

PRELIMINARY OFFICIAL STATEMENT DATED _____, 2021

NEW ISSUE - Book-Entry-Only

Ratings: See “RATINGS” herein

In the opinion of Squire Patton Boggs (US) LLP, Bond Counsel, under existing law (i) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the Series 2021A Bonds is excluded from gross income for federal income tax purposes, and is not an item of tax preference for purposes of the federal alternative minimum tax, and (ii) the Series 2021A Bonds and the income thereon are exempt from taxation under the laws of the State of Florida, except estate taxes imposed by Chapter 198, Florida Statutes, as amended, and net income and franchise taxes imposed by Chapter 220, Florida Statutes, as amended. Interest on the Series 2021A Bonds may be subject to certain federal taxes imposed only on certain corporations. For a more complete discussion of the tax aspects relating to the Series 2021A Bonds, see the discussion under the heading “TAX MATTERS” herein.

MIAMI BEACH

\$ _____*
CITY OF MIAMI BEACH, FLORIDA
Water and Sewer Revenue Refunding Bonds
Series 2021A

Dated: Date of Delivery

Due: September 1, as shown on inside cover page

The City of Miami Beach, Florida Water and Sewer Revenue Refunding Bonds, Series 2021A (the “Series 2021A Bonds”) will be issued by the City of Miami Beach, Florida (the “City”) as fully registered bonds, without coupons, in denominations of \$5,000 or any whole multiple thereof. When issued, the Series 2021A Bonds will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”), which will act as securities depository for the Series 2021A Bonds. Purchasers will not receive certificates representing their ownership interests in the Series 2021A Bonds purchased. See “DESCRIPTION OF THE SERIES 2021A BONDS - Book-Entry Only System” herein. Interest on the Series 2021A Bonds will accrue from their date of delivery and will be payable on September 1, 2021 and semiannually on each March 1 and September 1 thereafter. U.S. Bank National Association, Fort Lauderdale, Florida, will serve as the initial bond registrar and paying agent (collectively, the “Bond Registrar”) for the Series 2021A Bonds. While the Series 2021A Bonds are registered through the DTC book-entry only system, principal of and interest on the Series 2021A Bonds will be payable by the Bond Registrar to DTC.

The Series 2021A Bonds are being issued for the purpose of providing funds, together with other legally available moneys, to (i) provide for (a) the refunding and prepayment of all* of the City of Miami Beach, Florida Water and Sewer Revenue Refunding Bonds, Taxable Series 2009J-1B, which will be outstanding immediately prior to issuance of the Series 2021A Bonds in the aggregate principal amount of \$10,000,000, and (b) the refunding and prepayment of all* of the City of Miami Beach, Florida Water and Sewer Revenue Bonds, Taxable Series 2009J-1C, which will be outstanding immediately prior to issuance of the Series 2021A Bonds in the aggregate principal amount of \$30,000,000 (collectively, the “Refunded Bonds”); and (ii) pay costs related to the issuance of the Series 2021A Bonds and the refunding and prepayment of the Refunded Bonds. See “INTRODUCTION” and “PURPOSE OF THE ISSUE” herein.

The Series 2021A Bonds are payable from and secured by a lien on and a pledge of the Net Revenues derived from the City’s ownership or operation of the Water and Sewer Utility and certain other moneys held under the Resolution (as such terms are defined herein). Such lien on and pledge of Net Revenues and certain other moneys held under the Resolution, as described herein (the “Pledged Revenues”), shall be on a parity with the lien on and pledge of the Pledged Revenues (i) granted in favor

of the Series 2017 Bonds (as defined herein) and any other Bonds which shall remain Outstanding subsequent to issuance of the Series 2021A Bonds and (ii) that may be granted by the City in favor of Additional Bonds, Refunding Bonds, Alternative Parity Debt and parity Short-Term Indebtedness; **provided, however, that no deposit to the Reserve Account shall be made in connection with the issuance of the Series 2021A Bonds and the Series 2021A Bonds shall not be secured by, or entitled to any benefit from, amounts, Reserve Account Insurance Policies or Reserve Account Letters of Credit that may be held in the Reserve Account or any subaccount therein for the benefit of other Bonds that may be issued and Outstanding under the Bond Resolution (as such terms are defined herein).** Upon issuance of the Series 2021A Bonds, no amounts will be held in the Reserve Account for the benefit of Bonds Outstanding under the Bond Resolution. See “INTRODUCTION” and “SECURITY AND SOURCES OF PAYMENT” herein.

The Series 2021A Bonds are subject to optional and mandatory sinking fund redemption prior to maturity as described herein. See “DESCRIPTION OF THE SERIES 2021A BONDS - Redemption Provisions” herein.

THE CITY IS OBLIGATED TO PAY THE PRINCIPAL OF AND INTEREST ON THE SERIES 2021A BONDS SOLELY FROM THE PLEDGED REVENUES. THE SERIES 2021A BONDS SHALL NOT CONSTITUTE AN INDEBTEDNESS OF THE CITY, MIAMI-DADE COUNTY, FLORIDA, THE STATE OF FLORIDA OR ANY POLITICAL SUBDIVISION THEREOF WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY PROVISION OR LIMITATION AND THE FAITH AND CREDIT OF THE CITY, MIAMI-DADE COUNTY, FLORIDA, THE STATE OF FLORIDA OR ANY POLITICAL SUBDIVISION THEREOF IS NOT PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THE SERIES 2021A BONDS. ISSUANCE OF THE SERIES 2021A BONDS SHALL NOT DIRECTLY, INDIRECTLY OR CONTINGENTLY OBLIGATE THE CITY, MIAMI-DADE COUNTY, FLORIDA, THE STATE OF FLORIDA OR ANY POLITICAL SUBDIVISION THEREOF TO LEVY OR TO PLEDGE ANY TAXES WHATEVER THEREFOR, OR TO MAKE ANY APPROPRIATION FOR THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THE SERIES 2021A BONDS, EXCEPT AS PROVIDED IN THE RESOLUTION.

This cover page contains certain information for quick reference only. It is not a summary of this issue. Investors must read the entire Official Statement, including the Appendices, to obtain information essential to the making of an informed investment decision.

The Series 2021A Bonds are offered when, as and if issued by the City, subject to the opinion on certain legal matters relating to their issuance of Squire Patton Boggs (US) LLP, Miami, Florida, Bond Counsel. Certain legal matters will be passed upon for the City by Rafael A. Paz, Esquire, Acting City Attorney, and certain legal matters relating to disclosure will be passed upon for the City by the Law Offices of Steve E. Bullock, P.A., Miami, Florida, Disclosure Counsel. Bryant Miller Olive P.A., Miami, Florida, is serving as Counsel to the Underwriters. RBC Capital Markets, LLC, St. Petersburg, Florida, is serving as Financial Advisor to the City in connection with the issuance of the Series 2021A Bonds. It is expected that the Series 2021A Bonds will be available for delivery through DTC in New York, New York on or about _____, 2021.

PNC Capital Markets LLC

HilltopSecurities

DAC Bond[®]

Dated: _____, 2021

* Preliminary, subject to change.

Red herring: This Preliminary Official Statement and the information contained herein are subject to amendment and completion without notice. The Series 2021A Bonds may not be sold and offers to buy may not be accepted prior to the time the Official Statement is delivered in final form. Under no circumstances shall this Preliminary Official Statement constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Series 2021A Bonds in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

**MATURITIES, PRINCIPAL AMOUNTS, INTEREST RATES,
PRICES, YIELDS AND INITIAL CUSIP NUMBERS*†**

\$ _____ Series 2021A Serial Bonds

<u>Due (September 1)</u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Price</u>	<u>Yield</u>	<u>Initial CUSIP Number</u>
2021	\$	%		%	59324 ____
2022					59324 ____
2023					59324 ____
2024					59324 ____
2025					59324 ____
2026					59324 ____
2027					59324 ____
2028					59324 ____
2029					59324 ____
2030					59324 ____
2031					59324 ____
2032					59324 ____
2033					59324 ____
2034					59324 ____
2035					59324 ____
2036					59324 ____
2037					59324 ____
2038					59324 ____
2039					59324 ____

\$ _____ Series 2021A Term Bonds

\$ _____ % Series 2021A Term Bonds Due September 1, 20____ – Price: ____ / Yield:
____ % Initial CUSIP Number: 59324 ____

* Preliminary, subject to change.

† Neither the City nor the Underwriters is responsible for the use of CUSIP Numbers, nor is a representation made as to their correctness. The CUSIP Numbers are included solely for the convenience of the readers of this Official Statement.

CITY OF MIAMI BEACH, FLORIDA

MAYOR

Dan Gelber

CITY COMMISSION

Ricky Arriola, *Commissioner*
Michael Gongora, *Commissioner*
Steven Meiner, *Commissioner*
David Richardson, *Commissioner*
Mark Samuelian, *Commissioner*
Micky Steinberg, *Commissioner*

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Raul J. Aguila, Esquire

Assistant City Manager
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Acting City Attorney
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City Clerk
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Miami, Florida

Independent Auditor
RSM US LLP
Miami, Florida

No dealer, broker, salesman or other person has been authorized by the City or the Underwriters to make any representations, other than those contained in this Official Statement, in connection with the offering contained herein, and if given or made, such other information or representations 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 nor shall there be any sale of the Series 2021A Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information contained in this Official Statement has been obtained from public documents, records and other sources considered to be reliable and, while not guaranteed as to completeness or accuracy, is believed to be correct. Any statement in this Official Statement involving estimates, assumptions and opinions, whether or not so expressly stated, are intended as such and are not to be construed as representations of fact, and the Underwriters and the City expressly make no representation that such estimates, assumptions and opinions will be realized or fulfilled. Any information, estimates, assumptions and matters of opinion contained in this Official Statement are subject to change without notice, and neither the delivery of this Official Statement, nor any sale hereunder, shall, under any circumstances, create any implication that there has been no change in the affairs of the City since the date hereof.

The Underwriters have provided the following sentence for inclusion in this Official Statement. *The Underwriters have 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.*

The order and placement of materials in this Official Statement, including the Appendices, are not to be deemed a determination of relevance, materiality or importance, and this Official Statement, including the Appendices, must be considered in its entirety. The captions and headings in this Official Statement are for convenience only and in no way define, limit or describe the scope or intent, or affect the meaning or construction, of any provisions or sections in this Official Statement. The offering of the Series 2021A Bonds is made only by means of this entire Official Statement.

References to website 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 websites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement.

Certain statements included or incorporated by reference in this Official Statement constitute "forward-looking statements." Such statements generally are identifiable by the terminology used, such as "plan," "expect," "estimate," "project," "forecast," "budget" or other similar words. The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. The City does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations or events, conditions or circumstances on which such statements are based occur.

THE SERIES 2021A BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAW, NOR HAS THE RESOLUTION BEEN QUALIFIED UNDER THE TRUST INDENTURE ACT OF 1939, AS AMENDED, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACTS. THE EXEMPTION OF THE SERIES 2021A BONDS FROM REGISTRATION OR QUALIFICATION IN CERTAIN STATES CANNOT BE

REGARDED AS A RECOMMENDATION THEREOF. IN MAKING AN INVESTMENT DECISION, INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THE CITY AND THE TERMS OF THIS OFFERING, INCLUDING THE MERITS AND RISKS INVOLVED. NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY OTHER FEDERAL, STATE OR GOVERNMENTAL ENTITY OR AGENCY WILL HAVE PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT OR APPROVED OR RECOMMENDED THE SERIES 2021A BONDS FOR SALE. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES 2021A BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET, AND SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME. THE UNDERWRITERS MAY OFFER AND SELL THE SERIES 2021A BONDS TO CERTAIN DEALERS AND OTHERS AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES STATED ON THE INSIDE COVER PAGE OF THIS OFFICIAL STATEMENT, AND SUCH PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS.

THIS OFFICIAL STATEMENT SHALL NOT CONSTITUTE A CONTRACT BETWEEN THE CITY OR THE UNDERWRITERS AND ANY ONE OR MORE HOLDERS OF THE SERIES 2021A BONDS.

THIS OFFICIAL STATEMENT IS BEING PROVIDED TO PROSPECTIVE PURCHASERS EITHER IN BOUND PRINTED FORM (“ORIGINAL BOUND FORMAT”) OR IN ELECTRONIC FORMAT ON THE WEBSITE: WWW.MUNIOS.COM. THIS OFFICIAL STATEMENT MAY BE RELIED UPON ONLY IF IT IS IN ITS ORIGINAL BOUND FORMAT OR IF IT IS PRINTED IN FULL DIRECTLY FROM SUCH WEBSITE.

THIS PRELIMINARY OFFICIAL STATEMENT IS IN A FORM DEEMED FINAL BY THE CITY FOR PURPOSES OF RULE 15C2-12 UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED, EXCEPT FOR CERTAIN FINANCIAL INFORMATION PERMITTED TO BE OMITTED PURSUANT TO RULE 15C2-12(B)(1).

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OFFICIAL STATEMENT
relating to

§ _____*
CITY OF MIAMI BEACH, FLORIDA
Water and Sewer Revenue Refunding Bonds
Series 2021A

INTRODUCTION

The purpose of this Official Statement, including the cover page and all appendices, is to set forth certain information relating to the City of Miami Beach, Florida (the “City”), its water transmission and distribution system and sewage collection and transmission system, each of which is owned and operated by the City (collectively, the “Water and Sewer Utility”), and the sale by the City of its \$ _____* aggregate principal amount of Water and Sewer Revenue Refunding Bonds, Series 2021A (the “Series 2021A Bonds”). The Series 2021A Bonds are being issued pursuant to the Constitution and laws of the State of Florida, including Chapter 166, Florida Statutes, as amended, and the City of Miami Beach Charter (collectively, the “Act”) and other applicable provisions of law, and pursuant and subject to the terms and conditions of Resolution No. 95-21585 adopted by the Mayor and City Commission of the City (collectively, the “City Commission”) on May 17, 1995 (the “Bond Resolution”), as supplemented by Resolution No. 21-_____ adopted by the City Commission on _____, 2021 (the “Series 2021A Resolution” and, collectively with the Bond Resolution, the “Resolution”). For a complete description of the terms and conditions of the Series 2021A Bonds, and the provisions of the Resolution, see “APPENDIX C - The Resolution.”

The Series 2021A Bonds will be issued in book-entry only form and purchasers of the Series 2021A Bonds will not receive certificates representing their interest in the Series 2021A Bonds purchased. The Series 2021A Bonds will contain such other terms and provisions, including provisions regarding redemption, as described in “DESCRIPTION OF THE SERIES 2021A BONDS” herein.

The City has previously issued pursuant to the Bond Resolution its (i) \$115,180,000 original principal amount of City of Miami Beach, Florida Water and Sewer Revenue and Revenue Refunding Bonds, Series 2017 (the “Series 2017 Bonds”), \$111,555,000 of which will be Outstanding immediately prior to issuance of the Series 2021A Bonds; (ii) \$10,000,000 original principal amount of City of Miami Beach, Florida Water and Sewer Revenue Refunding Bonds, Taxable Series 2009J-1B (the “Series 2009J-1B Bonds”), all of which will be Outstanding immediately prior to issuance of the Series 2021A Bonds; and (iii) \$30,000,000 original principal amount of City of Miami Beach, Florida Water and Sewer Revenue Bonds, Taxable Series 2009J-1C (the “Series 2009J-1C Bonds”), all of which will be Outstanding immediately prior to issuance of the Series 2021A Bonds. Upon issuance of the Series 2021A Bonds, all* of the Series 2009J-1B Bonds and all* of the Series 2009J-1C Bonds shall be deemed refunded and prepaid. See “PURPOSE OF THE ISSUE - Plan of Refunding” herein. The Series 2021A Bonds, the Series 2017 Bonds and any Additional Bonds and Refunding Bonds hereafter issued are collectively referred to herein as the “Bonds.”

The principal of and interest on the Series 2021A Bonds will be secured by a lien on and pledge of the Pledged Revenues as described herein, on a parity with the Series 2017 Bonds and any other Bonds,

* Preliminary, subject to change.

Alternative Parity Debt or parity Short-Term Indebtedness that may be issued from time to time under the Bond Resolution; **provided, however, that no deposit to the Reserve Account shall be made in connection with the issuance of the Series 2021A Bonds and the Series 2021A Bonds shall not be secured by, or entitled to any benefit from, amounts, Reserve Account Insurance Policies or Reserve Account Letters of Credit that may be held in the Reserve Account or any subaccount therein for the benefit of other Bonds that may be issued and Outstanding under the Bond Resolution.** Upon issuance of the Series 2021A Bonds, no amounts will be held in the Reserve Account for the benefit of Bonds Outstanding under the Bond Resolution. See “SECURITY AND SOURCES OF PAYMENT - General and - Reserve Account” herein.

This introduction is intended to serve as a brief description of this Official Statement and is expressly qualified by reference to this Official Statement as a whole. A full review should be made of this entire Official Statement, as well as the documents and reports summarized or described herein. The description of the Series 2021A Bonds, the documents authorizing and securing the same, including, without limitation, the Resolution, and the information from various reports contained herein are not comprehensive or definitive. All references herein to such documents and reports are qualified by the entire, actual content of such documents and reports. Copies of such documents and reports may be obtained from the City by contacting the City’s Chief Financial Officer, 1700 Convention Center Drive, Miami Beach, Florida 33139, Telephone number: (305) 673-7466, Facsimile number: (305) 673-7795, Email address: www.miamibeachfl.gov/finance.

Capitalized terms used but not defined in this Official Statement shall have the meaning ascribed to such terms in the Resolution. See “APPENDIX C - The Resolution.”

PURPOSE OF THE ISSUE

General

The Series 2021A Bonds are being issued for the purpose of providing funds, together with other legally available moneys, to (i) provide for (a) the refunding and prepayment of all* of the Outstanding Series 2009J-1B Bonds, and (b) the refunding and prepayment of all* of the Outstanding Series 2009J-1C Bonds (collectively, the “Refunded Bonds”), as more particularly described below in “PURPOSE OF THE ISSUE - Plan of Refunding;” and (ii) pay costs related to the issuance of the Series 2021A Bonds and the refunding and prepayment of the Refunded Bonds. See “ESTIMATED SOURCES AND USES OF FUNDS” herein.

Plan of Refunding

A portion of the proceeds of the Series 2021A Bonds, together with other legally available moneys, will be used to provide for the refunding and prepayment of all* of the Refunded Bonds. The Refunded Bonds shall be prepaid on the date of issuance of the Series 2021A Bonds at a price equal to one hundred percent (100%) of the principal amount of the Refunded Bonds, without premium, plus any unpaid interest that shall be due on the Refunded Bonds on their prepayment date.

The Refunded Bonds are expected to consist of the following:

* Preliminary, subject to change.

