois General Assembly, but was vetoed.by the Governor. The expiration of the 99<sup>th</sup> General Assembly prevented a vote to override the Governor's veto; In January 2017, Senate Bill 0014 ("SB 0014") was introduced in the 100<sup>th</sup> General Assembly and contains the same provisions as SB 2437. SB 0014 was approved by the Illinois Senate in January and the Illinois House in April; the Governor, has not yet taken any action regarding SB 0014. The City makes no prediction as to whether any such amendments will become law. The City intends to continue to make City Contributions to the Municipal and Laborers"Funds in accordance with the Pension Code in effect when such City Contributions are payable. -

#### INVESTMENT CONSIDERATIONS

The following discussion of investment considerations should be reviewed by prospective investors prior to purchasing the Bonds. Any one or more of the investment considerations discussed herein could lead to a decrease in the market value and the liquidity of the Bonds or, ultimately, a payment default on the Bonds. There can be no assurance that other factors not discussed herein will not become material in the future.

#### Effect of Potential Future Ratings Downgrades

The City does not anticipate that any potential ratings downgrades would affect collection or availability of Net Revenues Available for Bonds in any material respect. However, such events could have an adverse effect on the Sewer System because the City funds ongoing capital improvement projects to the Sewer System, in part, through the sale of indebtedness of the Sewer System. Downgrades could increase the cost, or decrease the availability, or both, of such borrowing. If this occurred, additional pressure may be placed on sewer rates or capital funding. Additionally, ratings downgrades may have an adverse effect on the market value or liquidity of the Bonds.

#### Unfunded Pensions

The Retirement Funds have significant unfunded liabilities and low funding ratios. The City's contributions to the Retirement Funds in accordance with the Pension Code have not been sufficient, when combined with employee contributions and investment returns, to offset increases in the Retirement Funds' liabilities, which has contributed to the significant underfunding of the Retirement Funds. Moreover, the contributions to the Retirement Funds in accordance with the Pension Code have had the effect of deferring the funding of the Retirement Funds' liabilities, which increases the costs of such liabilities and the associated

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financial risks, including the risk that each Retirement Fund will not be able to pay its obligations when due. Furthermore, increases in the CityVcontributions to the Retirement Funds (such as those scheduled to occur under Act 1495, as modified by Act 506) caused the City to increase its revenues and may require the City to further-increase its revenues, reduce<sup>1</sup> its' expenditures/'or' some combination thereof,' which may impact the services provided by the City or limit the City's: ability to generate additional revenues for other purposes in the future'.: • .':.. ' v ■ 

<sup>1</sup> In addition, the actuaries for/MEABFiand'. LABF- project that' such Retirement Funds 'will not have sufficient assets on hand to make payments\*to beneficiaries beginning in 2025 and 2027, respectively,: based on the provisions of trie Pension Code currently in effect. The City makes no prediction as to the; impact of the insolvency of MEABF or LABF on the amount of the City's contributions to these Retirement Funds. However, should the'City's required to contribute the amounts necessary-to fund directly such payments to beneficiaries on a'pay-as-you-go basis upon the insolvency of such Retirement 'Funds, the\* amount of the City 's contributions to MEABF and LABF would substantially increase. '.::<sup>;i:</sup>- :<sup>;/</sup> up'lu >  $\blacksquare:>\blacksquare \bullet \bullet$ . |'<-;-.\*r. |-t,:>•, V.

Environm'ental<sup>^</sup>Regulations :<sup>3</sup>im

IM ."•..:! :':.".! $\blacksquare$ '• $\blacksquare$ "• :- $\blacksquare$  $\blacksquare$ '! <i: }"'<!: • $\blacksquare$ •i^'''`q <sup>J</sup>\]J:\' $\blacksquare$ 

- i n The^ City'is'subject to fstate arid federal) environmental laws'and? regulations applicable to the ;Sewer System's' overflows into Chicago! area waterways. These\* laws-vand' regulations are subject to change; and the City! may!'be<sup>1</sup> required-toi expend "substantiali furids:ito rheeti.the requirements -ofjsuch .'changing laws. and regulations in 'the future. Failure-to-comply with these laws and regulations, may. result in the\* imposition of administrative; civil and criminal penalties, orithe'impositiori^of anvinjunction:requiring>the City to take or refrain from, taking; certain: actions.rilnadditionV-the City may,; be: required to remediate contamination on properties' owned'or operated by the Gitylorion pfo'pertiesiownedcby others;:but contaminated as a result<sup>1</sup> of City Operations.

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Sewer services are governed- by various federal!and "stateJehvirortitiental protection and health and safety laws and regulations, including the federal Clean Water Act and similar state laws, and federal and state regulations-issued under these laws by the'>EPA<sup>1</sup> and IEPA: 'These laws and'regulations establish; among other things, criteria and standards for wastewater and for discharges into the<sup>1</sup> waters of the United States and nearby states. Pursuant to these--laws\* the . Department , is-'required to obtain various environmental permits for operations. Violations or noncompliance could'>result invfines-orother sanctions by regulators and/or such violations or noncompliance could result in civil suits. Environmental laws and regulations are complex and change frequently. These laws, and the enforcement thereof, have tended-to become more stringent over time. While the Department has budgeted for future capital and operating expenditures to comply with these laws and permitting requirements, it is possible that new of str-icter standards could be imposed that will require additional

**!\*** !: capital expenditures or raise operating costs. '.:i<sup>!</sup>

Security of the Sewer System

Damage to the Sewer System resulting from vandalism; sabotage; or terrorist-activities-may-adversely affect the operations and finances of the Sewer System. There can be no assurance that the City's security, emergency preparedness and response plans will be adequate to prevent or mitigate such damage, or that the costs of maintaining such security measures will not be greater than currently anticipated.

\_'• \_

The Department relies on information technology systems with respect to customer service and billing and accounting. In addition, the Department relies on these systems to track utility assets and to manage maintenance and construction projects, materials and supplies. A loss of these systems, or major problems with the operation of these systems, could have a material adverse effect on the financial condition and results of operations'of the Department. Information technology systems may be vulnerable to-damage or interruption from the following types of cyber security attacks or other events:

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- power loss, computer systems failures, and internet, telecommunications or data network failures;
- operator negligence or improper operation by, or supervision of, employees; '
- physical and electronic loss of data;
- computer viruses, cyber security attacks, intentional security breaches, hacking, denial of service actions,
- misappropriation of data and similar events;
- difficulties in the implementation of upgrades or modification to information technology systems; and
- fires, floods, severe weather events and other natural disasters.

Although the Department does not believe that its systems are at a materially greater risk of cyber security attacks than other similar utilities, its information technology systems may be vulnerable to damage or interruption from the types of cyber security attacks or other events listed above or other similar actions, and such incidents or other events may go undetected for a period of time.

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#### Water Conservation

Decreased customer water consumption as a result of water conservation efforts may adversely affect demand for sewer services and may reduce revenues and earnings. There may be declines in water usage per customer as a result of an increase in conservation awareness, and the structural impact of an increased use of more efficient plumbing fixtures and appliances. Difficulty obtaining future rate increases to offset decreased customer water consumption to cover investments and expenses, may adversely affect the business, financial condition, and results of operations of the Department.

#### Adverse Change in Laws

There are a variety of State and federal laws, regulations and constitutional provisions that apply to the

City's ability to raise taxes, fund its pension obligations or to reorganize its debts. There is no assurance<sup>1</sup> that there will not be any change in, interpretation of, or addition to such applicable laws, regulations and provisions. Any such change, interpretation or addition may have a material adverse effect, either directly or indirectly, on the City or the taxing authority of the City, which could materially adversely affect the City's operations or financial condition. •

On September 15, 2016, legislation was introduced in the Illinois General Assembly (House Bill 6604). The bill provides that for a period of 10 years after the effective date of the act, a municipality with a population of more than 1,000,000 may not increase: (i) the amount or rate of any tax imposed on the provision or sale of water, utility, or sewer service, or any combination thereof; or (ii) the amount or rate of any charge or fee imposed for the provision or sale of water, utility, or sewer service, or any combination thereof, which is a limit to home rule powers. The City is unable to predict whether the Illinois General Assembly will adopt any such legislation or the form of such legislation if enacted.

#### Bankruptcy

Under federal law, municipalities, including the City, are ineligible for bankruptcy unless specifically authorized to be a debtor in bankruptcy by state law or by a governmental officer or organization empowered by state law to authorize such entity to be a debtor in a bankruptcy. State law does not currently permit municipalities, including the City, to be debtors in bankruptcy, and therefore municipalities, including the City, are currently ineligible for bankruptcy.

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As with all State law, the current prohibition on municipal bankruptcies is subject'to review or. change by State government. From time to time, legislation has been introduced in the Illinois General Assembly, which, if enacted, would permit Illinois municipalities! to, be debtors in<br/>bankruptcy. The City, is unable, to predict whether the Illinois General Assembly will adopt any such legislation or the form of such legislation if enacted.

#### Uncertain Enforcement Remedies

..., **b** r:-|<s| !•**b** •**b b**; **b**,<**b**'.: **b** .'-• i:<|||r-

• hnt;-.<.u<IPh?- remedies available ^bondholders **u**uponfinonpa^ent-,of<sub>l</sub>iprincipal-of<sub>f</sub>pr:.interest orijthe. Bonds are uncertain and in many respects depende^ntMupon.i.dj.sOTelipna^-Judigial. actons,.; ;/S§ej<AP<sub>1</sub>P«EiNDlX<sub>i</sub> iW "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE-Remedies."

#### Force Majeure Events

.w..:Certain unanticipated.eyents;-beyond-the City's;control-could;,have a material,adverse effect on the

Department's :and,City's,pperations,;and -financial conditions,if-they .were, to ypccuj.;, These teyents include fire,

flood, earthquake, .epidemic, adyersejhealthjCpnditiqns.prv^ of .God, freight embargo, labpr;.:jstrikes or,work, stoppages,,civil comm^^ pf/;^ar^Qr.: escalation, of?existing^ar conditions, sabotage, terrorism or enemy action, pollution,(tunknown^s^^

affecting the environment, and any similar causes. No assurance can be provided that such events will not occur, and, if any such events were to occur, the effect of such event or events on the Department's and Cityjs operations and financial condition on the Net Revenues Available for Bonds cannot be predicted.

#### Other Considerations -.vr.

.! ...Debt Covenants. ,The,Cityiis,pbngatedjtq^comRly.with^the RatejCqvenant.;;<sub>i</sub>Failure.to comply with,the Rate Covenant, if not cured; or waived, could -result in, the City, beingirequired to.repay,or finance ,the related borrowings before their due date, limit future borrowings, cause cross-default issues, and increase (borrowing costs. If forced to repay or refinance (on less favorable terms) these borrowings, the Department's business, financial;condition, and results, of operations;cquld be adversely affected-by, increased costs and rates.

;;, . Sewer.Rates., iWhile there is.currently-no.State^statute^regulatm or

court decisions/could limit-or otherwise^adyerselyiaffect'm.e/^jty-i's ability, to set sewer rates. See "-^-Adverse

Change in Laws" above.

Unified Billing. As described herein under HFJ^ANCIAL.'. OPERATIONS-Collections and Delinquencies," partial bill payments made pursuant to the unified bill are allocated on a pro rata basis among the water, sewer and refuse collection charges and fees, with the oldest unpaid amounts being paid first. As, of January 1, 2017, the City also imposes the Chicago Water and Sewer Tax on the use or consumption of water in the City, and on the transfer of wastewater to the Sewer System from- properties located -in the City, which appears on the unified bill. Payments on the unified,-bill. are aHocated.pro rata among.the charges shown on the unified bill, with oldest unpaid amounts being paid first. No assurance can- be.given, however, that this will always be-the>method of allocation of partial payments. "Itis possible.that partial payments,may be. allocated in the future in a non-pro rata manner, in which event sewer charges could receive a lower priority than refuse

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collection charges, water charges and/or the Chicago Water and Sewer Tax in allocating partial payments. No assurance can be given as to the impact of the unified bill on the collection by the City of sewer charges.

#### Forward-Lboking Statements

This Official Statement contains certain statements relating to future results that are forward-looking statements. When used in this Official Statement;, the words "estimate," "intend," "expect" and similar expressions identify forward-looking statements. Any forward-looking statement is subject to uncertainty and risks that could cause actual results to differ, possibly materially, from those contemplated in such forward-looking statements. Inevitably, some assumptions used, to develop forward-looking statements will not be realized or unanticipated events and circumstances may occur. Therefore, bondholders and potential investors should be aware that there are likely to be differences between forward-looking statements and actual results; those differences could be material. The City does not undertake any obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

#### LITIGATION

There are no pending legal proceedings to which the City is a party or to which any of its property is subject that may materially affect the City's ability to pay the principal of and interest on the Bonds when they become due:  $\blacksquare \bullet \blacksquare' < < \blacksquare \blacksquare$ .

The:City, like other large municipalities; is involved in various litigation relating principally to claims arising from contracts, personal: injury, property damage, tax claims; police conduct and other matters. However, there is neither litigation pending nor, to the best of the- Gity's knowledge, threatened, seeking to restrain or enjoin the issuance or delivery of the Bonds, or except as disclosed herein, materially adversely affecting the collection, pledge or application of any moneys' orsecurity provided for the payment of the Bonds.

#### RATINGS

The Bonds are rated "A" (stable outlook) by S&P, "AA-" (negative outlook) by Fitch, and "AA-" (stable outlook) by Kroll. The 2017A Insured Bonds are expected to be assigned ratings of "AA" and "AA+" by S&P and Kroll, respectively, based upon the issuance of/the Policy for the 201-7A- Insured Bonds by AGM (defined herein) at the time of delivery of the 2017A Insured Bonds. The City did not request a rating from any other rating service for the Bonds. Any explanation of the significance of such ratings may be obtained only from the respective Rating Agencies. Certain information and materials concerning the Bonds, the City and the Sewer -System were furnished to the" Rating Agencies'by 'thei City ahd'Othefs. There is no'assurance that any of the ratings will be maintained for any given' period of time or that any of them may not be raised, lowered or withdrawn entirely by the respective Rating Agency, if, in its judgment, circumstances so warrant. Any change in or withdrawal of any rating may have an adverse effect on the price at which the Bonds may be resold.

#### CERTAIN LEGAL MATTERS

Legal matters incident to the authorization and issuance of the Bonds are subject to the separate approving opinions of Schiff Hardin LLP, Chicago, Illinois and Hardwick Law Firm, LLC, Chicago, Illinois, Co-Bond Counsel. The proposed forms of their opinions are included herein as APPENDIX D-"PROPOSED FORM OF OPINIONS OF CO-BOND COUNSEL."

Certain legal matters will be passed on for the City by (i) its Corporation Counsel, and (ii) in connection with the preparation of this Official Statement, Charity & Associates, P.C., Chicago, Illinois, and Quintairos, Prieto, Wood & Boyer, P.A., Chicago, Illinois, Co-Disclosure Counsel to the City. Certain legal matters will be passed on for the Underwriters by Miller, Canfield, Paddock and Stone, P.L.C., Chicago, Illinois.

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#### INDEPENDENT AUDITORS

The basic financial statements of the City of Chicago, Illinois Sewer Fund as of and for the years ended December 31, 2015 and 2014 and included as APPENDIX C to this Official Statement chave\*been 'audited\* by Deloitte & Touche LLP, independent auditors, as stated in their report appearing herein that was modified to include a> reference; to other auditors and to.jnchide an<sup>1</sup> emphasis'of a matter' paragraph! rej'ated46' theadoption of

Governmental'Accounting Standards Board (GASB) St'atement'No; d'i, Accounting'and'Financidl Reportingfor Pensions -an'amendment oj GASB'StateprehtNdi'27. ''  $\blacksquare$  -:<\ i\<A-j  $\blacksquare$ , -; », i\*K»<. : hi, -.  $\blacksquare$  <,-. -virj/.

CO-FINANCIAL ADVISORS AND INDEPENDENT REGISTERED MUNICIPAL ADVISOR *ii.:* • :, |y. : . • :, j|>>f|| • • . • v, » /t fi; . Vj'j.'i; |siiv.v <file:///siiv.v>; . : • b;-:. .-!nw.' 'Sj'y. •':•.:; ..: v., ,yy-...||ivy@

The City has retained.Martin J. Luby LLC as its independent registered municipal advisor (thep'-IRMA") as defined in the SEC Rule to evaluate financing proposals and recommendations in connection with the City's various :bond issuance programs and .othen financing/ideas being considered bynthe-- $\in$ ity;< >however,nthe IRMA wilhnot advisebon thei.investment) ofrGity. rands-held;; by .the;Officeiof!ithe.iGityxTreasurer.v TheilJRMAIs comperisatiOniis.-not dependent on:the issuance of theBorids.; .! $\blacksquare$  >::;i'. ft-;:-.\\\y... v va-; vi\_i>'it>/Lii> /ii.ii ...>a...j;i \y.i,-<>\js.lb r.li i<\j'iA'J '! $\blacksquare$ '= $\blacksquare$ .iiJIKA'I Vfi /T:>/iC>b 11' 'yjtUilis.s.i Vi\* ,• io :::.'! i>.\>. ,• io :::.'! i>.\>. ,• io ::..'! i>.\>. My- n = .

Siebert Cisneros Shank & Co., L.L.C, as; representative on behalf of itself and the other underwriters listed on the of this Official Statement (the "Underwriters") has agreed, subject to certain conditions, to cover purchase<the,S.eries/2017A> \*B.onds>at<:a jjrice-equal .td.v\$\*196;949;QA0i55;(which\*'represents-.the aggregate Bonds, plus: ainet: originaliissue. lpremium principal amount/of Series 2017A of \$1.7,322,the. 1f72.45;:less:anUnderwriters' discountiofi\$972,131;:90) and the Series'2013B'Bonds. afca.pric^iequa^ aggregate principal amountiof.'-the Series'2017B'Bonds,-plus a;rtetf'original -issuehprerriiumof \$28,3.9.7,991'.90, lessjanUnderwriters'idiseount,of\$.1;049,016.3.6).i- '...∎ . y,i:.;;;,i-.|./-i/. -...∎∎∎<...■>; i-v ., -...∎V ' -...',) \. .. vii' j ...ih :..<-' :...yv.\:j...i-j-, ::'Jv.\i.i:s !:::::, :,oJ-. rnuiiu v.ns: !:' > .?:>'.. :'.''-i:/- .Y. . /ij:/..':-::j .-.**u**'**uu**, !'K/i: The .obligation of .the Underwriters; Jo accept; delivery.jO fJhej Bonds.is subject ;tQ.yarious conditions,set forth in^a.Bopd (Purchase Agreement betw,een-the1,Underwriters-andrthe;.Ci^;; The.;Undepwriters are obligated .to :-'\-"..- • " ■■: purchaseall of the Bonds if any of the Bonds ;are .purchased. •∎;•)' • n :. i< ∎ =: i \*

The Bonds are being offered for sale to the public at the prices shown on the inside cover pages hereof. The Underwriters reserve the right to lower such, initial, offering prices as they deem necessary in connection with the marketing of the Bonds. The Underwriters may offer and sell the Bonds to certain dealers (including dealers depositing the? Bonds into investment trusts) and others at. prices. lower than the initial public offering price or prices, set forth in this Official Statement. Thei Underwriters reserve .the right-to join with, dealers and other underwriters in offering the Bonds to the public.

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#### TAX MATTERS

#### Federal Income Tax

Federal tax law contains a number of requirements and restrictions which apply to the Bonds, including investment restrictions, periodic payments of arbitrage profits to the United States, requirements regarding the proper use of bond proceeds and the facilities financed -with them, and certain other matters. The City has covenanted to comply with all requirements that must be satisfied in order for the interest on the Bonds to be excludable from gross income for federal income tax purposes. Failure to comply with certain of such covenants could cause interest on the Bonds to become includable in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds.

Subject to the accuracy of certain representations and the City's continuing compliance with the above-referenced covenants, under present law, in the respective opinions of Co-Bond Counsel, interest on the Bonds is excludable from the gross income of their owners for federal income tax purposes and thus is exempt from present Federal income taxes based upon gross income. Interest on the Bonds is not included as an item of tax preference in computing the federal

alternative minimum tax for individuals and corporations, but is taken into account in computing an adjustment used in determining the federal alternative minimum tax for certain corporations, as described in the following paragraph.

The Internal Revenue Code of 1986, as amended (the "Code"), includes provisions for an alternative minimum tax ("AMT") for corporations in addition to the corporate regular tax in certain cases. The AMT, if any, depends upon the corporation's alternative minimum taxable income ("AMTI"), which is the corporation's taxable income with certain adjustments. One of the adjustment items used in computing the AMTI of a corporation (excluding S Corporations, Regulated Investment Companies, Real Estate' Investment Trusts, REMICS and FASITs) is an amount equal to 75% of the excess of such corporation's "adjusted current earnings" over an amount equal to its AMTI (before such adjustment item and the alternative tax net operating loss deduction). "Adjusted current earnings" includes all tax exempt interest, including interest on the Bonds.

Ownership of the Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions,-certain insurance companies, certain corporations (including S corporations and foreign corporations operating branches in the United States), individual recipients of Social Security or Railroad Retirement benefits, individuals otherwise eligible for the earned income tax credit, and taxpayers who may be deemed to have incurred (or continued) indebtedness'to purchase^ or carry tax-exempt obligations. Co-Bond Counsel will express no opinion with respect to any such collateral consequences with respect to the Bonds. Prospective purchasers of the Bonds should consult with their own tax advisors regarding the collateral consequences arising with respect to the Bonds described in this paragraph.

#### **Discount and Premium**

If a Bond is purchased at any time for a price that is less than the Bond's stated redemption price at maturity, the purchaser will be treated as having purchased the Bond with market discount subject to the market discount rules of the Code (unless a statutory de minimis rule applies). Accrued market discount is treated as taxable ordinary income and is recognized when a Bond is disposed of (to the extent such accrued discount does not exceed gain realized) or, at the purchaser's election, as it accrues. The applicability of the market discount rules may adversely affect the liquidity or secondary market price of such Bond. Purchasers of the Bonds should consult their own tax advisors regarding the potential implications of market discount with respect to the Bonds.

An investor may purchase a Bond for a price in excess of its stated principal amount at maturity. (Such Bond is referred to as a "Premium Bond"). Such excess is characterized for federal income tax purposes as "bond premium" and must be amortized by an investor on a constant yield basis over the remaining term of the

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Premium Bond in a manner that takes into account potential call dates and call prices. An investor cannot deduct amortized bond premium relating to a Premium Bond. The amortized bond premiumds. treated as a reduction in the amount of tax-exempt interest received. As bond premium is amortized, it reduces the investor's basis in the Bond. Investors-who purchase'a Premium Bond should consult their own tax'advisors regarding the amortization of bond premium'and its; effect on the 'Premium Bond's basis-for purposes of computing gain or loss in connection with the sale, exchange, redemption or early retirement of such Premium Bond.

: Owners of Bonds who dispose of Bonds prior to their stated> maturity (whether by sale, redemption or otherwise), purchase Bonds in the initial public offering, but at a price different from their issue price, or purchase Bonds subsequent to the initial public offering should consult their own tax advisors as to the federal, state or local tax consequences of such-dispositiOnsor purchases.

State and Local-Taxes '>•■•■■-: .■: i!•. ■........! :••: ■....>.:/<■■ u, '..,**u**;.>jh- **u**•**uu**•**u**" **u**.**u**.:'!,**u**.**u**<.-!.,..**u**.**u**•

Interest on the Bonds is not exempt from present Illinois incometaxes'. Ownership; of .the Bonds may result in- other state :ahda-local tax consequences Ab certain taxpayers; , .Go-Bond.Counsel will .express no opinion

with respect to any such state and local tax consequences with respect to the Bonds. Prospective; purchasers'of the Bonds should consult with their own tax advisors regarding any state and local tax consequences arising withirespectto:the:Bohds:»:M *v.*[**.**,**..**]} *i^i.-p'f-:-*∧.

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#### •':<-. "";"".<!" **Basis of Bond Counsel Opinions**

■ i The,-(respective.iopinions of G.o-Bond Counsel to be;sdelivered,concurrently-with the: delivery), of the Bonds.; and.the.descriptions.of.thejax slaw.contained ;in this. Official.;Statement are ;based on,statutes^; judicial decisions, :regulations; i mlings iand.other, 'official! ihterpre^^

issued: -There:, can be ; ho assurance -.that: isuch. law - ori those: interpretations ; wilL nOt-.-be: changed or, that new provisions of law will not be enacted or promulgated at any time while the Bonds are outstanding in a manner that/wouldf adversely ^.affect (the .market - value of rliquidityi-or, 'the tax; treatment of i.ownership of theBonds. Co-Bond Counsel :have;not undertaken to provide advice with: respect to' any! such future changes^ ::' •; :..!::

v.-!, hi. In, rendering;! their.-; opinions,-,,Go-Bond' \*G.o.unselijiwillmre^eiv^^^

representations: of facts, calculations,: estimates -and expectations .furnished by the City and. others which Co-Bond Counsel will not-.have verified independently... .! .... . .;;•: !:....

Risk of Audit -: .' (- 🔳

The Internal Revenue Service ("IRS") conducts a program of audits of issues of .tax-exempt .obligations to determine whether, in the view of the IRS, interest on such obligations is properly excluded from the gross income of the owners-of such obligations; for federal-income, tax purposes.: Whetherrprnpt'thelRS will decide to-audit the Bondscannot be predicted. If the IRS begins; an/audit .ofithe Bonds, under, current IRS procedures; the IRS. will treat the City as the taxpayer subject to the audit.and ,the :holders,of the; Bonds may not have the right tOiparticipate. in the audit proceedings..., Theifact ithatian(audit ;of the Bonds! is^pending could, adversely affect the liquidity or. market price of the Bonds until the audit -is-.concluded'even.if.the result of the audit is favorable.

#### Legislation

From time to time, there are legislative proposals pending in, the: Congress, of the United States that, if enacted, could, alter, or, amend the federal tax. matters referred., to in this.section, or, adversely affect the market price or liquidity of tax-exempt bonds of the character of the Bonds: In some cases, these proposals have

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included provisions that had a retroactive effective date. It cannot be predicted whether or in what form any such proposal might be introduced in Congress or enacted or whether, if enacted, it would apply to bonds issued prior to enactment. Prospective purchasers of the Bonds should consult their own tax advisers regarding any pending or proposed federal tax legislation. Co-Bond Counsel will express no opinion regarding any pending or proposed federal tax legislation.

#### Backup Withholding

Payments of interest on, and proceeds of the sale, redemption or maturity of, tax-exempt obligations, including the Bonds, are in most cases required to be reported to the IRS. Additionally, backup withholding may apply to any such payments to any owner of Bonds who fails to provide an accurate Form W-9 Payers Request for Taxpayer Identification Number, or a substantially identical form, or to any such owner who is notified by the IRS, of a failure to report all interest and dividends required to'be shown on federal income tax returns. The reporting and backup withholding requirements do not affect the excludability of such interest from gross income for federal tax purposes.

#### SECONDARY MARKET DISCLOSURE,

The City will enter into a Continuing Disclosure Undertaking (the "Undertaking") for the benefit of the Beneficial Ownersof the Bonds' to send certain information annually and to provide notice'of certain events to the Municipal Securities Rulemaking Board (the "MSRB") to enable the Underwriters to meet the requirements of Section (b)(5) of Rule 15c2-12 (the "Rule") adopted by the SEC under the Exchange Act. The MSRB has designated its Electronic Municipal Market Access system, known as "EMMA," as the system to be used for continuing disclosures to investors. The information to be provided on an annual basis, the events which will be noticed on an occurrence basis and a summary of other terms of the Undertaking, including termination, amendment and remedies, are set forth below.

A failure by the City to comply with the Undertaking will not constitute a default under the Bonds or the Series 2017 Bond Ordinance, and Beneficial Owners of the Bonds are limited to the remedies described in the Undertaking. See "-Consequences of Failure of the City to Provide Information" under this caption. A failure by the City to comply with the Undertaking must be reported in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Bonds^in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Bonds and their market price.

:**I** 'The following is a'brief summary of certain provisioris of the-Undertaking of the-City and does not purport to be complete. The statements made under this caption are subject to the detailed provisions of the Undertaking, copies of which are available from the City upon request.

#### Annual Financial Information Disclosure

The City covenants that it will disseminate to EMMA its Annual Financial Information and its Audited Financial Statements (as described below) prepared in accordance with generally accepted accounting principles applicable to government units (as described below), with such obligation of the City commencing in 2017 for the 2016 Fiscal Year.

"Annual Financial Information" means financial information and statistical data generally consistent with that contained in this Official Statement (i) under the caption "SEWER SYSTEM - General," the table captioned "Sewer System Service Area Population," (ii) under the caption "DEPARTMENT OF WATER MANAGEMENT," the table captioned "Historical and Projected Capital Improvement Program Funding by Source" (only with respect to the total amounts for the previous five years), and (iii) under the

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caption "FINANCIAL OPERATIONS," the table captioned "Historical :Sewer. Rates"; (only, with respect to the previous. -five"years"and only the "Per 1,000 Gallons" column), the table captioned "Water:System and: Sewer System; Accounts,"/(only iwith respect :to;the. Sewer .-System; accounts for ithe-previous' five years), the table captioned "Annual .Net Sewer Charges" (only with respect to the previous ifive.years) and .the table captioned "Historical and Projected Financial Operations" (only with respect to the previous'five years).

"Audited Financial Statements" means the audited financial statements of the Sewer Revenue. Fund

y-' i i 'Annual Financial:Information exclusive of Audited Financial:StatementS;(commencing withuhe Audited Financial.Statements for the fiscal; year, ended December 31, 2016)>wilL be provided tojthe.MSRB hot more than 210 days after the last;day of the Sewer-System's fiscal year\* which currently is December 3Yh If Audited Financial Statements' are i not available; when 'the ; AnnualpFinanciali 'Information iis i filed,! 'unaudited financial statements shall be included, and Audited Financial Statements will be filed when;available.'! .-.:. i-

Reportable Events Disclosure ;" j > '**B** A <sup>r'</sup> **B**". '•**B**: '•'-aC . **B**"; **B**} **B**""**B**''

vfi; t'The-'City covenants that.it < http://that.it> will; disseminate in<sup>1</sup> a>timely.manner,:not in excess-of tenbusiness days after occurrence,<sup>1</sup> (tovthetMSR'B/the'disclosure

.mi.: ;.:i;i(a),;

payment.delinquencies; /,,,,!,(;;- .^<sub>fUi</sub>

- b) non-payment related defaults, if material;
- c) unscheduled draws oh debt service reserves reflecting financial difficulties; '•
- '(d) unscheduled draws oh credit enhancements reflecting fih<sup>^</sup>. (e) substitution of credit or liquidity

providers, or theirfailure'to perfbnh; '- ;i / ...

f) adverse tax opinions, the issuance by the Internal Revenue -Service, of. proposed or- final determinations of taxability, notices of proposed issue (IRS Form 5701-TEB) or other material notices or determinations, with respect to the. tax status of the Bonds, onothef .materialieventsiaffectingithetax status of the Bonds;--...  $\Box$ 

g) modifications to rights of security hoiders, if material;

h) bond calls, if material, and tender offers;

(i) • defeasances; '•• ' - :]! •...;;;:':••:- :>.• i ....(•• -.•...!..-/•<-•:.•...

(j) release, substitution or sale of property isecuring repayment of the Bonds, if material;- ■:. (k) rating

. ... ... ....

changes;

(1) bankruptcy, insolvency, receivership or similar event of the City (considered to have occurred in the following instances: the appointment of a receiver, fiscal agent or similar officer for the City in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all'of the assets or business of the

*i*::::principal)and:interest

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City, or if the jurisdiction of the City has been assumed by leaving the City Council and the City's officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City);

(m) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the-termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and

(n) appointment of a successor or additional trustee or the change of name of a trustee, if material.

#### Consequences of Failure of the City to Provide Information

The City shall give notice in a timely manner to the MSRB of any failure to provide disclosure of Annual Financial Information and Audited Financial Statements when the same are due under the Undertaking.

In the event of a failure of the City, to comply with any provision of the Undertaking, the Beneficial Owner of any Bond may seek mandamus or specific performance by court order to cause the City to comply with its obligations under the Undertaking. The Undertaking provides that any court action must be initiated in the Circuit Court of Cook County, Illinois. A default under the Undertaking shall not be deemed a default under the Bonds, the Series 2017 Bond Ordinance, or the Indenture, and the sole remedy under the Undertaking in the event of any failure of the City to comply with the Undertaking shall be an action to compel performance.

#### Amendment; Waiver

Notwithstanding any other provision of the Undertaking, the City may amend the Undertaking, and any provision of the Undertaking may be waived, if:

a) (i) the amendment or the waiver is made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of the Sewer System or type of business conducted;

(ii) <sup>1</sup> the Undertaking, as amended, or the provision, as waived, would have complied with the requirements of the Rule at the time of the primary offering, after taking into account any
 amendments or interpretations of the Rule, as well as any change in circumstances; and

(iii) the amendment or waiver does not materially impair the interests of the Beneficial

Owners of the Bonds, as determined by a party unaffiliated with the City (such as the Trustee or Co-

Bond Counsel), or by approving vote of the Beneficial Owners of the Bonds pursuant to the terms of the

Indenture at the time of the amendment; or

b) the amendment or waiver is otherwise permitted by the Rule.

#### EMMA

All documents submitted to the MSRB through EMMA pursuant to the Undertaking shall be in electronic format and accompanied by identifying information as prescribed by the MSRB, in accordance with the Rule. All documents submitted to the MSRB through EMMA will be word-searchable PDFs, configured to permit documents to be saved, viewed, printed and electronically retransmitted.

#### Termination of Undertaking

■ The Undertaking shall be terminated if. the City shall no longer-have any-legal liability, .for any obligation on or relating to repayment of the Bonds under the Series 2017 Bond Ordinance or the Indenture.

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#### Additional Information

; Nothingpin-i-the .Undertaking, will), be deemed , to,,-prevent.ithe City,,>from'i.disseminating; any, other information, using the means of dissemination-set forth; in the Undertaking or<; any. othermeans of communication, or including any other information in any Annual Financial Information or Audited Financial Statements or notice of; occurrence-of a material event, in, addition ; to that; which is required ; by the Undertaking. If the City chooses to include any information in any Annual Financial Information or Audited Financial Statements or notice of a material :ev'ent; inraddition; to "that .which: iisiSpecifically'required! by the Undertaking, the City shall have no obligation under the Undertaking to update such information or include it in any future Annual Financial Information or Audited Financial Statements or notice of occurrence of a material Statements or notice of a material Statements or notice of a material statements or include it in any future Annual Financial Information or Audited Financial Statements or notice of occurrence of a material Statements or notice of a material statements or notice

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; !The City failed; to comply >with certain eontinuingidisclos'ure undertakings previously entered'into by it

pursuant to the Rule .as-described below. Such non^compliahceimay or may hot; be material.': :,,

AnnualsFiinahcial-Information and: Audited; Financial<sup>1</sup> Statementscwere not ifilednby<sup>^</sup> the City An, 20 M: for

the Fiscal Year ended December 31, 2010, and in 2012 for the Fiscal Year ended December 31, 2011, with

respect to the City of Chicago Chicago O'Hare International Airport General Airport Third Lien Revenue and

Revenue Refunding Bonds, Series 2010A through Series 2010F. Annual Financial Information and Audited

FinahciaUStatements? were-- not 'filed iby 'the'Gity\* in-<201:l>'for 'tHe iFiscal:iYear ended<December 31; '2010, and in

2012 for the Fiscal Year ended December 31, 2011, with respect-to-the'City of'Chicago Chi'c'ago'fO'Hare

International Airport Passenger Facilities Charge Revenue and Revenue Refunding Bonds, Series 201 OA

through Series 2010D. On October 12, 2016; the City filed with EMM A such Annual<sup>5</sup> Financial Information and

Audited Financial'Statements with-respect to such bonds. ' :,.r.i

Annual Financial Information and Audited Financial Statements were not filed by the City in 2012 for the Fiscal Year ended December 31, 2011, with respect to 'the City of Chicago Chicago O'Hare International Airport General Airport Third Lien Revenue Bonds, Series 2011A through^ Series 2011C. Annual Financial Information and Audited Financial'Statements were not-filed iri<sup>1</sup> 2012 fOrthe<sup>1</sup> Fiscal-Year ended ^December 31, 2011, with respect to the City of Chicago Chicago Chicago O'Hare International Audited Financial'Statements were not-filed iri<sup>1</sup> 2012 fOrthe<sup>1</sup> Fiscal-Year ended ^December 31, 2011, and Chicago Ch

2011, with respect to the City of Chicago Chicago O'Hare International Airport Passenger Facility Charge

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# Revenue Bonds, Series 201 IA and Series 201 IB. On October 12, 2016, the'GityTiled with EMMA such Annual Financial Information and Audited Financial Statements with respect to such' bonds.

With respect to the City's Collateralized Single Family Mortgage Revenue Bonds, Series 2006A (the "Series 2006A Bonds"), S&P lowered its rating on the Series 2006A Bonds from "AA + " to "AA " and placed the Series 2006A Bonds on "Credit Watch with negative'implications" effective'December 16; 201 I. The City did not cause the trustee as dissemination agent to file a notice of a reportable event with EMMA at that time. Subsequently, S&P upgraded the rating on the Series 2006A Bonds from "AA" to "AA+" effective March 12,

2012. On March 18, 2012, S&P removed the "Credit Watch with negative implications " characterization from the Series 2006A"B6h'ds. The City caused'the trustee, as"dissemination'agent, TorHhe^Series 2006A"Bonds to file a notice of a reportable event with EMMA on March 26, 2012 disclosing the downgrade and subsequent upgrade of the Series 2006A Bonds by S&P.

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With respect to multiple series of the City's Chicago O'Hare International Airport General Airport Third Lien Revenue Bonds, American Airlines is an "obligated person" with respect to such bonds. On November 29, 2011, AMR Corporation (the parent company of American Airlines and Envoy Air (formerly American Eagle)) and certain of its United States-based subsidiaries (including American Airlines and American Eagle) filed voluntary petitions for Chapter 11 reorganization in the United States Bankruptcy Court for the Southern District of New York. The City filed a notice with EMMA with respect to this event on March 30, 2012 (not within the 10 business-day deadline imposed by the Rule). On December 9, 2013, American Airlines merged with US Airways. The City filed a notice with EMMA with respect to this event on the 10 business-day-deadline imposed by the Rule).

With respect to the City's Outstanding Motor Fuel Tax Revenue Bonds, the City's pledge of Additional City Revenues to the payment of such bonds (in addition to the pledge of Motor Fuel Tax Revenues) became effective as of March 19, 2013. The City filed a notice with EMMA describing the pledge of this additional source of revenue on May 16, 2013.

With respect to the City's Outstanding O'Hare International Airport Customer Facility Charge Senior Lien Revenue Bonds, Series 2013, Simply Wheelz, LLC d/b/a Advantage Rent A Car ("Advantage") is an "obligatedperson " with respect to such bonds. Advantage filed a voluntary bankruptcy petition in the Southern District of Mississippi on November 5, 2013. The City filed a notice with EMMA with respect to this event on December 5, 2013.

The rating agencies took certain rating actions with respect to the ratings of Ambac Assurance Corporation and Financial Security Assurance Inc. (collectively, the "Bond Insurers"). The Bond Insurers provided municipal bond insurance policies relating to certain series of the City's Chicago Midway Airport revenue bonds. Event notices.with respect to such rating changes were,not filed with EMMA. The City made such filings on May 22, 2014.

Ambac provided a municipal bond insurance policy relating to the City's Motor Fuel Tax Revenue Bonds, Series 2003A and Assured Guaranty Corp. provided municipal bond insurance policies relating to the City's Motor Fuel Tax Revenue Bonds, Series 2008. Event notices with respect to the rating changes taken by the Rating Agencies with respect to these insurers were not filed. The City made filings with EMMA on June 3, 2014 and August 22, 2014 with respect to these rating changes.

The City failed to file timely material event notices with respect to certain rating changes affecting the City's bonds subject to the Rule and for which the City is an "obligatedperson" under the Rule (collectively, the "Prior Bonds") or affecting bond insurance companies which insured any Prior Bonds (collectively, the "Prior Bond Insures"). The City

filed with EMMA on August 29, 2014 a notice with respect to all rating changes known to the City and affecting the Prior Bonds (including certain Senior Lien Bonds and Second Lien Bonds) occurring over the last ten years. The City filed with EMMA on August 27, 2014 a notice with respect to all rating changes known to the City and affecting the Prior Bond Insurers occurring during the last seven years.

On January 15, 2016, S&P upgraded the rating of the City's Midway Second Lien Bonds from A- to A. On May 17, 2016, the City filed with EMMA an event notice relating to this rating upgrade.

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#### CERTAIN VERIFICATIONS

Robert Thomas,: CPA, LLC, Shawnee Mission- Kansas (the"Verifier"), upon delivery of the.Bonds, will deliver .to the City, :Co<sup>·</sup>Bond..Counsel and 'the' Underwriters a report; stating'that the. firm, atithe request of the City and; the Underwriters, has reviewed the mathematical accuracy of certain computations based on certain assumptions relating to (i) the; sufficiency of the principal, :and' interest received from, the investment in the Defeasance Obligations, together with any initial' cash- deposit, to' meet the timely'payment; of the applicable principal or redemption price-of and interest on the Refunded Bonds, as- described under "ESTIMATED SOURCES AND USES OF FUNDS - Refunding of Refunded Bonds": and; (;ii)4he yields on;the Bonds and on the Defeasance Obligations.

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u > The<sup>;</sup> foregoing- summaries or'descriptions lofprovisions of the Seriesn2017 BondriOrdinarice-and. the Indenture and all references to other materials not purporting to be quoted in full, are qualified in their entirety by reference to the complete provisions of the documents and other materials summarized or described. Copies of these documents may be obtained from the office of the'Chief Financial Officer. ; **Description**.

The" references; excerpts arid summaries"ofall<sup>1</sup> docurrierits 'reTerred-'to -'herein"do'mot purport • to' be cbrriplete statements of the provisibri's of such-docurherits<sup>1</sup>," arid reference is directed to'all such'docurrients for full and complete statements of all matters of fact relating to the Bonds, the security for 4he-payrheht<sup>!</sup>'bf the 'Bonds and the rights and obligations of the Owners thereof.

### [REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

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Any statements made in this Official Statement involving matters of opinion, projection or estimates, whether or not so expressly stated, are set forth as such and not as representations of fact, and no representation is made that any of the projections or estimates will be realized. Neither this Official Statement nor any statement that may have been made orally or in writing shall be construed as a contract with the Owners or Beneficial Owners of the Bonds.

CITY OF CHICAGO

<u>By: I si Carole L. Brown</u> Chief Financial Officer [This Page Intentionally Left Blank]

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#### APPENDIX A GLOSSARY OF CERTAIN TERMS

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#### APPENDIX A

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#### GLOSSARY OF CERTAIN TERMS

The following are definitions of certain terms used in the Series 2017 Bond Ordinance, the Indenture

and this Official Statement. This glossary is provided for the convenience of the reader, and does not purport to

be comprehensive or definitive. ...

. "Aggregate Second Lien Debt Service" means, as of any particular date, of computation and with respect to a particular Fiscal Year or other specified 12-month period,, an amount of money equal to the aggregate of the amounts of Annual Second Lien Debt Service with respect to such Fiscal Year or other specified 12-month period for the Second Lien Bonds of all series.

"Aggregate Senior Lien Debt Service " means, as. of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period,, an .amount of money, equal to. the aggregate ,of the amounts of Annual Senior. Lien Debt Service with respect to such Fiscal Year or other specified 12-month period for the Senior Lien Bonds of all series.

"Annual Second Lien Debt Service" means, as, of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period for Second Lien Bonds of a particular series, an amount of money, equal to the sum of (a) all interest payable during such Fiscal Year or other specified 12-month period on all Second Lien Bonds of said series Outstanding on said date of computation and (b) all Principal Installments payable during such Fiscal Year or other specified 12-month period with respect to all Second Lien Bonds of said series Outstanding on said date of computation,, all calculated on the assumption that such Second Lien Bonds will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the ordinances and trust indentures creating such series of Second Lien Bonds of Principal Installments payable at or after said date, of computation. For purposes of computing the interest payable on any Variable Rate Bonds constituting Second Lien Bonds in any future Fiscal Year or other specified future 12-month period, the rate of interest shall be assumed to equal the highest monthly average rate of interest paid with respect to such Variable Rate,Bonds,during the 12 months preceding the date of such calculation, plus 0.5 percent, or if such Variable: Rate Bonds were not Outstanding during, the entire 12-month period preceding the date of calculation, the highest monthly average rate of interest paid with respect to comparable debt obligations having a comparable interest rate determination method, interest rate period and rating during such 12-month.period, plus 0.5 percent.. : If the, City has entered, into .an Interest, Rate Hedge Agreement with respect to any iSecond Lien Bonds, the interest payable on such Second Lien Bonds shall be deemed to be the sum of (i) the amount payable under the Interest.Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is in effect, plus (ii) the difference between the amount paid as interest on such Second Lien Bonds, and the amount received, by the City, pursuant to the Interest Rate Hedge Agreement (but not less than zero). If the City is to pay a variable rate pursuant to the Interest Rate Hedge Agreement, the variable rate calculation shall be made in the same manner as for Variable Rate Bonds. Amounts deposited in the Principal and Interest Accounts pursuant to the provisions of the Indenture, .or similar provisions in any trust indenture or ordinance securing Second.Lien Bonds, and capitalized or funded, interest from proceeds of Second Lien Bonds and used only to pay interest on such Second Lien Bonds, shall be credited against Annual Second Lien Debt Service.

"Annual Senior Lien Debt Service " means, as of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period for Senior Lien .Bonds.of a particular, series, an amount of money equal to the sum of (a) all interest payable during such Fiscal Year or other specified 12-month period on all Senior Lien Bonds of said series Outstanding on said date of computation and (b) all Principal Installments payable during such Fiscal Year or other specified 12-month period with respect to all Senior Lien Bonds of said series Outstanding on said date of computation and (b) all Principal Installments payable during such Fiscal Year or other specified 12-month period with respect to all Senior Lien Bonds of said series Outstanding on said date of computation that

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Senior Lien Bonds will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in ! accordance' with the Senior Lien Bond Ordinances of Principal Installments payable at or after said date of computation. For purposes of computing the interest payable on any Variable Rate Bonds constituting Senior Lien Bonds'in any future Fiscal Year or other specified future 12-rhonth\peribd; the'rate Ofinterest shall be assumed to equal the highest monthly average rate of interest paidwith

respect to such Variable Rate Bonds during the 12 months preceding the date of such calculation, plus 0.5 percent, or if such Variable Rate Bonds were not Outstanding during the entire 12-month period preceding the 'date''of calculation,', the highest Ttiohihly average 'rate<sup>1</sup> of 'interest 'paid with respect to -comparable debt obligations' having a comparable interest f ate 'deterrhiriatioh'm'ethodj-ihtefest rate period and'rating during such 12-month pen6d;'plus 0!5 percent. 'If the City lias'entered ihfb an Interest<sup>L</sup>R<sup>1</sup>ate"H'edg'e'Agreement to any Senior Lien Bonds, the interest payable on such Senior Lien Bonds<sup>1</sup> shall be deemed to' be'the sum of (i) the amount payable under the Interest Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is'in effect, 'plus (ii) uie';dirTfefenb'e- between-'the' 'amount paid' as interest on' siich Senior Lien Bonds

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iritegfal rhujtiple bf \$5,000'.""""""[ :"-"<sup>M</sup>V

' ^Authhraed'Officer " 'rri&ns'the' Chief Financial Officer of the Cityl or if the Chief Financial Officer so

determines arid<sup>1</sup>  $d^{\wedge\wedge}$ 

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 $: \blacksquare' > \{'.f \setminus Beneficial Owner' \blacksquare' \blacksquare m'eans' the' bwhe'r' bfa beheficial Mnfefest' in^Etbh'ds registered ih' the hame-bf Gede &' Cb.<sub>v</sub>as nominee of DTC'('bf a'successor securities depbsitory' br'nomiheefbf eithef of tHem)i' := \blacksquare ":"-!*;<$ 

•V " IV ••. •;!!!,'- -r '>!'!, . • '•/' =< 'if' .'•! .....'>" ';\<>'j.,-. " •! <: • H i::..' -i'li.. hi'K, vui, :':-,ri j.'i'jirv.'ii io -::-y: (' "Bond'Counsel-'- means; one ormore firms of nationally irecoghized bOhd counsel'designated' by the Corporation'Counsel of the City.' • '•' '•'-'--'''• '•'' =:•'< = "•' '=''-''': •''-''' • v\*'''K: 'io...;•,

"<' ■ "Bond Debt -Service Requirement "■ means,' for-any' Fiscal '-Year/ the' principal\* of: and interest On 'Senior Lien Bbnds'required to - be paid'iri mat<sup>1</sup> Fiscal Year.' With'respect to any Senior Lien Bonds for which any'interest is payable by 'appreciation' in principal ^amount, the Bond -Debt Service? Requirement 'for a Fiscal 'Year includes aihappreciatediprincipal'-payable in that Fiscal'Year but does'not include\*the incfease'in-principal! that'becurs in that F iscal Year but is not-payable in-that Fiscal -Year. Any Senior Lien Bonds required to be 'redeemed pursuant to' a mandatory - sinking .fund redemption. shal 1 -be treated' fori .these purposes as' beingdue 01V the' date! they are requiredito bei-re'deemed' and riot on their stated-maturity dates; For-purposes of computing the interest payable on' any 'Senior; Lien^Bbnds' issued' as "Variable'Rate Borids-in any futureFiscal Yeaf or other! specified future 12^ fnonth period<sup>1</sup>, the<sup>1</sup> rate of interestshall be assumed the equal the highest monthly average rate of interest paid with respect to such' Variable' Rate'Bonds during'the 12 month's preceding the' date 'bf such >'calculatibri,' plus 0.'5 percent, of if such Variable Rate'Bonds were not Outstanding: during-the entire 12-mohth period preceding the date of calculationii the highest- .monthly • average\* rate-"of interest paidi'wim'-respecti'to^comparable-^debt Obligatibnsiiaving'a 'Cbniparable interest rate determination method,"interest rate'period and "rating'during such 12-month period, plus 0.5-percent. Ih'the event the'City has eritered'intb'an-Interest Rate'Hedg'e' Agreement with respect to any Senior Lien Bonds, the interest payable on such Senior Lien Bonds shall be deemed to be the amount payable under the Interest Rate Hedge Agreement for the years in which the Interest Rate Hedge Agreement is in effect. If the City is to pay a variable-rate pursuant to the InterestsRate Hedge Agreement, the variable rate calculation shall be made in the same manner as for Variable Rate Bonds. >

■ -'Bond Debt Service Reserve Account'' means the separate account of that name previously established for the Senior Lien Bonds in the Sewer Revenue Fund and described in the Series 2017 Bond'Ordinance.

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"Bond Debt Service Reserve Requirement " means, as of any date of computation, an amount equal to the sum of (i) that amount established in each ordinance authorizing each .series of Outstanding Senior Lien Bonds; and (ii) with respect to any scries of Senior Lien Parity Bonds, such amounts as shall be established by the ordinance authorizing that series of Senior Lien Parity Bonds, not to exceed the least of (A) the highest future Bond Debt Service Requirement of that series of Senior Lien Parity Bonds in any Fiscal Year including the Fiscal Year in which the date of computation falls; (B) 1.0 percent of the .original principal amount of that series of Senior Lien Parity Bonds (less any original issue discount); or (C) 125 percent of the average annual Bond Debt Service Requirement for that series of Senior Lien Parity Bonds. Any Senior Lien Bonds required to be redeemed pursuant to a mandatory sinking fund redemption shall be treated for purposes of this definition as being due on the dates they are required to be redeemed and not on their stated maturity dates.

"Bondholder" or "Owner" means the person in whose name any Bond is registered on the registration books of the City kept by the Trustee. .

"Bond Principal and Interest Account" means the separate account of that name previously established for the Senior Lien Bonds in the Sewer Revenue Fund and described in the Series 2017 Bond Ordinance.

"Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2017, comprised of the Series 2017A Bonds and the Series 2017B Bonds, authorized by the Series 2017 Bond Ordinance and issued under the Indenture.

"Business Day" means any day of the year on which banks located in the city in which is located the Principal Office of the Trustee are not required or authorized to remain closed and on, which The New York Stock Exchange is not closed.

"Chief Financial Officer" means the person designated by the Mayor as the City's Chief Financial Officer, or if no such designation has been made or if such position is, vacant, the City Comptroller.

"City" means the City of Chicago.

"City Comptroller" means the City Comptroller of the City.

"City Council" means the City Council of the City, the governing body of the City.

"Commercial Paper and Line of Credit Account" means the separate account of that name established in the Sewer Revenue Fund as provided in the Series 2012 Bond Ordinance and other ordinances authorizing the issuance of Commercial Paper Notes and Line of Credit Notes.

"Commercial Paper Notes" means obligations commonly described as "commercial paper" issued by the City from time to time, payable from the Commercial Paper and Line of Credit Account described in Section 2.2(f) of the Series 2012 Bond Ordinance.

"Construction Account: 2017 Second Lien Bonds" means the "Construction Account: 2016 Second Lien Bonds" in the Sewer Revenue Fund established pursuant to the Series 2017 Bond Ordinance.

"Construction Account: 2017 Subordinate Lien Obligations" means the separate account of that name in the Sewer Revenue Fund established pursuant to the Scries 2017 Bond Ordinance.

"Construction Accounts" means the Second Lien Construction Accounts and any similar accounts established for Outstanding Senior Lien Bonds.

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"Costs of Issuance" means all fees and costs incurred by the City relating to the issuance of the Bonds, including, without limitation, printing costs, the Trustee's initial fees; and charges', financial advisory fees, engineering fees, legal fees, accounting fees, the cost of any premiums for financial guaranty insurance to insure trie Series 2017 A Insured Bonds,'aridi'the cbst of any related services'with respect to the Bonds. ""

- ' "Debt Service Reserve Account"" means an ac'courit'of that'name established in the'Second Lien' Bonds Account 'for'any 'series "oY'Outstkndihg'Secbnd'tlieri Borids'as describedlh the'appiicabieTride'nmre."

'•"Debi'Service Rkskrve'-ReqUirement" means, with" respect' to any senes of Outstanding 'Second Lien

Bonds for which the<sup>1</sup> applicable<sup>1</sup> indenture <sup>:</sup> of ordinance' establishes 'a Debt'Service Reserve'**=**Requirement;: as

of

any date of computation, -an"amount'equal-to theleastof: (1)10% of ^^the'stated 1 principal'amo^

(2) 100% of maximum Annual Second Lien Debt Service with respect to the applicable series of Outstanding

S'ec6rid<sup>\*</sup>Lieri"Borids' ^ any future Fiscal Yeafi'arid (3)'1 <sup>!</sup>25% of the"average Anriual<sup>...</sup>S'ecpnd Lien

Debt Service with respect to the applicable series of Outstanding Second-Lien Bonds' in the current'arid'any

future Fiscal "Year. .

"Defeasance Obligations " means' (i) cash; (iij'certificates^ notes, 'arid 'bonds' '(including' State' and 'Local Government Series) issued by the Treasury, (iii) direct obligations of the Treasury which have been stripped by 4h<sup>2</sup> e--Treasury' itself; CATS, TIGRS<sup>2</sup> and'similar;^

Kroll'and by' S&P; provided that if therssue^is'brily'raVd'by S'fepy-'men'm^'pre-renmded'^ have been pre-refunded with cash, direct U.S. or U.S. guaranteed obligations, or "AA+" fated'pre-refunded municipals, (v) the interest component of REFCORP strips which.have been stripped by request to the Federal Reserve'Bank,bf New York in book' entry 'foim,'Xvi)"obligatibns'.is'sued'by the following agencies which are Backed<sup>V</sup>Dy the'mlffaith^and^rediPof m^'u'is^ 'USYExport-^

fully guaranteed certificates of beneficial ownership), Farmers Home Administration '(FrnHA) '(certificates'of beneficiafownership), Federal Financing Bank, General Services, Administration .^participation certificates), U!S'." Maritime Administration '(guarantee XI ^aricinj^ 'Housing"and..Urban Development (HUD) (Project Notes', Local' Authority Bbnds, New Communities' Deberim'fes-U.S. government guaranteed debentures), and U.S. Public Housing Notes and Bonds-U.S.. government guaranteed public housing notes and bonds, or (vii) obligations issued by the following agencies that are not backed by the full faith and credit of the U.S.: Federal Home Loan Mortgage Corp. (I-TILMC) debt obligations, Farm Credit System (formerly: Federal Land Banks, Federal Intermediate Credit Banks, and Banks for Cooperatives) debt obligations, Federal Home Loan Banks, (FHL, Banks) debt obligations, Fannie Mae debt obligations, Financing Corp. (FICO) debt obligations, Resolution Funding Corp. (REFCORP) debt obligations, and U.S. Agency for International, Development (U.S. A.I.D.) Guaranteed notes; provided that Defeasance Qbligations.described in (iii) and\* (vi), above shall not be, used without the consent.pf S&P.if the City .seeks to have the, defeasance-.escrow ".**=**"**====**'/**=**"**=**'**>**..-Vr.:•'**==** rated by S&P.

". "Determination Certificate" means the Certificate of the Authorized Officer, with respect to the Bonds

pf one or more scries filed with the office of the City Clerk,- addressed to the. City Council as provided in the

Series 2017 Bond Ordinance.

-.‴**■** :'. ^.

"DTC" means The Depository Trust Company, New York, New York, its successors and assigns.

"Federal Subsidies" means (a) the direct payments by the United States Treasury Department to the

City of a. portion of the interest payable by the City on the Series 2010B Second Lien Bonds and (b) to the extent

hereafter available to the City, payments by the United States Treasury Department to. the City resulting from

subsidies, tax credits or other incentives or benefits to state and local governments in connection with the

issuance of debt obligations by such governments.  $\blacksquare$  , ...,  $< ..._{(V;;;;}$  , t < ...

"Fiscal Year" means the period beginning January I and ending December 31 of any year.

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"Fitch" means Fitch Ratings, its successors and assigns, and, if Fitch shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, "Fitch" shall be deemed to refer to any other nationally recognized securities rating agency designated by the City by notice to the Trustee.

"Gross Revenues" means all income and receipts from any source which under generally accepted accounting principles are properly recognized as being derived from the operation of the Sewer System, including without limitation (a) charges imposed for sewer service and usage, (b) charges imposed for inspections and permits for connection to the Sewer System, (c) grants (excluding grants received for capital projects) and (d) Investment Earnings. Gross Revenues do not include Federal Subsidies.

"IEPA " means the Illinois Environmental Protection Agency, and its successors and assigns, or in the case pf IEPA Loans made pursuant to the IEPA Program, the authorized lender under such Program.

"IEPA Loan" means, collectively, the borrowing or borrowings by the City from IEPA under the IEPA Program and evidenced by one or more IEPA Loan Agreements.

"IEPA Loan Agreement" means each loan agreement to be entered into between the City and IEPA setting forth the terms of an IEPA Loan.

"IEPA Program " means the Water Pollution Control Loan Program <sup>v</sup>or any successor program administered by the State of Illinois, and any similar program through which funds are authorized by the federal Government, including the United States Environmental Protection Agency, and administered by the State of Illinois or any federally authorized agency.