Series 2009J-1B Bonds

<u>Maturity (December 1)</u>	<u>Principal Amount</u>	<u>Maturity (December 1)</u>	<u>Principal Amount</u>
2021	\$3,170,000	2023	\$3,500,000
2022	3,330,000		

Series 2009J-1C Bonds

<u>Maturity (December 1)</u>	<u>Principal Amount</u>	<u>Maturity (December 1)</u>	<u>Principal Amount</u>
2031	\$2,270,000	2036	\$3,475,000
2032	2,855,000	2037	3,645,000
2033	3,000,000	2038	3,830,000
2034	3,150,000	2039	4,020,000
2035	3,305,000		

ESTIMATED SOURCES AND USES OF FUNDS

The following table sets forth the estimated sources and uses of funds in connection with the issuance of the Series 2021A Bonds:

Sources of Funds

Par Amount of Series 2021A Bonds	\$
Net Original Issue Premium / Discount	
Other Legally Available Moneys ⁽¹⁾	_____
Total Estimated Sources of Funds	\$ <u>_____</u>

Uses of Funds

Deposit to Prepay Refunded Bonds ⁽²⁾	\$
Deposit to Series 2021A Cost of Issuance Account ⁽³⁾	
Underwriters' Discount	_____
Total Estimated Uses of Funds	\$ <u>_____</u>

-
- (1) Constitutes amount held under the Bond Resolution to pay principal of and interest due on the Refunded Bonds.
(2) See "PURPOSE OF THE ISSUE - Plan of Refunding" herein.
(3) To pay certain costs of issuance of the Series 2021A Bonds and the refunding and prepayment of the Refunded Bonds, including, without limitation, printing costs and the fees of bond counsel, disclosure counsel, the financial advisor, and the rating agencies.

DESCRIPTION OF THE SERIES 2021A BONDS

General

The Series 2021A Bonds will be dated their date of delivery. The Series 2021A Bonds will bear interest at the rates and will mature on the dates and in the amounts set forth on the inside cover page of this Official Statement. Interest on the Series 2021A Bonds is payable semiannually commencing on September 1, 2021 and on each March 1 and September 1 thereafter. Such interest shall be calculated on the basis of a 360 day year consisting of twelve 30-day months. The City has appointed U.S. Bank National Association, Fort Lauderdale, Florida, to serve as the paying agent and as the bond registrar for the Series 2021A Bonds (collectively, the “Bond Registrar”).

In any case where the maturity date of, or the date for the payment of the principal of or interest on the Series 2021A Bonds, or the date fixed for redemption of the Series 2021A Bonds shall not be a business day, then payment of such interest or principal or redemption price need not be made by the Bond Registrar on such date but may be made on the next succeeding business day with the same force and effect as if made on the Interest Payment Date, the date of maturity or the date fixed for redemption, and no interest shall accrue for the period after such Interest Payment Date, date of maturity or date fixed for redemption.

The Series 2021A Bonds will be issued as fully registered bonds, without coupons, in denominations of \$5,000 or any whole multiple thereof, and when issued, will be registered in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company, New York, New York (“DTC”). Purchases of beneficial interests in the Series 2021A Bonds will be made in book-entry-only form, without certificates. Unless a securities depository other than DTC is selected by the City, so long as the Series 2021A Bonds shall be in book-entry-only form, the principal of and interest on the Series 2021A Bonds will be payable to Cede & Co. (or such other nominee selected by DTC), as registered owner thereof, and will be distributed by DTC and the DTC Participants to the Beneficial Owners (as such terms are hereinafter defined). See “DESCRIPTION OF THE SERIES 2021A BONDS - Book-Entry Only System” herein.

Redemption Provisions

Optional Redemption

The Series 2021A Bonds maturing on or before September 1, 20__ are not subject to redemption prior to maturity. The Series 2021A Bonds maturing on or after September 1, 20__ are subject to redemption prior to maturity, at the option of the City, on or after September 1, 20__, in whole or in part at any time, in any order of maturity selected by the City and by lot or by such other manner as the Bond Registrar shall deem appropriate within a maturity, at a redemption price equal to one hundred percent (100%) of the principal amount of the Series 2021A Bonds to be redeemed, together with accrued interest to the date fixed for redemption and without premium.

Mandatory Sinking Fund Redemption

The Series 2021A Bonds maturing on September 1, 20__ are subject to mandatory sinking fund redemption prior to maturity, in part, by lot or by such other manner as the Bond Registrar shall deem appropriate, through the application of Amortization Requirements, at a redemption price equal to one hundred percent (100%) of the principal amount thereof, on September 1 of each year in the following amounts and in the years specified:

Due
(September 1)

Amortization
Requirement

\$

*

* Final maturity.

Notice of Redemption

Mailing of Notice of Redemption. At least thirty (30) days, but not more than sixty (60) days, before the redemption date, a notice of redemption signed by the Chief Financial Officer (a) shall be filed with the Bond Registrar and (b) shall be mailed by the Bond Registrar, first class mail, postage prepaid, to all registered owners of Series 2021A Bonds (which, so long as DTC shall act as securities depository for the Series 2021A Bonds, shall be Cede & Co.) to be redeemed at their addresses as they appear on the registration books of the Bond Registrar, but failure so to mail any such notice to any registered owner shall not affect the validity of the proceedings for such redemption.

Each such notice shall specify the redemption date and the place or places where amounts due upon such redemption will be payable and, if less than all of the Series 2021A Bonds are to be redeemed, the numbers or other distinguishing marks of such Series 2021A Bonds to be redeemed in part and the respective portions thereof to be redeemed. Such notice shall further state that on such date there shall become due and payable upon each of the Series 2021A Bonds to be redeemed the redemption price or the specified portions thereof in the case of Series 2021A Bonds to be redeemed in part only, together with interest accrued to the redemption date, and that from and after such date interest thereon shall cease to accrue and be payable on such Series 2021A Bonds or portions thereof so redeemed.

In the case of an optional redemption of the Series 2021A Bonds, the redemption notice may state that (a) it is conditioned upon the deposit of moneys with the Bond Registrar or with a bank, trust company or other appropriate fiduciary institution acting as escrow agent, in amounts necessary to effect the redemption, no later than the redemption date, or (b) the City retains the right to rescind such notice on or prior to the scheduled redemption date (in either case, a "Conditional Redemption"), and such notice and optional redemption shall be of no effect if such moneys are not so deposited or if the notice is rescinded as described in this paragraph. Any such notice of Conditional Redemption shall be captioned "Conditional Notice of Redemption." Any Conditional Redemption may be rescinded at any time prior to the redemption date if the City delivers a written direction to the Bond Registrar directing the Bond Registrar to rescind the redemption notice. The Bond Registrar shall give prompt notice of such rescission to the affected Bondholders. Any Series 2021A Bonds subject to Conditional Redemption where redemption has been rescinded shall remain Outstanding, and neither the rescission nor the failure by the City to make such moneys available shall constitute an Event of Default under the Bond Resolution.

Effect of Calling for Redemption. On the date so designated for redemption, notice having been filed and mailed in the manner and under the conditions described above, the Series 2021A Bonds so called for redemption shall become and be due and payable at the redemption price provided for redemption of such Series 2021A Bonds on such date, and, moneys for payment of the redemption price being held in separate accounts by the Chief Financial Officer or by the Bond Registrar in trust for the Holders of the Series 2021A Bonds to be redeemed, all as provided in the Resolution, interest on the Series 2021A Bonds so called for redemption shall cease to accrue, such Series 2021A Bonds shall cease to be entitled to any lien, benefit or security under the Resolution, and the Holders or registered owners of such Series 2021A

Bonds shall have no rights in respect thereof except to receive payment of the redemption price thereof and accrued interest thereon.

Book-Entry Only System

The following description of the procedures and record keeping with respect to beneficial ownership interests in the Series 2021A Bonds, payment of the principal of and interest on the Series 2021A Bonds to DTC Participants or Beneficial Owners (as such terms are hereinafter defined) of the Series 2021A Bonds, confirmation and transfer of beneficial ownership interest in the Series 2021A Bonds and other related transactions by and between DTC, the DTC Participants and the Beneficial Owners of the Series 2021A Bonds is based solely on information furnished by DTC on its website for inclusion in this Official Statement. Accordingly, neither the City nor the Underwriters can make any representation concerning these matters or take any responsibility for the accuracy or completeness of such information.

DTC will act as securities depository for the Series 2021A Bonds. The Series 2021A Bonds will be issued as fully-registered securities registered in the name of Cede & Co., as DTC's partnership nominee, or such other name as may be requested by an authorized representative of DTC. One fully-registered Series 2021A Bond certificate will be issued for each maturity of the Series 2021A Bonds, each in the aggregate principal amount of such maturity, as set forth on the inside cover page of this Official Statement, and will be deposited with DTC.

DTC, the world's largest 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 of 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. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments from over one hundred (100) countries that its 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, thereby eliminating the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.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 Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is 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, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants" and, together with Direct Participants, "DTC Participants"). DTC has a S&P Global Ratings, a division of Standard & Poor's Financial Services LLC, rating of AA+. The DTC rules applicable to the DTC Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Series 2021A Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2021A Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2021A Bond ("Beneficial Owner") is in turn to be recorded on the DTC Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the DTC Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2021A Bonds

are to be accomplished by entries made on the books of DTC Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Series 2021A Bonds, except in the event that use of the book-entry system for the Series 2021A Bonds is discontinued.

To facilitate subsequent transfers, all Series 2021A 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 Series 2021A Bonds with DTC and their registration in the name of Cede & Co., or such other DTC nominee, will not effect any change in beneficial ownership of the Series 2021A Bonds. DTC has no knowledge of the actual Beneficial Owners of the Series 2021A Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2021A Bonds are credited, which may or may not be the Beneficial Owners. The DTC 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 DTC Participants to Beneficial Owners, will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Series 2021A Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2021A Bonds, such as redemptions, defaults and proposed amendments to the documents securing the Series 2021A Bonds. For example, Beneficial Owners of the Series 2021A Bonds may wish to ascertain that the nominee holding the Series 2021A Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the Bond Registrar and request that copies of notices are provided directly to them.

Redemption notices shall be sent by the Bond Registrar to DTC. If less than all of the Series 2021A Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Series 2021A Bonds unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series 2021A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the Series 2021A Bonds will be made to Cede & Co., or to such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the City or the Bond Registrar on the payable date in accordance with their respective holdings shown on DTC's records. Payments by DTC Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, nor its nominee, the Bond Registrar or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Bond Registrar, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of DTC Participants.

When reference is made to any action which is required or permitted to be taken by the Beneficial Owners, such reference shall only relate to those permitted to act (by statute, regulation or otherwise) on behalf of such Beneficial Owners for such purposes. When notices are given, they shall be sent by the City only to DTC.

NEITHER THE CITY NOR THE BOND REGISTRAR WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO ANY DIRECT OR INDIRECT PARTICIPANT OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE SERIES 2021A BONDS IN RESPECT OF THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DIRECT OR INDIRECT PARTICIPANT, THE PAYMENT BY DTC OR ANY DIRECT OR INDIRECT PARTICIPANT OF ANY AMOUNT IN RESPECT OF THE PRINCIPAL OF OR INTEREST ON THE SERIES 2021A BONDS, ANY NOTICE WHICH IS PERMITTED OR REQUIRED TO BE GIVEN TO BONDHOLDERS UNDER THE BOND RESOLUTION, THE SELECTION BY DTC OR ANY DIRECT OR INDIRECT PARTICIPANT OR ANY PERSON TO RECEIVE PAYMENT IN THE EVENT OF A PARTIAL REDEMPTION OF THE SERIES 2021A BONDS, OR ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS BONDHOLDER. SO LONG AS CEDE & CO. IS THE REGISTERED OWNER OF THE SERIES 2021A BONDS, AS NOMINEE OF DTC, REFERENCES IN THIS OFFICIAL STATEMENT TO THE BONDHOLDERS OR REGISTERED OWNERS OF THE SERIES 2021A BONDS SHALL MEAN CEDE & CO., AND SHALL NOT MEAN THE BENEFICIAL OWNERS OF THE SERIES 2021A BONDS.

Discontinuance of Book-Entry Only System

In the event the City determines that it is in the best interest of the Beneficial Owners to obtain Series 2021A Bond certificates, the City may notify DTC and the Bond Registrar, whereupon DTC will notify the DTC Participants, of the availability through DTC of Series 2021A Bond certificates. In such event, the City shall prepare and execute, and the Bond Registrar shall authenticate, transfer and exchange, Series 2021A Bond certificates as requested by DTC in appropriate amounts and within the guidelines set forth in the Bond Resolution. DTC may also determine to discontinue providing its services with respect to the Series 2021A Bonds at any time by giving written notice to the City and the Bond Registrar and discharging its responsibilities with respect thereto under applicable law. Under such circumstances (if there is no successor securities depository), the City and the Bond Registrar shall be obligated to deliver Series 2021A Bond certificates as described herein.

In the event Series 2021A Bond certificates are issued, the provisions of the Bond Resolution shall apply to, among other things, the transfer and exchange of such certificate and the method of payment of principal of and interest on such certificates. Whenever DTC requests the City and the Bond Registrar to do so, the City will direct the Bond Registrar to cooperate with DTC in taking appropriate action after reasonable notice (i) to make available one or more separate certificates evidencing the Series 2021A Bonds to any DTC Participant having Series 2021A Bonds credited to its DTC account; or (ii) to arrange for another securities depository to maintain custody of certificates evidencing the Series 2021A Bonds.

SECURITY AND SOURCES OF PAYMENT

General

The Bonds issued under the Bond Resolution are limited obligations of the City, payable solely from and secured by a lien upon and pledge of Net Revenues and, to the extent provided in the Bond Resolution, from Impact Fees and Special Assessments, and all moneys held in the respective Funds and

Accounts established under the Bond Resolution other than the Subordinated Indebtedness Account and the Arbitrage Rebate Fund (collectively, the “Pledged Revenues”). See “APPENDIX C - The Resolution” for a further description of the sources of funds pledged as security for the Bonds and referred to herein as the Pledged Revenues. The Series 2021A Bonds are payable from and secured by the Pledged Revenues on a parity with the Series 2017 Bonds and any other Bonds, Alternative Parity Debt or parity Short-Term Indebtedness that may be issued from time to time under the Bond Resolution; **provided, however, that no deposit to the Reserve Account shall be made in connection with the issuance of the Series 2021A Bonds and the Series 2021A Bonds shall not be secured by, or entitled to any benefit from, amounts, Reserve Account Insurance Policies or Reserve Account Letters of Credit held in the Reserve Account or any subaccount therein for the benefit of any other Bonds that may be issued and Outstanding under the Bond Resolution.**

With respect to the Series 2021A Bonds, there will be no Special Assessments or Impact Fees available to pay principal of or interest on the Series 2021A Bonds. Therefore, as applied to the Series 2021A Bonds, “Pledged Revenues” shall not be deemed to include Special Assessments or Impact Fees.

“Net Revenues” is defined in the Bond Resolution as being, for any particular period, the amount of Revenues for such period less Current Expenses for such period.

“Revenues” is defined in the Bond Resolution as all moneys received by the City in connection with or as a result of its ownership or operation of the Water and Sewer Utility, including the income derived by the City from the sale of water produced, treated or distributed by, or the collection, transmission, treatment or disposal of wastewater by the Water and Sewer Utility, any proceeds of use and occupancy insurance on the Water and Sewer Utility or any part thereof, payments made to the City under Interest Rate Swap arrangements, income from investments made under the Bond Resolution and, except for certain purposes related to the issuance of Additional Bonds under the Bond Resolution, amounts transferred or to be transferred from the Rate Stabilization Account; provided, however, Revenues shall not include grants, contributions or donations, investment income from investments of moneys on deposit in the Construction Fund, the Subordinated Indebtedness Account, the Impact Fee Account and the Special Assessment Account, proceeds of insurance (except use and occupancy insurance) and condemnation awards, moneys held in the Subordinated Indebtedness Account and in any Arbitrage Rebate Fund created pursuant to the Bond Resolution, proceeds of sales of property constituting a part of the Water and Sewer Utility, Special Assessments, the proceeds of Bonds or other Utility Debt and Impact Fees.

“Current Expenses” is defined in the Bond Resolution as the City’s reasonable and necessary current expenses of maintenance, repair and operation of the Water and Sewer Utility and shall include, without limiting the generality of the foregoing, all ordinary and usual expenses of maintenance and repair, which may include expenses not annually recurring, all payments due to the County for the services WASD provides to the City in connection with the Water and Sewer Utility, any reasonable payments to pension or retirement funds properly chargeable to the Water and Sewer Utility, insurance premiums, engineering expenses relating to maintenance, repair and operation, fees and expenses of the Bond Registrar, legal and accounting expenses, any fees, fines, or penalties lawfully imposed on the Water and Sewer Utility, any taxes which may be lawfully imposed on the Water and Sewer Utility or its income or operations and reserves for such taxes, annual fees for the maintenance of Credit Facilities, Liquidity Facilities, Reserve Account Insurance Policies, Reserve Account Letters of Credit or Interest Rate Swaps (other than payments due under an Interest Rate Swap on a parity with interest due on the Bonds and termination payments thereunder), and any other expenses required to be paid by the City in connection with the Water and Sewer Utility under the provisions of the Bond Resolution or by law, including any amounts required from time to time to pay arbitrage rebate under the Code to the United States of America directly or to fund the Arbitrage Rebate Fund, but shall not include any reserves for extraordinary maintenance or repair, or any

allowance for depreciation, or any administrative expenses payable to the City's General Fund, or any deposits or transfers to the credit of the Debt Service Account, the Reserve Account, the Rate Stabilization Account, the Subordinated Indebtedness Account, the Impact Fee Account or the Special Assessment Account.

Flow of Funds

The City maintains a special fund designated the "Water and Sewer Enterprise Fund" (the "Enterprise Fund"). The Bond Resolution establishes within the Enterprise Fund the Debt Service Account (and within the Debt Service Account, the Bond Service Subaccount and Redemption Subaccount), Reserve Account, Rate Stabilization Account, Subordinated Indebtedness Account, Impact Fee Account and Special Assessment Account. The Bond Resolution also establishes the Construction Fund. All such funds and accounts will be held by the City, and no independent trustee has been appointed to hold the moneys in such funds for the benefit of the Bondholders.

The City deposits all Revenues collected from the operation of the Water and Sewer Utility into the Enterprise Fund. Not later than the twentieth (20th) day of each month, the City will withdraw from the Enterprise Fund (except for an amount equal to the next two (2) month's Current Expenses under the Annual Budget, which amount shall be held for the payment of Current Expenses) and deposit the funds withdrawn in the following order:

(a) To the Bond Service Subaccount of the Debt Service Account, an amount which, together with amounts concurrently deposited therein from Impact Fees pursuant to the Bond Resolution and from Special Assessments pursuant to the Bond Resolution, will equal one-sixth (1/6) of the amount of interest payable on the Bonds of each Series on the next Interest Payment Date, and one-twelfth (1/12) or, if principal is payable semiannually, one-sixth (1/6), of the next maturing installment of principal on all Serial Bonds then Outstanding; provided, however, that in each month intervening between the date of delivery of Bonds (beginning with the month following the month in which such delivery takes place) and the next succeeding Interest Payment Date or principal payment date, respectively, the amount specified in this subparagraph shall be the amount which when multiplied by the number of deposits to the credit of the Bond Service Subaccount required to be made during such respective periods as provided above will equal the amounts required (in addition to any amounts received as accrued interest or capitalized interest from the proceeds of the Bonds) for such next succeeding interest payment and next maturing installment of principal, respectively;

(b) To the Redemption Subaccount of the Debt Service Account, an amount which, together with amounts concurrently deposited therein from Impact Fees pursuant to the Bond Resolution and from Special Assessments pursuant to the Bond Resolution, will equal one-twelfth (1/12) or, if any Bonds are required to be retired semiannually in satisfaction of the Amortization Requirements therefor, one-sixth (1/6), of the principal amount of Term Bonds of each Series required to be retired in satisfaction of the Amortization Requirements, if any, for such Fiscal Year;

(c) To the Reserve Account, the amount, if any, as may be required to make the amount deposited to the credit of the Reserve Account in such month equal to the Reserve Account Deposit Requirement for such month; provided, however, that if the Reserve Account Deposit Requirement is being satisfied by the restoration of any amounts drawn or paid under a Reserve Account Insurance Policy or a Reserve Account Letter of Credit, there shall be paid to the provider thereof such amount, if any, of any balance remaining after the deposits under clauses (a) and (b) above, as may be required to cause the Reserve Account Deposit Requirement to be satisfied;

(d) To the Rate Stabilization Account, amounts determined from time to time by the City Commission; and

(e) To the Subordinated Indebtedness Account, an amount, if any, equal to the sum of one-twelfth (1/12) of the principal, redemption premium, if any, and interest coming due on any Subordinated Indebtedness during the succeeding twelve (12) month period and the amount, if any, required to be deposited in any special reserve subaccount established within the Subordinated Indebtedness Account.