"Indenture " means the Trust Indenture from the City to the Trustee, dated as of June 1, 2017, with respect to the Bonds, as amended or supplemented in accordance with the terms thereof, providing for the issuance of the Bonds.

"Insurer" means Assured Guaranty Municipal Corp., a "New York stock insurance company, or any successor thereto or assignee thereof.

"Interest Payment Date " means January 1 and July 1 of each year, commencing January 1, 2018.

"Interest Rate Hedge Agreement" means an interest rate exchange, hedge or similar agreement, entered into in order to hedge or manage the interest payable on all or a portion of any series of Outstanding Senior Lien Bonds or of

Outstanding Second Lien Bonds, which agreement may include, without limitation, an interest rate swap, a forward or futures contract or an option (e.g., a call, put, cap, floor or collar) and which agreement does not constitute an obligation to repay money borrowed, credit extended or the equivalent thereof. Obligations of the City under an Interest Rate Hedge Agreement shall not constitute indebtedness of the City for which its full faith and credit are pledged or for any other purpose.

"Investment Earnings" means interest plus net profits and less net losses derived from investments made with any portion of the Gross Revenues or with any money in the accounts in the Sewer Revenue Fund (other than the rebate accounts established and held for the Senior Lien Bonds and Second Lien Bonds) described in the Series 2017 Bond Ordinance. Investment Earnings do not include interest or earnings on investments of moneys on deposit in any Senior Lien Construction Account, Second Lien Construction Account.

"Kroll" means Kroll Bond Rating Agency, Inc., a corporation organized and existing under the laws of the State of Delaware, its successors and assigns, and, if such corporation shall be dissolved or liquidated or

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shall no longer perform, the functions of a securities rating agency,! the term"Krph""s^alV'.b/e deemed.to refer to any other nationally recognized securities 'rating agency 'designated by the'City by 'nptice tolme'Trustee.

"Net Revenues" means, that .portion of the Gross Revenues remaining in any period after providing

sufficient, fiinds for. Operation and Maintenance Costs! ... ...

,'. "Net Revenues Available .for' Bonds " means that portion of the Net Revenues remaining in any period', minus any 'amounts deposited'"during<sup>1</sup> that period^ in "the Sewer .jjLafe'jS^Biiiiation Account' as'. proyideid'. jn.'tne Series 2017 Bond Ordinance (other than amounts transferred' 'to' that 'Account' upon 'the' issuance of any" Senior Lien Parity Bonds) and plus the amounts withdrawn during that period from, that Account.

'.: ■> .I :<:..'■ ■<, ■■■!■. ?\*)?:.>/;;,■■. ■■ '\-:=■<;, j.r. i ''<.\.'

"Notice by Mail" mean's a written notice'mailed'by first-class mail,' postage prepaid, to'BohdrlolderVat

their addresses as shown on the registration books kept pursuant to the Indenture. ., ,.

"Operation and Maintenance Costs" means ali<sup>^</sup>expensesreasohaDly incurred'-by'the' Ciiry<sup>J</sup>in'connection with the operation, maintenance, renewal, replacement and repair of the Sewer System that under, generally accepted accounting principles are properly chargeable to the Sewer System, and riot capitalized, including, without limitation, salaries; wages, taxes, contracts for services, costs of materials and supplies, purchase of power, fuel, insurance, reasonable, repairs and extensions necessary to render efficient service, the costs related to any interest Rate .'Hedge Agreements,'.trustee's and paying agents' fees andj'all incidental 'expenses, but excluding any provision for depreciation or for interest on Senior <Lien Bonds, .Second Lien Bonds or other obligations tor borrowed money payable from the Net Revenues Available for Bonds. ',.

-, "Opinion of Bond Counsel" means a written opinion of BondCounsel. ,.

"Outstanding" means, when used with reference to any series of subseries of Second Lien Bonds, all.of such obligations that are outstanding and unpaid, provided that such term does not include: '

(a) Second Lien Bonds'canceled at or prior to such' date or dejivered'tq or acquired by the

trustee or paying agent for such Second Lien Bonds at or prior to such date for cancellation;'

(b) matured or redeemed Second Lien Bonds which' nave not been presented for payment in

, , . Lien Borids .arid for the payment of which the. City has deppsitedffunds w for, such Second Lien Bonds; .... , ..."

, (c) , Second Lien Bonds; for Which the City has provided for payment, by depositing iii" an irrevocable trust, or escrow, ,cash or Defeasance Obligations, in each case, the maturing principal of and interest on which will be sufficient to pay at maturity, or if galled Tor. "redemption on, the .appjicable redemption date, the principal of, redemption premium,'if any,'arid interest ori su'cK'Secorid Lien Bonds;

e) Second Lien Bonds owned by the City.

When used with respect to Senior Lien Bonds, "Outstanding"" shall have the meaning ascribed to such term in the respective Senior Lien Bond Ordinances.

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"Outstanding Second Lien Bonds" means, collectively, the Outstanding Series 2001 Second Lien Bonds, the Outstanding Series 2008 Second Lien Bonds, the Outstanding Series 2010 Second Lien Bonds, the Outstanding Series 2012 Second Lien Bbnds, the Outstanding Series 2014 Second Lien Bonds and the Outstanding Series 2015 Second Lien Bonds.

"Outstanding Senior Lien Bonds " means the Outstanding Series 1998A Senior Lien Bonds.

"Permitted Investments" means any of the following:

a) direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America;

b) trust receipts or other certificates of ownership evidencing an ownership interest in the principal of or interest on; or both principal bf and interest on, obligations described' in clause (a) of this definition, which obligations are held in trust by a bank, trust company, national banking association or sayings and loan association that has capital of not less than \$100,000,000 ("Bank"), provided that such

- Bank holds such obligations separate arid segregated from' all other funds and accounts'of the City arid of such Bank and that a perfected first security interest under the Illinois Uniform Commercial Code, or under book entry procedures prescribed at 31 C.F.R. 306.0 et seq. or 31 C.F.R. 357.0 et seq. (or other similar book entry procedures similarly prescribed by federal law or regulations adopted after the date

' of the Indenture), has been created in such obligations for the benefit of the applicable account iri the Sewer Revenue Fund or, fo'the extent permitted, in any irrevocable trust of escrow established to make provision fof trie payfrierit and discharge of the indebtedness on any Bonds or other obligations that are payable from Net Revenues Available for Bonds; and

c) shares bf a money market fund registered tinder the Investment Company Act of 1940, whose shares are registered under the Securities Act of 1933.

"Person" means an individual, corporation, firm, association, partnership, limited liability company, trust, or other legal entity or group of entities, including a governmental entity or any agency Pr political subdivision thereof.

"Principal and Interest Accounts" mean the "City of Chicago Wastewater Transmission Revenue Bonds' Pfoject

Series 2017A Second Lien Bonds Principal and Interest Account" and the "City of Chicago Wastewater Transmission Revenue Bonds Refunding Series 2017B Second Lien Bonds Principal and Interest Account" in the 2017 Second Lien Bonds Revenue Fund as described in the Indenture.

"PrincipalInstallment" means:

(a) as of any particular date of computation and with respect to Senior Lien Bonds of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Senior Lien Bonds of said series which mature on a single future date, reduced by the aggregate principal amount ofsuch Outstanding Senior Lien Bonds which would at or before said future date be retired by reason of the payment when due and application in accordance with the Senior Lien Bond Ordinance authorizing the issuance of each series of Senior Lien Bonds of Sinking Fund Payments payable at or before said future date for the retirement of such Outstanding Senior Lien Bonds, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the "retirement' bf any Outstanding Senior Lien Bonds of such series, and for all purposes of the Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment; and

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."Principal Office ".means,, with, respect.tp the Trustee, its principal office in Chicago,; Illinois.;.,...

 $\label{eq:construction} ..../ "project,Cpsjs" <-means, .the,'>cqsts> pf_{acfluiringjj,cons_i(r^c ^rpjej^ts.,including, without Jimitatiph, acquisition of nec,essarj'_1.,.inter_!e.sts,. in. .prpp^ertVj,..engineerinj;; fees, or costs pf; the City, restoration.costs,Jega /jrni,-., \mi i>m'h;>q >; j<rr>$ 

consisting ,of thei construction, 'and, acquisitipn of. flood,, r^He'f^sewe^j. the, r^ab.ilitatip.nt, and.. replacement of

existing sewers, fhe expansion pf/pperatipnal facilities, s^ryjc,es and, equipjnejnt. .,fo prptect ,and,..enhance the

safety,..integrityiEPA/thrpugh theIEPA Program:"""""".•  $uI'^{\wedge}Ca$ ...,n-'..7; $A \wedge h^{\wedge}J^{\wedge}$ 

"Record Date " means June 15 and December 15 of each year.

"Refunded Bonds " ineans certairi'Series^ 2b08;X',Secbnd'Lieh Bond's and Series 2006. Second'Lien Bonds

to be refunded with the proceeds of the Series 2017BBonds.

."S&P" means S&P Global Ratings, .a .business unit of Standard ,& Poor's Financial Services LLC, its successors and.assigns, and,-if such, corporation shall be. dissolved ,or liquidated .or shall no -longer perform the functions of a securities rating agency, "S&P" .shall be deenied to refer, to any other nationally recognized securities; rating'agency designated by the City by notice to the Trustee.,.-

"SecondLien Bond Revenues" means any Net Revenues Available, for Bonds deposited into the Second Lien Bonds Account pursuant to (i) the ordinances authorizing the Outstanding Second Lieri Bonds, (ii) the Series 2017 Bond Ordinance, and (iii) the ordinances authorizing any Second Lien Parity Bonds.

"Second Lien Bonds" means the 'Series.2001 Second Lien Bonds', 'the 'Series' 2008i 'Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds, the Series' 2015 Second Lien Bonds, the Bonds and all Second Lien Parity Bonds.

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"Second Lien' 'Bonds' 'Account" means the separate account of that"name' established in the Sewer Revenue Fund as provided in the Series 2017 Bond Ordinance.

"Second Lien Bonds Subaccount " means the 2016 Second Lien Bonds Subaccount established in the Second Lien Bonds Account by the Series 2017 Bond Ordinance.

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"Second Lien Construction Accounts" means (i) the Construction Account: 2017 Second Lien Bonds and the various accounts established for construction purposes by the Series 2001 Bond Ordinance, the Series 2008 Bond Ordinance, the Series 2010 Bond Ordinance, the Series 2012 Bond Ordinance, the Series 2014 Bond Ordinance, the Series 2015 Bond Ordinance or the ordinances authorizing any Second Lien Parity Bonds and (ii) any account established to pay costs of issuance of Second Lien Bonds.

"Second Lien Parity Bonds" means obligations, other than the Series 2001 Second Lien Bonds, the Series 2006 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2012 Second Lien Bonds, the Series 2014 Second Lien Bonds, the Series 2015 Second Lien Bonds, and the Bonds, which are payable from Second Lien Bond Revenues on an equal and ratable basis with all other Outstanding Second Lien Bonds.

"Senior Lien Bond Ordinances" means, to the extent applicable, Parts A and D of the Series 1998 Bond Ordinance and the ordinances of the City authorizing the issuance of Senior Lien Parity Bonds.

"Senior Lien Bonds" means the Series 1998 Senior Lien Bonds and all Senior Lien Parity'Bonds issued and outstanding pursuant to the Senior Lien Bond Ordinances.

"Senior Lien Parity Bonds" means obligations, other than the Series 1998 Senior Lien Bonds, that are payable from Net Revenues Available for Bonds on an equal and ratable basis with all other Outstanding Senior Lien Bonds.

"Series 1998 Bond Ordinance" means the ordinance passed by the City Council on December 10, 1997, as amended by the City Council on February 5, 1998, authorizing the issuance of the Series 1998 Senior Lien Bonds.

"Series 1998 Senior Lien Bonds" means the Wastewater Transmission Revenue Bonds, Refunding Series 1998A, of the City authorized by and issued pursuant to the Series 1998 Bond Ordinance.

"Series 2001 Bond Ordinance" means the ordinance passed by the City Council on March 7, 2001 authorizing the issuance of the Series 2001 Second Lien Bonds.

"Series 2001 Indenture" means the Trust Indenture dated as of December 1, 2001 from the City to Amalgamated Bank of Chicago, as trustee, providing for issuance of the Series 2001 Second Lien Bonds.

"Series 2001 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2001 of the City authorized pursuant to the Series 2001 Bond Ordinance and issued pursuant to the Series 2001 Indenture.

"Series 2006 Bond Ordinance" means the ordinance passed by the City Council on October 4, 2006, authorizing the issuance of the Series 2006 Second Lien Bonds.

"Series 2006 Indenture" means the Trust Indenture dated as of November 1, 2006 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2006 Second Lien Bonds.

"Series 2006 Second Lien Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Series 2006, of the City authorized pursuant to the Series 2006 Bond Ordinance and issued pursuant to the Series 2006 Indenture, consisting of the \$60,000,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2006A, and \$95,030,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 2006B.

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"Series' 2008 Bond Ordinance" means the ordinance passed by the City Council on May . 14, 2008 authorizing the issuance of the Series 2008 Second Lien Bonds.

. "Series 2008A Indenture" means the Trust Indenture dated as of November: 1, 2008 from the .City .to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2008A Second Lien Bonds..

"Series 2008A Second Lien Bonds " means the Second Lien Wastewater Transmission Revenue Bonds,

Series '20.0.8 AH ofjtxie- City; authbfizedTpursuaht toithei Sen to the Series 2008A,Indenture,, consisting of the \$167,635,000 in original'aggregate principal amount of Second Lien Wastewater Transmission Revenue Bonds, Series 2008A. =-.+>,-+-.'+:=-:

."v- < .•.)"Series, :2008Ci'Second:Liem-Bonds" -means:.the;.Second;Lien, .Wastewater.' Transmission Revenue Refunding Bbhds,:Series2008Ci of the City authorized .pursuantto ;the Series 2008:BbndiOrdinaneeahd,issued pursuant to the Series 2008C Indenture, consisting of the \$332,230,000 in original aggregate principal amount bf Second Lien Wastewater Transmission Revenue Bonds, Series 2008C.

"Series 2010 Bond. Ordinance" means >the ordinance, passed by the City:Council:'oh July 28, 2010; authorizing the issuance of the Series 2010 Second Lien Bonds.

"Series 2010 Indenture" means the Trust Indenture, dated .as of.November<sup>1</sup>1, .2010 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2010 Second Lien Bonds.

"Series '201 OrSeconci' Lien Bonds "' means: the 'Series. 201 OA Second Lien<jBonds .andithe iSeries.20,10B Second Lien Bonds.

"Series 2010A **SecOnci**' Lien Bonds": means the Second Lien Wastewater Transmission Revenue

Refunding Bonds, Series 2010A (Tax-Exempt) of the City authorized-.pursuant tb the.iSeries .2010: Bond

Ordinance and issued pursuant to the Series 2010 Indenture, consisting of the \$25,865,000 in original aggregate

principal amount of Second Lien Wastewater Transmission Revenue Refunding Bonds, Series 201 OA (Tax-

Exempt).

'•■■.■') ':-' . '•!''''

"Series 2010B Second Lien Bonds " means the Second Lien Wastewater.Transmission Revenue Project Bonds, Taxable Series 201 OB (Build America Bonds-Direct Payment) of the City authorized pursuant to the Series 2010 Bond Ordinance and issued pursuant to the Series 2010 Indenture, consisting of the \$250,000,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Taxable Series 2010B (Build America Bonds-Direct Payment). "Series 2012 Bond Ordinance" means-the ordinance passed by the City Council -on! May. :9, 2012, authorizing the issuance of the Series 2012 Second Lien Bonds.

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"Series 2012 Indenture"" means the Trust Indenture dated as of September 1,<sup>5</sup> 2012 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2012 Second Lien Bonds.

"Series 2012 Second Lien Bonds'- means the Second Lien Wastewater Transmission Revenue Project Bonds, Series 2012, of the City authorized pursuant to the Series 2012 Bond Ordinance and issued pursuant to the Series 2012 Indenture, consisting of the \$276,470,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Series 2012.

"Series 2014 Bond Ordinance" means the ordinance passed by the City Council on April 30, 2014, authorizing the issuance of the Series 2014 Second Lien Bonds.

"Series 2014 Indenture" means the Trust Indenture dated as of September: 1, 2014 from the City to Amalgamated Bank of Chicago, as trustee, providing for the issuance of the Series 2014 Second Lien Bonds.

"Series 2014 Second Lien Bonds" means the Wastewater Transmission Revenue Project Bonds, Series 2014 of the City authorized pursuant to the Series 2014 Bond-Ordinance and issued pursuant to the Series 2014 Indenture, consisting of the \$292,405,000 in original aggregate principal amount of Second Lien Wastewater Transmission Revenue Project Bonds, Series 2014.

"Series 2015 Bond Ordinance" means the ordinance passed by the City Council on September 24, 2015, authorizing the issuance of the Series 2015 Second Lien Bonds.

"Series 2015 Indenture" means the Trust Indenture dated as of October 1;.2015.-, from, the City to Amalgamated Bank bf Chicago, as trustee, providing for the issuance of the Series 2015 Second Lien Bonds.

"Series 2015 Second Lien Bonds" means the Wastewater Transmission Revenue Bonds, Series 2015 (Taxable) of the City authorized pursuant to the Series 2015 Bond Ordinance and issued pursuant to the Series 2015 Indenture, consisting of the \$87,080,000 in original aggregate principal amount .of- Second Lien Wastewater Transmission Revenue Bonds, Series 2015 (Taxable).

"Series 2017 Bond Ordinance" means the ordinance passed by the City Council on January 13, 2016, authorizing the issuance of the Bonds. ...

"Series 2017A Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017 A, authorized by the Series 2017 Bond Ordinance and issued under the Indenture.

"Series 2017A Insured Bonds" means the Series 2017A Bonds maturing on January 1 of the years 2042 and 2052.

"Series 2017B Bonds" means the Second Lien Wastewater Transmission Revenue Bonds, Refunding Series 2017B, authorized by the Series 2017 Bond Ordinance and issued under the Indenture.

"Sewer Rate Stabilization Account" means the separate account of that name previously established by the City in the Sewer Revenue Fund and described in the Series 2017 Bond Ordinance.

"Sewer Revenue Fund" means the separate fund designated the "Sewer Revenue Fund of the City Of Chicago" previously established by the City pursuant to the Municipal Code and described in the Series 2017 Bond Ordinance.

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"Sewer System " means all property, real, personal or otherwise, owned or to be owned by the City or under the:control of..the City and used ,for sewer 'and wastewater-transmissions and any and all further extensions, improvements'arid-additioris to the. Sewer System.

"Short Term Obligations" means the Lineiof Credit Notes and the Commercial Paper.Notes.

"Sinking'FundRayment".means: . j ... '... '...

(a) as of any particular date of determination and with respect to the Outstanding Senior

• : \* LienBonds of any series, the amount required by a Senior .Lien Bond Ordinance to be paid iri-'any event

by the City on a single future date for the. retirement of Senior-L'ien Bonds iof such iSeries which, mature

after said future date, but does not include any amount payable by the City by reason only of the

' maturity: on: such I future: date rof a Senior\* Lien (Bond; and;  $1 \ge y \ge .u$ -yyi. '\*\* **DDD**:**D**:**C**:**S**:**C**:**C**:**C**:**C**:**C**:**C**:**C** 

" (b) as of any particular date of determination and with respect to the Outstanding Second

**■-■**!..-: Lien i Bonds" of any series, 'rthe' am6unt!) required by' the-rlndenture iwitlu respect to the Bonds, or the

-- "y. viarriourits)required^by>any<6fdinanee;o^,trus^indenture creating any:other-series.of'SecondhLienrBonds,>'t6

i;. .•\*•.>}'be'/paid in'jany .event .bythe.;Gity onia singlei.future'date for the 'retirement ofisiich:; Second Lien i Bonds

which mature after said future date, but does not include ahy.ambun't pay able by: the City by < reason only

of the maturity on such future date of a Second Lien Bond.

:/<') "Subordinai&'Zienr0bligation '.Revenues>'hi means ialh sums, ;amountSj funds or moneys ./which are deposited to: the Subordinate'Lien Obliga'tions'Accountas'described in the iSeries-2017iBbnd Ordinance: =

'-<sup>j</sup>•" Subordinate'Lien Obligations^ means-obligations -that arc payable from sums, amounts, funds or

monies which are deposited to!the.;Subbrdinate;Lien'Obligations Account or Subaccounts pursuant to Section

2.2(e) of the Series 2017 Bond Ordinance. •

"Subordinate Lien Obligations Account" means the separate account of that name established in the Sewer Revenue Fund' as; provided-in: the iSeries 2017 Bond Ordinance and other ordinances authorizing the issuance of Subordinate Lien Obligations. "Supplemental^^ "/wfye??/;//^-". means' any indenture modifying, altering, amending, supplementing or confirming the Indenture duly enterediinto in accordance. With the terms of the Indenture.

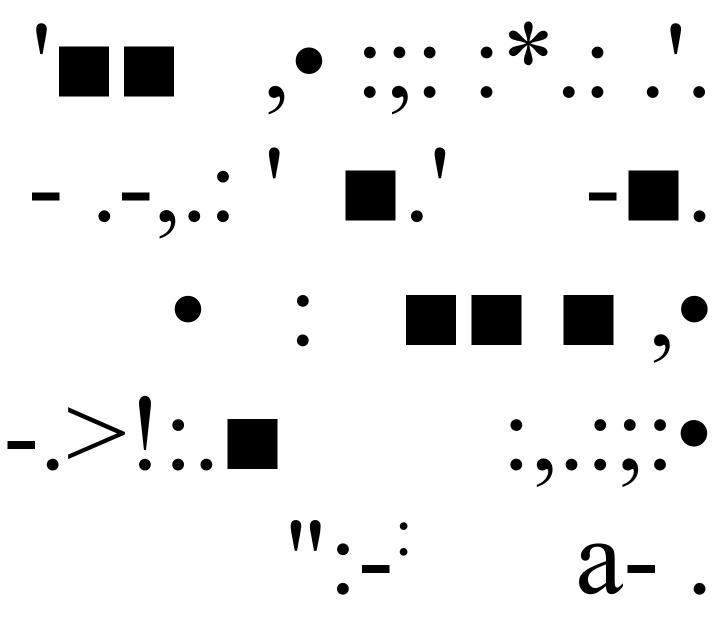
: ".Treasury" means<sup>1</sup>the United<sup>^</sup>StatestTreasury Department. ' • .:

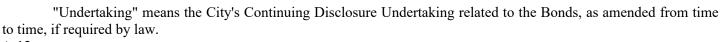
"Trustee" means Amalgamated Bank of Chicago, as Trustee under the Indenture, and its successors and

assigns. " . -<sup>;</sup><.- ... :∎.•∎.∎>'• ∎

∎.■>'• ■ .;?■■: • .:.

"2017 Second Lien Bonds Revenue Fund" means the "City of Chicago Wastewater Transmission Revenue Bonds Series 2017,-Second Lien Bond Revenue Fund" established under and as described in the Indenture.





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"Variable Rate Bonds" means any Second Lien Bonds or Senior Lien Bonds the interest rate on which is not established at the time they are issued at a single numerical rate for their entire term.

# APPENDIX B

# SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

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# APPENDIX B

#### SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

The following is a summary of certain provisions of the Indenture not summarized elsewhere in this Official Statement. This summary does not purport to be complete or definitive and is qualified in its entirety by reference to the Indenture, a copy of which is on file with the Trustee.

# Source of Payment; Pledge of SecondLien Bond Revenues

The provisions of the Indenture constitute a contract among the City, the Trustee and the .Owners of the Bonds. The Bonds are legal, valid and binding limited obligations of the City payable solely from Second Lien Bond Revenues and certain other moneys and securities held by the Trustee under the Indenture. The Bonds, together with any other Second Lien Bonds, also are secured by and payable.frpm any amounts on deposit in the Second Lien Construction Accounts. The Bonds and the interest thereon do not constitute an indebtedness of the City within the. meaning of any, constitutional or statutory provision or. limitation as to indebtedness and shall have no claim to be paid from taxes of the City. The Bonds are secured by a pledge of the Second Lien Bond Revenues and funds and accounts held by the Trustee under the Indenture. The Bonds have a claim for payment from Second Lien Bond Revenues and from amounts on deposit in the Second Lien Construction Accounts on a parity with the claim of any other Second Lien Bonds that may be Outstanding from time to time.

#### Additional Second Lien Parity Bonds

(a) As long as there are any Bonds Outstanding, the City may issue Second Lien Parity Bonds for any lawful purpose of the Sewer System, including to refund Outstanding Senior Lien Bonds,- Second Lien Bonds or obligations payable from revenues of the Sewer System on a basis subordinate to the Second Lien Bonds, upon compliance with the

following conditions:

i) the funds required to be transferred to the Principal and Interest Accounts must have been transferred in full up to the date of the delivery ofsuch Second Lien Parity Bonds; and

ii) Net Revenues Available for Bonds for the last completed Fiscal Year prior to the issuance of the Second Lien Parity Bonds (as shown by the audit of an independent certified public accountant), or Net Revenues Available for Bonds for such last completed Fiscal Year, adjusted as described below, shall equal at least 100 percent of the sum of the. Aggregate Senior Lien. Debt Service and the Aggregate Second Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a pro forma basis assuming the issuance of the proposed Second Lien Parity Bonds and the application of the proceeds of any Second Lien Parity Bonds as provided in the ordinance or trust indenture authorizing their issuance, sale and delivery. Net Revenues Available for Bonds may be adjusted as follows for purposes of this paragraph (ii):

(1) . if prior to the issuance of such Second Lien Parity Bonds, the City, has enacted

an increase in the rates of the Sewer System from the rates in effect for such last completed

Fiscal Year, Net Revenues Available for Bonds may be adjusted to reflect the Net Revenues

Available for Bonds for such last completed Fiscal Year as they would have been had the

increased rates been in effect during all of that last completed Fiscal Year; and

Officer.

(2)any such adjustment shall be evidenced by a certificate of the Authorized

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For purposes of calculating the adjustment described-irithis'p'aragraph (ii), any rate increase enacted by the City and scheduled to take effect in a future Fiscal Year may be reflected in Net Revenues Available for Bonds for purposes of calculating debt service coverage' for that arid each succeeding Fiscal Year.

If during the first six months "of a Fiscal'Year, an audit of the Sewer System for the'preceding Fiscal Year by an independent certified public accountant is not available, the conditions of paragraph (ii)<sup>s</sup>abbve<sup>i</sup> shall be deemed to have been satisfied if both (A)-Net Revenues' Available'Tor Bonds for the second preceding Fiscal Year (as shown by the audit of an independent certified public accountant), adjusted as described in paragraph (ii) above and (B) Net Revenues Available for Bonds for the-preceding Fiscal 'Vear Xas' estirriated by'the Authorized Officer), adjusted as described in paragraph (ii) above, shall equal at least 100 percent of the sum of the Aggregate Senior Lien Debt S'ervice' arid' the Aggregate'Second Lien' Debt Service'iri'^ Fiscal Year following the issuance of the proposed Second Lien Parity'Bonds, cbrriputed on a pro forma basis 'assuming'the issuance 'of the"prbp'6sed! 'Second .L'ieri' Parity Bonds'ahd<sup>J</sup> tne; applicatibri|'bf the<sup>1</sup> p'rbcebds of any' Secbri'd.<sup>L</sup>Lien Parity Bonds' as provided in the' Ordinance or trust indenture authorizing th'eif'issuarice,' sai'e'ahd delivery. '1'

h;  $q^j = -; ".Tft_e^city^n m^{\wedge \wedge \wedge}$ i'eilther 'of-' the i.IVI. ........... requirements of paragraph (a)(ii) above: ''•"•' "''= "/='=

< !m, ri(i), o:J--.'to.payv redeem or refund Senior.'Lien Bonds'or Second-Lien'BbndsJif in th'e'judgrrient of

the City there will be no moriey available to make payments of interest oir orpfincipalofi thbse-Senior

Lien Bonds or Second Lien Bonds (at maturity or on Sinking Fund Payment dates) as such amounts

become due; and"

-n;;\*' <■-.■} ■ Hkv?:^ !";!:i,'="u-

**■'**■'''''

!!•.-: ..;!<:<:"(ii)<. i b.to'pay,'-redeem'br refund ariySenibr'EienBbridsfor SecOhdiLien Bonds if the'sum of the

 '•'<sup>1</sup> "AggfegateSeri^ aftefi'th'e issuahee:'of
 -the 'Second<sup>1</sup> LienPariiyfiOrids and the payment; federnptiOn' or refunding ofsuch Senior L-ien Bonds or Second Lien Bonds will not be in excess of the sum'bf-the Aggregate •Seriior'Lieri<sup>i!</sup>Debt'Service<sup>;</sup>"br<sup>!</sup> th'e Aggregate Second Lien Debt Service prior to the issuance of the Second Lien Parity Bonds in each ■' Fisc'aTYearin which<sup>1</sup> there was tb be any Aggfegate'Seriior Lien Debt Service'or Aggregate Second Lien DebfS'ervieS'ori those prior O'ut'standi'ng'Senibf Lien Borids-b'r'Sec^rid'Lien'Bbrids^i :;J<sup>2</sup>! "' '

" "• (c)' " '••Other'-obligatibhsV^ihcludiHg<sup>1</sup> Subordinate"Lien' Obligations^'may' be issued'payable from Net

Revenues<sup>1</sup> Available'fbrBbri'ds'on'a basis suBordiri'afe tb the'Second Lieri Bbrids.