Impact Fees are required to be deposited to the Impact Fee Account, and Special Assessments are required to be deposited to the Special Assessment Account, and the amounts in such accounts are required to be used for the specific purposes for which such Impact Fees or Special Assessments have been levied. No Special Assessments or Impact Fees shall be available to pay principal of or interest on the Series 2021A Bonds. For a further description of such Accounts, see “APPENDIX C - The Resolution.”

Reserve Account

General

Under the Bond Resolution, the City has established the Reserve Account within the Enterprise Fund. The Reserve Account is held for the benefit of all Bonds Outstanding; provided, however, that pursuant to a Series Resolution for one or more particular Series of Bonds, the City may establish a separate subaccount within the Reserve Account for such particular Series of Bonds. In such event, such Series of Bonds shall be secured only by the moneys held for the credit of such separate subaccount and by no other amounts held for the credit of the Reserve Account or any other subaccount therein, and the Bonds Outstanding of any other Series will have no claim whatsoever on the moneys held for the credit of such separate subaccount in the Reserve Account.

The Reserve Account Requirement under the Bond Resolution is an amount equal to the lesser of (i) the Maximum Principal and Interest Requirements for all Bonds Outstanding secured by the Reserve Account in the current or any subsequent Fiscal Year, or (ii) the maximum amount allowed to be funded from Bond proceeds under the Code; provided that if the Series Resolution corresponding to a Series of Bonds provides for the establishment of a separate subaccount in the Reserve Account to secure only such Series of Bonds (with such Series of Bonds having no claim on the other moneys deposited to the credit of the Reserve Account), the Reserve Account Requirement for such Series of Bonds shall be calculated as set forth in the corresponding Series Resolution.

No Deposit for Series 2021A Bonds

The Series 2021A Resolution provides that, notwithstanding anything to the contrary contained in the Bond Resolution (i) the Series 2021A Bonds shall not be secured by, nor payable from moneys, Reserve Account Insurance Policies or Reserve Account Letters of Credit on deposit in, the Reserve Account or any subaccount therein created under or pursuant to the Bond Resolution and (ii) the Reserve Account Requirement with respect to the Series 2021A Bonds shall be \$0.00. **As a result, the Series 2021A Bonds shall not be entitled to any benefit from amounts, Reserve Account Insurance Policies or Reserve Account Letters of Credit that may be held in the Reserve Account or any subaccount therein for the benefit of other Bonds issued and Outstanding under the Bond Resolution.** Upon issuance of the Series 2021A Bonds, no amounts will be held in the Reserve Account for the benefit of Bonds Outstanding under the Bond Resolution.

Rate Covenant

The City has covenanted in the Bond Resolution that it will fix, charge and collect reasonable rates and charges for the use of the services and facilities furnished by the Water and Sewer Utility and that from time to time, and as often as it shall appear necessary, it will adjust such rates and charges by increasing or decreasing the same or any selected categories of rates and charges so that the Net Revenues (excluding from the computation of Current Expenses for any Fiscal Year any amount received from any source other than Revenues and applied to the payment of Current Expenses in such Fiscal Year) will be sufficient to provide an amount in each Fiscal Year at least equal to one hundred ten percent (110%) of the Principal and Interest Requirements on all Bonds for such Fiscal Year and one hundred percent (100%) of all amounts required to be deposited to the Reserve Account (or paid to the provider of a Reserve Account Insurance Policy or Reserve Account Letter of Credit), Rate Stabilization Account and Subordinated Indebtedness Account for such Fiscal Year.

If the City has covenanted to levy Special Assessments or Impact Fees against property to be benefitted by any Improvements (which levy is done in accordance with State law), and if, in the case of Special Assessments, the City has pledged such Special Assessments to the payment of Bonds or portions thereof and if, in the case of Impact Fees, such Impact Fees are legally available for application with respect to the payment of Bonds or portions thereof, then the Net Revenues in any Fiscal Year for purposes of the rate covenant shall be increased by an amount equal to eighty percent (80%) of the amount which the Consulting Engineers estimate will be received from the levy of said Special Assessments or Impact Fees, as the case may be, during such Fiscal Year, said amount to be the installment payments on the Special Assessments or Impact Fees, as the case may be, plus, in the case of Special Assessments, any interest payable on the unpaid portion of the Special Assessments during such Fiscal Year.

If in any Fiscal Year the Net Revenues are less than the amount required under the preceding paragraphs, within thirty (30) days of the receipt of the audit report for such Fiscal Year, the City is required to either cause the Chief Financial Officer, or employ a Rate Consultant, to review and analyze the financial status and operations of the Water and Sewer Utility, and to submit, within sixty (60) days thereafter, a written report to the City recommending revisions of the rates, fees and charges of the Water and Sewer Utility and the methods of operation of the Water and Sewer Utility that will result in producing the amount so required in the following Fiscal Year. Promptly upon its receipt of such recommendations, the City is required to transmit copies thereof to the City Manager and, if such recommendations were prepared by the Rate Consultant, the Chief Financial Officer and to revise its rates, fees and charges, or alter its methods of operation and take such other action as will conform with such recommendations.

If the City fails to comply with the recommendations of the Chief Financial Officer or Rate Consultant, as applicable, the registered owners of not less than ten percent (10%) in principal amount of all Bonds then Outstanding may institute and prosecute an action or proceeding in any court or before any board or commission having jurisdiction to compel the City to comply with the recommendations and the requirements of the preceding paragraph.

If the City complies with all recommendations of the Chief Financial Officer or Rate Consultant, as applicable, in respect to its rates, fees, charges and methods of operation, the failure of Net Revenues to meet the rate covenant described above will not constitute an Event of Default so long as the Revenues, together with available moneys in the Funds and Accounts created under the Bond Resolution, other than the Construction Fund and the Arbitrage Rebate Fund, are sufficient to pay in cash the Current Expenses and to pay the Principal and Interest Requirements on all Bonds Outstanding under the Bond Resolution and other Utility Debt for such Fiscal Year.

Additional Bonds

Additional Bonds of the City may be issued from time to time under and secured by the Bond Resolution, on a parity as to the pledge of the Net Revenues with the Bonds and any Alternative Parity Debt and parity Short-Term Indebtedness that may be issued under the Bond Resolution, subject to the conditions described below, for the purpose of paying all or any part of the Cost of any Improvements and the funding of the Reserve Account and/or the Rate Stabilization Account.

Before any Additional Bonds are permitted to be issued under the Bond Resolution, the City Commission shall adopt a Series Resolution authorizing the issuance of such Additional Bonds and there shall be filed with the City, among other things, the following:

(a) a certificate of the Chief Financial Officer, an Accountant or the Rate Consultant, demonstrating that either (i) the percentage derived by dividing the Net Revenues projected for the Water and Sewer Utility for the Fiscal Year following the Fiscal Year in which the Completion Date of the Improvements to be financed by the Additional Bonds then to be delivered is expected to occur, as certified by the Rate Consultant, adjusted as permitted below, by the Maximum Principal and Interest Requirements, including the Principal and Interest Requirements with respect to the Additional Bonds then to be delivered, for any future Fiscal Year is not less than one hundred ten percent (110%); or (ii) the percentage derived by dividing the Net Revenues for any period of twelve (12) consecutive months selected by the City out of the eighteen (18) months preceding the delivery of such certificate, by the Maximum Principal and Interest Requirements, including the Principal and Interest Requirements with respect to the Additional Bonds then to be delivered, for any future Fiscal Year is not less than one hundred ten percent (110%) (the period during which Net Revenues are determined being referred to hereinafter as the "Measurement Period"); and

(b) if the certificate described in (a)(i) above is being delivered, a certificate of the Rate Consultant setting forth the projected Net Revenues for the Fiscal Year following the Fiscal Year in which the Completion Date of the Improvements to be financed by the Additional Bonds then to be delivered is expected to occur;

(c) a certificate of the Chief Financial Officer to the effect that no event of default under the Bond Resolution and no event which with the passage of time, the giving of notice or both would become an event of default, has occurred within the twelve (12) consecutive calendar months prior to the date of such certificate and is continuing, or, if any such event or events has occurred and is continuing, that the issuance of such Series of Additional Bonds will cure the same; and

(d) an opinion of the City Attorney or Bond Counsel that the issuance of such Additional Bonds has been duly authorized and that all conditions precedent to the delivery of such Additional Bonds have been fulfilled.

In determining whether to execute and deliver the certificate mentioned in paragraph (a) above, the following adjustments to Net Revenues may be made:

(1) If the City, prior to the issuance of the proposed Additional Bonds, shall have increased the rates, fees, rentals or other charges for the services of the Water and Sewer Utility, the Net Revenues for the Measurement Period shall be adjusted to show the Net Revenues which would have been derived from the Water and Sewer Utility in such Measurement Period as if such increased rates, fees, rentals or

other charges for the services of the Water and Sewer Utility had been in effect during all of such Measurement Period.

(2) If the City shall have acquired or has contracted to acquire any privately or publicly owned existing water system or sewer system, then the Net Revenues derived from the Water and Sewer Utility during the Measurement Period shall be increased by addition to the Net Revenues for the Measurement Period of the net revenues which would have been derived from said existing water system or sewer system as if such existing water system or sewer system had been a part of the Water and Sewer Utility during the Measurement Period. For the purposes of this paragraph, the Net Revenues derived from said existing water system or sewer system during the Measurement Period shall be adjusted by deducting the cost of operation and maintenance of said existing water system or sewer system from the gross revenues of said existing water system or sewer system in the same manner provided in the Bond Resolution for the determination of Net Revenues.

(3) If the City, in connection with the issuance of Additional Bonds, shall enter into a contract (with a duration not less than the final maturity of such Additional Bonds) with any public or private entity whereby the City agrees to furnish services in connection with any water system or sewer system, then the Net Revenues of the Water and Sewer Utility during the Measurement Period shall be increased by the least amount which said public or private entity shall guarantee to pay in any one (1) year for the furnishing of said services by the City, after deducting therefrom the proportion of operating expenses and repair, renewal and replacement cost attributable in such year to such services. Such payments shall be deemed to be Net Revenues of the Water and Sewer Utility and pledged for the Bonds in the same manner as other Net Revenues of the Water and Sewer Utility.

(4) If the City has covenanted to levy Special Assessments or Impact Fees against property to be benefited by any Improvements (which levy must be done in accordance with State law), and if, in the case of Special Assessments, the City has pledged or pledges such Special Assessments to the payment of Bonds or portions thereof and if, in the case of Impact Fees, such Impact Fees are legally available for application with respect to Bonds or portions thereof, then solely for purposes of clauses (a) and (b) above the Net Revenues during the Measurement Period shall be increased by an amount equal to eighty percent (80%) of the amount which the Consulting Engineers estimate will be received from the levy of said Special Assessments or Impact Fees, as the case may be, during any Fiscal Year occurring within three (3) years of the date of the sale of such Additional Bonds, said amount to be the installment payments on the Special Assessments or Impact Fees, as the case may be, plus, in the case of Special Assessments, any interest payable on the unpaid portion of the Special Assessments during such Fiscal Year.

In the future, the City intends to issue Additional Bonds in accordance with its current multi-year capital improvement plan. See “WATER AND SEWER UTILITY - Capital Improvement Plan” herein. For a more detailed description of the conditions required to be satisfied in connection with the issuance of Additional Bonds and the effect of issuing such Bonds, see “APPENDIX C - The Resolution” and, in particular, Section 209 of the Bond Resolution.

Refunding Bonds

Under the provisions of the Bond Resolution, Refunding Bonds of the City may be issued under and secured by the Bond Resolution, on a parity as to the pledge of the Net Revenues with the Bonds and any Alternative Parity Debt and parity Short-Term Indebtedness that may be issued under the Bond Resolution, for the purpose of refunding all or a portion of any Bonds Outstanding of any one or more Series, funding the Reserve Account and/or the Rate Stabilization Account and paying any expenses in connection with such refunding.

Before any Refunding Bonds are permitted to be issued under the Bond Resolution, the City Commission shall adopt a Series Resolution authorizing the issuance of such Refunding Bonds and there shall be filed with the City, among other things, (A) either: (i) a certificate of the Chief Financial Officer that the issuance of the Refunding Bonds will result in a decrease in total Principal and Interest Requirements for all Bonds Outstanding, or (ii) the certificates required by (a), (b) and (c) under the caption “Additional Bonds” above; provided, however, that with respect to the certificates required by (a)(i) and (b), the projected Net Revenues shall be computed for the Fiscal Year immediately following the issuance of the Refunding Bonds; (B) an opinion relating to the Refunding Bonds required by (d) under the caption “Additional Bonds” above and (C) an opinion of Bond Counsel to the effect that upon the issuance of such Refunding Bonds and the application of the proceeds thereof, the Bonds to be refunded will no longer be deemed to be Outstanding under the Bond Resolution and that the issuance of the Refunding Bonds will not adversely affect the exclusion of interest on any Bonds then Outstanding from gross income for federal income tax purposes.

The Series 2021A Bonds are being issued as Refunding Bonds. See “INTRODUCTION” and “PURPOSE OF THE ISSUE - Plan of Refunding” herein. For a more detailed description of the conditions required to be satisfied in connection with the issuance of Refunding Bonds and the effect of issuing such Bonds, see “APPENDIX C - The Resolution” and, in particular, Section 210 of the Bond Resolution.

Limited Liability

The City is not obligated to pay the Series 2021A Bonds or the interest thereon except from the Pledged Revenues and neither the faith and credit nor any physical properties of the City are pledged to the payment of the Series 2021A Bonds. The issuance of the Series 2021A Bonds does not directly or indirectly or contingently obligate the City to levy any form of taxation whatever therefor or to make any appropriation for their payment except from the Pledged Revenues. Neither the full faith and credit nor the taxing power of the City, Miami-Dade County, Florida (the “County”), the State or any political subdivision thereof is pledged to the payment of the Series 2021A Bonds.

Other Parity Indebtedness

In addition to the issuance of Additional Bonds and Refunding Bonds, the City may issue other obligations on a parity with the Series 2021A Bonds and other Bonds Outstanding under the Bond Resolution as long as such obligations are issued in accordance with the provisions of the Bond Resolution authorizing their issuance as parity indebtedness. Such obligations include the issuance of Short-Term Indebtedness without the delivery of the certificates described under the caption “Additional Bonds” above as long as immediately following the issuance of such Short-Term Indebtedness, the outstanding principal amount of all Short-Term Indebtedness does not exceed ten percent (10%) of the Net Revenues of the Water and Sewer Utility, as shown on the Annual Budget for the current Fiscal Year.

For a more detailed description of the other types of indebtedness that may be issued from time to time on a parity with the Series 2021A Bonds and other Bonds Outstanding under the Bond Resolution, in addition to Additional Bonds and Refunding Bonds, and the tests applicable to the issuance of such other types of indebtedness, see “APPENDIX C - The Resolution” and, in particular, Sections 211 and 212 of the Bond Resolution.

Subordinated Indebtedness

The City may issue obligations under the Bond Resolution that are secured by the Net Revenues without satisfying the conditions for the issuance of Additional Bonds, Refunding Bonds or Alternative

Parity Debt so long as such obligations are issued as Subordinated Indebtedness. Subordinated Indebtedness is payable solely from amounts on deposit in the Subordinated Indebtedness Account. Net Revenues may be deposited in the Subordinated Indebtedness Account only after the deposit of amounts required to be made to the accounts securing the Bonds or Alternative Parity Debt, including the Rate Stabilization Account. As a result, the lien on Net Revenues in favor of Subordinated Indebtedness is junior and subordinate to the pledge of and lien on Net Revenues in favor of the Series 2017 Bonds, the Series 2021A Bonds and any other Bonds or Alternative Parity Debt issued under the Bond Resolution.

Modifications or Supplements to Resolution

Except as set forth in the third (3rd) succeeding paragraph below, no supplemental resolution may be adopted by the City Commission for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions of the Bond Resolution or of any resolution supplemental thereto without the consent in writing of the Holders of not less than a majority in aggregate principal amount of the Bonds then Outstanding; provided, however, that no such supplemental resolution shall (i) permit an extension of the maturity of the principal of or the interest on any Bond, (ii) reduce the principal amount of any Bond or the redemption premium or the rate of interest thereon, (iii) create a superior or parity lien upon or a pledge of Revenues other than the lien and pledge created by the Bond Resolution, or a preference or priority of any Bond or Bonds over any other Bond or Bonds, or (iv) reduce the aggregate principal amount of the Bonds required for consent to such supplemental resolution without, in each case, the consent of the Holders of all the Bonds Outstanding.

The consent of the Holders of any Additional Bonds or Refunding Bonds issued under the Bond Resolution shall be deemed given if the underwriters or initial purchasers for resale consent in writing to such supplemental resolution and the nature of the amendment effected by such supplemental resolution is disclosed in the official statement or other offering document pursuant to which such Additional Bonds or Refunding Bonds are offered and sold to the public.

In addition, for purposes of providing the written consent of the Holders of any Series of Bonds to any supplemental resolution modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions of the Bond Resolution or of any resolution supplemental thereto, to the extent any Series of Bonds is secured by a Credit Facility, so long as the issuer of such Credit Facility shall not be in default in its obligations under such Credit Facility, the consent of the Credit Facility Issuer for such Series of Bonds shall constitute the consent of the Holders of such Bonds.

Notwithstanding the foregoing, the City may, from time to time, without the consent of the Holders of any Series of Bonds, amend, change, modify or alter the Bond Resolution for any of the specifically authorized reasons set forth in Sections 1001(a) through (k) of the Bond Resolution. See “APPENDIX C - The Resolution.”

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DEBT SERVICE SCHEDULE

Set forth below are the debt service requirements of the Series 2021A Bonds, all other Bonds Outstanding upon issuance of the Series 2021A Bonds and the total combined debt service on all Bonds Outstanding immediately following issuance of the Series 2021A Bonds.

Fiscal Year Ending September 30	Series 2021A Bonds			Outstanding Bonds*	Total Series 2021A Bonds and Outstanding Bonds*
	Principal	Interest	Total		
2021	\$	\$	\$	\$ 6,809,400.00	\$
2022				6,639,400.00	
2023				6,639,150.00	
2024				6,640,400.00	
2025				10,222,900.00	
2026				10,227,400.00	
2027				8,658,650.00	
2028				8,654,650.00	
2029				8,655,400.00	
2030				8,655,150.00	
2031				7,778,400.00	
2032				5,125,400.00	
2033				5,131,800.00	
2034				5,132,300.00	
2035				5,138,300.00	
2036				5,144,300.00	
2037				5,145,050.00	
2038				5,150,550.00	
2039				5,153,350.00	
2040				5,157,350.00	
2041				9,282,350.00	
2042				9,278,350.00	
2043				9,278,750.00	
2044				9,280,250.00	
2045				9,278,500.00	
2046				9,277,750.00	
2047				9,282,000.00	
Total	\$	\$	\$	<u>\$200,817,250.00</u>	\$

* Does not include debt service on the Refunded Bonds. See "PURPOSE OF THE ISSUE - Plan of Refunding" herein. The Series 2017 Bonds will be the only other Outstanding Bonds upon issuance of the Series 2021A Bonds. See "INTRODUCTION" herein.

WATER AND SEWER UTILITY

The following is intended to provide only a summary description of the Water and Sewer Utility. More detailed information relating to the Water and Sewer Utility may be obtained by reviewing the City of Miami Beach, Florida Water and Sewer Rate Study dated October 5, 2020 (the “Rate Study”) prepared by GovRates, Inc., as the City’s consultant for the most recent analysis and recommendation of rates to be charged for services of the Water and Sewer Utility (the “Rate Consultant”). The Rate Study was prepared to address issues and provide information relevant to Water and Sewer Utility rates for the Fiscal Years ended September 30, 2020 and ending September 30, 2021 through September 30, 2030. The period between Fiscal Year ending September 30, 2021 through September 30, 2025, for which estimates, projections and forecast from the Rate Study or other sources may be provided in this Official Statement, is hereinafter sometimes referred to as the “Forecast Period.” A copy of the Rate Study may be obtained from the City by contacting the City’s Chief Financial Officer, 1700 Convention Center Drive, Miami Beach, Florida 33139, Telephone number: (305) 673-7466, Facsimile number: (305) 673-7795, Email address: www.miamibeachfl.gov/finance.

General

The Water and Sewer Utility is operated on a consolidated basis. The water transmission and distribution portion of the Water and Sewer Utility (the “Water System”) provides the system for distributing water to the residents of the City. The Water System does not have any water treatment facilities. The City purchases potable water at wholesale prices from the County. Similarly, the sewage collection and transmission portion of the Water and Sewer Utility (the “Sewer System”) comprises the facilities and equipment that collect the wastewater of the residents of the City and conveys it to appropriate sewage treatment facilities. Like the Water System, the Sewer System does not have any sewage treatment facilities. All of the wastewater from the Sewer System is treated at the County’s Central District Wastewater Treatment Plant. For such service, the City pays the County a monthly fee directly proportional to the amount of potable water consumed and the amount of wastewater generated.

The City exercises exclusive jurisdiction, control and supervision over the Water and Sewer Utility. The City Commission has the legal authority to fix, charge and collect from its customers, rates, fees, and charges, and to acquire, construct, finance and operate the Water and Sewer Utility, without supervision or regulation by any other commission, board, bureau, agency or other political subdivision of the County or the State; provided, however, that environmental impacts are regulated by various governmental entities. See “WATER AND SEWER UTILITY - Government Regulations” herein.

Public Works Department

General

The City’s Public Works Department (the “Public Works Department”) is a large, full service organization providing planning, design, construction, maintenance, repairs and operation services for City infrastructure, including utility systems, roadways and greenways. The department oversees City cleanliness and manages the solid waste/recycling collection and disposal program. The department is represented by professional, semi-professional and licensed disciplines working in the following divisions and sections: Operations, Engineering, Water Distribution, Sewer Collection, Stormwater Management, Streets and Street Lighting, Sanitation, and Greenspace Management. The Public Works Department was designated as an Accredited Public Works Agency by the American Public Works Association in May 2007 and re-accredited in June 2011, 2015 and August of 2019. The American Public Works Association notes that such accreditation provides formal recognition of acceptance by the Public Works Department of

concepts of continuous improvement and official verification of the department's compliance with recommended policies, procedures and practices established in the *Public Works Management Practices Manual*.

The Public Works Department is responsible for the management, planning, design, construction, maintenance, repair and operation of the City's infrastructure. Such responsibilities include operation and maintenance of the City's roadways, greenways, stormwater facilities, and the facilities of the Water and Sewer Utility. The Public Works Department is also responsible for solid waste and recycling collection in the City. The Public Works Department consists of four (4) divisions: Operations, Engineering, Sanitation, and Greenspace Management.

Alina Tejada Hudak is the Assistant City Manager in charge of the Public Works Department and Roy Coley is the Director of the department. As such, they are responsible for the management and supervision of all Water and Sewer Utility programs and initiatives. Rudy De La Torre, the Director of the Operations Division of the Public Works Department, is responsible for, among other duties, the daily operations of the Water and Sewer Utility. Mr. De La Torre oversees the operation and maintenance of the City's water distribution, wastewater collection, stormwater, street and street lighting systems.

Operations Division

Sections within the Operations Division of the Public Works Department consist of the following:

Water Division. The section referred to as the Water Division is responsible for providing reliable and high quality water that protects public health and safety in compliance with all federal, state, and local regulations. The Water Division conducts several thousand tests annually to ensure that the customers of the Water System receive the highest quality drinking water. Additionally, the Water Division maintains the City's 177 miles of water mains, 86 water crossings, 1,009 fire hydrants, 717 fire lines, and 23,000 water valves.

Sewer (Wastewater) Division. The section referred to as the Sewer (Wastewater) Division is responsible for operating and maintaining a reliable sanitary sewer system that protects public health and safety in compliance with all federal, state, and local regulations. The Sewer Division maintains the City's 122 miles of sanitary gravity sewer pipes and 3,160 sanitary sewer manholes.

Stormwater Division. The section referred to as the Stormwater Division is responsible for operating and maintaining a reliable stormwater collection, conveyance, and treatment system that protects public health and safety in compliance with all federal, state, and local regulations. The Stormwater Division cleans and maintains the City's 110 miles of stormwater lines, more than 7,800 stormwater structures (stormwater manholes, storm drains, and catch basins), 367 outfalls, and 49 pump stations.

Pumping Operations Services. The Pumping Operations Services team supports the water, sewer, and stormwater divisions by (i) operating the City's 78 pump stations (consisting of 6 water pump stations, 23 sewer pump stations, and 49 stormwater pump stations), (ii) maintaining the City's 4 water storage tanks, and (iii) managing the Control Room, which is a 24/7/365 live-human support center for all customers of the Water and Sewer Utility.

Streets and Street Lighting Division. The Streets and Street Lighting Division is responsible for providing quality maintenance and repairs of roads, sidewalks, and street lighting infrastructure in the City, including, without limitation, 140 miles of streets, 33 miles of alleys, 29 bridges (lights), 242 miles of sidewalk, 200 miles of curb and gutter, 7,300 linear feet of City-owned seawall, and 7,200 street lights.

Other Divisions

Other divisions within the Public Works Department are overseen by Jay J. Fink, P.E., one of the Assistant Directors of the Public Works Department. Mr. Fink reports directly to the Public Works Director. Nelson Perez-Jacome, P.E., the City Engineer, is responsible for the daily operations of the divisions overseen by Mr. Fink. Such divisions provide the following services:

Engineering Division. The Engineering Division performs design and drafting for plans, prepares specifications for improvements to the City's infrastructure, maintains engineering and utility records, and performs inspections on the City's bridges, seawalls, storm sewer, sanitary sewer, water, and street lighting systems. The Survey Section within the division provides surveys, legal descriptions, construction layouts, line and grade for water and sewer, streets, streetlights, and stormwater improvements. The division also issues utility construction permits, reviews planning and zoning board issues, and conducts building plan reviews. The Right-of-Way Management Section within the division issues permits and oversees utilization of rights-of-way.

Sanitation Division. The Sanitation Division is responsible for the collection and disposal of residential garbage, trash and refuse generated at municipal buildings, the residential recycling program, sanitation inspections, street sweeping on public rights-of-way and collection and disposal of litter from public litter bins. Collection and disposal services for residential garbage, as well as residential recycling, are provided by a private hauler contracted by the City.

Greenspace Management Division. The primary directive of the Greenspace Management Division is to promote the health, vitality, sustainability, and resiliency of the vegetation in all of the City's rights-of-way, including specifically, without limitation, the gateways to the City, the City's green spaces that are not dedicated parks, the City's Lincoln Road Mall, and the municipal buildings, parking facilities, and coastal areas within the City. The division is committed to the proliferation of the City's urban tree canopy and the protection of its natural environment through the use of Florida Friendly Landscaping Principles and Integrated Pest Management Protocol to promote water conservation and combat the growth of undesirable plants and pests. The Division consists of three (3) sections, In-house Landscape and Tree Maintenance, Contracted Landscape Maintenance, and Right-of-Way Enhancement.

The Public Works Department is also supported by other departments within the City. For example, the City Manager's office provides managerial and administrative guidance, the Finance Department performs the utility billing functions, the Procurement Department handles requests for proposals for engineering consultant contracts, requests for payment of invoices, advertising, awarding of construction contracts, and purchases of equipment, and the Office of Management and Budget approves spending requests and allocates funding for all water, wastewater and stormwater operations. Set forth below is a brief summary of the background, qualifications and experience of those management officials of the City who are responsible for the operation of the Water and Sewer Utility:

[EACH BIO. TO BE REVISED, AS NEEDED]

Raul J. Aguila, Esq., Interim City Manager. Mr. Aguila was appointed Interim City Manager for the City in December 2020. Prior to accepting his position as Interim City Manager, Mr. Aguila served as the City Attorney for the City for nearly seven years, after having served as one of the attorneys in the City Attorney's Office for more than twenty years. During Mr. Aguila's tenure as City Attorney, the City spearheaded cutting-edge quality-of-life and social equality legislation that has influenced local governments throughout Florida and the country, earning the City the distinction as one of the first cities in the United States to enact human rights legislation and domestic partnership protections. Additionally,

during Mr. Aguila's tenure as City Attorney, the City was one of the first to pass ordinances guaranteeing a living wage to employees of City contractors, and requiring City contractors to provide equal benefits to the domestic partners of their employees. As a result of being the City's lead transactional attorney during most of his tenure in the City Attorney's office, Mr. Aguila has been personally involved in the overwhelming majority, if not all, of the City's most important public and public-private development projects, including the revitalization of Lincoln Road, the Miami Beach Convention Center, the Loews Hotel, and the New World Center and SoundScape Park (home of the New World Symphony). Most recently, Mr. Aguila advised the City on its \$439 million General Obligation Bond Program, which is already revitalizing public spaces, public structures, and public security for the future of the City. Mr. Aguila received his Bachelor of Arts from Florida International University and his Juris Doctorate from the University of Miami.

Alina Tejada Hudak, Assistant City Manager. Ms. Hudak was appointed Assistant City Manager for the City in February 2020 to oversee several major departments, including the Public Works Department. Prior to her employment with the City, Ms. Hudak spent 35 years serving in various upper management and leadership positions for Miami-Dade County. Her career began with the County in 1984 as a management trainee. In 1993, she was appointed Assistant County Manager and, in 1996, was appointed Director of the General Services Administration, one of the County's largest and most complex operational responsibilities, then composed of seven divisions and over 800 employees. In 1998, she returned to the County Manager's Office as an Assistant County Manager, where she led an extensive procurement reform effort that culminated in the creation of improved and expedited procurement legislation. In 2011, Ms. Hudak was appointed County Manager to ensure County business continuity and excellence during a transformation in leadership and governance. Prior to accepting the position as Assistant City Manager for the City, Ms. Hudak served as a Deputy Mayor for Miami-Dade County.

Winning a myriad of accolades from national and local community organizations, Ms. Hudak has been a trailblazer as the first woman Director of a large operational department for Miami-Dade County, the first Hispanic woman appointed Assistant County Manager, and the first woman to serve as County Manager. Ms. Hudak led Miami-Dade County's nationally-recognized response to the ZIKA emergency in 2016, recognized by the Centers for Disease Control and Prevention as the only government to eradicate the disease transmission successfully. She also led the County's largest debris removal effort after Hurricane Irma in 2017. Ms. Hudak holds a Bachelor's degree in Business Administration and a Master's degree in Public Administration, both from the University of Miami.

John Woodruff, Chief Financial Officer. Mr. Woodruff was appointed Chief Financial Officer for the City in February 2017. Mr. Woodruff previously served as Interim Chief Financial Officer for the City from September 2015 through January 2016. Mr. Woodruff also served as the Director of the Office of Budget and Performance Improvement for the City from 2013 through March 2016, prior to leaving the City to become the Director of the Office of Management and Budget for the City of San Antonio, Texas. Prior to joining the City, Mr. Woodruff served as co-owner of Panama Realtor Property Management Services from August 2012 to June 2013. He also served in various capacities for Pinellas County, Florida, including serving as Director of the Pinellas County Office of Management and Budget from April 2007 to July 2012 and as a Manager in such office from April 2002 to April 2007. Prior to employment in Florida, Mr. Woodruff served in various positions for the City of San Antonio, Texas, including serving as a Senior Budget and Management Analyst in the Office of Management and Budget for the City of San Antonio from February 2000 to April 2002 and as a Budget and Management Analyst in such office from January 1998 to February 2000. He also interned with the U.S. Department of Commerce, the International Affairs Department for the City of San Antonio and the Mayor's Office for the City of San Antonio. Mr. Woodruff received a Master of Business Administration, in International Business, from the University of Texas at San Antonio and a Bachelor of Arts in History from the University of Texas at Austin.

Roy Coley, Public Works Director. Mr. Coley was appointed Director of the Public Works Department in April, 2018. Prior to being appointed Director, Mr. Coley served as the Assistant Public Works Director and Director of the Infrastructure Division of the Public Works Department from August, 2015, when he began his career with the City. He has over 23 years of experience in water resources operations and maintenance, including 10 years with the Florida Keys Aqueduct Authority where he was the Director of Operations responsible for water and wastewater throughout the Florida Keys. In 2010, the American Water Works Association published his research and work on water quality management in Key West drinking water systems in its technical manual M56 second edition. He is licensed by the states of Alabama and Florida in water and wastewater treatment and has six certifications from California State University College of Engineering, Sacramento, in various water resources treatment and management fields. Mr. Coley received his Bachelor of Arts, *summa cum laude*, in Organizational Leadership from St. Thomas University and his Master of Business Administration from Saint Leo University.

Rodolfo De La Torre, Infrastructure Director. Mr. De La Torre was appointed Director of the Infrastructure Division of the Public Works Department (currently the Operations Division) in April 2018. Since his appointment, Mr. De La Torre has been responsible for directing nearly 120 licensed, skilled, and certified professionals of the Operations Division's four disciplines: Water, Sewer, Stormwater, and Streets and Street Lighting, and overseeing an annual budget totaling nearly \$100 million. Under his leadership, the Operations Division has had several accomplishments, including, but not limited to, securing a modern and user-friendly Advanced Metering Infrastructure system for the customers of the Water System, initiating the Miami Beach Smart Street Lighting Master Plan, and transforming the Operations Division's warehouse that houses nearly \$1.7 million of inventory into a highly-secured and highly-regarded facility that has achieved superior audits since Fiscal Year 2018.

Nelson Perez-Jacome, P.E., City Engineer. Mr. Perez-Jacome was appointed City Engineer for the City in March, 2019. Mr. Perez-Jacome is a Civil Engineer with considerable experience in the procurement, design, permitting, and construction of large scale water, wastewater, and stormwater projects. Prior to accepting his position as City Engineer, Mr. Perez-Jacome worked for several engineering firms in senior level positions, including Client Services Manager for AECOM from 2018 to 2019, principal engineer for Hazen and Sawyer from 2015 to 2018, and project engineer for King Engineering Associates from 2014 to 2015 and for A&P Consulting Transportation Engineers from 2010 to 2014. He has provided engineering consulting services to a wide array of clients in Florida, including, without limitation, the Miami-Dade County Water & Sewer Department, the City of North Miami Beach, the City of Homestead, the City of Coral Gables, the City of Hialeah, the Town of Medley, and Broward County Water & Wastewater Services. He has worked on a myriad of water mains, force mains, sanitary sewer collection systems, pump stations, and stormwater management systems, providing design and construction management services.

Mr. Perez-Jacome is actively involved in the local engineering community, serving as the President of the American Society of Civil Engineers, the Secretary of the Cuban-American Association of Civil Engineers (CAACE), and the YP committee chair of the American Water Works Association Florida Section (FSAWWA). He has received multiple professional accolades, including the CAACE 2013 Young Engineer of the Year Award and the FSAWWA Region VII 2013 Volunteer of the Year Award. Mr. Perez-Jacome received his Bachelor of Science in Civil Engineering from Florida International University and his Master of Engineering in Environmental Engineering Sciences, with a specialization in water, wastewater, and stormwater, from the University of Florida.

For a more detailed discussion of the Public Works Department, including the various training and certification programs provided for operators and other personnel of the Water and Sewer Utility, see the City's website at <https://www.miamibeachfl.gov/city-hall/public-works/>.

Water System

General

The City owns, operates and maintains the potable water system serving customers within the corporate limits of the City. The Water System includes water storage, pumping, transmission and distribution facilities. The City's water storage and conveyance system consists of approximately 177 miles of transmission and distribution lines, two 4.0 million gallons ("MG") and two 3.0 MG above ground reinforced concrete storage tanks and six water booster pump stations that serve specific areas throughout the City. Also included in the Water System are 23,000 water valves, 750 fire mains, 1,009 fire hydrants and 12,500 water meters. The Water System provided potable water service to approximately 10,407 domestic and 3,071 irrigation retail accounts during Fiscal Year 2019.

Because the City is a coastal barrier island surrounded by salt water, it was never practical for the City to develop its own water supply system. The least costly and highest quality water comes from the Biscayne Aquifer water supply wells located on the mainland, which are owned and operated by the County. As a result, the most economical water supply approach was to purchase water from the County for distribution to the City's residents and businesses. The City's potable water is supplied exclusively by the Miami-Dade Water and Sewer Department (the "MDWASD"), the department of the County that oversees operation of the County's water and sewer system. Set forth below is a summary of the water purchased for the Water System from the County during Fiscal Year 2019.

<u>Water System - Water Use Summary</u>	<u>Fiscal Year Ended September 30, 2019</u>
Average Annual Accounts Served ⁽¹⁾	13,478
Average Annual ERUs Served ⁽¹⁾⁽²⁾	53,272
Total Finished Water Purchased	
Total Gallons (000s)	8,109,301
MGD - Annual Average Daily Flow ⁽³⁾	22,217
Total Finished Water Sold to Retail Customers	
Total Gallons (000s)	6,924,691
MGD - Annual Average Daily Flow ⁽³⁾	18,972
Non-Revenue Water Percentage (% of Purchases)	14.60%

Source: City of Miami Beach, Florida Water and Sewer Rate Study dated October 5, 2020 and City of Miami Beach, Florida Public Works Department.

- (1) Reflects all classes of customers served and includes 10,407 domestic accounts and 3,071 irrigation accounts.
- (2) ERUs = Equivalent Residential Units. See "WATER AND SEWER UTILITY - Water System - Accounts" herein.
- (3) MGD = Millions Gallons Per Day.

Non-Revenue Water. The International Water Association (the "IWA") and the American Water Works Association (the "AWWA") use the term "non-revenue water" to describe the volume of water lost through leakage, meter inaccuracies, flushing and other authorized usage. Non-revenue water represents finished water that is not billed to water system customers.

In 2013, the AWWA assembled validated water audit data from twenty-six (26) utilities across the United States of America and Canada that ranged in size from 850 to over 500,000 water service connections. These water audit data were averaged to develop the percentages of finished water produced and billed on an annual average day flow (“AADF”) basis. Such water audit data revealed that 80.0% of finished water was billed to customers, with approximately 14.6% constituting real, unaccounted for water losses, approximately 2.8% constituting apparent lost water and approximately 2.6% constituting lost water from authorized uses, like flushing of water lines, fire hydrant testing and lift station wash downs for maintenance purposes. Real water losses are the result of leakage in the distribution system piping and apparent water losses are the result of faulty meters, data collection errors and theft.