# Covenant-Against Pledge of Second-Lien Bond Revenues ! "-'-#''-'' '### #>''''#

Thei'City agrees in the Indenture not to issue any -bonds," notes or other- evidences of indebtedness secured-by the pledge'contained in'the Indenture-other than Second Lien Parity Bbnds,'and riot to create or cause to be created any lienor charge; on Net'Reyenues'Available for Bonds, or on. any amounts'pledged for the benefit of Owners of Bonds; under the Indenture, other than the pledge contained in the Indenture, provided that the Indenture does not prevent the City from (a) issuing Senior Lien Bonds, (b) issuing bonds, notes or other evideri'ces''of .indebtedness payable but 'of, 'or''secured by a 'pledge- of, Net Revenues'Available for Bonds to be derived on arid after'' such date as the pledge contained in the Indenture shall be discharged and satisfied as provided in the Indenture, or (c) issuing bbrids, notes or other evidences of indebtedness which are payable out of, or secured by, or the which are pledged-, amount's which riiay be withdrawn from of secured by, the Second Lien Bonds Account so long-as such pledge is expresslyjunior arid subordinate to-the pledge contained in the Indenture.

#### Punctual Payment

The City covenants in the Indenture that it will duly and punctually pay or cause to be paid the principal of, premium, if any, and interest on all Bonds in strict conformity with the terms of such Bonds and of the

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Indenture, and that it will faithfully observe and perform all the conditions, covenants and requirements of the Series 2017 Bond Ordinance, the Indenture, and of the Bonds issued under them.

Other Covenants

In addition to the covenants referred to above, the ,City has covenanted under the Indenture, so long as any of the Bonds are Outstanding, as follows:

a) To maintain the Sewer System in good repair and working order, to : operate it continuously on a Fiscal Year basis, and,to perform punctually all duties with respect, to the Sewer System required by the Constitution and laws of the State.

" \" '(c) Prior to the end of each Fiscal Year, to .conduct a review to determine whether it has

been and will be in compliance with the requirement described above under the. subcaption

"SECURITY FOR THE BONDS - Second Lien Rate Covenant" and, whenever this annual review

indicates, that the projected Gross Revenues will not be sufficient to comply with the rate covenant, to

prepare or cause to be prepared a rate study for the Sewer System identifying the rate changes necessary

, to, comply, with, the rate.covenant, and, the Budget Director.and the. Authorized Officer shall recommend

appropriate action ,tp ,the City Council to compiy with the rate covenant. See. "FINANCIAL

OPERATIONS - Annual Budget Review and Implementation of Annual Budget.",....∎

d) To make all necessary and proper repairs, replacements, additions and betterments, to the Sewer System so that it may at all times be operated efficiently, economically and properly. When any necessary equipment or facility becomes worn out, destroyed or otherwise is insufficient.for proper use, it shall promptly be replaced so that the value and efficiency of the Sewer System will be at all times fully maintained.

e) To establish such rules and regulations for the control and operation of the Sewer System as are necessary for the safe, lawful, efficient and economical operation of the.Sewer. System.,

Additionally, for so long as any of the Bonds continue to bear interest (whether or not they are Outstanding) and after the Bonds cease to bear interest (but only within such subsequent period as shall be required for the City to comply with the covenants described in this paragraph), the City agrees:

a) Not to direct or permit any action which (or fail to take any action the failure of which) would cause any Bond to be an "arbitrage bond" within the meaning of the Code, as amended from time to time and as applicable to the Bonds.

b) To (i) take all actions that are necessary to be taken (and avoid taking any action that it is necessary to avoid being taken) so that interest on the Bonds will not be or become subject to federal income taxation under present law, and (ii) will take all actions reasonably within its power to take that are necessary to be taken (and avoid taking any actions that are reasonably within its power to avoid taking and that it is necessary to avoid) so that interest on the Bonds will not be or become includable in gross income for federal income tax purposes under the federal income tax laws as in effect from time to time.

c) To, without limitation, (i) to the extent required by the Code, restrict the yield on investments of amounts received upon the sale of the Bonds and other amounts, and (ii) timely rebate to

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the United States of America certain amounts that may be received as interest or other investment earnings on accounts of the SewenRevenue Fund, .all as shall-be necessary to comply with .paragraph (a) above. The City shall also make or cause to be made identifiable investments of amounts allocable to the Bonds as shall be necessary or appropriate to be able to ascertain the amounts that may be required so to be rebated to the United States of America. The City shall from time to time determine the ' amounts-ih Accounts'^fthe-Sewer'Revenue' Furid<sup>[</sup>-that shall be subject'so"to<sup>:</sup> be"reBatfed'Shd'those

amounts from time to time shall be held by the City in a rebate: 'account' for' the Bonds and shall be rebated to the United States of America in the amounts and at the times as required. Such amounts so " subject from time to'tirrie'so 'to'be rebated'sHall not bV available for the "other purposes for which the Sewer Revenue Fund and its accounts arid'sub-accounts established by the Indenture may be applied, and, for purposes of computing the balance iri'the Sewer Revenue Fund' and such'various' accounts shall be disregarded. .. (. °:; ': - (d) 'Not to take any of the following actions without in each<sup>J</sup> such event 'obtaining the Opinion of Bond Counsel (which may represent the City from time to time in other matters)<sup>1</sup> that such action will not, contravene any covenant of the Indenture and will riot make compliance with those" 'covehah^impbssiBle: (i)' defease any Bonds; (ii) sell, 'lease or otherwise dispos'e.of any material portion •"<sup>J</sup>, of the Sewer SysWm;"(n^ contract for'sewer service by the City other, than pursuant to general rates charged to me general .public; or (iv) enter into or amend any' contract: bf arrangement, for p^ bWer'than its 'emplb'yeesio manage the'Sewer System. Th'e'proyiSj.o'ns'bTdescn interprete^'to4n^i^b^e, upb'rV'the City any obligation to redeem'or to purchase: any' Bonds<sup>1</sup> other 'than with proceeds or other amounts availarile under  $|| i;w;n/;|| ;|olh11 | VAi<:u bnu ||||||| \land \_: ] || || ?y| >n HO$ the Indenture. h ':' ''''■''' '^>-'-[''' '\* i;,,!: •'"•\_'\_!\_ : Remedies ···· ^ !-:;•. h "Any Owner'of'a Bbhd;myy" pfbceed by civil action'to'com^ duties-required by the

Indenture,' including the 'establishmerit' ah'd! "collectibn of sufficient' fees, ch the" services supplied by the Sewer System, and the application of Gross Revenues as provided 'iff the Indenture. Subject to the terms of the Indenture, the Insurer ,shall be treated as the Owner of the Series 2017A Insured Bonds for purpose's 'of exercising<sup>5</sup> reme'dies 'und'er th'elntiehmfe'ahd the". Insurer is<sup>1</sup> ehtitfe'd'.jto' 'all fights and remedies granted to the Owners bf the Series 2017A Insured' Bonds! ""

Amendments

• "" " ■• "" " ■• "" "

The City and the Trustee, from tifne<sup>;</sup> to time and at any'time;-without the consent of or notice to the Bondholders, may amend the Indenture as follows:

"

i) to cure any formal defect, omission, inconsistency or ambigiiity'ih the Indenture;

ii) to provide limitations and restrictions in addition to the limitations and restrictions contained in the" Indenture' oh' the issuance of Second'Lien Parity Bonds or other evidences of indebtedness; "

iii) to grant to or confer or impose upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers', 'authority, security, liabilities' of duties which 'may lawfully be granted, conferred or imposed and which are not contrary to or inconsistent with the Indenture as heretofore in effect, provided that no such additional liabilities or duties shall be imposed upon the Trustee without its consent;

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iv) to add to the covenants and agreements of, and limitations and restrictions upon the City in the Indenture, other covenants, agreements, limitations and restrictions to be observed by the City which are not

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contrary to or inconsistent with the Indenture;

v) to confirm, as further assurance, any pledge under, and the subjection to any claim, lien or pledge created or to be created by, the Indenture, or of any moneys, securities or funds;

vi) to authorize a different denomination or denominations of. the Bonds and to make correlative amendments and modifications to the Indenture regarding exchangeability of Bonds of different denominations, and similar amendments and modifications of a technical nature;

vii) to comply with any applicable requirements of the Trust Indenture Act of 1939, as from time to time amended; or

(yiii) . to modify, alter, amend or supplement the Indenture in any other respect which is not materially adverse, to the Bondholders and which does not otherwise, require Bondholder consent as described in "Amendments with Bondholder Consent" below and which, in the judgment of the Trustee (which may rely upon an Opinion of Bond Counsel), is not to the material prejudice of the Trustee.

Before the City and the Trustee may amend the Indenture as described above, there shall be delivered to the Trustee an Opinion of Bond Counsel stating that such amendment (i) is authorized or permitted by the Indenture', (ii) complies with the tefrhs of the Indenture, (iii) upon the adoption of the Indenture, will be valid and binding upon the City in'accordance with its terms, and (iv) will not adversely affect the exclusion of interest on any Bonds from the gross income of the owners of Bonds for federal income tax purposes under the Code, and the Trustee may^rely conclusively upon such opinion as to such matters.

# Amendments with Bondholder Consent

Except for any amendment described above, subject to the terms and provisions described below and not otherwise, the City and the Trustee may, from time to time, with the written consent of the Insurer and the Bondholders of more than 50 percent in aggregate principal amount of the Bonds then Outstanding (excluding therefrom any Bonds then owned by the City), enter into any Supplemental Indenture deemed necessary or desirable by the City for the purposes of modifying, altering, amending, supplementing or rescinding, in any particular, any ofthe terms or provisions contained in the Indenture; provided that, unless approved in writing by the Owners of all the Bonds then Outstanding, nothing in the Indenture shall permit, or be construed as permitting: (i) a change in the times, amounts or currency of payment ofthe principal of or interest on any Bond then Outstanding, or a reduction in the principal amount of any Bond then Outstanding, or the rate of interest on such Bonds; or (ii) a preference or priority of any Bond or Bonds over any other Bond or Bonds; or (iii) a reduction in the aggregate principal amount of Bonds, the consent of the Owners of which is required for any such amendment.

# Defeasance

If the City pays or causes to be paid to the Owners of all Outstanding Bonds, the principal of and interest to become due on such Bonds, at the times and in the manner stipulated in the Bonds and in the Indenture, then the pledge of any moneys, securities, funds and property pledged by the Indenture and all other rights granted by the Indenture shall be discharged and satisfied. In such event, the Trustee, upon the request of the City, shall execute and deliver to the City all such instruments as arc desirable to evidence such discharge and satisfaction, and the Trustee shall pay over or deliver all moneys or securities held by it pursuant to the Indenture which arc not required for the payment or redemption of Bonds theretofore surrendered for such payment or redemption. If the City pays or causes to be paid, or there otherwise is paid, to the Owners of any Outstanding Bonds the principal of, redemption premium, if any, and interest due or to become due on such

Bonds, at the times and in the manner stipulated in such Bonds and in the Indenture, such Bonds shall cease to be entitled to any benefit or security under the Indenture and. all covenants, agreements and obligations of the City to the Owners of such Bonds shall thereupon'cease, terminate and become void; and be discharged and satisfied.

Outstanding Bonds shall, prior to the maturity Or redemption :date of such Bonds, be deemed to have

been paid as meant and with the effect expressed above if: (i) in case any of said Bonds are to be redeemed on

any'date prior tb their maturity; the City shall have'given to the Trustee or an escrow agent in form satisfactory

to it irrevocable instructions to give notice of redemption as provided in the Indenture'on said date of such

notice, (ii) there has been deposited with<sup>1</sup> or held<sup>1</sup> by the Trustee or ariyeserow agent either moneys in  ${}^{j}ah$  amount

which are sufficient, or noncallable, nonprepayable Defeasance Obligations the principal of and the interest on

Which when due will provide moneys which; together with the -moneys; 'if 'ariyy 'deposited' with or held by the

Trustee or escrow agent at the same time, shall be sufficient to pay when due'the principal of, redemption

premium, if any, and interest due and to, become due on said Bonds on andf prior to the maturity date or

redemption date of such Bonds; as the' case may"be;'as ce'rtified'by ,anj,independent certified public accountant

acceptable to the'Trustee; provided' that such 'certification 'may, be made by 'the Trusteej'esbrow agent or an

investment' Dank^h^firm in connection'with'a^ if any Bonds do, not mature and are not by their 'teifhs'subject<sup>1</sup>to' 'reSem'pifiori' within 'u^e^'hext"succee'aing' 60 'Bays; 'the"Cify' has' given 'the trustee or escrow agent in form satisfactory to it irrevocable instructions to provide Notice by, Mail, as spon as practicable, to,,the Owners; of suchi! Bonds'that the 'deposit required has .been madewith the Trustee or escrow agent anil that said Bonds are deemed to have been paid in accordance'with thei'Indenture, and stating such maturity pf redemption date upon.- <which. moneys. are. tb;be:avanabJe,for the, payment .bf the principal, of, redemption premium, if any, and interest on said Bon'ds. Neither pefeasance'Obligations nor moneys deposited with the Trustee or escrow agent pursuant to the Indenture nor principal or interest payments on, any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust tor, the payment of, redemption premium, if any, the principal of and interest on. said, Bondsand such Bonds not,, sp defeased shall have no right to such moneys and Defeasance Obligations; but any cash received from such principal<sub>M</sub>qn interest payments, on such<sup>^</sup>efeasance Obligatio<sub>(ns)</sub>deposited, with the Tra<sup>^</sup> if not tijen^needed.for.such>purpo.se, shall to the extent .practicable, be reinvested, in .Defeasance Obligations, maturing at. times and in; amounts sufficient to pay when due the principal of, redemption premium, if any, and interest, to becomedue pn said.Bonds on .and prior, to, such redemption date prmaturity date.pf such Bonds, as tite.case, may be, and interest earned .ftpm, such, reinvestments, shall, be.paid .oyer ,tq the City -free and clear of any trust, lien .or pledge. .....

. Nothing, in the indenture, shall .prohibit any <a href="http://any>depps.it">http://depps.it</a> of Defeasance Obligations,, as provided above, from

being subject to a subsequent:, sale of such. Defeasance Obligations and, reinvestment, of allpr a portion of the

proceeds of that sale in Defeasance Obligations which, together with money to remain so held in trust with the

Trustee or escrow agent, shall be sufficient to provide for the payment of the principal, of. and interest on, any

Bonds deemed to have been paid as provided above. Amounts held by the Trustee or escrow agent jn excess of

the amounts needed so to provide for the payment of such Bonds may be subject to withdrawal by the City for

deposit in the Sewer Revenue Fund.

Payment, Registration and Transfer Provisions

Details of payments of the Bonds when in the book-entry form and the book-entry only.system are described above under the .subcaptiorf "DESCRIPTION OF THE BONDS ^- Book-Entry Only System." ".The following provisions of the Indenture apply to the Bonds upon the discontinuation of the DTC or any other book-entry registration system for the Bonds.

The principal and redemption' price of each Bond'is payable upon surrender of such "Bond at"the Principal Office of the Trustee. Payments of principal of the Bonds shall be payable in clearinghouse funds

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except as provided in the Indenture. Such payments shall be made to the Owner of the Bond so surrendered, as shown on the registration books maintained by the Trustee on the applicable Record Date.

All payments of interest on the Bonds shall be paid to the persons entitled to such payments by the Trustee on the Interest Payment Date or special interest payment date, as applicable, (A) upon request of any Owner of such Bonds in the principal amount of \$1,000,000 or more, by federal funds wire on the Interest Payment Date to any address in the continental United States, if such Owner provides the Trustee with written notice of such wire transfer address at least 15 days prior to the applicable Record Date (which notice may provide that it will remain in effect with respect to subsequent Interest Payment Dates unless or until changed or revoked by subsequent notice), or (B) if no instructions are given as aforesaid, by clearinghouse funds check or draft mailed on the Interest Payment Date to the persons entitled to such payment at such address appearing on the registration books of the Trustee or such other address as has been furnished ,to the Trustee in writing by such person.

The transfer of any Bond shall be registered upon the books of the Trustee at the written request of the Bondholder or its attorney duly authorized in writing, upon surrender of such Bond at the Principal Office of the Trustee, together with a written instrument of transfer satisfactory to the Trustee duly executed by the Bondholder or its attorney duly authorized in writing. '

The City and the Trustee may deem and treat the Bondholder as the absolute owner of such Bond, whether such Bond is overdue or not, for the purpose of receiving payment of, or on account of, the principal of and interest on such Bond and for all other purposes, and neither the City nor the Trustee shall be affected by any notice to the contrary. All such payments so made to any such Bondholder shall be valid and effectual to satisfy and discharge the liability upon such Bond to the extent of the sum or sums so paid.

Any Bond, upon surrender of such Bond at the Principal Office of the Trustee, together with an assignment executed by the Bondholder or its duly authorized agent, at the option of the Bondholder, may be exchanged for an equal aggregate principal amount of Bond or Bonds of any Authorized Denomination, of the same series, interest rate and maturity as the Bond being surrendered.

In all cases in which the privilege of exchanging Bonds or registering the transfer of Bonds is exercised, the City shall execute and the Trustee shall authenticate and deliver Bonds in accordance with the provisions of the Indenture. For every such exchange or registration of transfer of Bonds, whether temporary or definitive, the Trustee may make a charge in an amount sufficient to reimburse it for any tax or other governmental charge required to be paid with respect to such exchange or registration of transfer, which sum or sums shall be paid. by the person requesting such exchange or registration of transfer as a condition precedent to the exercise of trie privilege of making such exchange or registration of

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transfer.

Neither the Trustee nor the City shall be required to register the transfer of any Bond during the 15 days next preceding an interest payment date or, in the case of a, proposed redemption of Bonds, after they have been selected by the Trustee for redemption.

# The Trustee

The City has appointed Amalgamated Bank of Chicago, Chicago, Illinois, as Trustee, for the purposes and upon the express terms and conditions set forth in the Indenture.

The Trustee need perform only those duties that are specifically set forth in the Indenture.and no others. The Trustee shall not be answerable for the exercise of any discretion or power under the Indenture or for anything whatsoever in connection with the trust created by the Indenture, except only for its own negligence or bad faith. Under the Indenture, the Trustee is required to exercise such of the rights and powers vested in it by the Indenture and use the same degree of skill and care in its exercise as a prudent person would use and

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exercise under the circumstances in the conduct of his or'her own affairs; provided that the Trustecis under .no obligation to take any action in respect of the:execution or enforcement of any of the trusts created by the Indenture, or to institute, appear in or defend any suit or other proceeding in connection with such execution or enforcement, unless requested in writing so to do by Bondholders of at least a majority in aggregate"principal amount' of the Bonds then Outstanding, and-, if iiV its 'opinion such action-may tend to involve 'it in expense<sup>1</sup> of liability, unless furnished from time tb time as often a's'fa may'require, with security"and indemnity satisfactory toit; but'the foregoing<sup>1</sup> provision isMnterided only for the protection of the Trustee; -' ' '= i =<=;=

The Trustee may execute any of the trusts or powers of the Indenture and perform the<sup>r</sup> duties; required

under the Indenture by; or through; attorneys,' agents or receivers, and i is entitled to,.and may >rely.upon,'written

adviceofcounseT concerning all matters of trust and duty under th'eTndenfufe, and the Trustee is not answerable

for the fnegligence or misconduct of any, such attorney on agent selected by it with reasonable-cafe. > y'v

The Trustee may buy, sell, own, hold and deal in any of the Bonds for its own account or that of any pther Rerspn^andjmay, join in ,any, action<sub>if</sub>whjph any Bondholder.may be'.entitled to take |with. like .effect as if it did not act riniany capacity under the Indenture. The jrustee,,eimer...as. principal or agent<sub>n</sub>alsp may engagedn or bejnterestedjin.any..financial .or other transaction, with, .the City and may .act as: .depository, trustee or, agent, for any committee or body of Bondholders secured by the Indenture, or cither .obligations pf.the.City <a href="http://pf.the.City>:as..freely asrift">http://pf.the.City</a> s..freely asrift, it did not act in any capacity under the Indenture.

Resignation or Removal of. Trustee .,

,...Thp;.Trustee..may resign.and..be,(discharged of the. trusts', created.by, the Indenture by executing^n

instrument in writing resigning such irusts and, specifying, the date .when such resignation shalUake effect, ., and

filing the same with the City, not fewer than 45 days before the date specified in such instrument when such

resignation,shall(take;effect,, and by^giving Notice by .Mail of suchiresignation, nptfewer than.21 days prior to

|        | specifiediin isuch, instrument and notice, but only if a successor, Trustee has been appointed and, has accepted the   |
|--------|--|
|        | duties of the Trustee. After any such resignation,-the City shall,cause Nptice by .Mail .of such resh tp,,be           |
|        | given to the Insurer. If the successor Trustee shall not have been appointed within a period of 90 days following      |
|        | the.giving of such. notice • then the Trustee is authorized to petition any court of competent jurisdiction to appoint |
|        | a-successor-Trustee, ∎•,!-;:∎/∎'•.•∎ •■ -ii <sup>:</sup> ".' ■■ ••!!■ ■,];' -v i'; ••" <sup>!</sup> :!'                |
|        | the Trustee may be"removed by the City at'any time by filing with the Tfustee ah instrument or                         |
| (or    | instruments" in, writing executed by the City; 'appointing a successbr., Such' fe'mbyal shall be effective; 30 day's   |
| ho'sı. | such longer 'period" as may Be set forth in such' instrument)'after del iyery of trie ihstr urnent; provided that acli |
|        | removal sliairbe' effective until the" successor trustee executes. "acknowledges and deli vers [to the City ah         |

such, resignation .date, toftthe, Owners of putstanding, Bonds.,; , Such resignation; shall /take, effect on, the , day

removal sharbe' effective until the" successor trustee executes, "acknowledges and deli vers [to the City ah instrument accepting such appointment. After any such removal, the City sh'al 1' cause' Notice' by Maii ofsuch renioval to be given to the Insurer. . .... v

Appointment and Qualifications of Successor- Trustee; Automatic Succession in Certain Events

If at any time the Trustee is removed, or is dissolved, or if its property or affairs are taken under the control of any state or federal court or administrative body because of insolvency or bankruptcy, or for-any other reason, and if the Trustee shall resign, then the office of the Trustee shall be vacant immediately and a successor may be appointed by the City. After any such appointment; the City must cause notice of such, appointment to be given to the predecessor Trustee and the successor Trustee, and must cause Notice by Mail to be given tcall Bondholders and the Insurer. No such appointment will be effective until the successor Trustee has accepted such appointment.

the Indenture described above within 90 days following the giving of notice of resignation, the retiring Trustee may immediately apply to a court of competent jurisdiction for the appointment of a successor Trustee. Such

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court may thereupon, after such notice, if any, as it may deem proper and prescribe, appoint a successor Trustee meeting the qualifications set forth in the Indenture.

Each successor Trustee must be a commercial bank with trust powers or a trust company (a) duly organized under the laws of the United States or any state or territory of the United States, (b) authorized under such laws to perform all the duties imposed upon it by the Indenture and the laws of the State, (c) capable of meeting its obligations under the Indenture, (d) subject to supervision or examination by Federal or state authority, and (e) with combined capital and surplus of at least \$50,000,000. If the Trustee publishes reports of condition at least annually pursuant to law or the requirements of such authority, then for the purposes of the Indenture the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

Any corporation into which any Trustee is merged or converted or with which it is consolidated, or any corporation resulting from any merger or consolidation to which any Trustee is a party, or any company to which all or substantially all of the corporate trust business of the Trustee is sold or transferred, shall be the successor Trustee under the Indenture, without the execution or filing of any paper or any further act on the part of the parties to the Indenture,

anything in the Indenture to the contrary notwithstanding.

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APPENDIX C

CITY OF CHICAGO, ILLINOIS SEWER FUND BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014, AND INDEPENDENT AUDITORS' REPORT

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# City of Chicago, Illinois Sewer Fund

Basic Financial Statements as of and

for the Years Ended December 31, 2015 and 2014, and Independent Auditors' Report CITY OF CHICAGO, **ILLINOIS** SEWER FUND TABLE OF CONTENTS Page INDEPENDENT AUDITORS' REPORT 1 - 2 MANAGEMENT'S DISCUSSION AND ANALYSIS 3-10 BASIC FINANCIAL STATEMENTS: . . Statements of Net Position as of December 31,2015 and 2014 11 Statements of Revenues, Expenses, and Changes in Net Position for the Years Ended December 31,2015 and 2014 12 .f\.;.:"-|[ ' "i '5-..; '>. 7 \" '. ' 2 . '\ Statements of Cash Flows for the Years Ended December 31, 2015 and 2014 13-14 Notes to Basic Financial Statements as ofahd for the . '**=='=**}\-'. **=** \;**-'**{ Years Ended December 31,2015 and 2014' " - 15-^0 REQUIRED SUPPLEMENTAL INFORMATION L»-. ;c ry y.yy. :d,vih, v! o,...41 Schedule of Changes in the Net Pension Liability and RelatediRatiosi., 1... - f{i:-.,:ifK, ...nj • 42-43 Schedule of Contributions 44^15 Schedule of Other Postemployment Benefits Funding Progress 46

> Deloitte & Touche LLP 111 South Wacker Drive

Chicago, IL 60606-4301 USA Tel:+1 312 486 1000 Fax:+1 312 486 1486 www.deloitte.com <http://www.deloitte.com >,

# INDEPENDENT AUDITORS' REPORT

The Honorable Rahm Emanuel, Mayor and Members of the City Council City of Chicago, Illinois

We have audited the accompanying basic financial statements of the Sewer Fund (the "Sewer Fund"), an enterprise fund of the City of Chicago, Illinois (the "City"), as of and for the years ended December 31, 2015 and 2014, and the related notes to the basic financial statements, which collectively comprise the Sewer Fund's basic financial statements as listed in the table of contents.

# Management's Responsibility for the Basic Financial Statements

Management is responsible for the preparation and fair presentation of these basic financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

# Auditor's Responsibility

Our responsibility is to express an opinion on these basic financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the basic financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the. amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

# Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the financial position of the Sewer Fund as of December 31, 2015 and 2014, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

# Emphasis of Matter

As discussed in Note 1 to the basic financial statements, the basic financial statements referred to above present only the Sewer Fund, an enterprise fund of the City, and do not purport to, and do not, present the financial position of the City as of December 31, 2015 and 2014, changes in its financial position, or its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

As discussed in Notes 1 and 11 to the basic financial statements, beginning net position at January 1, 2015 was restated due to the City's adoption of Governmental Accounting Standards Board (GASB) Statement No. 68, Accounting and Financial Reporting for Pensions-an amendment of GASB Statement No. 27; and, ending net position as of December 31, 2015 reflects changes in certain benefits and actuarial assumptions (Note 6). Our opinion is not modified with respect to these matters.

# **Other Matters**

# *Required Supplementary Information* June 30, 2016

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the Schedule of Changes in the Net Pension Liability and Related Ratios, Schedule of Contributions, and

Schedule of Other Postemployment Benefits Funding Progress, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.



# MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion and analysis of the City of Chicago, Illinois (the "City"), Sewer Fund (the "Sewer Fund") financial performance provides an introduction and overview of the Sewer Fund 's basic financial activities for the fiscal years ended December 31, 2015 and 2014. Please read this discussion in conjunction with the Sewer Fund's basic financial statements and the notes to basic financial statements following this section.

# FINANCIAL HIGHLIGHTS 2015

- Operating gross revenues for 2015 increased by \$53.3 million (15.8%) compared to prior-year operating revenues. This increase is primarily due to an increase in sewer billing rates.
- Operating expenses before depreciation and amortization for 2015 increased \$191.4 million compared to 2014. This increase of 160.5% is primarily due to an increase for pension expense related to the implementation of GASB 68.
- The Sewer Fund's total net position for 2015 decreased by \$358.5 million or 48.8% compared to 2014.
- The Sewer Fund's total assets and deferred outflows were greater than total liabilities by \$376.2 million (net position) at December 31, 2015. Net position comprises \$559.7 million of net investment in capital assets, \$116.1 million of restricted for capital projects, and (\$299.6) million of unrestricted.
- Capital asset additions, net, being depreciated for 2015 were \$284.1 million, principally due to completion of sewer construction and rehabilitation projects.

2014

- Operating gross revenues for 2014 increased by \$46.5 million (15.9%) compared to prior-year operating revenues. This increase is primarily due to an increase in sewer billing rates. Increase in provision for doubtful accounts of about \$4.1 million affected the net revenue.
- Operating expenses before depreciation and amortization for 2014 increased \$9.9 million compared to 2013. This increase of 9.1% is primarily due to an increase in repairs, general fund, and administrative and general with a

slight increase in maintenance and engineering.

• The Sewer Fund's total net position for 2014 increased by \$100.4 million or 15.8% compared to 2013.

- 3 -

- The Sewer Fund's total assets and deferred outflows were greater than total liabilities by.
- \$734.7 million (net position) at December 31, 2014. Net position comprises \$520:6 million of net
- investment in capital assets, \$111.3 million of restricted for capital projects, and \$102.8 million of
- unrestricted.
- Capital asset additions, net, being depreciated for 2014 were \$210.4 million, principally due to completion of sewer construction and rehabilitation projects.

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- In March, 2014, Moody 's Jjrjy.estors: Service fMpc4y's), downgraded.the .ratings, pf the Wastewater
- At December 31,2014, the Sewer Fund was in compliance with the debtepvenants as stated in the
- Master Trust Indentures. Details regarding the Sewer Fund's long-term debt are in Note 4 of the notes
- to the basic financial statements.

# OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as ah introduction to the Sewer Fund's basic financial to basic financial statements. In addition to the basic financial statements,; this report also presents statistical data after the notes to basic financial statements.

The, statements of net position present all of the Sewer Fund's assets, deferred outflows, and liabilities using the accrual basis of accounting. The difference between assets, deferred outflows, and liabilities, is reported as net position. The increase or decrease in net position may serve as an indicator, over time, whether the Sewer Fund's financial position is improving or .deteriorating. .However, the .consideration of other nonfinancial factors maybe necessaryjn the. assessment of pyerall.'finimciaf^ositiori and.health of the SewerJFJund.