As noted in the Water System - Water Use Summary table above, the percentage of water purchased for the Water System in Fiscal Year 2019 that constituted non-revenue water was 14.6%. The non-revenue water in the 2013 AWWA Water Audit data averaged approximately 20%. Hence, the purchase of water for the Water System that constituted non-revenue water for Fiscal Year 2019 was less than the national average. For more additional information relating to non-revenue water, see “WATER AND SEWER UTILITY - Customers - Water System” herein. To address the problem of leaks that may be in the Water System’s distribution network, older pipes are scheduled to be replaced as part of the City’s current multi-year capital improvement plan. See “WATER AND SEWER UTILITY - Capital Improvement Plan” herein.

Water Supply Agreement. On June 24, 1957, the City entered into an agreement with the Department of Water and Sewers of the City of Miami to obtain potable water. That agreement expired on June 18, 1989. The County subsequently became the legal successor in interest to the Department of Water and Sewers of the City of Miami and assumed all rights, duties, and obligations of such department. Thereafter, the City executed five (5) year service term agreements with the MDWASD for the purchase of potable water.

On May 20, 2006, the County and the South Florida Water Management District (the “SFWMD”) entered into a contract under which the County was required to secure twenty (20) year water service agreements with its volume (wholesale) water customers (including the City) to coincide with the request of the County for twenty (20) year water consumptive use permits issued by the SFWMD. On July 29, 2008, the City entered into a twenty (20) year “Contract Providing for the Rendition of Water Service” with the MDWASD (the “Water Supply Agreement”). The Water Supply Agreement addresses a number of issues, including, without limitation, the basis for charges, points of delivery, meter reading, water pressures and maximum hourly demand rates. The agreement provides that if the County ever has an insufficient supply of water to fulfill the requirements of all its customers, it shall furnish to the City the City’s pro-rata share of the available supply.

Under the Water Supply Agreement, the City’s flow of potable water is metered at the four interconnections that serve as the points of delivery of potable water from the County to the City. The City maintains four large diameter metered supply interconnections with the County’s water distribution system consisting of one 20 inch diameter main located in the southernmost section of the City, one 30 inch diameter main and one 36 inch diameter main located in the middle portions of the City, and one 36 inch diameter main located in the northernmost section of the City.

Cost of Water Purchased. The City is charged a uniform rate (applicable to all volume customers) for the delivered potable water metered at each point of delivery that is based on prior fiscal year costs, reflecting the sum of the following for the County’s regional water system:

- Budgeted operating expenses, including taxes assessed (if any);

- Budgeted annual renewal and replacement expenses;
- Budgeted annual interest obligations of outstanding notes and bonds;
- Budgeted annual charge for the amortization of the outstanding notes and bonds;
- Budgeted annual charge for customer accounting and service;
- Projected annual administration and general expenses; and
- Charge for debt service coverage requirement for bond issues for the County’s regional water system.

The uniform rate is the sum of the above expenditure items divided by the total projected amount of metered water sales used to bill all the County’s water customers over the same time period. As of October 1, 2019, the uniform rate charged by the County to the City for the purchase of wholesale potable water was \$1.6904 per 1,000 gallons. Effective October 1, 2020, the uniform rate charged by the County to the City increased to \$1.7947 per 1,000 gallons.

Since the City is a large volume user of the County’s water and sewer system, cost increases incurred with respect to the County’s system, which are passed through to the County’s customers, have a direct impact on the rates charged by the City to its retail customers. The City anticipates that rate increases for the services received from the County by the Water System will be imposed by the County over the next several years as a result of, among other factors, recent and anticipated debt issuances of the County to fund improvements to its water and sewer system, a portion of the cost of which can be included in the rates charged to the City.

Water Storage and Distribution System

The City’s water distribution system provides water service to all areas of the City. The system is operated and maintained by the Public Works Department. The table below provides information as to the specific size, amount and age of piping comprising the City’s water distribution system. As evidenced in the table below, the vast majority of the piping that comprises the Water System is estimated to be forty (40) years old or older. See “WATER AND SEWER UTILITY - Capital Improvement Plan” herein.

[TABLE NEEDS UPDATING? Information below is from last Annual Report filed on EMMA but the information in that Annual Report was from the 2017 Engineer’s Report]

Water Main Piping

<u>Diameter</u>	<u>Length (miles)⁽¹⁾</u>	<u>Length (miles)⁽²⁾</u>	<u>Total Length (miles)</u>
2-4 inches	2.91	15.17	18.08
6-8 inches	23.43	72.31	95.74
10-12 inches	7.59	17.66	25.25
14-24 inches	8.24	24.20	32.44
26-36 inches	0.16	2.89	3.05
Above 36 inches	<u>0.08</u>	<u>2.63</u>	<u>2.71</u>
Total	<u>42.41</u>	<u>134.86</u>	<u>177.27</u>

Source: The City of Miami Beach, Florida Public Works Department.

(1) Pipe age is estimated to be less than forty (40) years.

(2) Pipe age is estimated to be forty (40) years or older.

Potable water purchased for the Water System is stored in four (4) reinforced concrete above ground water storage tanks, two (2) of which are located in the northern portion of the City and two (2) of which are located in the southern portion of the City. In total the ground storage tanks of the Water System have a capacity of approximately 14.0 MG. Stored water is used to supplement the water supply during periods of high demand and for fire suppression storage. The water storage tanks are refilled by system pressure during periods of low demand, which generally occurs at night.

The ground storage tanks of the Water System are considered by the City to be in good condition overall.

Accounts

The City estimates that during Fiscal Year 2019, the Water and Sewer Utility provided potable water and sanitary sewer service to an average of 13,478 domestic and irrigation water accounts and 53,272 water equivalent residential units. An ERU is representative of the average daily capacity of a single family residential unit, generally represents the lowest level and the most common level of use and is used to evaluate the size and capacity needs of a utility system. The estimate of the ERUs served provides a more accurate representation of the service provided, since it attempts to place all customers on an equivalent basis as to capacity needs.

For the purpose of calculating the ERUs for the Water and Sewer Utility, (i) all individually-metered single family residential accounts were considered as being one (1) ERU (which is consistent with the City's pricing structure for the application of rates for service from the Water System) and (ii) all master-metered multifamily residential and non-residential ERUs were based on the meter size serving the respective customer premise and information published by the AWWA regarding meter capacities, which were used to develop meter equivalent factors (by meter size, the larger the meter, the more ERUs allocated to the account). This approach is also used by the Florida Public Service Commission and many other public utilities in the development of rates for water and sanitary sewer service.

For the determination of the estimated number of retail ERUs served, such estimate was based on the use of meter equivalent factors applied to the meters in service for all customers, except the individually-metered residential customer class. Such meter equivalent factors are set forth in the table below. The meter equivalent factors were based on information published by the AWWA that documents the capacities of the various meters that are used by several Florida utilities in the establishment of rates for service, including the Florida Public Service Commission. See "WATER AND SEWER UTILITY - Customers" herein for information relating to the sales and growth of customer accounts of the Water System.

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Meter Equivalent Factors

<u>Meter Size (Inches)</u>	<u>Meter Equivalent (ERU Factor)</u>
5/8" and 3/4"	1
1"	2.5
1-1/2"	5
2"	8
3"	16
4"	25
6"	50
8"	80
10"	115
12"	215

Source: City of Miami Beach, Florida Water and Sewer Rate Study dated October 5, 2020.

A summary of the domestic water meters and ERUs by customer class of the Water System for Fiscal Year 2019 is as follows:

Water System Annual Average Accounts By Class - Domestic (Fiscal Year 2019)

<u>Description</u>	<u>Individually-Metered Residential</u>	<u>Master-Metered Multifamily Residential</u>			<u>Non-Residential</u>			<u>Total</u>
		<u>Apartment</u>	<u>Condominium</u>	<u>Duplex</u>	<u>Commercial</u>	<u>Hotel</u>	<u>Public (City)</u>	
Accounts	5,692	1,234	1,235	25	1,842	268	111	10,407
Percent	54.69%	11.86%	11.86%	0.24%	17.70%	2.58%	1.07%	100.00%
Total ERUs	15,421	4,157	8,832	62	7,920	2,329	846	39,567
Percent	38.97%	10.51%	22.32%	0.16%	20.02%	5.88%	2.14%	100.00%

Source: City of Miami Beach, Florida Water and Sewer Rate Study dated October 5, 2020.

A summary of the irrigation customers and ERUs by customer class of the Water System for Fiscal Year 2019 is as follows:

[Remainder of page intentionally left blank]

Water System Annual Average Accounts By Class - Irrigation (Water Only) (Fiscal Year 2019)

<u>Description</u>	<u>Individually-Metered Residential</u>	<u>Master-Metered Multifamily Residential</u>			<u>Non-Residential</u>			<u>Total</u>
		<u>Apartment</u>	<u>Condominium</u>	<u>Duplex</u>	<u>Commercial</u>	<u>Hotel</u>	<u>Public (City)</u>	
Accounts	1,919	56	222	0	279	69	526	3,071
Percent	62.49%	1.82%	7.23%	0.00%	9.08%	2.25%	17.13%	100.00%
Total ERUs	6,356	216	1,353	5	1,916	471	3,388	13,705
Percent	46.38%	1.58%	9.87%	0.03%	13.98%	3.44%	24.72%	100.00%

Source: City of Miami Beach, Florida Water and Sewer Rate Study dated October 5, 2020.

A summary of the water meters and ERUs by customer class of the Water System on a combined basis (domestic and irrigation) for Fiscal Year 2019 is as follows:

Water System Annual Average Accounts By Class - Domestic and Irrigation (Fiscal Year 2019)

<u>Description</u>	<u>Individually-Metered Residential</u>	<u>Master-Metered Multifamily Residential</u>			<u>Non-Residential</u>			<u>Total</u>
		<u>Apartment</u>	<u>Condominium</u>	<u>Duplex</u>	<u>Commercial</u>	<u>Hotel</u>	<u>Public (City)</u>	
Accounts	7,611	1,290	1,457	25	2,121	337	637	13,478
Percent	56.47%	9.57%	10.81%	0.18%	15.74%	2.50%	4.73%	100.00%
Total ERUs	21,777	4,373	10,185	67	9,836	2,800	4,234	53,272
Percent	40.88%	8.21%	19.12%	0.12%	18.46%	5.26%	7.95%	100.00%

Source: City of Miami Beach, Florida Water and Sewer Rate Study dated October 5, 2020.

As reflected in the tables above, the residential classes (i.e., individually metered residential and master metered multifamily residential) are the primary classes served by the Water System. Such classes represented approximately 77% of the total accounts served by the Water System during Fiscal Year 2019. In addition, the residential classes accounted for approximately 68% of the estimated ERUs served by the Water System during Fiscal Year 2019.

Government Regulations

General. Federal regulatory jurisdiction of the Water System is vested in the United States Environmental Protection Agency (the “USEPA”). The Water System must comply with the federal Safe Drinking Water Act (the “SDWA”). However, the USEPA has delegated the primary responsibility for

enforcement of drinking water standards to the State of Florida. The State, acting through the Florida Department of Environmental Protection (the “FDEP”), has its own system of operational permits which govern the MDWASD’s use and treatment of water. On a regional level, the SFWMD controls groundwater withdrawals through consumptive use permits, which stipulate the maximum annual and daily withdrawals allowed by the County, with permit durations from five (5) to twenty (20) years. Locally, the County’s Department of Environmental Resource Management (“DERM”) has jurisdiction delegated by the FDEP over the quality of treated potable water.

Drinking water is subject to federal, state, and regional regulations that are intended to protect public health and ensure aesthetic quality. The National Primary Drinking Water Regulations are legally enforceable standards that apply to public water systems. Primary standards protect public health by limiting the levels of undesirable constituents present in drinking water. The federal government has given the FDEP primacy over the majority of drinking water regulations. DERM has been given jurisdiction over such regulations for water systems located within the County by the FDEP.

The City samples, tests, and reports different drinking water parameters as required by the federal, State and County guidelines and regulations for potable water. Review of the City’s most recent water quality testing results indicated that the water quality of the Water System has consistently achieved compliance with applicable primary drinking water standards.

Federal Regulatory Requirements. The SDWA was passed in 1974 to protect public drinking water supplies throughout the nation. The SDWA provides jurisdiction to the USEPA to assess and regulate all contaminants that may have an adverse effect on public health. Since 1974, the SDWA has been amended to include a wide range of contaminants and specific rules concentrating on particular areas. Because the City operates and maintains its water distribution system, the two (2) rules of the SDWA that impact the City are the (i) Total Coliform Rule and (ii) Lead and Copper Rule.

Total Coliform Rule. The total coliform rule sets the maximum contaminant level (the “MCL”) for total coliforms for water distribution systems. In 1989 the USEPA established a MCL for total coliforms based on the presence or absence of total coliforms. A monitoring program is required for water distribution systems, which includes a minimum number of samples to be taken each month, based upon system size. The MCL for water distribution systems is the presence of coliforms in not more than one (1) sample or five percent (5%) of the samples taken per month, whichever is greater.

The City tests for the presence of total coliform at each of their above ground water storage facilities every Monday and Wednesday. The City also tests sixteen (16) separate sample points throughout the City on every Monday of the month and sixteen (16) different separate sample points every Wednesday of the month. Such tests have provided assurance that the potable water of the Water System is consistently absent of any detectable total coliform.

Lead and Copper Rule. In 1986 a federal initiative was instituted to eliminate the use of lead-based products in the construction of water systems. In 1991, the USEPA published a regulation to control lead and copper in drinking water. Action levels for lead and copper were established and an annual sampling program of high risk areas was implemented. When ten percent (10%) of the lead or copper levels of the first draw samples from the high-risk locations of a water system exceed the action levels, remediation is required, which includes corrosion control, public education, and lead service line removal.

Based on the results from its sampling program, the City has determined that the Water System is in conformance with the lead and copper rule and no detection of lead or copper that would require remediation has occurred.

State Regulatory Requirements

Total Chlorine Residual. Rule 62-555.350(6) of the Florida Administrative Code (“FAC”) requires that the total chlorine residual in drinking water be a minimum of 0.6 mg/L. The City tests chlorine residual at each of its above ground water storage facilities every workday (Monday through Friday). The City also tests sixteen (16) separate sample points every Monday of the month and sixteen (16) different separate sample points every Wednesday of the month. Such tests have provided assurance that the water of the Water System meets the chlorine residual requirement.

pH Levels. pH is a measure of the hydrogen ion content of water. It indicates whether the water is acidic (i.e., has a pH that is less than 7), basic (i.e., has a pH that is greater than 7 and up to 14), or neutral (i.e., has a pH of 7). There is no health based standard range for pH. However, the USEPA has established a Secondary Drinking Water Regulation for pH of 6.5 to 8.5. Per FAC 62-550.520(1), a lime softening plant is allowed to produce finished water with a pH as high as 9.0 without having to gain FDEP approval. The majority of the water of the Water System is obtained from the MDWASD Hialeah and Preston Water Treatment Plants, with a small portion being obtained from the MDWASD Alexander Orr Water Treatment Plant. The three (3) treatment plants that provide water to the City are lime softening plants.

The City samples water and tests for pH and temperature at several locations throughout the City. Based on such samples and tests, the water of the Water System averages, between a pH of 9.3 - 9.4. This range is acceptable and not uncommon for a typical distribution system in South Florida that receives its water from a lime softening plant. In addition, pursuant to an agreement between the MDWASD and the Florida Department of Health, the average pH level of water from the Water System is deemed acceptable for volume water customers receiving water from the MDWASD’s lime softening facilities.

Local Regulatory Requirements. Under the Home Rule Amendment and Charter of Miami-Dade County, Florida, as amended, the County is vested with the authority to set service standards and to operate and regulate water systems in incorporated and unincorporated areas of the County. The County’s water supply facilities produce the overwhelming majority of all potable water consumed within the County and such facilities are the sole supplier of water to the Water System. The County’s ability to satisfy the long term potable water requirements of its population depends heavily on effective management of its natural water resources. In this regard, as the designated countywide water and sewer utility, the MDWASD has been given extensive responsibility and authority to promulgate rules and regulations governing utilization of the County’s water system.

Sewer System

General

The City owns, operates and maintains a sanitary sewer collection and transmission system serving customers within its corporate boundaries. All land development within the City is required to connect to the Sewer System in accordance with City policy. As a result, all customers of the Water System also receive service from the Sewer System. There are no septic tanks in operation in the City.

The Sewer System is comprised of a gravity collection network, pump stations and force mains. The Sewer System's gravity sewer network directs wastewater to pump stations which in turn pump wastewater flow through a manifolded force main network. The Sewer System also transmits wastewater from three (3) smaller "satellite" cities: the Town of Bay Harbor Islands, the Village of Bal Harbor and the Town of Surfside (collectively, the "Satellite Cities"). Previously constituting one of the Satellite Cities, the City of North Bay Village currently connects to the County's sewer system directly and, as a result, no longer utilizes the facilities of the Sewer System. Each of the Satellite Cities has entered into a service agreement with the City for the conveyance of wastewater for disposal that has an initial term of five (5) years, with the option to renew for successive five (5) year terms. The service agreements between the City and the Satellite Cities are dated July 5, 2016, with respect to the Town of Bay Harbor Islands, July 9, 2015, with respect to the Town of Surfside, and February 8, 2017, with respect to the Village of Bal Harbor. The service agreements are in effect pursuant to a recent exercise of the renewal option, with respect to the Town of Surfside, or pursuant to the original term, which is expected to be renewed upon its expiration, with respect to the Town of Bay Harbor Islands and the Village of Bal Harbor.

Wastewater received from the Satellite Cities is metered at the connection to the Sewer System's force main network. All wastewater collected by the Sewer System is directed southward through the force main network and exits the City at South Pointe Park through a subaqueous 60-inch diameter force main under the shipping channel known as Government Cut. Wastewater flow is received for treatment and disposal at the MDWASD's Central District Wastewater Treatment Plant ("CDWWTP") located at Virginia Key.

The County's wastewater collection, transmission and treatment system is divided into three (3) districts, referred to as the North, Central and South Districts. Each district is served by its own wastewater treatment plant. In addition to the City, the CDWWTP treats wastewater from the City of Miami as well as other communities and unincorporated areas within the Central District. The County's wastewater transmission system has the capability to transfer limited quantities of wastewater flows between districts.

The Sewer System's wastewater conveyance network consists of 117 miles of gravity sewer mains, 26 miles of active force mains, 23 pump station service areas (basins), and 3,100 sewer manholes that provided sanitary sewer service to approximately 9,607 retail accounts and 3 wholesale wastewater accounts during Fiscal Year 2019. Operation and maintenance activities performed for the Sewer System by the Public Works Department include cleaning and flushing sewer pipes and mains, repairing and replacing damaged sewer lines, pump station repair and maintenance, and repairing the many valves of the system.

Set forth in the table below is a summary of the wastewater disposal services purchased for the Sewer System from the County during Fiscal Year 2019.

[Remainder of page intentionally left blank]

<u>Sewer System - Wastewater Disposal Summary</u>	<u>Fiscal Year Ended September 30, 2019</u>
Average Annual Retail Accounts Served ⁽¹⁾	9,607
Average Annual ERUs Served ⁽¹⁾⁽²⁾	36,969
Total Wastewater Treatment by Contract (Satellite Cites)	
Total Gallons Purchased (000s)	8,058,077
MGD - Annual Average Daily Flow ⁽³⁾	22,077
Total Wastewater Flow Billed to Customers	
Total Gallons Billed - Retail Customers (000s) ⁽⁴⁾	
Amount of Gallons Billed	5,133,315
MGD - Annual Average Daily Flow ⁽³⁾	14,064
Total Gallons Billed - Wholesale Customers (000s) ⁽⁵⁾	
Amount of Gallons Billed	901,657
MGD - Annual Average Daily Flow ⁽³⁾	2,470
Total Wastewater Billed to Both Retail and Wholesale Customers	
Total Gallons Billed (000s)	6,034,972
MGD - Annual Average Daily Flow ⁽³⁾	16,534

Source: City of Miami Beach, Florida Water and Sewer Rate Study dated October 5, 2020 and City of Miami Beach, Florida Public Works Department.