The statements of revenues, expenses, and changes in net position present all current fiscal year revenues and expenses, regardless of when cash is received or paid, and the ensuing change in net position.

The statements of cash'flows report how cash and cash equivalents were'provided and used by the Sewer Fund's operating, capital financing, and investing activities. These statements are prepared on a cash basis and present the cash received and disbursed, the net increase or decrease in cash and cash equivalents, fpr.the year, and the cash and cash equivalents balance at year-end.

The notes to basic financial statements are an integral .part of the basic financial statements; accordingly, such disclosures are essential for a full uridefstafidihgof the. information provided in the basic "financial statements.

In addition tp the basic financial statements, this report includes statistical data. The statistical data section presents

unaudited debt-service coverage calculations and includes certain unaudited information related to the Scwcr Fund's historical financial and nonfinancial operating results and capital activities.

#### **FINANCIAL ANALYSIS**

At December 31, 2015, the Sewer Fund's financial position continues to be strong with total assets and deferred outflows of \$3,079.7 million, total liabilities with deferred inflows of \$2,703.5 million, and net position of \$376.2 million. A comparative condensed summary of the Sewer Fund's net position at December 31, 2015, 2014, and 2013, is as follows:

-4-

#### (In thousands)

Current assets Restricted and other assets Utility plant-net Deferred outflows

|  | 2015                               |                                     |
|--|------------------------------------|-------------------------------------|
| NT-4 Da - 141 a m                              |                                    | 389,922 159,704 2,263,159 266,925   |
| Net Position                                   | 2014                               |                                     |
|  | <u>\$ 357,81</u>                   | 1 293,011 2,025,220 89,905          |
| 2013   |                                    |                                     |
|  |                                    | \$ 296,167 '81,362 1,838,328 74,973 |
| Total assets and deferred outflows             |                                    |                                     |
| Current liabilities Derivative instrument liab | oility Pension Liability Long-term | liabilities                         |
|  | Total liabilities •                |                                     |
| 256,423  |                                    |                                     |
| 663,872 1,777,496                              |                                    |                                     |
| 2,697,791                                      |                                    |                                     |
|  |                                    | 249,313 71,861                      |
| 1,710,019 2,031,193                            |                                    | 100 202 50 705                      |
|  |                                    | 192,303 52,705                      |
| <u>1,411,509 1,656,517</u>                     |                                    |                                     |
| Office of the City Clerk                       | Page 208 of 266                    | Printed on 1/11/2024                |

# Deferred Inflows

Net position: Net invested in capital assets Restricted for capital projects Unrestricted

| Total net position<br>520,627 111,333 102,794<br><u>481,946 73,858 78,509</u><br>5,681 |         |    |       |  |                               |                   |
|--|---------|----|-------|--|-------------------------------|-------------------|
| \$   | 376,238 | \$ | 734,7 |  | <u>5 116,105</u><br>\$ 634,31 | <u>(299,584.)</u> |

# 2015

Current assets increased by \$32.1 million (9.0%) due to an increase in cash and cash equivalents, accounts receivable and inventories with a decrease in due from other funds. Restricted and other assets decreased by \$133.3 million (45.5%) and utility plant-net increased by \$237.9 million (11.8%) due principally to capital activities for sewer construction and rehabilitation projects. Deferred outflows increased in the amount of \$177.0 million (196.9) primarily due to the adoption of Government Accounting Standards Board (GASB) Statement No. 68, Accounting and Financial Reporting for Pensions. During 2015, the Sewer Fund lined an additional 55.1 miles of sewers.

Current liabilities increased by \$7.1 million (2.9%), which is primarily related to increase related to accounts payable and accrued liabilities with offsetting decrease in due to other funds and unearned revenue. Derivative instrument liability decreased by \$71.9 million (100%) due to changes in the fair value of interest rate swaps. Long-term liabilities increased by \$67.5 million (3.9%). Pension liability in the amount of \$663.9 million and \$5.7 million in deferred inflows were recorded to the Sewer Fund basic financial statement in connection with the adoption of GASB Statement No. 68, Accounting and Financial Reporting for Pensions.

Net position may serve, over a period of time, as a useful indicator of the Sewer Fund's financial position. As of December 31, 2015, total net position was \$376.2 million, a decrease of \$358.5 million (48.8%) from 2014. **2014** 

Current assets increased by \$61.6 milliori'(20:8%) due to an-increaseah<sup>1</sup> cash and cash equivalents, accounts receivable, and due from other funds with a decrease in inventories. Restricted and other assets increased by \$211.6 million (260.1 %) primarily due to the issuance of debt'in20'14and utility plant-net increasedtoy \$186.9 million (10.2%) due principally to capital activities for sewer construction and rehabilitatiohpr'ojccts. Deferred outflows increased in the amount of \$14.9 million (19.9%) due to changes in the fair value of interest, rate swaps. During 2014; the Sewer Fund lined an additional 21.1 miles of sewers.

Current liabilities increased by \$57.0 million (29.6%), which is primarily related to increases.related to due to

other funds, unearned revenue and accrued liabilities with offsetting decrease in accounts payable. Derivative

instriimentiliability. increased by \$19.2 million (36.3%) due to changes in the fair rvalue pf interest rate swaps.

Long-term liabilities-.increased by \$298:5 million (21.1%).

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| Netppsitipn may ser    | ve;,pvcr a periodpf   | time, as a useful indicator | pf-die-Se^er-^imd's-flnand | cial position. As of December 31 | , 2014, |
|------------------------|-----------------------|-----------------------------|----------------------------|----------------------------------|---------|
| total net position was | s \$734.7 million, an | increase of \$ 100.4 millio | n (15.8%) from             |                                  |         |
| 2013'                  | : -; o;               | .:, -y \                    |                            | ,, <b>y</b> .: ■                 |         |

A summary of revenues, expenses, and ehanges in net position for the years ended December 3.1, 2015, 2014, and/2013, is as

follows::

(In thousands)

Revenues: Operating revenues: Sewer service - net • Other operating-revenues '•

Nonoperatirig revenues Revenues before Capital grants •' ^ Capital grants Total revenues; 321,100 i;i28 322,228 3,813' 326,041 374,770 1,107 375,877 3,921 379,798 Revenues, Expenses, and Changes in Net Position 2014 2013 2015 \$ 278,649 ■ 1,180 279,829 -" (2,754) 277,075 326,041

2,500 279,575

Expenses: ... • , ■ > Operating expenses before deprecation and amortization: Depreciation and amortization Interest expense Swap Termination Fee, .

310,689 ., 40,444 83,656 7.0,243...

119.279 36,701 69.620

109,333 31,280 63,513

Total expenses

: 379,798.

Total operating revenues'

Change in net position (125,234)

Net position -beginning of year (as restated) 50 j,472

Net position-end of year \$376,238

100,441 634,313 \$ 734,754

#### 75,449 558,864 \$ 634,313

-6-

# 2015

Net sewer service revenues for the years ended 2015 and 2014 were \$374.8 million and \$321.1 million, respectively. Other revenue, which consists primarily of inspection fees and house drain fees, for the years ended 2015 and 2014 was \$1.1 million respectively. The increase in 2015 net sewer service revenue of \$53:3 million (15.8%) is primarily due to an increase in water and sewer rates of 15% and 4%, respectively.

Nonoperating revenues increased slightly by \$.1 million compared to 2014 as a result of proceeds primarily from other nonoperating revenue.

#### 2014

Net sewer service revenues for the years ended 2014 and 2013 were \$321.1 million and \$278.6 million, respectively. Other revenue, which consists primarily of inspection fees and house drain fees, for the years ended 2014 and 2013 was \$1.1 million and \$1.2 million, respectively. The increase in 2014 net sewer service revenue of \$42.5 million (15.2%) is primarily due to an increase in water and sewer rates of 15% and 4%, respectively.

Nonoperating revenues increased by \$6.6 million compared to 2013 as a result of proceeds primarily from . investments.

A comparative summary of the Sewer Fund's operating expenses, as classified in the basic financial statements, for the years ended December 31, 2015, 2014, and 2013, is as follows:

#### **Operating Expenses**

#### (In thousands)

Repairs Pension General Fund reimbursements Maintenance Engineering v Administrative and general 2013 2013 2014 \$ 42,131 \$ 40,435\$.38,910 187,593 • 40,007, 36,740 32,144 25,322 24,37423,004 3,299 12,337 14,394 12,008

3,336,3,267

Operating expenses before depreciation and amortization

Depreciation and amortization Total operating expenses

310,689 40,444

\$351,133 \$155,980 \$140,613

# 2015

Overall, operating expenses before depreciation and amortization for 2015 increased by \$191.4 million (160.5%o) in 2014 primarily due to increases in pension expense due to the implementation of GASB 68. Depreciation and amortization increased due to an increase in utility plant.

#### 2014

Overall, operating expenses before depreciation: and amortization for 2014 increased by \$9:9 million (9.1%) in 2014 primarily due to increases in repairs, -general fund, administrative and general with a slight' increase in maintenance. and engineering: Depreciation. and iamortization-increased due to an increase in utility .plant.

A comparative summary of the Sewer Fund's cash flows for the years ended December 31, 2015, 2014, and

| 2013, is as follows:  | Ι      | . <b>.</b> .'=.: <b>.</b> : <b>.</b> : <b>i</b> / | '.•.•:,∎.•/■ | ■.■•>:;• •                 |
|---|--------|---|--------------|----------------------------|
|   |        |   | Cash Flows   |                            |
| (In thousands)  |        |   |              |                            |
| Cash from activities: <sup>;</sup> •<br>• <i>Operating'</i> '■■       |        |   | Com          | tal and related financing  |
| • investing" ' ""   |        |   | Capi         | ital and related financing |
| \$ 239;225 (356J905) 2'04,'436 <sup>:</sup>                           |        |   |              |                            |
| \$191,355 "" 6?;122   |        |   |              |                            |
| S 155,991 (264,353) <sup>:</sup> 64.130                               |        |   |              |                            |
| Net change, in cash and cash equiva                                   | lents. |   |              |                            |
| <i>Cash and cash equivalents:</i><br><i>-Beginning of year '~:\/-</i> |        |   |              |                            |

<u>\$177,208</u> <u>\$90,452</u> <u>\$44,706</u>

# 201^

As of December 3 T,' 2015, the<sup>1</sup> Sewer Fund's cash and cash equivalents of \$177.2 million represented an increase of \$86.8 million from December 31, 2014, as compared to an increase of \$45.7 million from December 31, 2013 to December 31, 2014, primarily due to investment-related activities in 20r5t Total cash arid.cash equivalent's at

December31, 2015, were composed of unrestricted and restricted^cash and cash equivalents of \$37.4 million ahdr\$69.2 million, respectively. <sup>1</sup>

# 2014

As of,December<sub>r</sub>31,, 2014, the Sewer Fund's cash and cash equivalents of \$90.5,miliion represented an increase of \$45.7 million from December 31, 2013, as compared to a decrease of \$44.2 million from December 31, 2012.to December 31, 2013, primarily due to construction-related activities in 2014. Total cash and cash equivalents at December 31, 2014, were composed of unrestricted and restricted cash and cash equivalents of \$69.2 million and \$21.2 million, respectively.

# CAPITAL ASSET AND DEBT ADMINISTRATION

# 2015

At the end of 2015 and 2014, the Sewer Fund had net utility plant of \$2,263.2 million and \$2,025.2 million, respectively. During 2015, the Sewer Fund had capital additions being depreciated of \$207.2 million, and completed projects totaling \$17.2 million were transferred from construction in progress to applicable facilities and structures capital accounts. **2014** 

At the end of 2014 and 2013, the Sewer Fund had net utility plant of \$2,025.2 million and \$ 1,838.3 million, respectively. During 2014, the Sewer Fund had capital additions being depreciated of \$210.4 million, and completed projects totaling \$16.3 million were transferred from construction in progress to applicable facilities and structures capital accounts

The Sewer Fund's net utility plant at December 31, 2015, 2014, and 2013, is summarized as follows:

| (In thousands)  | 2015        | 2014       | Net Utility Plant at Year-End<br>2013 |
|---|-------------|------------|---------------------------------------|
| Utility plant not depreciated:  |             |            |                                       |
| Land and land rights  | \$ 560 \$   | 5 560      | \$ 560                                |
| Construction in progress  | 92,339      | 25,703     | <u>16,294</u>                         |
| Total utility plant not depreciated                                     | 92,899      | 26,26.     | <u>3</u> <u>16,854</u>                |
| Utility plant being depreciated:  |             |            |                                       |
| Facilities and structures   | 2,671,508   | 2,462,714  | 2,252,341                             |
| Furniture and equipment   | 30,575      | 32,196     | 32,742                                |
| Total utility plant being depreciated<br>Less accumulated depreciation: | 2,702,08    | 33 2,494,  | <u>9102,285,083</u>                   |
| Facilities and structures   | (509,550)   | (474,136)' | (442,064)                             |
| Furniture and equipment   | (22,273)    | (21,817)   |                                       |
| Total accumulated depreciation  | (531,823    |            | <u>(21,34.3)</u><br>53)(463,609)      |
| Utility plant being depreciated-net                                     | 2,170,260   | 1,998,957  | <u>1,821,474</u>                      |
| Utility plant-net   | \$2,263,159 | 2,025,220  | <u>\$1,838,328</u>                    |

The Sewer Fund's capital activities are funded through Sewer Fund revenue bonds and Sewer Fund revenues. Additional information on the Sewer Fund's capital assets is presented in Note 5 of the notes to basic

financial statements.

The Sewer Fund's outstanding debt at December 31, 2015, 2014, and 2013, is summarized as follows:

| Long-Term Outstanding Debt at Year                                  |               |                   |                  |  |  |
|---|---------------|-------------------|------------------|--|--|
| (In thousands)  | 2015          | 2014              | 2013             |  |  |
| Revenue bonds<br>Add interest accretion on Series 1998              | \$ 1,686,179  | \$1,638,935       | \$ 1,369,459     |  |  |
| capital appreciation bonds<br>Unamortized net bond discount/premium | 54,193<br>83, | 349,615,55161,306 | 45,272<br>34,707 |  |  |

Outstanding debt-net

The Sewer Fund's revenue bonds at December 31, 2015, have underlying credit ratings with each of the three major rating agencies as follows:

|  | ■■ Moody's<br>Investor <sup>;</sup><br>Ratings |      | Fitch Kroll Services | & Poor's |
|--|--|------|----------------------|----------|
| Senior Lien Wastewater Revenue Bonds ' | Baa2   | ' A+ | NotRated NotRate     | d        |
| Second Lien Wastewater Revenue Bonds   | Baa3   | A    | AA AA-               |          |

In February 2015, Moody's downgraded the ratings of the Wastewater senior lien revenue bonds from A2 to A3', and the Wastewater second lien/revenue bonds from A3,to.JBaaa 1,eachwith -a;negative outlook.

In May 2015, Moody's downgraded the ratings of the Sewer Fund senipr lien, revenue bonds from A3 to Baa2 and the Sewer Fund second lien revenue.bonds from Baal to Baa3, each wj^.a.negative^putlpcjo. Also in May 2015y. Standards ,& Poor's Financial: Services downgraded the ratings of the Sewer F|und senior lien revenue bonds from AA to A and the Sewer Fund second lien revenue bonds from AA- to A-.

At December 31; 2014', the Sewer Fund was in compliance with'the debt covenants as stated in the Master

Trust Indentures. Details regarding the Sewer Fund's long-term debt are in Npte.4pf;the notes, to the basic

. 'financial statements...)(

...•. ;•.;

# **REQUESTS FOR INFORMATION**

This financial report is designed to provide the reader with a general overview of the Sewer Fund's finances. Questions concerning any of the information provided in this report.or. requests for additional financial information should be addressed to the City of Chicago Department of Finance.

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| CITY<br>FUND   | OF  | CHICAGO,  | ILLINOIS  | SEWER                          |
|--|---|---|---|--------------------------------|
|  |   | PENSES, AND CHANGES IN NET<br>ER 31, 2015.AND 2014<br>:_: | POSITION  |                                |
|  |   |   | 2015 j2014                                      |                                |
| Sewer service-g  | VENUES: Sewer se<br>ross<br>for doubtful accour |   | \$ 390,924<br>(16,154)(                         | 4\$337,657<br>( <u>16,557)</u> |
| Sewer servi  | ce-net  |   | ?•<br>321,100                                   | 374,770                        |
| Other  | "   |   | 1   | <u>1,107</u> <u>1,128</u>      |
| Total opera  | ting revenues ∎ ∎,'                             | $^{\wedge} \blacksquare > ^{\wedge} a. \qquad " \land i$  | 375,8773  | 22,228                         |
| -  | " - ; :   |   | * z '''' <sup>;</sup> ; ; -<br>40,435<br>•      | : '- y * 42,131                |
| General Fund rein<br>Pension expense<br>Maintenance .<br>Engineering<br><u>Administrative an</u> | (Note 6) -                                      | 1*1   | '_; ± >18<br>" 25,322<br>3,299<br><u>12,337</u> | 7,593<br>2 24,374<br>3,336     |
| Total opera  | ting expenses befor                             | e depreciation and amortization                           | 310,689119,2                                    | 279                            |
| Depreciation and   | amortization                                    |   | 40,444  | <u>36,701</u>                  |
| Total opera  | ting expenses                                   |   | <u>j'∎• . ;</u>                                 | 351,133                        |
|  |   |   | <u>155,980</u>                                  |                                |
| OPERATING INC  | COME  |   | 24,744  | 166,248                        |

| NONOPERATING REVENUE (EXPENSES):<br>Investment income (loss)<br>Interest expense<br>Other<br>Swap termination fees |                      |              | 2,600 2,98<br>(83,656)(69,<br>1,321 82<br>(70,243) | 620)<br>29                     |  |
|--|----------------------|--------------|--|--------------------------------|--|
| Total  | nonoperating expense | es-net       | <u>(149,97</u>                                     | <u>(8)</u> <u>; , (65,807)</u> |  |
| CHANGE IN NET POSITION   |                      |              | (125,234)100,441                                   |                                |  |
| TOTAL NET POSITION-Beginning of year, as restated (Note 11)" 501,472 "•-634,313:'                                  |                      |              |  |                                |  |
| TOTAL NET POSITION-End of year   |                      | \$ 376,238\$ | 734,754  |                                |  |
| See notes to basic financial statements.   |                      |              |  |                                |  |
|  |                      |              |  |                                |  |
| CITY<br>FUND   | OF                   | CHICAGO,     | ILLINOIS   | SEWER                          |  |
| STATEMENTS (   | OF CASH FLOWS        |              |  |                                |  |

STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014 (In thousands)

## 2014

CASH FLOWS FROM OPERATING ACTIVITIES: Received from customers Transactions with other City funds Payments to vendors Payments to employees

Net cash provided by operating activities

CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES: Acquisition and construction of capital assets Proceeds from issuance of bonds Interest paid on revenue bonds Swap termination fees Principal paid on bonds and notes

Net cash provided by (used in) capital and related financing activities

CASH FLOWS FROM INVESTING ACTIVITIES: Sales and purchases of investments-net Investment interest

Net cash (used in) provided by investing activities

## NET CHANGE IN CASH AND CASH EQUIVALENTS

CASH AND CASH EQUIVALENTS-Beginning of year

## CASH AND CASH EQUIVALENTS- End of year

\$ 358,014 (42,764) (33,131) (42,894)

239,225

(275,866) 87,081 (58,040) (70,243) (39,837)

(356,905)

- 200,252 4,184
- 204,436
- 86,756
- 90,452
- \$ 177,208
- \$ 310,970 (40,218) (35,780) (43,617)
  - 191,355
  - (167,115) 338,026 (69,860)
  - (37,929)

63,122

(213,388) 4,657

- (208,731)
  - 45,746
  - 44,706
- \$ 90,452

(Continued)

| CITY<br>FUND | OF                                | CHICAGO,                | ILLINOIS | SEWER |
|--------------|-----------------------------------|-------------------------|----------|-------|
|              | OF CASH FLOWS<br>RS ENDED DECEMBE | ER 31, 2015 AND 2014. i |          |       |

2015 2014 RECONCILIATION TO CASH AND CASH EQUIVALENTS ' **REPORTED ON THE STATEMENTS OF NET POSITION:** ,,**∎** - •. 5<sup>;</sup> = -: . Unrestricted >' \$ 37,383 S 69,205 -Restricted 139.825 21'.247 TOTAL \$177,208, \$90,452 **RECONCILIATION OF OPERATING INCOME TO** CASH FLOWS FROM OPERATING ACTIVITIES: i:'! .■ ■. .'• >\* . \* A \ •. .■:/.. • :-S: 24,744 \$> 166-248 Operating income :Adjustments to reconcile: .'.- Depreciation'and amortization 40,444;:i. .. 36,701 ">">"Pension expense o'ther than contribution :■>■!<>■> ;j ls83,)l65j ' :; ' -Provision for uncollectible accounts 16,154 16^557 *i yvClianges in assets*\* *and liabilities:* , -*jHiv.* ':.< nu buy. •.,>",. y, |v|Increase in due from other City funds 3,223 (2,489) Increase in accounts receivable ; ^,(31,8^4)-... < . .....(29,162) , Decrease in-inventories .--^u An'klS&h-'-yiv.l 652 " Increase in accrued liabilities 9.178 3.043 (Decrease) increase in accounts payable and due to other. City funds;  $-, \blacksquare \bullet \blacksquare (3,473)$ :(1.54.1): Increase (decrease) in unearned revenue (2, 143).,, 1,346 CASH FLOWS FROM OPERATING ACTIVITIES \$ 239,225 \$ 191,355 SUPPLEMENTAL DISCLOSURE OF NONCASH ITEMS-Property .; additions in 20,15 and 2014 of \$101,584 and \$54,611, respectively, have outstanding accounts payable and accrued liabilities. See notes, to basic financial statements. CITY OF CHICAGO. ILLINOIS SEWER FUND

NOTES TO BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014 (In thousands)

## 1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization-The Sewer'Fund (the "Sewer Fund") collects and transmits wastewater to the treatment facilities of the Metropolitan Water Reclamation District Of Greater Chicago. The Sewer Fund is included in the Cityof Chicago, Illinois (the "City"), reporting entity as ah enterprise fund.

The accompanying basic financial statements present only the Sewer Fund and are not intended to preserit'the financial position of the City or' the results of its operations and cash flows.

Basis of Accounting-The accounting policies of the Sewer Fund are based upon accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board (GASB).

The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. The accounts of the Sewer Fund are reported using the flow of economic resources measurement focus.

The Sewer Fund uses the accrual basis of accounting under which revenues are recognized when earned and expenses are recognized when the liability is incurred.

When both restricted and unrestricted resources are available for use, it is the City's policy to use restricted resources first, then unrestricted resources as they are needed.

Annual Appropriated Budget-The Sewer Fund has a legally adopted annual budget that is not required to be reported.

Management's Use of Estimates-The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash, Cash Equivalents, and Investments-Cash, cash equivalents, and investments generally are held with the City Treasurer as required by the Municipal Code of Chicago (the "Code"). Interest earned on pooled investments is allocated to participating funds based upon their average combined cash and investment balances. Due to contractual agreements or legal restrictions, the cash and investments of certain funds arc segregated and earn and receive interest directly.

The Code permits deposits only to City Council-approved depositories, which must be organized state or national banks and federal and state savings and loan associations, located within the City, whose deposits arc federally insured.

Investments authorized by the Code include interest-bearing general obligations of the City, the State of Illinois (the "State"), and the U.S. government; U.S. Treasury bills and other non-interest-bearing general obligations of the U.S. government purchased in the open market below face value; domestic

money market funds regulated by and in good standing with the Securities and<sup>1</sup> Exchange Commission; and tax anticipation warrants issued by the City. The City is prohibited by ordinance from investing in derivatives, as defined, without City Council approval.

The Sewer Fund values its inyestnients, at. fair., value or.. amortized cost, as applicable. U-.S., government

securities purchased at a price other than par with a maturity of less than one year are [reported at/

amortized'eost: The fair value of U.S. agency securities, "corporate" bonds; and "municipal "bondVa're""

estimated using recently executed transactions, market price quotations (where observable), or bond

spreads. ; ; ; : - **u u**; : - **u** · - ;: ;.. u/.-. •,•<>; ...• **u**,.'/-<

Repurchase agreements. can be purchased only from banks, and certain .other institutions ;authorized to do business in .the State.,. The City Treasurer requires, that securities pledged, to secure, these, agreements have a market -;value.equal, tp thc;cQSt, of the repurchase, agreement, 'plus .accrued mterest:,  $j_{)y}j_{..., ...}$ 

Investments, generally, may.npt have.aiinaturity.in excess,pf 30 years from the ;date of purchase. Certain other

investment balances, arc held in accprdance.jwith, the specific p,rpyisipnsjOf, 'applic abje bpnd ordinances.

.*Cash* equivalents include certificates, of .deposit and! pther'iny.estnients with maturities of three months or "iess<sub>n</sub> wh^h~purchas.e^ ..., ..., ..., ... !f';;-", fi.;;!!'j;:..u. .u;...ty,-y- A; >i-...'l. n |l-.-  $\blacksquare$  ,  $1 \equiv <,, \bullet \blacksquare \blacksquare \blacksquare \blacksquare \bullet. \bullet/$ 

Accounts Receivable-The Sewer Fund accounts receivable result from biliings and collections for

sewer services processed by the Department of Water Management. Management has provided an

.jallp.wance.fpr.ampuntSTecorded be uncollectible..... {f,,v?...,, ,,, ■ r

Transactions with the City-The City's General Fund provides services to all other funds. The amounts, allocated .to pther funds, for,these services <a href="http://servic.es">http://servic.es</a>,are treated aspperatingiexpenses by the Sewer Fund and consist mainly of employee benefits, selfansured .risks,,and administrative expenses., ;

Inventories-Inventories, composed mainly of materials and supplies,: are .stated.at cost, .determined

principally on the first-in, first-out method.

Utility Plant-Utility.plant is recorded at cos.t,or,,fpr donated, assets, at fair .value.a.t.the, date of acquisition. ,Utility,plant is defined,,by. the Sewer.Eund as;assets with an initial cost of more than \$5,000 and an estimated useful life in excess pf.two year^;rSuch|as^ets,ar.e..)^orded.,at.historicalicpst. if purchased. Depreciation is provided using the straight-line method and begins in the year following the year of acquisition or completion. Estimated useM. lives are. as follows:

;;∎

| Facilities and structures | 75 years   |
|---------------------------|------------|
| Furniture and equipment   | 5-20 years |
| Sewer rehabilitation      | 50 years   |

Costs of repairs and maintenance that do not significantly extend the useful life of assets are charged to operations.

Deferred, Outflows-Deferred outflows represent the fair value of derivative instruments that are deemed to be effective hedges, unamortized loss on bond refundings and differences between estimated and actual investment earnings related to pensions, and changes in actuarial assumptions related to pensions.

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Deferred Inflows-Deferred inflows represent the differences between projected and actual actuarial experience related to pensions.

Net Position-Net position is composed of net earnings from operating and nonoperating revenues, expenses, and capital grants. Net position is displayed in three components: net investment in capital assets, restricted for capital projects, and unrestricted. Net investment in capital assets consists of all capital assets, net of accumulated depreciation and reduced by outstanding, debt, net of debt service reserve, and unspent bond proceeds. Restricted for capital projects consists of assets on which constraints are placed by external parties (such as lenders and grantors) and laws, regulations, and enabling legislation, reduced by liabilities and .deferred inflows of resources related to those assets. Unrestricted consists of the net amount of, all other assets, deferred outflows, liabilities, and deferred inflows not categorized as cither of the above.

Employee Benefits-Employee benefits are granted for vacation and sick leave, workers' compensation, and health care. Unused vacation leave is accrued and may be carried over for one year. Sick leave is accumulated at the rate of one. day for each month worked, up to a maximum of 200 days. Severance of employment terminates all rights to receive: compensation for any unused sick leave. Sick leave pay is not accrued. Employee:benefit claims outstanding, including claims incurred but not **•**., reported, are estimated and recorded as- liabilities. ..

Employees are eligible to defer a portion of their salaries until future years under the City's<sup>1</sup> deferred compensation plan created in accordance with Internal Revenue Code Section 457. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency. The plan is administered by third-party administrators who maintain the investment . portfolio. The plan's assets haveibeen placed in trust accounts with the plan administrators for the exclusive .benefit of participants and their beneficiaries and are not considered assets of the City.

The City is^subject the State Unemployment Compensation Act and has elected the reimbursing employer option for providing unemployment insurance benefits for eligible former employees. Under . this option, the City reimburses the State, for claims paid by the State.

Bond Issuance Costs, Bond Premiums Discounts, and Refunding Transactions-Bond issuance costs related to bond insurance and bond premiums discounts are deferred and amortized over the term of the related debt, except in the case of refunding debt transactions where the amortization period is . over the..term of the refunding or refunded, debt, whichever is shorter. •

Capitalized Interest-Interest expense is capitalized during construction of those capital projects that are paid for from the bond proceeds and arc being amortized over the depreciable life of the related assets on a straight-line basis. Interest expense capitalized for 2015 and 2014 totaled \$7.9 million and \$4.4 million, respectively.

Capital Grants-Capital grants are reported as contributed revenue in the statements of revenues, expenses, and changes in net position.

Revenue Recognition-Sewer service revenue is billed as a percentage of the City's water billings and is recorded as revenue when the water is consumed by the customers. Of the accounts receivable balances, \$33.1 million and \$31.5 million represent revenue recognized on sewer service that had not yet been billed to customers at December 31, 2015 and 2014, respectively. Unearned revenue represents amounts collected from nonmetered customers prior to usage.

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Revenues and Expenses-The Sewer Fund distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from.providing services and producing and delivering goods in connection with the Sewer Fund's principal ongoing operations. The principal operating revenues of, the Sewer Fund are chargesitocustomers for sales and services. ;Operating expenses include the cost of sales and services,<sup>1</sup> administrative expenses;'and depreciation and amortization on capital assets.- All revenues and expenses hot meeting this''definitioff are reported as nonoperating revenues and.expenses.  $\blacksquare \blacksquare \ = \ y \blacksquare \ ::, \ <\blacksquare\blacksquare$ 

Adopted AccountingiStandards-GASB Statement No.:68; Accounting and Financial Reporting for

Pensions ("GASB :68"), establishes new financialireportingircquir'ernents for most governments that

provide their employees'with .pension benefits^through-these types.ofplans:-.GASB 68' will be: effective for the Sewer Fund beginning with its year ending December 31, 2015. GASB 68:replaces the requirements of GASB Statement No. 27, Accounting for Pensions by State and Local Governmental Employers and GASB' StatementiNo.. 5Q, PensiomPisclbsures\ as they relate: to governments uhat 'provide pensions thrOugfipensiomplansiadministered' as trusts' or similar arrangements thatjmeet certain "criteria; GASBi 68 requires governments providing defined benefit pensions'to recognize their long-term •obligation, for pension'benefits 'as; a'liabilityj for ^he'first'time^aridUo'moreXomprehensively-and "comparably measure the'anriual costs ofp'ensionibbnefits.^The Statement alsoenhances 'accountability and transparency through revised and new note disclosures and required supplementary information (see RSI and Notes 6 and 11). Beginning Net Position at January 1, 2015 was restated as a result of implementation of thisstandard-(sec. Note'l 11).  $\frac{2}{2} \left[ \frac{1}{2} \left[ \frac{1}{2}$ 

GASB'StatementNoVT^-Pension-Transition-for- Gontr-ibutions MaU&Subse'quent 'to 'the'Measurement Date^an amendment'-ofGASB 'Statement No:' t5#l("GASB 7'l")j'relates to; amounts! associated'with tontributions^if any, made by a'State or-local government .'employer or nonemployer-contributing entity • to a<sup>1</sup> defined: benefitipension;plan after/the measurement date of thei government' s-beginning! net pension liability. GASB 71 will be effective for the Sewer Fund beginning with its year ending December 31, 2015;This statement amends paragraph<sup>1</sup>137 of GASB 68 to require that,' at'traiisitiony a government recognizee beginning'deferred'outflowofresources'foritsipen subsequent to the measurement-date of the beginning net'p^risi^^

balances for other deferred outflows of resources and deferred inflows of resources related to pensions be reported at frans'iti'6n'6nly-if itMs'praetic arnbunfsVThere%'as noWmpact on the Sewer Fund's Financial- Statement as a result of th'e-impremehfatioh bf GASB' 7i.<sup>1</sup> • <sup>1</sup>

Upcoming Accounting Standards-Otheraccounting-'standards that the'-Sewer Fund-is currently reviewing for applicability and potential impact on the financial statements include:

'GASB Statement No. • 72, fair Value Measurement and Application ("GASB 72")-iaddress'es accounting

'andTinahcial-reporting issues related to-fair Value-nieasurements] GASB -7'2'willbe effective for the

Sewer Fund beginning with its year ending December 31, 2016. This Statement provides guidance for

determining a fair value measurement for financial reporting purposes and the related disclosures. This

Statement requires agovernment to use^aluation'technique's'thafare appropriate under the"'-"

circumstances and for which sufficient data arc available to measure fair value. This Statement

establishes a hierarchy of inputs to valuation techniques used to measure fair value. This Statement also

requires disclosures to be made about fair value measurements, the level of fair value hierarchy, and

valuation techniques. """  $\blacksquare$  <sup>1</sup>

GASB Statement No. 74, Financial Reporting for Postemploymenl BenefitPlans Other Than Pension Plans ("GASB 74"), replaces Statements No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, and No. 57, OPEB (Other Postemployment Benefits) Measurement by Agent Employers and Agent Multiple-Employer Plans. GASB 74 will be effective for

the Sewer Fund beginning with its year ending December 31, 2017. Included are requirements for defined contribution OPEB plans that replace the requirements for those OPEB plans in Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, as-amended, Statement 43, and Statement No. 50, Pension Disclosures. GASB 74 also includes requirements to address financial reporting for assets accumulated for purposes of providing defined benefit OPEB through OPEB plans that are not administered through trusts that meet specified criteria.

GASB Statement No. 76, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments ("GASB 76"), supercedes Statement No. 55, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments. GASB 76 will be effective for the Sewer Fund beginning with its year ending December 31,2016.

GASB Statement No. 79, Certain External Investment Pools and Pool Participants ("GASB 79"), addresses accounting and financial reporting for certain external investment pools and pool participants. It establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes. GASB 79 establishes additional note disclosure requirements for qualifying external investment pools that measure all of their investments at amortized costs for financial reporting purposes and for governments that participate in those pools. GASB 79 will be effective for the Sewer Fund beginning with its year ending December 31, 2016.

GASB Statement No. 82, Pension Issues-An Amendment of GASB Statements No. 67, No. 68 and No. 73 ("GASB 82"), addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (Plan member) contribution requirements. GASB 82 will be effective for the Sewer Fund beginning with its year ending December 31, 2017.

## RESTRICTED AND UNRESTRICTED CASH, CASH EQUIVALENTS, AND INVESTMENTS

Cash Equivalents and Investments-As of December 31, 2015, the Sewer Fund had the following cash equivalents and investments (in thousands):

| Investment Maturities (in Years)                                  |                 |                       |                      |                          |                 |
|---|-----------------|-----------------------|----------------------|--------------------------|-----------------|
|   | More            |                       |                      |                          |                 |
|   | Less than 1 1-5 | 5 6-                  | 10 than 10           | Fair Value               |                 |
| U.S. agencies<br>Commercial paper<br>Certificates of deposits     | \$ 40,356       | <b>5</b> ■ \$123,026  | \$ 4,007 \$4,        | ,288 \$171,677<br>3      | 2,379 ' 32,379  |
| and other short-term<br>Corporate bonds<br><u>Municipal bonds</u> | ]               | 990<br>1 <u>2,603</u> | 7,897<br><u>99</u> 4 | 4,026 12,913<br>4 13,597 | 107,551 107,551 |
| Subtotal  | \$ 180,286      | \$ 136,619            | \$ 11,904 \$         | 9,308 338,117            |                 |
| Share of City's pooled funds                                      |                 |                       |                      | <u>68,680</u>            |                 |

<u>Total</u>

\$ 406,797

- 19-

Asiof December 31, 2014, the Sewer Fund had the following cash equivalents and investments;(in thousands):

|   | <ul> <li> Investment-Ma</li> </ul>   | turities;(in <sub>:</sub> Years) <sub>:</sub> y\'                       |   |
|---|--|---|---|
|   | :': -<br>Less than 1 1-5,  | : More,<br><sub>;</sub> 6-10 than 10, Fair Va                           | alue  |
| U.S. agencies   | \$ 7,129 \$280,282   |   | \$34,355 \$ -<br>\$321,766                  |
| Comrnercial <sub>(paper</sub>   | 60,368 ∎ "   |   | , , 6,0,368                                 |
| 'Certificates'ot deposi<br>and other short-terr<br>'Corporate-bonds <sup>!: :</sup><br><u>Municipal bonds</u> | n 81.944; 'v<br>''''' 5\54&" "3,982'   | ,   | ':: 81,944<br>'''∎ 9,522<br>≟∎∎'            |
| <u>5,809</u>  |  |   |   |
| Subtotal ;' <sup>;</sup> '  | "] \$1;57,98'6;" \$287,068\$'34,3  | 55 <sup>!,y</sup>   | "[ '479,409                                 |
| <sup>!,i</sup> -';ShareafCity,'s^o6 <sup>:</sup> led  | ;mnd^ ":iiii;;<: J !!!!!; !!!J!!!!!!!  | $: 1n; virn : irv \land 44$   | 1,740                                       |
| • <sup>2</sup> <b>.</b>   | <[>.'.   ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  | j,, ,T7r  |   |
|   | $\underbrace{\texttt{me:m*!}}_{i!v.ri \ v.i \ mkjh\ i\ vi.j:i}} \underbrace{\texttt{me:m*!}}_{.\bullet' bui: < i\ r^{j<}}$ | <u>= :=£::∎n11</u> ∎∎∎! ■ ^1<br><; <n^(\ i±i="">∎.jjriu; 'r; . •</n^(\> | <u>ri;. \$524,149</u><br>'' ;∎)<•'jV/mi>    |
| tj.S. agenciesTnclude'in<br>Association, Federal,H  | vcstmerits in government-sponsored<br>ome. Loan :B^^   | enterprises, such as Federal  | National Mortgage                           |
| interest Raite 'Ri<br>interest  | sk-rVAsi a means of Ti   | m^ losses arising'from  | .ris.irig <http: 'from.ris.irig=""></http:> |
|   | ment policy.requires that myestnient   | s.generally.rp^ have a ma   | tanty .datc in                              |
|   | 'lhe date ofpi^i^eV'Certairi' other my   |   |   |
|   | -'i UJi) Li''OLfA/lv '.,-iu ','<)>   |   |   |

specinc provisions of applicable: pramancjes...? r, ;!:. , - v,

Credit Risk-With regard to credit risk, the Code limits the investments in securities to:

- 1) Interest-bearing general obligations of the United States and the State of Illinois;
- 2) United States treasury bills 'andotner non-interest bearing general obligations of the United States or United States government agencies when offered for sale at a price below the face value of same, so as tp.afford.the.city a return .on, such investment in lieu of interest;
- (3);; TaxTanticipation warrants, municipal bonds, nptes,,cgmmercial paper or other instruments representing a debt obligation issued by the City of Chicago;
- 4) Commercial paper which: (1) at the time of purchase, is rated in the two: highest classifications by at least two accredited ratings agencies; and (2) matures not more than 270 days after the date of purchase;

5) Reverse repurchase agreement if: (1) the term does not exceed 90 days; and (2) the maturity of the investment acquired with the proceeds of the reverse repurchase agreement does not exceed the expiration date of the reverse repurchase agreement; Reverse repurchase agreements may be transacted with primary dealers and financial institutions, provided that the City has on file a master repurchase agreement;

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- 6) Certificates of deposit of banks or savings and loan associations designated as municipal depositories which are insured by federal deposit insurance; provided that any amount of the deposit in excess of the federal deposit insurance shall be collateralized as noted in Custodial Credit Risk-Cash and Certificates of Deposit below;
- 7) Bankers acceptance of banks whose senior obligations; at the time of purchase, are rated in either the AAA or AA rating categories by at least two accredited ratings agencies;
- 8) Tax-exempt securities exempt from federal arbitrage provisions.applicable to investments of proceeds of theCity's tax-exempt debt obligations;
- Domestic money market mutual funds regulated by and in good standing with the' Securities and Exchange Commission; provided that such money market mutual funds' portfolios are limited to investments authorized by this section;
- 10) Any other suitable investment instrument permitted by state laws governing municipal.investments generally, subject to the reasonable exercise of prudence in making investments of public funds;
- Except where otherwise restricted or prohibited, a non-interest-bearing savings account, non-interest-bearing checking account or other non-interest bearing demand account established in a national or state bank, or a federal or state savings and loan association, when, in the determination of the treasurer, the placement of such funds in the non-interest bearing account is used as compensating balances to offset fees associated with that account that will result in cost savings to
  - the City;'
- 12) Bonds of companies organized in the United States with assets exceeding \$500.0 million that, at the time of purchase, are rated not less than A-, or equivalent rating, by at least two accredited ratings agencies;
- 13) Debt instruments of international financial institutions, including but not limited to the World Bank and the International Monetary Fund, that, at the time of purchase, are rated within 4 intermediate credit ratings of the United States sovereign credit rating by at least two accredited ratings agencies, but not less than an A-rating, or equivalent rating. The maturity bf investments authorized in this subsection shall not exceed 10 years. For purposes of this subsection, an
  - '-" "international financial'institution" means a financial institution that has been established or chartered by more than one country and the owners or shareholders are generally national governments or other international institutions such as the United Nations;
- 14) United States dollar denominated debt instruments of foreign sovereignties that, at the time of purchase, are rated within 4 intermediate credit ratings of the United States sovereign credit rating by at least two accredited ratings agencies, but not less than an A-rating or equivalent rating;

15) Interest-bearing bonds of any county, township, city, village, incorporated town, municipal corporation, or school district, of the State of Illinois, of any other state, or of any political subdivision or agency of the State of Illinois or of any other state, whether the interest earned thereon is taxable or tax-exempt under federal law. The bonds shall be registered in the name of the city or held under a custodial agreement at a bank. The bonds shall be rated, at the time of purchase, not less than A-, or equivalent rating, by at least two accredited rating agencies with nationally recognized expertise in rating bonds of states and their political subdivisions;

21 -

(16), Bonds registered and regulated by the Securities and Exchange Gomrission and for which the full

. faith-and.crcdit.of the-State of Israel is pledged for payment;: provided.that the bonds have an A-. rating or above or equivalent rating by at leasttwo accredited\* ratings, agencies;-

(17) Bonds, notes, debentures, or other similar obligations of agencies of the United States rated, at the

time of purchase, no less than-AAA by.'at least two accredited'rating agencies. ;

Total holdings across all funds held by the treasurer shall have no less than an overall average rating of • Aafon a.quarterly:basis, as:rated by two accredited-rating agencies.-A schedule summarizing the Sewer Fund's

exposure to credit risk as of Deeembeil'3<lv2015 and 2014<sup>1</sup>,:is-.as\*follows: (iri>mousands):

| Quality Rating                  | g=,,;  |                                  | 2015              | <b>2014</b> |
|---------------------------------|--|----------------------------------|-------------------|-------------|
| I•.:"•!. <b>=</b> : - '.•h;m'!  | iff : ./ywy . ;.u,-ii '.,.•:>:!.; ::oi;!/• •': | <b>■</b> .<>:•.'t'j              | <i>m.:;</i> /     |             |
| Aaa/AAA                         | ·····,r· · ··· ··, <sup>-</sup> , ···          | ,S. 19,407                       | \$ 15,784         |             |
| Aa/AA                           |  | 16                               | 5,188 318,308     |             |
| ■A/A, ifIV,/ ■:•:',.[<br>P.1/A1 | - : ,^rn-a ∎;>∎∎,:r- ∎n,^,- <sub>y:</sub> ^ -! | ri,::m- :r3 <sup>51</sup> - , ,3 | 3,005<br>' 60 368 | 2           |
| Not rated ' ^                   | <b></b> '• <b>_</b> _'' • <b>_</b> "-          | <u>15</u>                        | 2,571 81,944      | ,<br>,      |
| <u>Total ,,,,,;,,</u>           |  | <u>.</u> \$338,1                 | 17 \$479,409      |             |
|                                 |  |                                  |                   |             |

The Seweri Fund.participates in

includes amounts

from otherCity funds.and iSitnaintained by,the City.Treasurer. Individual;cash; or. investments are riot specifically identifiable to any participant in the pool. The Treasurer's pooled fundus included in the City's financial statements. :;:•!;:;;!:::: ').{)'∎) C:  $J; - \dots V.K \setminus J - \langle i \rangle = b; j \cup j \rangle, = j, = j$ ;rn-:., ii; (i: i

^Custodial Credit Risk-Cash .and Certificate^

of a bank

failure, the City's Deposits may not be returned. The City's Investment Policy states, that in order to protect the City public fund deposits, depository institutions are to maintain collateral pledges on City

, deppsitS; and ieer tificates of deposit during the ^ermpff the deposit--, h-t y^.-^m r--<"t '∎' i :

For certificates, of .deposit pf^banksjor sayings and; loan associations designated as.municipal depositories ., which arc insured byifederaldeposit insurance, any/amount of the jdeppsit in excess pf the federal deposit insurance shall be either: (1) fully collateralized at least 102 •percent by: (i) marketable U.S. v. government.securities m constituting .the -direct and general .obligation of any agency.pr instrumentality, of the, United States; or (iii) bonds, notes or other securiu's.co.nstitating .a,dire,ct and general pbligation of any county, township, city, village, incorporated town, municipal corporation, or school district, of the State of Illinois or of .anyjjther state,-pr,pfj^

State of Illinois: or-any other; state which

arc rated in cither thc;AAA.or AA rating categories by at leasttwo:accredited ratings agencies and maintaining such rating during the term;of such investments; (.2)-se.cured by .a.corpprate.surety bond issued by an insurance company licensed to do business in Illinois and having a claims-paying rating in the.top rating category;as rated by a nationally recognized,statistical rating organization and maintaining suclv rating during the term of such investment; or (3) fully collateralized at-least. 1.02 percent by an irrevocable letter of credit-issued in favor of the City of Chicago by the Federal Home Loan Bank,

• -provided^that,the. Federal Home Loan Bank's short-term,debt obligations are ratedrin,the:highest rating category by at least one accredited ratings agency throughout the-.term of the certificate, of deposit.

-22 -

The collateral required to secure City funds must be held in safekeeping and pursuant to collateral agreements which would prohibit release or substitution of pledged assets without proper written notification and authorization of the City Treasurer. The final maturity of acceptable collateral pledged shall not exceed 120 months.

The bank balance of cash and certificates of deposit with the City's various municipal depositories was \$626.6 million. 98.3 percent of the bank balance was either insured or collateralized with securities held by City agents in the City's name. \$10.5 million was uncollateralized at December 31, 2015, and thus was subject to custodial credit risk.

A schedule summarizing the investments reported in the basic financial statements as of December 31, 2015 and 2014, is as follows (in thousands):

2015 2014

|  | 2013 2014                  |
|--|----------------------------|
| Per Note 2:<br>Investments-Sewer Fund                    | \$338,117 \$479,409        |
| Investments-City Treasurer pooled fund                   | 68,680 44,740              |
| / <u> </u>   | <u></u>                    |
|  | <u>\$406,797 \$524,149</u> |
| Per financial statements:                                |                            |
| Restricted investments-current                           | \$200,191 . \$103,473      |
| Restricted investments-noncurrent                        | 34,044 289,041             |
| Unrestricted investments                                 | 41,974                     |
| Investments included as cash and cash equivalents on the |                            |
| statements of net position s                             | 172,562 89,661             |
|  | \$406,797 \$524,149        |

## **RESTRICTED ASSETS AND ACCOUNTS**

Sewer service revenues are pledged to pay outstanding Wastewater Revenue Bonds. The ordinances authorizing the issuance of outstanding Wastewater Revenue Bonds provide for the creation of separate accounts into which net revenues, as defined, or proceeds to be credited, are as follows:

Wastewater Revenue Bonds, Refunding Bonds Series 1993 (the "Senior Lien Bonds"), and 1998A Wastewater Capital Appreciation Bonds:

Bond Principal and Interest Account-No later than 10 days prior to each principal or interest payment date, an amount to pay principal; premium, if any; and interest becoming due, whether upon maturity, redemption, or otherwise.

Debt Service Reserve Account-For each series, an amount equal to the least of (i) the maximum annual debt service requirement; (ii) 10% of the original principal amount, less original issue discount; or (iii) 125% of the average annual debt service requirement. The required balance in this account was met by the purchase of surety bonds.

Construction Account-Proceeds of the Senior Lien Bonds were deposited in this account for the purpose of paying construction costs of projects as defined in the ordinance.

Wastewater Revenue-Bonds, Series 2015, 2014, 2012, 2010, 2008, 2001; Refunding Series 2004, and Refunding Series-2006 (the "Second Lien Bonds"): -.

Bond Principal and Interest Account-No later than the business day immediately preceding January I and July 1, an amount to pay principal; redemption premium, if any; and interest on the bonds. The City is also required to make:dcpbsits in the Second Lien Bonds'-account to meet other payment-obligations .under the'indenture.<sup>3</sup> authorizingiSecond Lien Parity:Bonds.-:<sup>3</sup> -»\\.•• u,-:; •== '. =-''-'= >u. >i;<<>=• o 'v

Debt Service Reserve Account-For each series, an amount equal ito. the.-least of. (i) the-highest-mture debt service requirement; (ii) 10% of the original principal amount, less original issue discount; or  $\cdot$ (iii)'l;25% of the average'annual:debt service requirement. -The required.'balance.in thi's acc'ount was met by the purchase of a surety bond.

^ConstructibiPAccount-Proceeds of the Second Lien Bonds were deposited in this account for the purpose of paying construction cost of projects as defined in the ordinance.

Sewer Rate Stabilization Account-Any net revenues.remaining after providing sufficient funds for all required deposits in the bond accounts may be transferred'to'the sewer rate stabilization account upon the direction of the City to be used for any lawful purpose of the Sewer Fund.

For accounts established by ordinances with balances, the amounts as of December 31, 2015 and 2014, are as follows (in thousands): <sup>ij</sup>.

#### 2014

## \$340,016

.•>

## - 24 -

2015 2014

## LONG-TERM DEBT

As of December 31, 2015 and 2014, long-term debt consisted of the following (in thousands):

|  | 2013 20      | 17       |        |
|--|--------------|----------|--------|
| \$109,998 Scries 1998A Senior Lien Wastewater Transmission Revenue Bonds   |              |          |        |
| issued March 18, 1998, due through 2030; interest at 4.0% to 5.25%<br>\$73,100 Scries 2001 Second Lien Wastewater Transmission Revenue Bonds | \$<br>35,168 | S 35,168 | 8      |
| issued December 6, 2001, due through 2031; interest at 4.0% to 5.5%  | 58,575       | 62,095   |        |
| \$61,925 Series 2004B Second Lien Wastewater Transmission Revenue Bonds  |              |          |        |
| issued July 29,2004, due through 2016; interest at 3.0% to 5.25%   | 16,185       | 29,400   |        |
| \$155,030 Series 2006A & B Second Lien Wastewater Transmission Revenue<br>Bonds issued November 1, 2006, due through 2039; Scries A          |              |          |        |
| interest at 4.0% to 5.0% (4.0% at December 31, 2036);  |              |          |        |
| Series B interest at 4.0% to 5.0%  | 122,240      | 130,945  |        |
| \$167,635 Scries 2008A Second Lien Wastewater Transmission Revenue Bonds   |              |          |        |
| issued November 5, 2008, due through 2038; interest at 3.5% to 5.5%  | 150,485      | 153,820  |        |
| 5332,230 Series 2008C Second Lien Wastewater Transmission Revenue Bonds  |              |          |        |
| (2004A Refunded) issued October 16, 2008, due through 2039;<br>mteTestrate;intcrestat4.0%to5.0%asofDecember31,2015                           | 332,230      | 222 220  |        |
| \$275,865 Series 201 OA & B Second Lien Wastewater Transmission Revenue  | 332,230      | 552,250  |        |
| Bonds issued November 16, 2010, due through 2040; interest at 2.0% to 6.0%   | 266,105      | 269,135  |        |
| \$1,546 Illinois Environmental Protection Agency Loan Agreement  | ŕ            | ŕ        |        |
| signed May 28,2008, due through 2027; interest at 2.50%  | 1,027        | 1,101    |        |
| \$276,470 Series 2012 Second Lien Wastewater Transmission Revenue Bonds  | 266 705      | 71 (()   |        |
| issued September 13, 2012, due through 2042; interest at 3.0% to 5.0%<br>\$15,000 Illinois Environmental Protection Agency Loan Agreement    | 266,705      | 2/1,660  |        |
| signed January 20, 2010, due through 2031; interest at 0%  | 11,858       | 1        | 12,623 |
| \$17,812 Illinois Environmental Protection Agency Loan Agreement   | 11,000       |          | 12,025 |
| signed October 8,2010, due through 2032; interest at 1.25%   | 15,763       | 16,590   |        |
| \$17,564 Illinois Environmental Protection Agency Loan Agreement   |              |          |        |
| signed September 22,2011, due through 2033; interest at 1.25%  | 15,952       | 16,763   |        |
| \$ 15,000 Illinois Environmental Protection Agency Loan Agreement<br>signed October 2,2012, due through 2034 interest at 2.295%              | 14,400       | 15 000   |        |
| \$292,405 Scries 2014 Second Lien Wastewater Transmission Revenue Bonds  | 14,400       | 15,000   |        |
| issued September 22,2014, due through 2044; interest at 3.0% to 5.0%   | 292,405      | 292,405  |        |
| \$87,080 Scries 2015 Bonds issued October 19, 2015   | ·            |          |        |
| due through 2039; interest at 2.59% to 6.04% 87,080  |              |          |        |
|  |              |          |        |

#### Total revenue bonds

1,686,178 1,638,935

| Add accretion of Series 1998 Capital Appreciation Bonds | 54,194           | 49,615 |
|---|------------------|--------|
| Add unamortized net bond (discount)/premium             | 83,551 61,306    |        |
| Less current portion (payable from restricted assets)   | (46,427) (39,837 | 7)     |

Long-term portion- net

<u>\$ 1,777,496</u> \$ 1,710,019

25

During the years ended December 31, 2015 and 2014, long-term debt changedias follows (in thousands)

Revenue bonds Accretion of series 1998 capital appreciation bonds Unamortized net discount/premium

Total revenue bonds

 Balance '
 Image: marked constraints
 Balance ; Duewithin

 January 1,
 December 31, One

 2015
 Additions
 Reductions

 49,615.61,306.
 2015 Year

 4,578 26,735.
 54,193, ,83,551

.\$(39,83,7)t \$1,686,17?, \$46,427 (4,490),

<u>\$1,749.856</u> <u>\$118,394</u> .,<u>\$.(44,327)</u>, <u>\$1,823,923....</u> <u>\$46,427</u>

Revenue bonds Accretion of series 1998 capital<sup>2</sup>,<•== = appreciation bonds Unamortized net discount/premium

Total revenue bonds Balance ". January 1, 2014 Additions

\$1,369,459 \$307,405

<u>45,272 .-. ' 4,343</u> 34,706 .• .- 29,792

S-1V449.437 'S34W540'

■ :;.■] I v...: ;r..i,::>: i 1;:

#### Balance Due within ..' December 31, One Reductions- J i2014 Year

\$1,638,935 \$39,837

; ' 49,615 61,306

<u>\$(37,929)<sup>±</sup> (3,192)</u>

#### 

Interest expense includes amortization,of5therlp,ss,,p^ million; less amortization of net bond discount/premium of \$4.5 millioni and \$3.2, million, respectively; and accretion of Series 1998 capital appreciation bonds of \$4.6'million and \$4.3'million,<sup>1</sup> respectively.

As defined in the ordinances, net revenues are pledg'ed^foir'tti'e'p'ayhiejrit' of principal arid interest on the bonds. The ordinances require that netrey.enues available fpr,bpnds (efl^l,ri,f5^,of,me;Seriior lien debt service requirement and that net revenues available for bonds,equalthe sum of 100%,of the aggregate annual senior lien debt service requirement and '1'00% of the aggregate annual-second-lien debt service requirement: The above requirements were'met for 2015'and 2014'.'

Rate Increases-Sewer service rates are set by ordinance. The sewer service, charge.is, established in an amount designed to pay the costs of Sewer Fund operations-and capital improvements, including any related debt service. During 2015 and 2014, the charge for sewer service was increased and was an ' amount equal-to 100% of the gross amount charged for water service, whether such-water service is metered or nonmetered. The rate charged for water was increased and was \$28.52 per 1,000 cubic feet and \$24180 per 1,000 cubic feet during 2015 arid 2014, respectively. ; \

Issuance of Debt-In October 2015, the City converted \$332.2 million outstanding of the Series 2008c Second Lien. Wastewater Transmission Revenue Bonds to fixed rate Bonds at ^premium. The bonds have interest rates ranging from 4.0 percent to 5.0 percent and maturity dates ranging from January 1, 2017 to January 1, 2039. The net proceeds of \$357.0 million will be used to pay the mandatory tender prices of the Series 2008c bonds (\$332.2 million) and to fund debt service reserve (\$24.8 million).

Second Lien Wastewater Transmission Revenue Bonds, Series 2015 (\$87.1 million) were sold at par in October 2015. The bonds have interest rates ranging from 2.591 percent to 6.042 percent and maturity dates from January 1, 2018 to January 1, 2039. The net proceeds of \$86.4 million were used to refund the line of credit notes used for the swap termination (\$70.2 million), to fund debt service reserves (\$10.5 million), and to fund capitalized interest \$5.7 million.