- (1) Reflects all classes of retail customers served and does not include “pass-through” wholesale service to the Satellite Cities.
- (2) ERUs = Equivalent Residential Units. See “WATER AND SEWER UTILITY - Water System - Accounts” herein.
- (3) MGD = Millions Gallons Per Day.
- (4) Billed flows for sanitary sewer retail customers based on metered water use, as measured at the customer’s premise. As is standard in the industry, wastewater flows received from a retail property is not individually metered for sewer collection purposes.
- (5) Billed flows for sanitary sewer wholesale customers (i.e., the Satellite Cities) are billed based on metered wastewater collected from each respective local government.

Sanitary Sewer Service Agreement. On May 17, 1972, the City entered into agreements with the Department of Water and Sewers of the City of Miami to obtain sewage disposal services from the City of Miami. The County subsequently became the legal successor in interest to the Department of Water and Sewers of the City of Miami and assumed all rights, duties, and obligations of such department. Thereafter, the City contracted with the MDWASD to receive sewage disposal services from the County.

On December 17, 2014, the City and the County entered into the “Interlocal Contract Providing Sewage Disposal Service” (the “Sanitary Sewer Service Agreement”), which represented a twenty (20) year sewage disposal service agreement with the County. The Sanitary Sewer Service Agreement may be terminated at any time by mutual consent and agreement of the parties.

Cost of Sanitary Sewer Service Purchased. Under the Sanitary Sewer Service Agreement, the wastewater flow from the Sewer System is metered at the CDWWTP and the City is charged a uniform rate (applicable to all volume customers of the County's water and sewer system) for the Sewer System's wastewater flow that is delivered to the County for treatment and disposal. The uniform rate is initially based on projections from the prior fiscal year reflecting the sum of the following for the County's regional sewer system:

- Budgeted annual operating and maintenance expenses, including taxes assessed (if any), in connection with the County's regional (i) force main and regional gravity interceptor sewage system; (ii) regional sewage pumping stations; and (iii) sewage treatment plants, and reclamation facilities and disposal, including sewage effluent outfalls, deep disposal wells and/or any other effluent disposal process;
- Budgeted annual renewal and replacement expenses for all the County's regional capital wastewater facilities, according to the County's policy in effect at the time for determining a rate consistent with good municipal utility accounting practices and the budgeted renewal and replacement projects for the ensuing fiscal year;
- Budgeted annual interest obligations of outstanding loans, lines of credit, notes, and bonds for its regional sewage system;
- Budgeted annual charge for the amortization of the County's outstanding loans, lines of credit, notes and bonds for its regional sewage system;
- Budgeted annual administration and general expenses for the County's regional sewage system that are not covered by the minimum charge; and
- Charge for the County's debt service coverage requirement for loans, lines of credit, notes and bonds for its regional sewer system.

No costs associated with the County's stormwater system or local collection systems are included in the rate for wholesale wastewater treatment service provided to the City. The uniform rate is the sum of the above expenditure items divided by the total projected amount of flow at the County wastewater treatment facilities that is used to bill all of the County's sewage disposal customers over the same period. As of October 1, 2019, the uniform rate was \$_____ per 1,000 gallons during dry season months (typically November through April) and \$_____ per 1,000 gallons during wet season months (typically May through October), or an average of \$3.1954 per 1,000 gallons. For the Fiscal Year 2021, the County wholesale sanitary sewer rate will be \$2.8850 during the dry season and \$3.7092 during the wet season, or an average of \$3.2971 per 1,000 gallons.

Following the close of each fiscal year, a year-end adjustment is calculated to reconcile actual costs with collections during the year and determine whether the City owes additional charges or is due a refund (a "true-up," which allows the City to annually pay the actual cost of wastewater treatment and disposal service).

Since the City is a large volume user of the County's water and sewer system, cost increases incurred with respect to the County's system, which are passed through to the County's customers, have a direct impact on the rates charged by the City to its retail customers. The City anticipates that rate increases for the services received from the County by the Sewer System will be imposed by the County over the next several years as a result of, among other factors, recent and anticipated debt issuances of the

County to fund improvements to its water and sewer system, a portion of the cost of which can be included in the rates charged to the City.

Sanitary Sewer Collection and Transmission System

The gravity collection network of the Sewer System carries wastewater from homes and businesses and transmits it to pump stations through a series of gravity pipelines and manholes. Manholes located at regular intervals allow access to the pipe for inspection and cleaning. Due to the City’s high ground water table and relatively flat topography, deep gravity sewers are not practical. Therefore, multiple pumps stations are utilized in the Sewer System to transmit wastewater flows.

Normal electric utility service for all pump stations is supplied by the Florida Power and Light Company (“FPL”). When FPL utility power is not available, emergency power from a generator must be used so the station can continue to pump wastewater and avoid an overflow at the pump stations. The City owns six (6) portable generators for use at the pump stations of the Sewer System. Pump stations considered critical to the Sewer System are equipped with permanent onsite generators. In addition, each pump station utilizes a Supervisory Control and Data Acquisition (“SCADA”) system to monitor pump station operating conditions and alarms. The SCADA system monitors, transmits, and records all data on the various pump station parameters. The SCADA system transmits an alarm signal to Public Works Department facilities. The SCADA system is monitored 24 hours per day for alarm notifications. When an alarm is received, staff of the Public Works Department are dispatched to investigate the alarm and perform the necessary corrective actions.

Accounts

The City estimates that during Fiscal Year 2019, the Water and Sewer Utility provided sanitary sewer service to an average of 9,607 retail domestic accounts. Set forth below is a summary of the retail domestic accounts of the Sewer System by customer class for Fiscal Year 2019. Also see “WATER AND SEWER UTILITY - Customers” herein for information relating to the sales and growth of customer accounts of the Sewer System, including wholesale service provided to the Satellite Cities.

Sewer System Annual Average Accounts By Class - Domestic (Fiscal Year 2019)

<u>Description</u>	<u>Individually-Metered Residential</u>	<u>Master-Metered Multifamily Residential</u>			<u>Non-Residential</u>			<u>Total</u>
		<u>Apartment</u>	<u>Condominium</u>	<u>Duplex</u>	<u>Commercial</u>	<u>Hotel</u>	<u>Public (City)</u>	
Accounts	5,084	1,162	1,195	22	1,767	266	111	9,607
Percent	52.92%	12.09%	12.44%	0.23%	18.39%	2.77%	1.16%	100.00%
Total ERUs	13,667	3,939	8,550	56	7,595	2,316	846	36,969
Percent	36.97%	10.66%	23.13%	0.15%	20.54%	6.26%	2.29%	100.00%

Source: City of Miami Beach, Florida Water and Sewer Rate Study dated October 5, 2020.

Identical to the Water System, as reflected in the table above, the residential classes (i.e., individually metered residential and master metered multifamily residential) are the primary classes of retail

accounts served by the Sewer System. Such classes represented approximately 78% of the total retail accounts served by the Sewer System during Fiscal Year 2019. In addition, the residential classes accounted for approximately 71% of the estimated ERUs served by the Sewer System during Fiscal Year 2019.

Government Regulations

General. Wastewater collection, treatment and disposal is regulated at the national level by the USEPA, at the state level by the FDEP, and at the local level by DERM. The City owns, operates and maintains a wastewater collection and transmission system comprised of a gravity collection network, pump stations, and force mains. The City is therefore responsible to operate and maintain the Sewer System in accordance with all applicable federal, State and County regulations.

The City transmits all of its wastewater to the MDWASD for treatment and disposal, making the City a volume sewer customer (“VSC”) of the MDWASD. Being a VSC, the City is required to comply with all of the requirements of Chapter 24-42.2 of the Code of Miami-Dade County, Florida, known as the Volume Sewer Customer Ordinance (the “VSC Ordinance”).

Federal Regulatory Requirements. Federal regulatory requirements have been imposed in response to the enactment of several federal laws, including, without limitation, the federal Water Pollution Control Act of 1972, the Marine Protection, Research and Sanctuaries Act of 1972 and the federal Clean Water Act of 1977. Regulations promulgated pursuant to the federal statutory framework are mainly designed to address compliance with requirements and restrictions imposed on (i) wastewater treatment plant construction, operation, maintenance, upgrading and rehabilitation, (ii) the introduction of toxins and other pollutants into wastewater treatment facilities, and (iii) pollutant discharges from treatment facilities or sources of collection or conveyance. Enforcement of all federal requirements is entrusted to the USEPA. The USEPA has delegated permitting and enforcement authority to the FDEP.

State Regulatory Requirements. State regulations set forth various permitting requirements applicable to sanitary sewer systems. Construction of new wastewater facilities or the modification of existing facilities requires a construction permit issued by the FDEP. Prior approval of the FDEP is required to place new collection and transmission systems into operation. State regulations also set forth, among other requirements, criteria and standards for treating wastewater prior to discharge, including, without limitation, discharge into disposal systems. In addition, operation of all wastewater treatment and disposal facilities requires acquisition by the County of an operating permit from FDEP. With respect to obtaining permits required by the FDEP to complete the improvements to the Sewer System contained in the City’s current multi-year capital improvement plan, the City believes that it will be able to obtain such permits in the time period required to implement such improvements as currently contemplated. For a general description of Sewer System capital projects currently contemplated in the City’s multi-year capital improvement plan, see “WATER AND SEWER UTILITY - Capital Improvement Plan” herein.

Local Regulatory Requirements. Wastewater collection, transmission, treatment and disposal is regulated locally by DERM. Within the County, DERM serves as the permitting agency for the FDEP.

NAPOT. As part of the VSC requirements, the City must maintain records for the run time of each pump station in the Sewer System. These runtimes must be reported to DERM on a monthly basis and DERM maintains a database to determine a nominal average pump operating time (“NAPOT”). Pump stations must operate at a NAPOT value at or below ten (10) hours. Once ten (10) hours is exceeded, corrective actions must be taken to bring the pump station into compliance.

Of the 24 pump stations in the Sewer System, two (2) are currently under moratorium, with corrective action required, one (1) that was cited as having a NAPOT exceeding ten (10) hours is incomplete and subject to further review, and two (2) that were cited as having a NAPOT exceeding ten (10) hours have received approval of the corrective action taken. In addition, five (5) pump stations in the Sewer System have been identified as approaching the ten (10) hour NAPOT limit and, as a result, should be assessed and rehabilitated in order to prevent a moratorium status from being issued. All of the pump stations identified as approaching the ten (10) hour NAPOT limit are located in the northern portion of the Sewer System service area. No sewer allocations are permitted while a pump station is in a moratorium status or when its information is incomplete and subject to further review. **[TO BE UPDATED, AS NEEDED, BY THE CITY]**

Consent Decree. The County has entered into consent decrees with federal and State authorities previously to address issues in the operation or maintenance of certain facilities of the County's water and sewer system. The terms of such consent decrees sometimes impose requirements on the government entities that receive service from the County's water and sewer system. The County is currently operating under a consent decree with the FDEP, the USEPA, and the United States Department of Justice. Such consent decree obligates the County to make changes to its sanitary sewer operating practices to ensure compliance with State and federal requirements for the operation of sanitary sewer collection systems. The consent decree was formally approved by the USEPA and the County's Board of County Commissioners with an effective date of December 6, 2013 (the "2013 Consent Decree").

As a result of the 2013 Consent Decree, all wastewater VSCs in the County were required to provide a Plan of Compliance documenting how they will comply with the new requirements of the 2013 Consent Decree. DERM also prepared proposed amendments to the VSC Ordinance and submitted them for USEPA review on April 4, 2014. The USEPA approved the proposed changes to the VSC Ordinance, with an effective date of March 17, 2015. As required by the 2013 Consent Decree, the County's Board of County Commissioners implemented the approved changes to the VSC Ordinance on September 11, 2015. The new VSC Ordinance, as amended, required all utilities to develop a Plan of Compliance within six (6) months of the September 11, 2015 enactment.

In response to the requirements of the new VSC Ordinance, the City developed its Plan of Compliance for the Sewer System, which included implementation of: (i) a Sewer Overflow Response Plan; (ii) a new Information Management System; (iii) a Sewer System Asset Management Program; (iv) a Gravity Sewer System Operation and Maintenance Program; (v) a Pump Station Operations and Preventative Maintenance Program; and (vi) a Force Main Operations, Preventative Maintenance and Assessment/Rehabilitation Program. The City's Plan of Compliance for the Sewer System was submitted to DERM on March 11, 2016 for review and comment. The City is currently awaiting a formal response to its Plan of Compliance from DERM. **[TO BE UPDATED, AS NEEDED, BY THE CITY]**

Capital Improvement Plan

General

In 2019 the City retained an engineering firm to develop a master plan for the Water and Sewer Utility (the "Master Plan"). The objective of the Master Plan is to determine the capital improvements that should be made to the Water and Sewer Utility for the next twenty-five (25) years and to prioritize the implementation of such improvements. From the list of projects established in the version of the Master Plan reviewed by the City in 2020, the City (i) created a list of the most critically needed projects and (ii) developed a capital improvement plan which contains a five-year schedule, beginning in Fiscal Year 2020, for the design, planning, acquisition, construction and installation of such critical projects (the "CIP"). The

CIP includes the rehabilitation of aged infrastructure, the replacement of assets at the end of their useful life, and the upgrade of certain existing facilities. The total projected cost of the CIP is anticipated to be approximately \$122.2 million. Set forth below is the list of improvements included in the CIP and the cost projected to acquire, construct or install the improvements.

Summary of CIP Projects

Cost of Projects⁽¹⁾

Fiscal Year Ending September 30

<u>General Description of Project</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Total</u>
Water and Wastewater Mains and Rehabilitation	\$16,093,000	\$10,277,855	\$14,214,469	\$15,441,872	\$15,268,653	\$ 71,295,849
Water Pump Station Improvements	- 0 -	5,592,900	4,710,396	- 0 -	- 0 -	10,303,296
Wastewater Stations Rehabilitation	- 0 -	11,103,400	5,209,019	- 0 -	- 0 -	16,312,419
Value Assessment and Replacement Program	900,000	927,000	954,810	- 0 -	- 0 -	2,781,810
Sewer Pump Station Odor Control	850,600	- 0 -	- 0 -	- 0 -	- 0 -	850,600
SCADA and PLC Replacement at Pumping Stations ⁽²⁾	1,625,250	- 0 -	- 0 -	- 0 -	- 0 -	1,625,250
Wastewater Manhole Rehabilitation	1,500,000	1,545,000	1,591,350	1,639,091	1,688,263	7,963,704
Water Meter Replacement	<u>11,104,893</u>	<u>- 0 -</u>	<u>- 0 -</u>	<u>- 0 -</u>	<u>- 0 -</u>	<u>11,104,893</u>
TOTAL	<u>\$32,073,743</u>	<u>\$29,446,155</u>	<u>\$20,680,044</u>	<u>\$17,080,963</u>	<u>\$16,956,916</u>	<u>\$122,237,821</u>

Source: City of Miami Beach, Florida Public Works Department.

(1) Based on current estimates established by the Public Works Department, which are subject to change.

(2) Project provides for the installation of Supervisory Control And Data Acquisition (SCADA) systems and Programmable Logic Control (PLC) systems.

The City has identified several funding sources it currently intends to use to fund the improvements identified in the CIP, including Water and Sewer Utility revenues available after payments required by the terms of the Bond Resolution and other required transfers have been made, and proceeds from the issuance of Bonds. Set forth below are the sources currently projected to fund the CIP.

City of Miami Beach, Florida
Water and Sewer Utility Capital Improvement Plan
Estimated Sources of Funding

<u>Funding Source</u>	<u>Estimated CIP Funding ⁽¹⁾</u>	<u>Percent of Total CIP Funding</u>
Series 2021 Bonds ⁽²⁾	\$ 11,500,000	9.4%
Series 2017 Bonds ⁽³⁾	24,000,000	19.6
Available Revenues ⁽⁴⁾	36,737,821	30.1
Additional Bonds ⁽⁵⁾	<u>50,000,000</u>	<u>40.9</u>
Total	<u>\$122,237,821</u>	<u>100.0%</u>

Source: City of Miami Beach, Florida Public Works Department.

- (1) Constitutes amount expected to be available to pay for projects included in the CIP. Such amount, however, may change if other sources of funds are made available to finance projects in the CIP.
- (2) Represents the net present value debt service savings expected to result from issuing the Series 2021 Bonds, which will be available to fund projects included in the CIP.
- (3) Represents proceeds available from the issuance of the Series 2017 Bonds that are scheduled to be assigned to fund projects in the CIP.
- (4) Represents (i) revenues generated by the Water and Sewer Utility from prior Fiscal Years that are unencumbered and currently available to fund CIP projects and (ii) revenues projected to be generated by the Water and Sewer Utility and available to fund CIP projects after payments required under the Bond Resolution and all other required transfers have been made.
- (5) Represents Additional Bonds currently projected to be issued during Fiscal Year 2022.

Approximately 30.1% of the total cost of the projects in the CIP are currently expected to be funded from available revenues of the Water and Sewer Utility. The City is not required to maintain a renewal and replacement fund or similar account under the Bond Resolution as a reserve to provide funding for Water and Sewer Utility renewals, replacements, additions or repairs. However, as part of the ongoing operations of the Water and Sewer Utility, the City has historically accrued funds for capital reinvestment. Funds accrued for Water and Sewer Utility capital reinvestment historically have averaged approximately twelve percent (12%) of total revenues collected by the Water and Sewer Utility annually. Revenues collected by the Water and Sewer Utility for the Fiscal Year ended September 30, 2019 totaled \$91,353,611.

The City expects to continue to accrue funds for Water and Sewer Utility capital reinvestment, as noted above in the sources expected to be available to fund the CIP. No assurance can be given, however, that such accrual of funds will occur or that accruals will be in the amounts historically made or currently projected. For a more detailed description of the funds historically available and projected to be available for Water and Sewer Utility capital reinvestment, see “WATER AND SEWER UTILITY - Historical and Projected Operating Results - Summary of Historical Operating Results” herein.

Selection of Projects

The projects in the CIP were selected by the City based on a series of non-cost parameters used to establish the most immediate capital improvement needs of the Water and Sewer Utility. The parameters used were described as (i) state of the system, (ii) concurrence with other projects, and (iii) regulatory compliance. Such parameters are briefly summarized as follows:

State of the System. The state of the system criteria involved an analysis of (i) the age of the asset (giving preference among planned projects to deteriorated assets that are older), (ii) the condition of the asset (giving preference to assets that, based on visual observation, seemed in danger of failure or malfunction in the short-term), and (iii) the stage of development (giving preference to projects that were ready to be implemented).

Concurrence with other projects. The concurrence with other projects criteria involved an analysis of (i) the impact on the public created by implementation of the required improvements (giving preference among planned projects to those located in areas of the City where stormwater improvements or similar projects were already scheduled to be implemented), (ii) cost savings (giving preference among planned projects to those that could be implemented at the same time other improvements at the same site or in the same area are planned to be implemented), and (iii) cost of inaction (giving preference to projects that will be more expensive to implement at a later date if they are not included in the CIP).