Following is a schedule of debt service requirements to maturity (in thousands):

| Years Ending<br>December 31 | Total Debt<br>Principal Interest Service |  |
|-----------------------------|--|--|
| 2016                        | \$ 46,427 \$ 77,342\$ 123,769            |  |
| 2017                        | 46,98881,654128,642                      |  |
| 2018                        | 51,44679,480130,926                      |  |
| 2019                        | 53,90477,059130,963                      |  |
| 2020                        | 49,53081,862131,392                      |  |
| 2020                        | 2021-2025277,590380,106657,696           |  |
| 2020                        | 2026-2030294,083333,145627,228           |  |
| 2020                        | 2031-2035377,695188,511566,206           |  |
|                             |  |  |

## 2020 2020

# $\frac{2036\text{-}2040386,75577,241463,996}{2041\text{-}2044101,7608,678110,438}$

## Total \$1,686,178 \$1,385,078

## \$3,071,256

#### Derivatives

Pay-Fixed, Receive-Variable Interest Rate Swaps:

Objective of the Swaps-In order to protect against the potential of rising interest rates, the Sewer Fund has entered into various separate pay-fixed, receive-variable interest rate swaps at a cost less than what the Sewer Fund would have paid to issue fixed-rate debt.

| Governmental Activities    | Changes in F<br>Classification       | Fair Value<br>Amount | December<br>Classification    | <u>31, 2015</u><br>Amount Notional |
|----------------------------|--------------------------------------|----------------------|-------------------------------|------------------------------------|
| Cash flow hedges-pay-fixed |                                      |                      |                               |                                    |
| interest rate swaps        | Deferred outflow <u>of resources</u> | <u>\$(71,861)</u>    | Deferred outflow of resources | <u>\$ \$</u>                       |

During 2015, the city terminated the swap associated with series 2008c second lien wastewater transmission variable rate revenue refunding bonds; the termination payment amounted to \$70.2 million. UTILITY PLANT

During the years ended December 31, 2015 and 2014, utility plant changed as follows (in thousands):

Balance Disposals January 1, and 2015 Additions Transfers'

Balance December 31, 2015

Utility plant not depreciated: .■ . Land anddand rights ., ,, Construction in progress

Total utility plant not depreciated

Utility plaritb'cing depreciated: Facilities and'structures Furniture and equipment

Total utility plant being depreciated

Less accumulated depreciation: Facilities and structures Furniture and equipment

<sup>;;</sup> Total accumulated depreciation<sup>;</sup>

Utility plant being depreciated-net

Utility plant-^-net <u>560 25,703</u>

<u>26,263</u> <u>\$ "-96,776</u>

<u>96,776</u>

(30,140) (30,140)

\$

<u>\$ 560 92,339</u>

#### (15,983) (1,621)

92,899

224,777

(474,136) (21,817) (35,414) (2.017)

2,494,910 224,777 (17,604) 2,702,083 1,561 (495,953) (37,431) 1,561-

(509,550) <sup>≤</sup>(22,273) ■(■16,043> 187,346,-

**•**(531,823)

<u>; -2,170,260</u> Disposals " and Transfers

<u>\$2,263,159</u> Additions

Balance December 31, 2014

Utility plant not depreciated: Land and land rights Construction in progress

Total utility plant not depreciated

Utility plant being depreciated: Facilities and structures Furniture and equipment

\$ ■ ■ 560'., •■\$,,-:-25,703

#### <u>16,854</u>

2,252,341 32,742

2,285,083

#### (16,294) (16,294)

\$::< - 560 (56,944) (1,955) 2,671,508 30,575

2,462,714 32,196

Total utility plant being depreciated

. 16,294., . 25,703

. 25,703 26,263

2,462,714 32,196

#### (58,899) 2,494,910

Less accumulated depreciation: Facilities and structures Furniture and equipment

Total accumulated depreciation

Utility plant being depreciated-net

Utility plant net 1,717 (474,136) (21,817)

(495.953)

1,998,957 (32,072) (1,989)

<u>(34,061)</u>

234.665 1,717

(442,064) (21,545)

(463,609)

1,821,474 (57,182)

<u>\$1,838,328</u> <u>\$260.368</u> <u>\$(73,476)</u> <u>\$2,025,220</u>

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## PENSION PLANS

General Information about the Pension Plan

Plan Description-Eligible Sewer employees participate in one of two single-employer defined benefit pension plans (Plans). These Plans-are: the Municipal Employees' Annuity and Benefit Fund of Chicago (Municipal); and the Laborers' and Retirement Board Employees' Annuity and Benefit Fund.of Chicago (Laborers'). Plans are administered by individual retirement boards of trustees comprised of City officials'Or.their designees and of. trustees elected by plan.membcrs. Certain employees of the Chicago Board of Education participate in the Municipal Employees' Fund or the Laborers' and Retirement Board Employees' Annuity and Benefit Fund. Each Plan issues a publicly available financial report that includes financial statements and required supplementary information that can be obtained at www.meabf.org <a href="http://www.labfchicago.org">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org/">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org/">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org/">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org/">http://www.labfchicago.org</a> <a href="http://www.labfchicago.org/">http://www.labfchicago.org/</a> <a href="http://www.labfchicago.org/">http://www.labfchicago.org

Benefits Provided-The Plans provide retirement, disability, and death benefits as established by State law. Benefits generally vest after 10 years of credited service. Employees qualify for an unreduced retirement age minimum formula annuity based on a combination of years of service and age of retirement. Employees may also receive a reduced retirement age minimum formula annuity if they do not meet the age and service requirements for the unreduced retirement age annuity. The requirement of age and service are different for employees who became members before January 1, 2011, and those who became.members on or after January 1, 2011. The annuity is computed by multiplying

the final average salary by a percentage ranging from 2.2 percent to 2.5 percent per year of credited service. The final average salary is the employee's highest average.annual salary for any four consecutive years within the last 10 years of credited service for participants who became members before January 1,2011 and any eight consecutive years within the last 10 years of credited service for participants who became members on or after January 1, 2011. '

Benefit terms provide for annual adjustments to each employee's retirement allowance subsequent to the employees' retirement date. For participants who became members before January 1, 2011, the annual adjustments for Municipal and Laborers are 3.0 percent, compounded, for annuitants born before 1955 and 1.5 percent, simple, born in 1955 or later. For participants that first became members on or after January 1, 2011, the annual adjustments are equal to the lesser of 3.0 percent and 50 percent of CPI-U of the original benefit.

Contributions-Historically State law required City contributions at statutorily, not actuarially, determined rates. State law also requires covered employees to contribute a percentage of their salaries. The City's contribution was calculated based on the total amount of contributions by employees to the Plan made in the calendar year two years prior, multiplied by 1.25 for the Municipal, and 1.00 for the Laborers'. The City's contributions are budgeted in the same year as the applicable levy year for the property taxes funding the contributions. The City's contributions are then paid to the pension funds in the following year (which is when the levy property taxes are collected and paid to the City by the Cook County Treasurer).

The City's contributions to Municipal and Laborers' are determined pursuant to the formulas set forth in the Illinois Pension Code (the Pension Code). Pursuant to Public Act 098-641 (P.A. 98-641), the City's contributions to Municipal and Laborers' were scheduled to increase beginning in 2015; however, in July 2015 the Circuit Court of Cook County (Circuit Court) determined P.A. 98-641 to be unconstitutional. As a result of such determination by the court, the provisions of the Pension Code governing the City's contributions to Municipal and Laborers' have reverted to the provisions in effect prior to the enactment of P.A. 98-641. Furthermore, in March 2016, the Illinois Supreme Court upheld the ruling made by the Circuit Court.

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The contribution to both pension plans from the Sewer Fund was \$4.4 million for the year ended December 31, 2015.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions-At,December 31, 2015, the Sewer Fund reported a liability of \$663.9 million for its proportionate share of the net pension,liability. The net pension liability was measured as'of December 3'1, 201-5, iand the total! pension.li'abilityused:toicalculate:the net pension 'liability.-was'determihed'by an actuarial; valuation'as of thafdateiiThe'Sewer'Fund's proportion ofthe net ' pension liability was determined based'on the rates-'of budgeted Sewer Fund's salaries within each corresponding pension plan\* to the' total- budgeted salaries: At December 31, 2015, the Sewer-Fund's !pr6portionlwas<-2:0 perpent'of the Municipal Plan, il-2.'l«pe'reetiti of\*he.^Laborer's Wan.'r. =.-.>:•

Changes in benefits and actuarial assumptions: As discuss.ed<sub>r</sub>aboye, P:A. 98-^0641, was determined to be

unconstitutional resulting in changes in the discount rate caused by a change in the required funding

policy and changes in benefits for the'participants of the Municipal-and Laborers', pension, plans, which

include restoring mil automatic annual'increase and-changes in the-retirement age for certain-

| participants'.ji      | ∎ •> '• ∎'∎       | ' ∎:- <sup>,(</sup> iyy ∎,;∎< y -'••;.• i ;   | v,\ ;riuH:f:;mii-        | ∎∎:;- = i»j> |
|-----------------------|-------------------|---|--------------------------|--------------|
|                       |                   | in the sufficient of the state |                          |              |
| The change in the dis | scount rate assur | mption increased the Sewer Fu   | ind's allocated.share of | the net      |

At December 31; 2015, theSewerFuhdirepbrteditotal.deferied outflows of resources of \$253.1; million and deferred inflows of resources of \$5:7 million related to pensions from the following sources:

| jMunicipali(dollars in.thousands):- I;! 🔳   | ;«• | _• | • :>» ,>.:.                         |          |   |            |
|---|-----|----|-------------------------------------|----------|---|------------|
|   |     |    | Deferred Deferre<br>of Resources Re |          |   | of Inflows |
| 'prfferen'cgs b^e^een expected and actual exp<br>,Changes pf assumptions'. '<br>Net difference between projected and actual<br><u>on pension plan investments</u> |     | ,  | '<br>l'36j319<br><u>3,883 •</u>     | .\$,     | - | .\$1,719   |
| <u>Total :</u>  |     |    | <u>\$ 140,202 \$1;71</u>            | <u>9</u> |   |            |

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Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

#### Year Ended December 31:

2016 2017 2018 2019 2020

Thereafter Laborers' (dollars in thousands): \$34,621 34,621 .34,621 34,621

> Deferred Deferred Outflows of. Inflows of Resources Resources

Differences.between expected and actual experience

."• Changes' of assumptions ". -

Net difference between projected and actual earnings on pension plan investments

## Total

\$

\$ 3,962

,101-, 103,.. 11,800,

## <u>\$112,903.,i \$3,962</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources-related to pensions will be recognized in pension'expense as follows:

#### Year Ended December 31:

December 31:

| 2016       |       | - \$42,690 |
|------------|-------|------------|
| 2017       |       | 42,690     |
| 2018       |       | 20,611     |
| 2019       |       | 2,950      |
| 2020 -     | j - • |            |
| Thomastion |       |            |

Thereafter

Actuarial Assumptions-The total pension liability in the December 31, 2015 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

|                           | Municipal       | 1 ~       |  |
|---------------------------|-----------------|-----------|--|
|                           | Employees'      | Laborers' |  |
| Inflation                 | 3.00 %          | 3.00 %    |  |
| Salary increases          | 4.5 %-8.25 %(a) | 3.75 (b)  |  |
| Investment rate of return | 7.50 (c)        | 7.50 (d)  |  |

a) Varying by years of service

- b) Plus a service-based increase in the first 15 years
- c) Net of investment expense
- d) Net of investment expense, including inflation

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•Mortality rates were based on the RP.-2000 Health Annuitant Mortality Table for Males:or Females, as appropriate for Municipal and Laborers'. ...

The mortality actuarial assumptions used in the December 31, 2015 valuation were adjusted based on the results of actuarial experience study for the period:

' Municipal-January 1, 2005-December 31, 2009.

.: Laborers'-January 1, 2004-December 31, 2011

i ".r-t.

The long term expected rate of return on pension plan investments was determined using the building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment

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expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by 'weightingthe expected future real rates pf return by the target asset allocation percentage and by adding expected inflation. The target ' "^allocatioffand'best estimates of arithmetic real rates of return for each major asset class are summarized m.the following table:

|                             | Target Allocat           |            | ion ====     | Long-<br>Term<br>Expec<br>ted<br>-Real<br>Rate<br>of<br>Retur<br>n |        |
|-----------------------------|--------------------------|------------|--------------|--|--------|
| Assetdass                   |                          | Municipal  | Laborers'    | n<br>Mu  | Lab    |
| ✓ ";:•:∎! V, n.i            |                          |            | .;•>!', v;   |  |        |
| Dome'stic equity            |                          | 26.0 %     | •'22.0'%     | : 4.   | 5.9(   |
| Non U.S. equity             |                          |            | 13.0         |  | 7.90   |
| Global <sup>1</sup> _equity |                          |            | 14.0         |  | i 6.5  |
| International equity        |                          | 22.0       |              | 5.00   |        |
| (Fixediincome-vj ,∎ ■■      | ∎.∎∎∎∎u iyj-;-,-; iije.y | : 21Q      | ,16:0 :      | r.0.2  | 2.60   |
| Hedge funds                 | .'.•,,•/•:, Ii ?v, o n   | . 10:0,;:. | • ;: j.8:0 , | <sup>i</sup> ∎≫<br>3.0.  | ; .,.3 |
| Private equity              |                          | 5.0        |              | 8.60   |        |
| Private markets             |                          |            | 11.0         |  | " 6.!  |
| GAA                         |                          |            | 8.0          |  | 4.70   |
| Real estate                 |                          | 10.0       | 6.0          | 6.00   | 4.4(   |
| Risk parity                 |                          |            | 2.0          |  | 5.00   |
| Total                       |                          | 100.0 %    | 100.0 %      |  |        |

### Discount Rate

Municipal-The discount rate used to measure the total pension liability was 3.73%. This Single Discount'Rate wasbased bri^^ari'expectedVate'p'freturn' On pension plan investments of 7:5'pefcent and a municipal bond rate of 3.6 percent (based- on the Bond Buyer 20- Bond Index Of general' obligation municipal bonds as of December 31, 2015). The projection of cash flows used to determine the discount rate assumed member contributions will be made at the current contribution rate and that employer .contributions will be,made at the 1.25 multiple of member contributions from two years prior. For this purpose, 'only employer contributions that are intended to fund benefits of current plan members and their beneficiarics are included. Projected employer contributions and contributions from future plan members ,that arc intended to fund the service costs of future plan members and their beneficiaries are not included. Based on those assumptions, the pension plan's fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members. The projected benefit payments through 2023 were discounted at the expected long-term rate of return. Starting in 2024, the projected benefit payments were discounted at the municipal bond rate. Therefore, a single equivalent, blended discount rate of 3.73% was calculated using the-long-term expected rate of return and the municipal bond index.

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Laborers'-A Single Discount Rate of 4.04 percent was used to measure the total pension liability. This Single Discount

Rate was based on an expected rate of return on pension plan investments of 7.5 percent and a municipal bond rate of 3.6 percent (based on the Bond Buyer 20- Bond Index of general obligation municipal bonds as of December 31, 2015). The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between statutory contributions and the member rate. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2027. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2027, and the municipal bond rate was applied to all benefit payments after that date.

Sensitivity of the Sewer Proportionate Share of the Net Pension Liability to Changes in the Discount Rate.

Municipal-The following presents the Sewer's allocated share of the net pension liability as of . December 31, 2015, calculated using the discount rate of 3.73 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.73 percent) or 1 percentage point higher (4.73 percent) than the current rate:

| Net Pension Liability December 31, 2015 | (dollars in thousands) Current<br>1% Decrease Discount Rate 1% Increase |
|---|---|
| Municipal discount rate                 | 2.73% 3.73% 4.73%   |
| Municipal liability                     | \$434,365 \$364,150 \$306,610   |

Laborers'-The following presents the Sewer's allocated share of the net pension liability as of December 31, 2015, calculated using the discount rate of 4.04 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (3.04 percent) or 1 percentage point higher (5.04 percent) than the current rate:

| Net Pension Liability December 31, 2015 | (dollars in thousands)<br>Current<br>1% Decrease Discount Rate 1% Increase |           |           |  |
|---|--|-----------|-----------|--|
| Laborers' discount rate                 | 3.04 %   | 4.04 %    | 5.04 %    |  |
| Laborers' liability                     | \$365,562  | \$299,722 | \$245,750 |  |

Pension plan fiduciary net position. Detailed information about the pension plan's fiduciary net position is available in the separately issued Pension Plan's financial report.

## OTHER POSTEMPLOYMENT BENEFITS (OPEB)-PENSION FUNDS

The Pension Funds also contribute a portion of the-City's contribution as subsidytoward the cost for

each of their annuitants to participate in the'City's health benefits plans, which include basic benefits for

eligible annuitants and their: dependents and supplemental benefits.for Medicare .eligible annuitants and

their dependents; The amounts below represent theiaccrued'liability of the; City's\* pension-plans; related

to their own annuitants arid the subsidy paidito the City (see^section c)..The plands financed on a pay as

you go basis (dollars in thousands).. ; ... :::= .

Annuaf OPEB Cost and ContributionsiMade For Fiscal Year Ended December 31, 2015 ;./;;∎

|   | Municipal | ,La borers'.  | Total     |
|---|-----------|---|-----------|
| Contribution Rates City: A portion of the City's employer contr<br>used to finance the health insurance supplement benefit paymer   |           | nsion Funds is                                      |           |
| Annual required contribution ';<br>Interest <sup>1</sup> bh'netVOPBfi <sup>;</sup> 6B <sup>n</sup> cm <sup>:</sup> ' ' " • • • <sup>n</sup> • <sup>11</sup><br>Adjustment to 'annualrequired'e'oritributioh' "*'>;! | -         | \$ 2,402 <sup>:</sup><br>ji. :. 209 ∎"<br>(2,376) " | -         |
| " "AririuaTOPEB cost (gain)   | (15,751)  | 235   | (15,516)  |
| Contrfcutidrisiriade  | ' 8,491   | - <b>2</b> ,154 '                                   | 10,645    |
| Decrease, in net OPEBi obligation   | (24,242). | ;.(i,9i9);:   | (26,161)  |
| Net OPEB obligation-beginning pf year.  | 53,486    | 4,649   | 5.8,135   |
| Net OPITB obligation -end bf year   | \$ 29,244 | S 2,730   | \$ 31,974 |

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Actuarial Method and Assumptions-For the Pension Funds' subsidies, the actuarial valuation for the fiscal year .ended Deccmber-31, 2015 was determined using the Entry Age Normal actuarial cost method. Projections of benefits for financial reporting purposes are based on the substantive plan (the plan understood by the employer and plan members) and included the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to. that point. The actuarial method and assumptions used include

techniques that are designed to reduce the effects of short term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long term perspective of the calculations.

#### Municipal

Actuarial valuation date

Actuarial cost method • Amortization method Remaining amortization method 1 year closed

|                                 | Entry age normal | Entry age normal |
|---------------------------------|------------------|------------------|
|                                 | Level dollar     | Level dollar     |
| 1 year closed                   |                  |                  |
| (Pay-as-you-go) (Pay-as-you-go) | No assets ∎      | , No assets      |

Actuarial assumptions: OPEB investment Rate of return <sup>(a)</sup> Projected salary increases <sup>w</sup> Inflation Seniority/merit Healthcare cost trend rate <sup>w</sup>

4.5 % 3.0 %.

## %

4.5 % 3.0 %

## %

<sup>(a)</sup> Compounded annually
 <sup>(b)</sup> Service-based increases equivalent to a level annual
 <sup>(c)</sup> Service-based increases equivalent to a level annual

<sup>(d)</sup> Trend not applicable-fixed dollar subsidy

rate of increase of 1.4 percentage rate of increase of 1.9 percentage

## Year

2013 2014 2015 Annual OPEB Cost

\$ 13,389 (13,100) (15,750) % of Annual Net OPEB OPEB Obligation Obligation 71.01 % 75,637 53,486 29,244

2013201420153,00983.676,442567416.044,649235917.152,730

■ Actuarial:valuations of an'ongoing.plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future; Examples include assumptions ;about future employment; mortality ,.arid the healthcare cost trend'.; Amounts determined

. regarding ithe funded status of the plan :and the annual required contributions of the-employer are subject

• to continual revisions as the results are compared, withrpast expectations and .newestimates are made about thei future. The schedule of funding progress,-presents, as required,'supplementary in formation

:; following; the notesito thei financial; statements:(dollacstin thousands; unaudited);', (,<, ;

.Municipal EmpjqyecsV Laborers'

Actuarial Actuarial Value of Valuation Assets ;;::! Date (a)

,12/31/2015 \$ -' 12/31/2015

Actuarial Accrued Liability

(AAL) Entry Age (b)

\$8,147 2,133

Unfunded (Surplus) UAAL (b-a)

\$8,147 2,133

Funded' Ratio (a/b)

" " Covered ' Payroll -'(c) S 1,643,481 ' 204,773 Dayroll ' ((b-a)/c) 0.50 % 1.04

Other Post Employment Benefits-City Obligation

'tip;'to June 30, 2013, tHejannuitants who retired prior to July 1, 2005 re'eeived'a'55 percent subsidy from the City and the anriuifarifs who retired on or after July 1, 2005 received a 50, 45, 40 and zero percent subsidy from the City based on the annuitant's length'of actual employment with the City for the gross cost of retiree health care under a court approved settlement agreement, known as "trie "Settlement Plan." The pension funds contributed their subsidies of \$65 per month for each Medicare eligible annuitant and \$95 per month'for each Non-Medicare eligible annuitant to their gross cost. Th'e'annuitants 'contributed a total of \$104.4 ^million in 2015 to the gross cost of their retiree health' care pursuahf to premium amount's set forth in the below-referenced settlement agreement. <sup>1</sup>

The City of. Chicago subsidized a portion of the cost (based upon service) for, hospital and medical

coverage for eligible retired employees and their dependents based upon a settlement agreement entered

in 2003 and which expired on June 30, 2013.

u;., '.i«»tj»«nr:

On May I-S, 2013, the City-announced plans to, among ,other things: (i). provide a lifetime healthcare plan to former employees who retired before August :23, ,1.989, with ,a contribution-from, the City of up to 55% of the cost of that plan; and (ii) beginning July 1, 2013, provide employees who retired on or after -'August23',s:1989jwith healthcare benefits in a new Retiree Health Plan (Health Plan), but with "significantccHahges to the^erms including increases in premiums and deductibles, reduced benefits and -'the phase-outTof the Health'Plan for such-employees by December 31,2016.

The cost of -health benefit's is recognized as an expenditure in the accompanying financial statements as claims are reported and'are funded on a pay-as-you-go basis. In 2015, the net expense to the City for providing these benefits to approximately 22,697 annuitants plus their dependents was approximately \$44.0 million.

Plan Description Summary-The City of Chicago was party to a written legal settlement agreement outlining the'provisions of the Settlement Plans, which ended June 30, 2013. The Health Plan provides for annual modifications to the City's level of subsidy. It is set to phase out over three years, at which the Health Plan, along with any further City subsidy, will expire by December 31, 2016, for all but the group of former employees (the Korshak class of members) who retired before August 23, 1989, who shall have lifetime benefits. Duty Disabled retirees who have statutory pre-63/65 coverage will continue to have fully subsidized coverage under the active health plan until age 65.

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The provisions of the Health Plan provide in general, that the City pay a percentage of the cost (based upon an employee's service) for hospital and medical coverage to eligible retired employees and their dependents for the specified period, ending December 31, 2016. The percentage subsidies were revised to reduce by approximately 25 percent of 2013 subsidy levels in 2014, and 50 percent of 2013 subsidy levels in 2015, and 75% of 2013 subsidy levels in 2016.

In addition, State law authorizes the two respective Pension Funds (Municipal and Laborers') to provide a fixed monthly dollar subsidy to each annuitant who has elected coverage under any City health plan ' through December'3172OI6. After that date, no Pension Fund subsidies are authorized, the liabilities for the monthly dollar Pension Fund subsidies contributed on behalf of annuitants enrolled in the medical plan by their respective Pension Funds are included in the

NPO actuarial valuation reports of the respective two Pension Funds under GASB 43.

Funding Policy-No assets are accumulated or dedicated to funding the retiree health plan benefits.

Annual OPEB Cost and Net OPEB Obligation<sup>^</sup>The City's annual other post-employment benefit (OPEB) cost (expense) is calculated based on the annual required contribution of the employer (ARC). The ARC (Annual Required Contribution) represents a level of funding that, if paid on an ongoing basis, is projected to coyer, the normal cost each year and to amortize any unfunded actuarial liabilities over a period of ten years.

Trie following table shows the components pf the City's annual OPEB costs for the year for the Plans, the amount actually contributed to the Plans, and changes in the City's net OPEB obligation to the retiree Health Plan. The Net OPEB Obligation is the amount entered upon the City's Statement of Net Position as of year-end as the net liability for the other post-employment benefits-the'Health Plan. The amount of the annual cost that is recorded in the Statement of Changes in Net Positibn'for 2015 is the Annual OPEB Cost (expense).

#### Annual OPEB Cost and Contributions Made

(dollars in thousands)  $\blacksquare \ge \blacksquare \bullet$ 

|   | 2015<br>Health Plan                  | 2014<br>Health Plan            |
|---|--------------------------------------|--------------------------------|
| Contribution rates:<br>"City "'• ■'■'<br>Plan members   | Paya's'you go"<br>N/A <sup>;</sup> ∎ | -Pay as you go<br>N/A          |
| Annual required contribution<br>Interest on net OPEB obligation<br>Adjustment to annual required contribution | \$106,723<br>5,326<br>(20,209)       | \$128,625<br>5,795<br>(21,988) |
| Annual OPEB cost  | 91,840                               | 112,432                        |
| Contributions made  | 96,551                               | 128,061                        |
| Decrease in net OPEB obligation   | [_ (4,711).                          | (15,629)                       |
| Net OPEB obligation-beginning of year   | t 177,562                            | 193,191                        |
| Net OPEB obligation-end of year   | \$172,851                            | * \$177,562                    |

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The City's annual OPEB cost, the percentage of annualOPEB cost contributed to, the plan, and the net OPEB obligation for fiscal year 2015, 2014 and 2013 are as follows.(dollars in thousands):

Schedule of Contributions, ..

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OPEB Costs and Net Obligations , ,,,...

|                    |                | Percentage of ,:      |            |
|--------------------|----------------|-----------------------|------------|
| Fiscal.Year,       | Annua}         | Annual OPEB, .        | Net OPEB   |
| Ended ,            | OPEB Cost      | Cost<br>Contributed.  | Obligation |
| 12/31/2015         | \$ 91,840 '    | 105.1 %               | \$172,851  |
| 12/31/2014 '' : '' | ' 112,432 ' .' | Tl'3:9                | ' 177,562  |
| 12/31/2013         | T'17,166       | <i>118.6 ' '</i> ;i•i | 193,191    |

Fuhde'd Status arid Funding Prbgr'ess-A's'bf'January t, 2015, the most recent acmarial valuation date, the actuarial accrued liability for benefits was \$780.6, million all pf which was unfunded. The covered payroll (annual payroll of active employees covered by. the plan) was approximately \$2,488.'6 million and the'ratiO of trie'unfunded actuarial [liability to'the covered payroll' was 31.4%.

]' 'AenjaYi'aVyaf^

assumptions about the probability of occurrence of events far into the future. <sup>1</sup>Examples'iric'iude . assumptions about future, employment, mortality, and the healthcare cost trend. Amounts determined " ' regarding'me'''m

to continual revisions as the results are compared with past expectations and-new, estimates are made ib'out"uie'raltufe;!The schedule of mnding'progress, presents,'as required, supplementary information following the notes'to the"'financial ^

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|           |           |              | Unfunded' - | 'mm/ ' j) it | •< ./ . n .∎  | UAAL                |
|-----------|-----------|--------------|-------------|--------------|---------------|---------------------|
|           |           | Actuarial    | Actuarial   |              |               | as a                |
| Actuarial | Actuarial | cA'ccrued'=c | Accrued-'   |              | t-L- '*'. :T: | Perce<br>ntage      |
| Valuation | Value of  | Liability    | Liability   | Funded'j     | oflCoveredilo | :;of<br>Cover<br>ed |

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|------------------------------|--------|----------------------|----------------------|-------|--------------------------|----------------|
| Date                         | Assets | (AAL)                | (UAAL)               | Ratio | Payroll                  | Payroll        |
| 12/31/2014<br>12/31/2013     | S -    | \$780,637<br>964,626 | \$780,637<br>964,626 | - %   | \$2,487,787<br>2,425,000 | 31.4 %<br>39.8 |

Actuarial.Method and Assumptions-Projections of benefits for financial reporting purposes are based on the substantive plan (the plan understood by the employer and plan members) and included the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between.the'employer and plan members to that point. The actuarial m'ethbd.andiassumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent'with the long term perspective of the calculations.

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For the Health Plan benefits (not provided by the Pension Funds), the entry age normal actuarial cost method was used. The actuarial assumptions included an annual healthcare cost trend rate of 8.0% initially, reduced by decrements to an ultimate rate of 5.0% in 2026. The range of rates included a 3.0% inflation assumption. Rates included a 2.5% inflation assumption. The plan has-not accumulated assets and does not hold assets in a segregated trust. However, the funds expected to be used to pay benefits are assumed to be invested for durations which will yield an annual return rate of 3.0%. The remaining Unfunded Accrued Actuarial Liability is being amortized as a level dollar amount over ten years. The benefits include trie provisions under the new Health Plan, which will be completely phased-out by December 3.1,' 2016, except for the Korshak categoryj which is entitled to lifetime benefits..

## Summary of Assumptions and Methods

|                             | Health Plan<br>2015 | 2014               |
|-----------------------------|---------------------|--------------------|
| ■■•■>.'t-i ■'V              |                     |                    |
| Actuarial valuation date    | December 31, 2014   | December 31, 2013  |
| Actuarial cost method       | Entry age normal    | Entry age normal   |
| Amortization method         | Level dollar, open  | Level dollar, open |
| Remaining amortization peri | oil0 years          | 10 years           |
| Asset valuation method      | Market value        | Market value       |
|                             |                     |                    |

| Actuarial assumptions:     |                                |                                |
|----------------------------|--------------------------------|--------------------------------|
| Investment rate of return  | 3.0 %                          | 3.0%"                          |
| Projected salary increases | ' <b>■</b> 2.5%                | 2.5 %                          |
| Healthcare inflation rate  | 8.0 % initial to 5.0 % in 2026 | 8.0 % initial to 5.0 % in 2026 |

The OPEB benefit information pertaining expressly to the Sewer Fund employees is not available as the obligation is the responsibility of the general government. Accordingly, no obligation has been recorded in the accompanying basic financial statements. Amounts for the City are recorded within<sup>1</sup> the City's government-wide basic financial statements

## **RELATED-PARTY TRANSACTIONS**

Included in operating expenses are reimbursements to the General Fund of the City and certain other funds for services provided by other City departments, employee fringe benefits, and certain payments made on behalf of the Sewer Fund. Such reimbursements amounted to \$227.6 million and \$36.7 million in 2015 and 2014, respectively.

## COMMITMENTS AND CONTINGENCIES

The Sewer Fund has certain contingent liabilities resulting from litigation, claims, or commitments incident to the ordinary course of business. Management expects that final resolution of these contingencies will not have a material adverse effect on the financial position or results of operations of the Sewer Fund.

The Sewer Fund provides workers' compensation benefits and employee health benefits under self-insurance programs administered by the City. Such claims outstanding, including claims incurred but not reported, are estimated and recorded as liabilities in the basic financial statements.

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Uninsured claim.expenditures arid liabilities are reported when it:is probable that a-loss has occurred and theamount .of that loss can'be reasonably estimated..These losses include an estimate for claims that ?have bccnlncurredjibut-riot.reported." GhangesIn the claims liability amount-for the years ended December'3 f,>2015 and;2014, are as follows (inithousarids): ,i i^ .

#### 2015

Balance-January, 1, i., :, x, :, x, :, Claims.incurred on currentand prior-year, events Claims paid on current and prior-year events

\$, 17,374 .: 21,479 (13,724) \$ 16,784 .12,996 (12,406)

\$ 25.'129 \$ 17.374

Balance-December 31

The City-purchases arinuity contracts<sup>frofn</sup> commercial insurers to satisfy certain liabilities; accordingly, no.liability is reported for those claims. Property and casualty risks for the Sewer Fund are transferred to 1'c^mmercial'-irisurers. Claims have not exceeUed'the purchased insurance coverage'in the past three

years. ■MfriOii -Ji.')'. '>:.i:|

> At December 31, 2015 and 2014, the Sewer Fund entered into contracts with outstanding commitments of approximately \$105.2 milliori-and \$113.6 million, respectively, for construction projects.

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## 10. DEFERRED OUTFLOWS / INFLOWS OF RESOURCES

| (in thousands)   | FY 2015               | FY 2014        |
|--|-----------------------|----------------|
| Deferred outflows of resources ■<br>Accumulated decrease in fair value of hedging derivatives<br>;*•.i::::::::::::::::::::::::::::::::::::   | .\$253,105,<br>13,820 | \$ -<br>89,905 |
| Total deferred outflows of resources<br>;;,, $\blacksquare$ ;;!. ir, .;,;v; ::?;/n>.' $\blacksquare$ /<: <, $\blacksquare$ $\blacksquare$ •. y . $\blacksquare$ !•'., $\blacksquare$ v V: i<br>Deferred inflows of resources:, | \$266,925             | \$89,905       |
| Deferred inflows . •.; ,, ,; a ■   | \$ (5,681)            |                |

## 11. RESTATEMENT DUE TO IMPLEMENTATION OF NEW ACCOUNTING STANDARDS

During fiscal year 2015, the Sewer Fund implemented two new accounting standards. GASB Statement No.'68, "Accounting'and-FihancialvReporting for Pensions an amendment of GASB Statement No. 27", revised-standards\* of accounting-and reporting ,for.perision expenses-and liabilities as well as allowing for the deferral of certain pension expenseelements.-As a result of implementing this statement, net position was restated at January 1, 2015. The net position at January 1, 2014 was not restated as it was not practical since the information was not available. The impact of these changes on the beginning balances reported in the financial statements is shown below (in thousands):

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|                                    | As Originally |             |             |
|------------------------------------|---------------|-------------|-------------|
|                                    | Reported      | Adjustment  | As Restated |
| Total net position-January 1, 2015 | \$734,754     | \$(233,282) | «-«ni ,m    |

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## **REQUIRED SUPPLEMENTAL INFORMATION**

## -41 -REQUIRED SUPPLEMENTARY INFORMATION CITY OF CHICAGO, ILLINOIS

## SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS Last Fiscal Year (dollars are in thousands)

| Office of the City Clerk Page 252 of 266   | Pi         |
|--|------------|
| Net change in plan fiduciary net position  | (438,059)  |
| Other  |            |
| Administrative expenses  | (6,701)    |
| Benefit payments iifcludiqg'rcfimdsid^cinplpy;ee j&ntribuUon^ »j ^ t-i tj  ;j !);'.*; h!^! | (826,036)  |
| Net investment income  | 114,025    |
| Contributions-employee   | 131,428    |
| Contributions-employer   | 149,225    |
| Plan fiduciary net position  |            |
| Total pension liability-ending <sup>(ar</sup>  | 23,358,870 |
| Total pension liability-beginning  | 12,307,094 |
| Net change in total pension liability  | 11,051,776 |
| Pension plan administrative expense  |            |
| Benefit payments including refunds   | (826,036)  |
| Assumption changes   | 8,711,755  |
| Differences between expected and actual experience   | (109,835)  |
| Benefit changes  | 2,140,009  |
| Interest   | 909,067    |
| Service cost   | \$ 226,816 |
| Total pension liability  |            |
| Municipal Employees':  | 2015       |
| Municipal Employace  | 2015       |

| Plan fiduciary net position-beginning                                       | 5,179,486              |
|---|------------------------|
| Plan fiduciary net position-ending <sup>(b)</sup>                           | 4,741,427              |
| Net pension liability-ending <a)"(b)< td=""><td>\$18,617,443</td></a)"(b)<> | \$18,617,443           |
| Plan fiduciary net position as a percentage of the total                    |                        |
| pension liability   | 20.30 %                |
| Covered-employ cc payroll   | S 1,643,481            |
| Employer's net pension liability as a percentage of                         |                        |
| covered-emp loy ee p ay roll  | 1,133                  |
| Allocated net pension liability   | <sup>1</sup> 364, f 50 |
| Allocated percentage  | 1.96 %                 |

'Covered payroll is the amount in force as of the valuation date and likely differs from actual payroll during fiscal year

\*Notc:Beginning with fiscal year 2015, the City will accumulate ten years of data.

(Continued)

# REQUIRED SUPPLEMENTARY INFORMATION CITY OF CHICAGO, ILLINOIS

## SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS Last Fiscal Year (dollars are in thousands) \_\_j \_\_\_\_\_j

| Laborers':   | 2015           |
|--|----------------|
| Total'pension liability                            |                |
| Service-cost                                       | \$ 38,389      |
| Interest   | 153,812        |
| Benefit changes                                    | 384,033        |
| Differences between expected and actual experience | (46,085)       |
| Assumption changes,                                | 1,175,935      |
| Benefit payments including refunds                 | (152,530)      |
| Pension plan administrative expense                | <u>(3,844)</u> |
| Net change in total pension liability              | 1,549,710      |
| Total pension liability-beginning                  | 2,162,905      |
| Total pension liability-ending w                   | 3.712.615      |

| 1 2 5   | - ,- ,   |                    |
|---|--|--------------------|
| Plan fiduciary net position<br>Contributions-employer<br>Contributions-employee<br>Net investment income<br>Benefit payments including refunds of employee contribution<br>Administrative expenses<br>Other | 12,412<br>16,844<br>(22,318)<br>(152,530)<br>(3,844) |                    |
| Net change in plan fiduciary net position   |  | (149,436)          |
| Plan fiduciary net position-beginning   |  | 1,388,093          |
| Plan fiduciary net position-ending <sup>(b)</sup>   |  | 1,238,657          |
| Net pension liability-ending (a)-(b)  |  | <u>\$2,473,958</u> |
| Plan fiduciary net position as a percentage of the total  |  |                    |
| pension liability   |  | 33.36 %            |
| Covered-employee payroll **   |  | \$ 204,773         |
| Employer's net pension liability as a percentage of covered-employee payroll  |  | 1,208.15 %         |
| Allocated net pension liability<br>Allocated percentage   |  | 299,722<br>12.12%  |

Includes pension plan administrative expense.

Covered payroll is the amount in force as of the valuation date and likely differs from actual payroll paid during fiscal year. Note: Beginning with

fiscal year 2015, the City will accumulate ten years of data.

(Concluded)

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# REQUIRED SUPPLEMENTARY CHICAGO, ILLINOIS

**INFORMATION** 

CITY

OF

<u>SCHEDULE OF.iCONTRIBUXI.ONS</u> <<u>http://OF.iCONTRIBUXI.ONS>;</u>, <<u>http://</u>,>Last Ten Years (dollars are in thousands)

#### Municipal Employees':

Years Ended December 31,

2013;. : 2014 ' 2015 . .

#### Actuarially Determined Contributions'

#### $325,914\ 343,123\ 360,387\ 413,509\ 483,948\ 611,756\ 690,823\ 820,023\ 839,039\ 677,200$

#### Contributions in Relation to the Actuarially Determined Contribution

157,063 139,606 146,803 148,047 154,752 147,009 148,859 148,197 149,747 149,225

Contribution Deficiency.

\$ i68, 1851!!J 203,517 213,584 265,462 329,196 464,747/;:i-541,964 671,826 689,292 527,975

#### Covered Employee Payroll"

H',475,877' 1,564,459 1:543,977' 1,551,973 1,541,388 .1,605,993: 1,590,794 ∎ly580,289: i,602,978 1,643,481

Contributions as ; a percentage of Covered • Employee. , Payroll.-: ,

.'; 10.64 %

: 9.15 9.36 ii-,.;! ;-.9:38.. : 9.34 9.08

The funding method mandated by the Illinois Pension Code is insufficient to avoid insolvency, and without a change. Therefore, the Fund is projected to become insolvent within the next 10 years (during 2025). the actuarially determined contribution is comprised of an employer normal cost payment and a 30-year, level dollar amortization payment on the unfunded actuarial accrued liability.

Coycred.payroll is the amount in force as of the valuation date and likely differs from actual payroll paid during fiscal year.

Laborers':

#### Years Ended December 31,

#### Actuarially Determined Contributions'

\$ 21,142 21,726 17,652 33,518 46,665 57,259 77,566 106.199 106,019 79.851

#### Contributions in Relation to the Actuarially Determined Contribution

\$

: ' 9.51 '; " 9.54 10.04

106 13,256 15,233 14,627 15,352 12,779 11,853 11.583 12,161 12,412

#### Contribution Deficiency

\$ 21,036 8,470 2,419 18,891 31,313 44,480 65,713 94,616 93,858 67,439

Covered Employee Payroll \*\*

5 193,176 💵 192,847 216,744 208,626 199,863 195,238 198,790 200,352 202,673 204,773

#### Contributions as a percentage of Covered Employee Payroll

 $\begin{array}{c} 0.06 \ \% \\ 6.87 \\ 7.03 \\ 7.01 \\ 7.'68 \\ 6.55 \\ 5.96 \\ 5.78 \\ 6.00 \\ 6.06 \end{array}$ 

The LABF Statutory Funding docs not conform to Actuarial Standards of Practice, therefore, the actuarially determined contribution is equal to the normal cost plus an amount to amortize the unfunded liability using dollar payments and a 30 year open amortization period. (Continued)

Covered payroll is the amount in force as .ofthe valuation date and likely.differs from actual payroll paid during fiscal year.

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## REQUIRED SUPPLEMENTARY OF CHICAGO, ILLINOIS

INFORMATION

CITY

### SCHEDULE OF CONTRIBUTIONS

Actuarial Methods and Assumptions:

Actuarial valuation date

Actuarial cost method • Amortization method, ; Remaining amortization period Asset valuation method

Actuarial assumptions: Inflation Salary increases Investment rate of return Retirement Age Mortality Other information

Municipal Employees'

12/31/2015 (a)

Entry age normal Level dollar, open 30 years 5-yr. Smoothed Market

 $\begin{array}{c} 3.0 \ \% \ 4.5 \% \ -8.25 \% \ (d) \ 7.5 \ \% \ (0 \\ (h) \ 0 \ ) \ (1) \end{array}$ 

(b)

#### Laborers'

12/31/2015

Entry age normal Level dollar, open (c) 30 years 5-yr. Smoothed Market

3.0 % 3.75 % (e) 7.5 % (g) (i) (k) (m)

- a) Actuarially determined contribution amount is determined as of December 31, with appropriate interest to the middle of the year.
- b) Actuarially determined contribution rates are calculated as of December 31, which is 12 months prior to the end of the fiscal year in which contributions are reported.
- c) The statutory contributions are based on a multiple of member contributions from the second prior year. The statutory contribution multiple is 1.00
- d) Varying by years of service.
- e) Plus a service-based increase in the first 15 years.
- f) Net of investment expense.
- g) Net of investment expense, including inflation.
- h) For employees first hired prior to January 1, 2011, rates of retirement arc based on the recent experience of the Fund (adopted December 31, 2010). For employees first hired on or after January 1, 2011, rates of retirement for each age from 62 to 80 were used (adopted December 31, 2011).
- (i) Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the December 31, 2012,
- valuation pursuant to an experience study of the period January 1, 2004, through December 31, 2011.
- (j) Post-retirement mortality rates were based on the RP-2000 Healthy Mortality Tables with mortality improvements projected to 2010 using Scale AA. Pre-retirement mortality rates were based on
- the post-retirement mortality assumption, multiplied by 85% for males and 70% for females, (k) RP2000 Combined Healthy mortality table, sex distinct, set forward one year for males and setback two years for females.
- No adjustment is made for post-disabled mortality. (1) Other assumptions: Same as those used in the December 31,2015, actuarial funding valuations, (m) Notes: Benefit changes based on the provisions in effect prior to Public Act 98-0641 were recognized in the

Total Pension Liability as of December 31, 2015.

(Concluded)

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REQUIRED SUPPLEMENTARY INFORMATION: ;/ ^ CITY OF CHICAGO, ILLINOIS O

.

## SCHEDULE OF OTHER POSTEMPLOYMENT BENEFITS FUNDING-PROGRESS v. '

#### Last Three Years (dollars are in thousands)

Actuarial

Actuarial Value

Valuation of Assets

Date (a)

Actuarial Accrued Liability (AAL) Entry Age (b)

Unfunded Actuarial Accrued Liability (UAAL) (b-a)

#### Funded Covered

Ratio Payroll

(a/b) (c) : ' Unfunded (Surplus) AAL as a Percentage of Covered Payroll ((b-aj/c)

Municipal Employees' 2013 2014 20W "v

12/31/2013 \$ 12/31/2014 12/31/2015

27,573 17,495 8,147

## \$ 27,573 17,495 8,147

#### % \$1,580,289 1,602,978 1,643,481

1.74 % 1.09 0.50

Laborers' 2013 2014 "<sup>;</sup> 2015

-City bf Chicago' <sup>J,;</sup> 2013 2014 2015

#### 12/31/2013 12/31/2014 12/31/2015

#### 12/31/2012 12/31/2013 12/31/2014

7,074 4,593 2,133

997,281 <sup>:</sup>964;626 <sup>:i;</sup> 780,637

7,074 4,593 2,133

997,281 :' ;'' 964,'62'6 780,637 '

00

200,352 202,673 204,773

' %• ' '2,385,-198;" ' '2,425,000 ' 2,487.787

#### 3153 % 2.27' 1.04

''41.81 % 39.78 •31.38

\*\*\*\*\*

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## APPENDIX D

## PROPOSED FORM OF OPINIONS OF CO-BOND COUNSEL

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June , 2017

Amalgamated Bank of Ghicago, as trustee under the Trust Indenture defined below 30 Ndrth'LaSalle St. i'-Chicago/Illinois 60602

•We have examined a certified-copy of the record of proceedings of the City of Chicago' (the "City"), together with various accompanying certificates, pertaining to the issuance today by the City of (a) \$180,590,000 Second Lien Wastewater Transmission Revenue Bonds, Project'Series 2017A (the "Series 2017A Bonds")', and (b) \$215,485,000 Second Lien Wastewater Transmission Revenue' Bonds, Refunding 'Series 2017B (the "Series 2017B Bonds" and, together with the Series 2017A Bonds, the "Bonds"). The record of proceedings includes an Ordinance adopted by the City Council of the City on January 13; 2016, providing for the issuance of the Bonds (the "Bond Ordinance"), a Trust Indenture, dated as of June 1, 2017 (the "Trust Indenture"), from the City to Amalgamated Batik of Chicago, as trustee (the "Trustee"), providing for the issuance of the Bonds, a Determination Certificate of the City Clerk pursuant to the Bond Ordinance establishing certain terms of the Bonds and filed with the City Clerk pursuant to the Bond Ordinance (the "Determination Certificates), and certificates of officers of the City, the Trustee and the purchasers of the Bonds as to various factual matters. Capitalized terms defined in the Bond Ordinance and the Trust Indenture and not otherwise defined in this opinion are used with the same meanings in this opinion.

The Series 2017A Bonds are being issued for the purposes of (i) paying or reimbursing the City for its payment of certain Project Costs, and (ii) paying Costs of Issuance of the Series 2017A Bonds. The Series 2017B Bonds are being issued for the purposes of (i) refunding certain Outstanding Second Lien 'Wastewater'Transmission Revenue Bonds of the City, and (ii) paying Costs of Issuance of the Series 2017B Bonds.

The Bonds are dated the date of this opinion and bear interest from their date until paid, payable semi-annually on January 1 and July 1 in each year, with the first interest payment date being January 1, 2018, at the rates per year, and mature on January 1 of each of the years and in the principal amounts, provided in the Bond Ordinance and the Determination Certificate. The Bonds are subject to optional and mandatory sinking fund redemption in advance of their maturity as provided in the Bond Ordinance and the Determination Certificate.

Based upon this examination, we are of the opinion that:

vν

June \_, 2017 Page 2

1. The Bond Ordinance, has been duly and lawfully adopted by the City, is in full force and effect and is valid and binding upon the City. The Determination Certificate has been duly authorized and executed by the City, is in full force and effect and is valid and binding upon the City.

vv

2. The Trust Indenture has been duly authorized, executed and delivered by the City. Assuming the due authorization<sup>^</sup> execution and delivery of the Trust Indenture by the Trustee, the Trust Indenture is in full force and effect and is valid and binding upon the City.  $\dots -$ 

3. The Bonds are valid and legally binding limited obligations of the City. The

3. Bonds, together with the City's Outstanding Second Lien, Bonds and any Second Lien; Parity Bonds

3. which may be issued in the future, have a claim for payment, as to principal, ,redemption .premium, if any;

3. and interest, solely from the Second Lien Bond Revenues deposited into the 2017 Second'Lien Bonds

series.pf

3. Subaccount established by the Bond Ordinance or comparable subaccounts.established>fpr(pther es.pf

3. Second Lien Bonds in the Second Lien Bonds Account in the City's Sewer Revenue Fund and from

3. certain, other5rnpneyS)held by the,Trustee, under the Trust Indenture, all; as, prpyided.in the Bond Ordinance

3. and <sub>;</sub>the.,Trust Indenture..,Second, Lien. .Bond. Revenues, consist, of. Net Revenues ;Ayailable.,for. Bonds

3. remaining.fin; the ;Sewer .Revenue:.;Fundrafter required,£ have been : made. ;to certain

3. Senior, Lien ^ccounts^in^he Sewer Reyjenue,Fund pursuant to the ordinances.aumorizing. the,-Outstanding

3. Senior,, Lien Bonds and .any,(Senior Lien.Parity.Bonds;4that the,City may- issue,in; the futurej^ThejSecpnd

3. Lien;;Bpnd; Revenues parity-withi'the

3. Outstanding Second LienJBonds and  $_0any.$  Second Lien Parity. Bonds that . the City may issue in-the future

3. in accordance. wi% the, applicable provisions .; of the Trust . Indenture and-the  $_{\rm i}$  ordinances , andi indentures

3. authprizing. the. Outstendm at; the time

3. Outstanding. The Bonds.dp.not have^ax

. ■:....rr:o:.m

'■ : ' not Ismisi; i:;t-iti''' Oi'i: -y.-vur'-lr.'-J bflOiM >•'' -:: f.y\\ A::' ■■ >■'''■ :.'?!• r-..•.■!'!

,-, ,,... 4. .kThe Bond.Ordinance. and;the,,Trust,Indenture createia valid pledge pf the Trust Estate,,,including Second Lien,Bond Revenues and,moneys and securities, held,in the Second,Lien Bonds Account, subject to application of, such moneys and securities in .the. manner provided in the Bond Ordinance and the Trust Indenture.

• / - •«.- .5.,..., ^Interest .on the,Bonds>under .present law is not included!in "gross,income" for federal' incpm.ei: tex:--pujrRpses .and .thus,is,-exempt from federal income-taxes based o.n;grossjincorne.-This opinion is subject.to .- compl iance, of the City .with its covenant in the Trust. Indenture to comply with all requirements which must be met in order for interest on the Bonds not to be included in gross income for federal income tax purposes under present law. The City has the power to comply with its covenant. If the City, were to fail to .comply with; these, requirements, interest-:on the Bonds\* could be included in gross income.fpr-federal, income-tax!purppses:retrpactive to the.date the Bonds are issued. Interest.on the Bonds is not an;,item of tax, preference for calculation of an alternative, minimum tax for individuals or corporations under present law: Interest on; the Bonds, will,be taken into account in computing an adjustment used in determining the alternative minimum tax for certain corporations. Ownership of the Bonds may result in other federal tax consequences to certain taxpayers, and we express no opinion regarding any such collateral consequences arising with respect to the Bonds.

6. Interest on the Bonds is not exempt from present Illinois income taxes.

Ownership of the Bonds may result in other federal, state and local tax consequences to certain taxpayers and we express no opinion with respect to any such tax consequences with respect to the Bonds.

D-2

June\_, 2017 Page 3

The rights of registered owners of the Bonds and the enforceability of provisions of the. Bonds, the Bond Ordinance and the Trust Indenture may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights. Enforcement of provisions of the Bonds, the Bond Ordinance or the Trust Indenture by an equitable or similar remedy is subject to general principles of law or equity governing such a remedy, including the exercise of judicial discretion whether to grant any particular form of relief.

This opinion is based upon facts known or certified to us and laws in effect on its date and speaks as of that date. The opinions stated in. this letter are expressions of professional judgment based upon such facts and, law and are not a guaranty of a result if the validity, or. taxrexempt status of the Bonds are challenged. We have not undertaken any obligation to revise or supplement this opinion to reflect any facts or circumstances that may come to our attention after the date of this opinion or any changes in law that may occur after that date, In.addition, we have not undertaken any obligation .to assist the City in complying with those, requirements described in paragraph 5 above which the City must meet after the date of this opinion ,hv order for interest on the Bonds not to be included in gross income for federal income tax purposes under present law.

Very truly yours,

## D-3

Siebert Cisneros Shank & Co., L.L.C, ' M'elvin & Company, L.L.C. 111<sup>1</sup> East Wacker Drive, Suite'2605 ! ;455;Cityfrdht Plaza Drive, 31st Floor' Chicago,'Uliriois 60611 ' '; ■ - -^^^ • . Chicago, Illinois 60611<sup>\*</sup> The'WilliaWs'tap'ital Grdup; L:F: Blayloek Van,'LLC '**--**-; 650 Fifth Avenue, 9th Floor 180 North La Salle Street, Suite 3145 New York, New York 10019 Chicago, Illinois 60601 ;y.<\':' fir ■■■■>■ i r>ni; >i\ '.',;'."iv.; .• **=••** >.Vj\. a'^v: oo.∎.' ∎∎; ; <', • v;::<sub>i</sub> <sup>IVp?i</sup> · :r!! f^ischierFiriaricjal Grbup^inc." " Estrada Hinojosa^Cbmp 161 North Clark' Street, Suite '4700 i: " " 1^f 1 Bayside Drive, Suite 100 Chicago, IUinois<sup>r</sup>6060r "" Jirii ftewpbrt Beach, |CalifOrnia<sup>v</sup>92625 ": -nt m, ^l∎;; hi :.:;;b >:'\\ ■■. ;rr.i?<sup>:.:</sup>.-'∎ m , :(;<;-.rr!i . r. ^ ;•••! •/!iri :!;!^0 ;! NbWSbuWCaplM^^ •<sup>i!,</sup>-,'#6<sup>,</sup>d«fsta<sup>:</sup>#fc6?'<sup>lj</sup> :/;d'208^6uth!LaS'alleS^ 200'West AdamsV^Suitei2230,',-Chicago, Illinois<sup>^</sup> 60606 -"Chicago, Illinois 60604 ';;;;

#### ."lit')." ..:.!; /'!'\_> V

D-4

## APPENDIX E

## SPECIMEN MUNICIPAL BOND INSURANCE POLICY

t

# [This Page Intentionally Left Blank] \* Assured Guaranty

MUNICIPAL

# MUNICIPAL BOND INSURANCE POLICY

On the later of the day on which such Business Day next following the Business Dav^fn whI AGM will disburse to or for the benefit of eachlwvner of on the Bond that is then Due for Payment put jfsBhen only upon receipt by AGM, in a form reasonably ^fls/actory receive payment of the principal appropriate instruments of assign principal or interest that is Due for deemed received on a given Busii Business Day; otherwise, Nonpayment received purposes of the precj Owner, as approprij respect of a Bond to receipt of paynTBBt»pf Owner, incluwng AGM herflriaaej-. Pa the extent thel5bt disc]

ue for Payment or the d Notice of Nonpayment, nt of principal of and interest pf Nonpayment by the Issuer, but evidence of the Owner's right to then^EBte for PaVropnt and (b) evidence, including any nt, that all of thej&Dwner's jfqhts with respect to payment of such lyment shall thereupoMtes\* in AGM. A Notice of Nonpayment will be eivecwprior to 1:00 p.m. (New York time) on such received on the next Business Day. If any Notice of e deemed not to have been received by AGM for promptly so advise the Trustee, Paying Agent or

ed Notice of Nonpayment. Upon disbursement in  $\operatorname{\mathsf{nt}}$  by rge the

pwner of the Bond, any appurtenant coupon to the Bond or right st on the Bond and shall be fully subrogated to the rights of the payments under the Bond, to the extent of any payment by Trustee or Paying Agent for the benefit of the Owners shall, to AGM under this Policy.

jjsept tc^ffi&extent expressly modified by an endorsement hereto, the following terms shall have meanings specifleflWfpr all purposes of this Policy."Business Day" means any day other than (a) a jrrlay orAigdav orljm^day on which banking institutions in the State of New York or the Insurer's Fisiaj^gmtJaffiKHthori^q or required by law or executive order to remain closed. "Due for Payment" means (a)wnen fSwing^o the principal of a Bond, payable on the stated maturity date thereof or the date on which the same Mall have been duly called for mandatory sinking fund redemption and does not refer to any earlier/jateioD<fflhich payment is due by reason of call for redemption (other than by mandatory sinking fund redempnBfffr acceleration or other advancement of maturity unless AGM shall elect, in its sole discretion, to pay such principal due upon such acceleration together with any accrued interest to the date of acceleration and (b) when referring to interest on a Bond, payable on the stated date for payment of interest. "Nonpayment" means, in respect of a Bond, the failure of the Issuer to have provided sufficient funds to the Trustee or, if there is no Trustee, to the Paying Agent for payment in full of all principal and interest that is Due for Payment on such Bond. "Nonpayment" shall also include, in respect of a Bond, any payment of principal or interest that is Due for Payment made to an Owner by or on behalf of the Issuer which recovered has been pursuant from such Owner to the

E-1

Page 2 of 2 Policy No. -N

United StatesBankruptcyCode by a trustee in bankruptcy in accordance with a final, nonappealable order of a court having competent jurisdiction. "Notice" means telephonic or telecopied notice, subsequently confirmed in a signed writing, or written notice by registered or certified mail, from an Owner, the Trustee or the Paying Agent to AGM which notice shall specify (a) the person or entity making the claim, (b) the Policy Number, (c) the claimed amount and (d) the date such claimed amount became Due for Payment. "Owner" means, in respect of a Bond, the person or entity who, at the time of Nonpayment, is entitled under the terms of such Bond to payment thereof, except that "Owner" shall not include the Issuer gr any person or entity whose direct or indirect obligation constitutes the underlying security for the Bonds<sup>^</sup> made directly of AGM 's Fiscal ents due

AGM may appoint a fiscal agent (the "Insurer's Fiscal Agent") for purposes giving written notice to the Trustee and the Paying Agent specifying the name and notice ai Insurer's Fiscal Agent. From and after the date of receipt of such notice by\_Agent, (a) copies of all notices required to be delivered to AGM pun simultaneously delivered to the Insurer's Fiscal Agent and to AGM and sb^lftxjt received by both, and (b) all payments required to be made by AGM uncUff his Policy m" by AGM or by the Insurer's Fiscal Agent on behalf of AGM. The InsurfJcs Fiscalftgent only and the Insurer's Fiscal Agent shall in no event be liable to anv<6wm^or arrMct of Agent or any failure of AGM to deposit or cause to be deposing sufficie^fijiSastCT ma^e under this Policy.

To the fullest extent permitted by applicable law, AGNte3§r|gs not tiJS|§»rU\$-jfTd hereby waives, only for the benefit of each Owner, all rights (whether by counterBSirMbetoff orcflpBrwise) and defenses (including, without limitation, the defense of fraud^ubether acguireBaby subluxation, assignment or otherwise, to the extent that-such rights and- defe^e^roSe^ avaitable^STOSM to avoid-payment-of its obligations under this Policy in accordance witfcfjpe exprefespr^fo.gstPf this policy.

ly], ano^shall not be modified, altered or any mSHjfication or amendment thereto. Except to a) a'nywe'rnium paid in respect of this Policy is or provision being made for payment of the led or revoked THIS POLICY IS NOT CE SECURITY FUND SPECIFIED IN ARTICLE 76

In witnes: executed on its beh;

This Policy sets forth in.fultttie.urn affected by any other agreement or ins^pmljjt, the extent expressly modified by anffindpresement heF nonrefundable for any reason whatsoever, including paj Bonds prior to maturity and (b) trjs Policy may not be COVERED BY THE PROPERTY/CSSyALTY INSURAJ OF THE NEW YORK INSURANCE 13

boing made for paymont, or the loa of revolted. This is defor to their de dedoration

MUNICIPAL CORP. has caused this Policy to be ASSURED GUARANTY MUNICIPAL CORP.

By

Authorized Officer

A subsidiary of Assured Guaranty Municipal Holdings Inc. 1633 Broadway, New York, N.Y. 10019 (212) 974-0100

Form 500NY (5/90)

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