Regulatory compliance. The regulatory compliance criteria involved an analysis of (i) the 2013 Consent Decree (giving preference among planned projects to those included in or which would support the City's Plan of Compliance for the Sewer System that was submitted to DERM on March 11, 2016), (ii) environmental impacts (giving preference among planned projects to those that will adversely impact the environment if not included in the CIP), and (iii) local ordinances (giving preference to projects that will enable or facilitate continued compliance with local regulatory requirements). **[TO BE UPDATED, AS NEEDED, BY THE CITY]**

The improvements included in the CIP constitute the renewals, repairs and upgrades considered the most critical of all of the projects recommended in the Master Plan, using the parameters and criteria described above to make that determination. No assurance can be provided, however, that improvements proposed by the City in its Plan of Compliance for the Sewer System that was submitted to DERM on March 11, 2016 will be consistent with the improvements required by DERM when it responds to such Plan of Compliance or that other regulatory requirements or developments relating to the Water and Sewer Utility will render other projects in the CIP more critical than the improvements which currently comprise the CIP, or will render other projects not currently in the CIP more critical than certain projects currently included therein. The City plans to make changes to the CIP, in accordance with the terms of the Resolution, as needed to address the need to fund improvements determined in the future to constitute projects in need of implementation in the short-term. No assurance can be given, however, that adequate funding will be available to implement such new or substitute projects or that the City will be able to provide such funding in the time period required for such projects to be implemented. The City expects to address such matters issues when, and if, they arise.

Customers

Water System

The service area of the Water System is essentially built-out (with respect to land available for development) but potential exists for future redevelopment, including vertical construction. As a result, there has been minimal growth in the Water System in recent years. Forecasts for Water System customer growth during the Forecast Period assume the continuation of minimal growth. Set forth below is information relating to historical and projected customer accounts and sales for the Water System.

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[TABLES TO BE UPDATED, AS NEEDED, BY THE CITY]

Water System Customer Growth

Fiscal Year Ended September 30, (Historical)	Average Annual Water Accounts (Domestic)	Billed Water Sales (Domestic) (kgal) ⁽¹⁾	Average Annual Water Accounts (Irrigation)	Billed Water Sales (Irrigation) (kgal) ⁽¹⁾	Total Average Annual Water Accounts	Total Billed Water Sales (kgal) ⁽¹⁾
2016	10,484	5,644,986	3,001	1,586,396	13,485	7,231,382
2017	10,498	5,275,584	3,005	1,608,178	13,503	6,883,762
2018	10,508	5,276,526	3,005	1,608,178	13,513	6,884,704
2019	10,518	5,277,468	3,005	1,608,178	13,523	6,885,646
2020	10,528	5,278,410	3,005	1,608,178	13,533	6,886,588
Annual Average Historical Growth Rate	0.24%	0.03%	0.57%	1.23%	0.31%	0.29%

Fiscal Year Ending September 30, (Projected)	Average Annual Water Accounts (Domestic)	Billed Water Sales (Domestic) (kgal) ⁽¹⁾	Average Annual Water Accounts (Irrigation)	Billed Water Sales (Irrigation) (kgal) ⁽¹⁾	Total Average Annual Water Accounts	Total Billed Water Sales (kgal) ⁽¹⁾
2021	10,538	5,279,352	3,005	1,608,178	13,543	6,887,530
2022						
2023						
2024						
2025						
Annual Average Projected Growth Rate ⁽²⁾	0.10%	0.11%	0.02%	0.23%	0.08%	0.81%

Source: City of Miami Beach, Florida Public Works Department.

(1) kgal = 1,000 gallons.

(2) Compound growth rate calculated from Fiscal Year 2019 actual results.

With respect to projected water sales, the amounts set forth above assume that the recent average use (billed sales) per ERU for the Water System would generally continue. Therefore, no increase in average water use per ERU has been projected.

The water customer and sales projections summarized above serve as the basis for the projection of rate revenues from the Water System described in this Official Statement. See “WATER AND SEWER UTILITY - Historical and Projected Operating Results” herein. Set forth below is a historical summary of actual water purchases from the County and sales of the Water System and projections of such purchases and sales.

[TABLES TO BE UPDATED, AS NEEDED, BY THE CITY]

Water System Purchases and Sales⁽¹⁾

Fiscal Year Ended September 30, <u>(Historical)</u>	Water Purchases <u>(kgal)</u> ⁽²⁾⁽³⁾	Water Sales <u>(kgal)</u> ⁽³⁾	<u>Non-Revenue Water</u>	
			<u>Amount</u> <u>(kgal)</u> ⁽³⁾	<u>Percent of</u> <u>Water Purchases</u>
2016	8,429,053	7,231,382	1,197,671	14.21%
2017	8,490,207	6,883,762	1,606,445	18.92
2018	8,099,652	6,884,704	1,214,948	15.00
2019	8,100,760	6,885,646	1,215,114	15.00
2020	8,101,868	6,886,588	1,215,280	15.00

Fiscal Year Ending September 30, <u>(Projected)</u>	Water Purchases <u>(kgal)</u> ⁽²⁾⁽³⁾	Water Sales <u>(kgal)</u> ⁽³⁾	<u>Non-Revenue Water</u>	
			<u>Amount</u> <u>(kgal)</u> ⁽³⁾	<u>Percent of</u> <u>Water Purchases</u>
2021 ⁽⁴⁾	8,102,976	6,887,530	1,215,446	18.92%
2022	8,104,085	6,888,472	1,215,613	15.00
2023	8,100,760	6,885,646	1,215,114	15.00
2024	8,101,868	6,886,588	1,215,280	15.00
2025	8,102,976	6,887,530	1,215,446	15.00

Source: City of Miami Beach, Florida Public Works Department.

- (1) Amounts shown are expressed on an average annual daily flow basis.
- (2) The City purchases all of its potable water from the MDWASD. See “WATER AND SEWER UTILITY - Water System - General” herein.
- (3) kgal = 1,000 gallons.
- (4) Amounts shown are based on _____ (____) months of actual information (representing the period from October 1, 2020 through _____, 2021). Actual amounts for the entire Fiscal Year are expected to be different.

As reflected in the table above, the Water System experienced an average approximately _____% level of non-revenue water for the past five (5) Fiscal Years. For the two (2) most recent Fiscal Years the Water System averaged approximately _____% of non-revenue water. In addition to being below the average non-revenue water average in the 2013 AWWA Water Audit data (see “WATER AND SEWER UTILITY - Water System - General - Non-Revenue Water” herein), the City’s

non-revenue water level is within the acceptable range of the industry. The national non-revenue water average, as reported by the USEPA in 2013, is approximately 16%.

The forecast in this Official Statement of total finished water sales for the Water System is based on an annual projection of water to be purchased, as adjusted for non-revenue water, assuming a 15% factor to recognize that a certain percentage of the finished water purchased from the County will not be billed.

Sewer System

Similar to the Water System, the Sewer System service area is essentially built out and, as such, there has been minimal growth in its customer base in recent years. In addition, the sanitary sewer flow from the wholesale customers has decreased significantly as a direct result of the City of North Bay Village now transmitting all of its sewage flow to the County directly. The City expects the remaining Satellite Cities will continue to receive wholesale sanitary sewer service from the Sewer System during the Forecast Period.

Set forth below is information relating to customer accounts and billed sanitary sewer flow for the Sewer System. As was assumed for the Water System, minimal Sewer System growth is expected during the Forecast Period.

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[TABLES TO BE UPDATED, AS NEEDED, BY THE CITY]

Sewer System Customer Growth

Fiscal Year Ended September 30, (Historical)	Average Annual Sewer Accounts (Retail)	Billed Sewer Flow (Retail) (kgal) ⁽¹⁾⁽²⁾	Average Annual Sewer Accounts (Wholesale) ⁽³⁾	Billed Sewer Flow (Wholesale) (kgal) ⁽¹⁾⁽³⁾	Total Average Annual Sewer Accounts	Total Billed Sewer Flow (kgal) ⁽¹⁾
2016	10,484	5,644,986	3	775,615	10,488	6,420,601
2017	10,498	5,275,584	3	775,165	10,501	6,051,199
2018	10,508	5,276,526	3	775,165	10,511	6,052,141
2019	10,518	5,277,468	3	775,165	10,521	6,053,083
2020	10,528	5,278,410	3	775,165	10,531	6,054,025
Annual Average Historical Growth Rate	0.24%	0.03%	-6.94%	-6.66%	0.24%	-0.91%
Fiscal Year Ending September 30, (Projected)	Average Annual Sewer Accounts (Retail)	Billed Sewer Flow (Retail) (kgal) ⁽¹⁾	Average Annual Sewer Accounts (Wholesale) ⁽³⁾	Billed Sewer Flow (Wholesale) (kgal) ⁽¹⁾⁽³⁾	Total Average Annual Sewer Accounts	Total Billed Sewer Flow (kgal) ⁽¹⁾
2021	10,538	5,279,352	3	775,165	13,541	6,054,967
2022	10,548	5,280,294	3	775,165	13,551	6,055,909
2023						
2024						
2025						
Annual Average Projected Growth Rate ⁽⁴⁾	0.10%	-1.11%	0.00%	0.00%	0.10%	-0.97%

Source: City of Miami Beach, Florida Public Works Department.

- (1) kgal = 1,000 gallons.
- (2) Amounts shown represent billed sanitary sewer flow based on metered water use and not the amount billed to the City by the County for wholesale sanitary sewer purchases.
- (3) Wholesale amounts represent amounts attributable to the Satellite Cities. See “WATER AND SEWER UTILITY -Sewer System - General” herein.
- (4) Compound growth rate calculated from Fiscal Year 2019 actual results.

The sewer customer and billed sewer flow projections summarized above serve as the basis for the projection of rate revenues from the Sewer System described in this Official Statement. See “WATER AND SEWER UTILITY - Historical and Projected Operating Results” herein. Set forth below is a

historical summary of actual sanitary sewer purchases from the County and projections of such purchases for the Forecast Period.

[TABLES TO BE UPDATED, AS NEEDED, BY THE CITY]

Sewer System Purchases⁽¹⁾

Fiscal Year Ended September 30, <u>(Historical)</u>	<u>City Requirements</u>			Satellite City Requirements <u>(kgal)</u> ⁽³⁾⁽⁴⁾	Total Sewer Purchases <u>(kgal)</u> ⁽²⁾⁽³⁾
	Sewer Purchases <u>(kgal)</u> ⁽²⁾⁽³⁾	Estimated ERUs <u>ERUs</u>	Average Annual Wastewater Treated per ERU <u>(kgal)</u> ⁽²⁾⁽³⁾		
2016	8,021,330	29,305	273.7	775,615	8,796,945
2017	8,078,811	29,515	273.7	775,165	8,854,426
2018	7,516,498	29,525	254.6	775,165	8,292,113
2019	7,517,789	29,535	254.5	775,165	8,293,404
2020 ⁽⁵⁾	7,519,080	29,545	254.5	775,165	8,294,695

Fiscal Year Ending September 30, <u>(Projected)</u>	<u>City Requirements</u>			Satellite City Requirements <u>(kgal)</u> ⁽³⁾⁽⁴⁾	Total Sewer Purchases <u>(kgal)</u> ⁽²⁾⁽³⁾
	Sewer Purchases <u>(kgal)</u> ⁽²⁾⁽³⁾	Estimated ERUs <u>ERUs</u>	Average Annual Wastewater Treated per ERU <u>(kgal)</u> ⁽²⁾⁽³⁾		
2021	7,520,370	29,555	254.5	775,165	8,295,985
2022	7,521,661	29,565	254.4	775,165	8,297,276
2023					
2024					
2025					

Source: City of Miami Beach, Florida Public Works Department.

- (1) Amounts shown represent billed sanitary sewer flow based on the amount billed to the City by the County for wholesale sanitary sewer purchases.
- (2) The City transfers all of its wastewater to the MDWASD for disposal and pays a fee to the County for such service related to the amount of wastewater generated by the Sewer System. See “WATER AND SEWER UTILITY - Sewer System - General” herein.
- (3) kgal = 1,000 gallons.
- (4) See “WATER AND SEWER UTILITY - Sewer System - General” herein for a description of the sanitary sewer service provided for the Satellite Cities.
- (5) Amounts shown are based on _____ () months of actual information (representing the period from October 1, 2020 through _____, 2021).

Largest Customers

Set forth below is a summary of certain statistical information for the ten (10) largest retail customers of the Water and Sewer Utility in Fiscal Year 2019. Such customers, on a combined basis,

accounted for approximately 10% of the retail water and sanitary sewer user rate revenue for the Water and Sewer Utility in Fiscal Year 2019.

[TABLE TO BE UPDATED, AS NEEDED, BY THE CITY]

Top Ten Water and Sewer Utility Customers
(Based on Rate Revenue)⁽¹⁾

<u>Customer Name</u>	<u>Customer Class</u>	<u>Annual Rate Revenue⁽²⁾</u>	<u>Percent of Total Rate Revenue</u>	<u>Total Water Consumption (kgal)⁽³⁾</u>	<u>Percent of Total Water Consumption</u>
Mount Sinai Hospital	Commercial	\$ 1,537,368	1.97%	120,493	1.65%
Morton Towers Apartments	Apartment	1,045,830	1.34	87,885	1.22
Crescent Heights	Condominium	823,187	1.06	64,111	0.89
Fontainebleau Florida	Hotel	756,684	0.97	151,926	2.10
Miami Beach Redevelopment	Commercial	710,765	0.91	64,270	0.89
Deauville Hotel Condominiums	Condominium	630,991	0.81	49,252	0.68
2201 Collins Fee LLC	Commercial	592,934	0.76	46,993	0.65
Carillon South Joint	Condominium	532,059	0.68	50,626	0.70
Triton Tower Condominiums	Condominium	507,834	0.65	39,551	0.55
Decoplage Condominiums	Condominium	<u>507,674</u>	<u>0.65</u>	<u>39,521</u>	<u>0.55</u>
Total of Ten Largest Users		7,645,326	9.80	714,628	9.88
All Other System Retail Users		<u>70,358,886</u>	<u>90.20</u>	<u>6,516,754</u>	<u>90.12</u>
Total System Retail Users		<u>\$78,004,212</u>	<u>100.00%</u>	<u>7,231,382</u>	<u>100.00%</u>

Source: City of Miami Beach, Florida Public Works Department.

- (1) Amounts shown are for the Fiscal Year ended September 30, 2019. Amounts may not add due to rounding.
- (2) Amounts shown reflect only revenue derived from the monthly rates for water and sanitary sewer service (i.e., amounts shown do not include miscellaneous revenue such as fire line charges, meter connection fees, late payment fees, etc.).
- (3) kgal = 1,000 gallons.

Rates, Fees and Charges

General

The rates for monthly service from the Water and Sewer Utility are set by the City Commission and are not subject to regulation by the Florida Public Service Commission or the County. On September 27, 2016, the City Commission enacted Ordinance No. 2016-4039 to establish the water and sanitary sewer

monthly user rates for the Water and Sewer Utility (the “Rate Ordinance”). The monthly rates established in the Rate Ordinance include:

- (a) a flat or constant base facility charge for services of the Water System and of the Sewer System that is predicated on the size of the meter;
- (b) for the Water System:
 - (i) a consumption charge consisting of inclining blocked rates to promote water conservation, and
 - (ii) a purchased water pass-through rate to recover the costs of wholesale water service purchased from the County, including any increase in DERM Fees (hereinafter defined); and
- (c) for the Sewer System:
 - (i) a constant volumetric flow charge based on one hundred percent (100%) of the metered water consumption to such account (domestic use; would not include separately metered water-only use), and
 - (ii) a purchased sanitary sewer pass-through rate to recover the costs of wholesale wastewater service from the County, including any increase in DERM Fees.

On December 9, 2020, the City Commission enacted Ordinance No. 2020-_____ to amend the rates and charges for services of the Water and Sewer Utility established in the Rate Ordinance (the “Amending Rate Ordinance”). Pursuant to the Amending Rate Ordinance, the monthly water and sewer user rates for services of the Water and Sewer Utility will be increased by the following amounts at the beginning of the following Fiscal Years:

City of Miami Beach, Florida
Water and Sewer Utility Adopted Rate Increase

Fiscal Year Ending September 30	Estimated Percentage Increase Approved by Rate Ordinance ⁽¹⁾	Additional Percentage Increase to Become Effective as a Result of Amending Rate Ordinance	Total Percentage Increase to Become Effective as a Result of Amending Rate Ordinance	Amount of Monthly Water and Sewer Bill ⁽²⁾
2021	0.0%	0.0%	0.0%	\$108.69
2022	0.9	0.1	1.0	109.85
2023	0.9	2.7	3.6	113.27
2024	0.9	2.7	3.6	116.86
2025	0.8	2.9	3.7	120.69

Source: City of Miami Beach, Florida Public Works Department.

Footnotes for the immediately preceding table are provided on the following page.

- (1) Without enacting the Amending Rate Ordinance, monthly water and sewer user rates would have been increased in each Fiscal Year, based on the automatic rate indexing provisions of the Rate Ordinance. See “Automatic Rate Indexing” below. The rate increase pursuant to such provisions have already been implemented for Fiscal Year 2021, since they became effective for the current Fiscal Year prior to enactment of the Amending Rate Ordinance.
- (2) Reflects the amount billed to an individually metered residential customer for the average 7,000 gallons of monthly use.

The increases approved by the Amending Rate Ordinance are designed to increase revenues of the Water System by approximately 3.5% annually and revenues of the Sewer System by approximately 1.5% annually. The increases approved by the Amending Rate Ordinance are in addition to the pass-through of future wholesale water and sewer rate increases from the County. See “Pass-Through of Wholesale Rate Adjustments” below. However, the automatic rate indexing provisions of the Rate Ordinance will not be effective during Fiscal Years 2022 through 2025 when user rates will increase in the percentage amounts described in the immediately preceding table.

The revenues derived from the application of the rates for monthly retail water service and retail and wholesale wastewater service accounted for approximately [ninety-nine percent (99%)] of reported Revenues during Fiscal Year 2019. See “SECURITY AND SOURCES OF PAYMENT - General” and “WATER AND SEWER UTILITY - Historical and Projected Operating Results” herein.

DERM Fees

Pursuant to Section 24-34 of the Code of Miami-Dade County, Florida, the City (as well as other utilities located within the County) is required to collect from its customers and pay to the County a service fee equal to six percent (6.0%) of the revenues derived from its water and sanitary sewer utility operations conducted within the County (the “DERM Fee”). The purpose of the DERM Fee is to fund the operations costs of DERM associated with providing certain environmental services to and certain environmental regulation of the utilities located within the County. See “WATER AND SEWER UTILITY - Water System - Government Regulations” and “- Sewer System - Government Regulations” herein. The DERM Fee is based on revenues derived from service rendered to retail customers. Therefore, receipts from wholesale water and sanitary sewer service to other water or sewer utilities (e.g., revenues collected by the City from the wholesale sewer service provided to the Satellite Cities) are excluded from the imposition of the DERM Fee. In Fiscal Year 2018, the DERM Fee was reduced by the County from its previous level of eight percent (8.0%) to its current level of six percent (6.0%).

The DERM Fee is due and payable to the County annually and must be paid no later than the first day of December of each year for the Fiscal Year that ended on September 30 of that year. Failure to pay the DERM Fee to the County on or before each December 1 obligates the respective utility to pay a late charge of 1.5% of the unpaid balance for each month or part of each month that the fee remains unpaid. Payment of the DERM Fee to the County must be accompanied by a statement verified by the utility showing its receipts upon which such fee is computed and may be subject to audit by the County.

Automatic Adjustments to Monthly User Rates

The Rate Ordinance includes certain provisions that provide for automatic rate adjustments, either annually to recover an allowance for inflation and its impact on the cost of operations or immediately upon certain events that would result in a change in costs, such as an increase in wholesale water and sanitary sewer rates billed by the County or an increase in the DERM Fee. Although generally presented to the City Commission for review and consideration, the Rate Ordinance provides that the automatic rate

adjustments are not required to be presented to the City Commission to be implemented. Following is a brief summary of the automatic rate adjustment provisions contained in the Rate Ordinance:

Pass-Through of Wholesale Rate Adjustments. The Rate Ordinance provides that the purchased water pass-through rate and the purchased sanitary sewer pass-through rate will be adjusted without a public hearing whenever the County implements changes to its wholesale service rates charged to the City. During Fiscal Year 2019, the purchased water costs and purchased wastewater costs accounted for approximately [sixty-five percent (65%)] of the total Current Expenses of the Water and Sewer Utility. The pass-through adjustment formulas established in the Rate Ordinance consider the change in the wholesale service rates, adjusted to account for the amount of the DERM Fee.

Automatic Rate Indexing. The Rate Ordinance allows for automatic rate indexing of the monthly user rates to account for general increases in operating expenses other than increased costs for wholesale service (which are passed-through separately) due to inflationary impacts on the ongoing cost of providing service. The index applied by the City is the Consumer Price Index - All Urban Consumers, Miami-Fort Lauderdale, as published by the United States Bureau of Labor Statistics. The rate indexing formula contained in the Rate Ordinance also is required to be adjusted to account for the amount of the DERM Fee. Pursuant to the terms of the Amending Rate Ordinance, the automatic rate indexing provision in the Rate Ordinance will not be effective until after Fiscal Year 2025.

Impact Fees

In addition to the monthly rates for water and sanitary sewer service, the City currently charges Impact Fees based on the equitable and proportionate share of the cost for the water and sanitary sewer transmission capacity of the Water and Sewer Utility. The purpose of the Impact Fees is to pay or reimburse the City for a customer's equitable share of the capital costs of the construction, expansion or equipping of excess or unused transmission or conveyance capacity of the Water and Sewer Utility in order to serve new users. If an existing customer requests an increase in water or wastewater capacity due to increased development, an additional Impact Fee will be collected prior to development in an amount that is consistent with the net increase in demand.

Fire Protection Fees

The Rate Ordinance authorizes a monthly base facility charge to all privately-owned fire protection systems and equipment connected to the Water System. Individual customer specific connections for fire sprinkler service may be charged a monthly fee for such service based on the size of the service line connecting the private system to the Water System.

Miscellaneous Service Charges

In addition to the rates, fees and charges summarized above, the City has adopted a schedule of rates, fees and charges that are applicable to miscellaneous or customer-requested services and are customary utility service charges. Following is a brief summary of the primary miscellaneous service charges for the Water and Sewer Utility imposed by the City.

Water Tapping Fees. The City charges its water customers a fee to connect to the water distribution system. The tapping fee is designed to recover the cost of physically connecting a customer to the Water System, including the cost of the water tap, the service line, and the meter installation. The current water tapping fees are set forth in the Rate Ordinance and are charged by meter size.

Guarantee of Payment Deposit. The City currently charges a security deposit to all new customers to limit the risk of nonpayment of a utility bill. The amount of the security deposit is set forth in the Rate Ordinance and varies based on meter size.

Other Miscellaneous Service Charges. In addition to the miscellaneous service charges described above, the City has several other charges that are applicable to miscellaneous or customer-requested services. A list of such charges is set forth in the Rate Ordinance and includes, among others, disconnect charges, meter test fees, meter repair or replacement fees and fees for unauthorized usage.

For a detailed listing of the current rates and fees charged for services of the Water and Sewer Utility and specific information relating to such charges, see the website for the City at: <https://www.miamibeachfl.gov/city-hall/public-works/utility-rates/>.

Rate Comparisons

The following is a comparison of the monthly cost of providing water and sanitary sewer services for a typical single family residential customer of the City. Monthly costs are calculated reflecting a 5/8 and 3/4 inch or smaller rate meter at a usage level of 7,000 gallons (which is approximately the average monthly consumption of a 3/4 inch meter, single family residential customer of the Water and Sewer Utility). Also included in the following rate comparisons are bills calculated under the rates of other neighboring Florida utilities as of the billing month of July 2020. The monthly bills for the various Florida utilities used for the comparisons are exclusive of local taxes and water use restriction surcharges, if any. Additionally, municipal-owned utility systems may charge customers located outside the corporate limits of such municipality a surcharge up to 50% of the rates charged to customers located within the corporate limits of such municipality. The following rate comparison reflects inside-the-city rates only and not any surcharge that may be assessed customers located outside the corporate limits of a municipality.

The 5/8 and 3/4 inch meter or smaller comparisons were prepared since such meter sizes represent the majority of the residential customers of the Water and Sewer Utility and the majority of the customers for the other utilities reflected in the comparison. As can be seen in the following comparison, the current rates charged by the City produce bills that are generally higher than charges for similar service provided by other neighboring utilities. Although the City's existing rates are higher, such rates are (i) not so high as to make the service of the Water and Sewer Utility uncompetitive; and (ii) expected to become more comparable to similar neighboring utility systems, since a majority of other Southeast Florida utilities are anticipating increasing rates in the near future.

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Comparison of Typical Monthly Charges for Water and Sewer Service
(5/8" or 3/4" Meter @ 7,000 Gallons)⁽¹⁾

<u>Utility</u>	<u>Water</u>	<u>Sewer</u>	<u>Total</u>
City of Miami Beach - Existing Rates (FY 2021)	\$28.52	\$80.17	\$108.69
<u>Other Utilities Surveyed in Miami-Dade County</u>			
City of Homestead ⁽²⁾⁽³⁾	\$14.89	\$37.92	\$ 52.81
City of Opa-locka ⁽²⁾	26.68	42.41	69.09
City of Coral Gables ⁽⁴⁾	25.07	46.18	71.25
Miami-Dade County ⁽⁵⁾	25.07	47.13	72.20
City of Hialeah ⁽²⁾⁽³⁾	24.08	50.42	74.50
City of North Miami Beach ⁽³⁾	40.44	83.93	124.37
<u>Other Neighboring Utilities Surveyed</u>			
City of Boynton Beach ⁽⁵⁾	\$24.48	\$34.56	\$ 59.04
City of Delray Beach	20.72	41.78	62.50
City of Margate ⁽⁵⁾	39.43	31.62	71.05
City of Riviera Beach Utilities District ⁽⁵⁾	38.32	37.28	75.60
City of Tamarac ⁽⁵⁾	27.72	52.35	80.07
City of Coral Springs ⁽⁵⁾	28.98	53.70	82.68
City of Plantation ⁽⁵⁾	30.41	55.12	85.53
Cooper City ⁽⁵⁾	35.98	49.79	85.77
City of Pembroke Pines ⁽⁵⁾	44.38	49.24	91.62
City of Miramar ⁽⁵⁾	41.78	52.60	94.38
City of Fort Lauderdale ⁽⁵⁾	35.76	60.57	96.33
City of Hallandale Beach ⁽⁵⁾	49.22	50.20	99.42
City of West Palm Beach ⁽⁵⁾	48.99	51.76	100.75
City of Sunrise ⁽⁵⁾	49.50	58.80	108.30
City of Lake Worth Beach ⁽⁵⁾	50.53	64.59	115.12
City of Hollywood ⁽⁵⁾	42.11	75.77	117.88
City of Dania Beach ⁽⁵⁾	48.08	73.74	121.82
City of Oakland Park ⁽⁵⁾	64.17	62.66	126.83
Town of Davie ⁽⁵⁾	51.52	90.02	141.54
Average of Other Utilities in Miami-Dade County	26.04	51.33	77.37
Average of Other Neighboring Utilities	40.64	55.06	95.59
Average of Other Miami-Dade County and Neighboring Utilities	\$37.13	\$54.17	\$ 91.22

Source: City of Miami Beach, Florida Water and Sewer Rate Study dated October 5, 2020.

Footnotes for the immediately preceding table are provided on the following page.

- (1) Amounts shown: (a) reflect rates in effect as of July 2020 for service inside the boundaries of each governmental entity listed (except amounts for the City are the rates in effect for Fiscal Year 2021) and (b) do not include any utility taxes, franchise fees, surcharges or drought rates that may apply. All rates are as reported by the respective utility. The information provided in this table is intended to show comparable charges for similar utility service for comparison purposes only and is not intended to be a complete listing of all rates, fees and charges of each utility listed.
- (2) Utility purchases sanitary sewer service on a wholesale basis from the MDWASD.
- (3) Utility purchases potable water on a wholesale basis from the MDWASD. For the City of Homestead, the purchase of potable water is limited to an as needed basis and water usage by Homestead is not consistent with that of wholesale customers of the MDWASD.
- (4) The MDWASD currently provides water on a retail basis for the City of Coral Gables. Coral Gables provides retail sanitary sewer service to its customers.
- (5) Utility is currently involved in a rate study, is planning to conduct a rate study or expects to implement a rate revision within the next twelve (12) months.

Rates for water and wastewater utility service greater than four percent (4.0%) of the median household income in a service area may present an affordability concern, as determined by utility industry standards (including the USEPA's affordability criteria set forth in its Guidances for Water Quality Standards and Financial Capability Assessment), and may be considered a financial burden to certain utility customers. Based on the median household income in the City of \$53,348, as reported by the United States Census Bureau, and the average utility use of 7,000 gallons per month, the City's average water and sewer bill currently approximates 2.45% of the median household income in the City. As a result, the average water and sewer bill for services of the Water and Sewer Utility is considered to be within the affordability levels generally recognized in the utility industry.

Historical and Projected Operating Results

General

The historical and projected operating results presented in the tables below for the Water and Sewer Utility were prepared based on financial information compiled and provided by the City and information included in the Comprehensive Annual Financial Report of the City for the Fiscal Years indicated. In general, the historical and projected operating results have been prepared in a manner consistent with the requirements of the Bond Resolution relative to the determination of Net Revenues. Therefore, the amounts shown reflect certain differences in the presentation of the financial results when compared to the Comprehensive Annual Financial Reports of the City. Specifically, the major differences are that the historical and projected results of operations reflected in the tables below do not include: (a) as part of Current Expenses: (i) depreciation and amortization expenses; or (ii) internal administrative charges; (b) as part of interest income, any earnings derived from moneys on deposit in: (i) the Construction Fund, (ii) the Subordinated Indebtedness Account, (iii) the Impact Fee Account, or (iv) the Special Assessment Account; and (c) as part of Revenues (i) amounts excluded from the definition of Revenues in the Bond Resolution, such as proceeds derived from the sale of property of the Water and Sewer Utility, and (ii) net changes in Revenues due to transfers to or from the Rate Stabilization Account.

Summary of Historical Operating Results

The historical operating results for the Water and Sewer Utility for the Fiscal Years ended September 30, 2016 through 2020 are summarized below.

**Water and Sewer Utility Historical Operating
Results and Debt Service Coverage⁽¹⁾**

[TABLE TO BE UPDATED, AS NEEDED, BY THE CITY]

	Fiscal Year Ended September 30,				
	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020⁽²⁾</u>
Revenues ⁽³⁾					
Water	\$35,429,___	\$34,257,___	\$35,523,___	\$37,455,___	\$ _____
Wastewater	45,435,___	50,483,___	51,689,___	53,899,___	_____
Total Revenues	<u>\$80,863,817</u>	<u>\$84,740,___</u>	<u>\$87,212,___</u>	<u>\$91,354,___</u>	<u>\$ _____</u>
Current Expenses					
Water	\$25,136,___	\$27,664,___	\$24,523,___	\$24,452,___	\$ _____
Wastewater	31,988,___	35,206,___	35,296,___	35,187,___	_____
Total Current Expenses	<u>(57,124,877)</u>	<u>(62,870,___)</u>	<u>(59,819,___)</u>	<u>(59,639,___)</u>	<u>(_____)</u>
Net Revenues	<u>\$23,738,940</u>	<u>\$21,870,___</u>	<u>\$27,393,___</u>	<u>\$31,715,___</u>	<u>\$ _____</u>
As a Percent of Total Revenues	29.36%	25.81%	31.41%	41.28%	_____%
Debt Service Coverage:					
Net Revenues	\$23,738,940	\$21,870,___	\$27,393,___	\$31,715,___	\$ _____
Debt Service on Bonds ⁽⁴⁾	(8,881,733)	(11,304,436)	(13,862,___)	(11,718,___)	(11,___,___)
Coverage	267%	193%	198%	271%	_____%
Bond Resolution Required Coverage	110%	110%	110%	110%	110%
Required Transfers ⁽⁵⁾	<u>(3,840,888)</u>	<u>(_____)</u>	<u>(_____)</u>	<u>(_____)</u>	<u>(_____)</u>
Amount Available for Other Purposes ⁽⁶⁾	<u>\$11,016,319</u>	<u>\$ _____</u>	<u>\$ _____</u>	<u>\$ _____</u>	<u>\$ _____</u>

Source: City of Miami Beach, Florida Finance Department.

- (1) Numbers may not add due to rounding.
- (2) Unaudited.
- (3) Amounts shown include increased Revenues resulting from the application of the automatic rate increase provisions of the Rate Ordinance. See "WATER AND SEWER UTILITY - Rates, Fees and Charges" herein.
- (4) Includes actual Principal and Interest Requirements on all Bonds Outstanding during the Fiscal Years indicated.
- (5) Represents transfers made in accordance with the provisions of the Bond Resolution, including any required transfers to the Reserve Account, the Rate Stabilization Account and the Subordinated Indebtedness Account. The administrative fees that are not included as Current Expenses, in accordance with the provisions of the Bond Resolution, were classified and included as a required transfer, since such fees were paid from Revenues. The required transfers also include payments assigned to the Water and Sewer Utility from a master equipment lease between the City and SunTrust Equipment Finance and Leasing Corporation. This master equipment lease financed several vehicles for the City that are used for Water and Sewer Utility operations.
- (6) Represents amounts available for other utility purposes, such as future capital expenditures of the Water and Sewer Utility.

Summary of Projected Operating Results

The projected operating results for the Water and Sewer Utility for the Fiscal Years ending September 30, 2021 through 2025 are summarized below.

Water and Sewer Utility Projected Operating Results and Debt Service Coverage⁽¹⁾

[TABLE TO BE UPDATED, AS NEEDED, BY THE CITY]

Fiscal Year Ended September 30,

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Revenues ⁽³⁾					
Water	\$35,429,___	\$34,257,___	\$35,523,___	\$37,455,___	\$_____
Wastewater	<u>45,435,___</u>	<u>50,483,___</u>	<u>51,689,___</u>	<u>53,899,___</u>	_____
Total Revenues	<u>\$80,863,817</u>	<u>\$84,740,___</u>	<u>\$87,212,___</u>	<u>\$91,354,___</u>	<u>\$_____</u>
Current Expenses					
Water	\$25,136,___	\$27,664,___	\$24,523,___	\$24,452,___	\$_____
Wastewater	<u>31,988,___</u>	<u>35,206,___</u>	<u>35,296,___</u>	<u>35,187,___</u>	_____
Total Current Expenses	<u>(57,124,877)</u>	<u>(62,870,___)</u>	<u>(59,819,___)</u>	<u>(59,639,___)</u>	<u>(_____)</u>
Net Revenues	<u>\$23,738,940</u>	<u>\$21,870,___</u>	<u>\$27,393,___</u>	<u>\$31,715,___</u>	<u>\$_____</u>
As a Percent of Total Revenues	29.36%	25.81%	31.41%	41.28%	_____%
Debt Service Coverage:					
Net Revenues	\$23,738,940	\$21,870,___	\$27,393,___	\$31,715,___	\$_____
Debt Service on Bonds ⁽⁴⁾	(8,881,733)	(11,304,436)	(13,862,___)	(11,718,___)	(11,___,___)
Coverage	267%	193%	198%	271%	_____%
Bond Resolution Required Coverage	110%	110%	110%	110%	110%
Required Transfers ⁽⁵⁾	<u>(3,840,888)</u>	<u>(_____)</u>	<u>(_____)</u>	<u>(_____)</u>	<u>(_____)</u>
Amount Available for Other Purposes ⁽⁶⁾	<u>\$11,016,319</u>	<u>\$_____</u>	<u>\$_____</u>	<u>\$_____</u>	<u>\$_____</u>

Source: City of Miami Beach, Florida Finance Department.

Footnotes for the immediately preceding table are continued on the following page.

- (1) Numbers may not add due to rounding.
- (2) Amounts shown include increased Revenues resulting from the application of the automatic rate increase provisions of the Rate Ordinance and the percentage rate increase provisions of the Amending Rate Ordinance. See "WATER AND SEWER UTILITY - Rates, Fees and Charges" herein.
- (4) Includes Principal and Interest Requirements on all Bonds anticipated to be Outstanding during the Fiscal Years indicated, including, in addition to the Series 2017 Bonds and the Series 2021A Bonds, a Series of Additional Bonds expected to be issued during Fiscal Year 2022 in the aggregate principal amount of approximately \$50,000,000.
- (5) Represents transfers made in accordance with the provisions of the Bond Resolution, including any required transfers to the Reserve Account, the Rate Stabilization Account and the Subordinated Indebtedness Account. The administrative fees that are not included as Current Expenses, in accordance with the provisions of the Bond

Resolution, were classified and included as a required transfer, since such fees were paid from Revenues. The required transfers also include payments assigned to the Water and Sewer Utility from a master equipment lease between the City and SunTrust Equipment Finance and Leasing Corporation. This master equipment lease financed several vehicles for the City that are used for Water and Sewer Utility operations.

- (6) Represents amounts available for other utility purposes, such as future capital expenditures of the Water and Sewer Utility.

PENSION AND OTHER POST EMPLOYMENT BENEFITS

[SECTION TO BE UPDATED, AS NEEDED]

Defined Benefit Plans

The City provides separate defined benefit pension plans for general employees of the City and for the City’s police and fire department personnel.

Employees’ Retirement Plan

Plan Description. All full-time employees of the City who work more than thirty (30) hours per week and hold classified and unclassified positions, except for policemen and firemen and persons who elected to join the defined contribution retirement plan sponsored by the City, are covered by the Miami Beach Employees’ Retirement Plan (the “Employee Plan”). A classified employee and/or an unclassified employee is any person employed by the City on a regular basis who receives compensation from the City for personal services and who is within a group or classification of employees designated by the Board of Trustees of the Employee Plan as eligible for membership in the Employee Plan. The Employee Plan is a single employer defined benefit pension plan that was established by the City Commission under Ordinance number 2006-3504. Effective on March 18, 2006, the Employee Plan was created under and by the authority of Chapter 18691, Laws of Florida, Act of 1937, as amended, by merging the Retirement System for General Employees of the City of Miami Beach, created by the City Commission pursuant to Ordinance number 1901, with the Retirement System for Unclassified Employees and Elected Officials of the City of Miami Beach, created by the City Commission pursuant to Ordinance number 88-2603, as amended.

All full-time classified and unclassified employees of the City, except those who joined the City’s defined contribution plan, must participate in the Employee Plan. See “PENSION AND OTHER POST EMPLOYMENT BENEFITS - Other Retirement and Compensation Plans” herein. Membership in the Employee Plan consisted of the following as of October 1, 2018, the date of the latest accrual valuation:

Employee Plan Membership

Inactive plan members and beneficiaries currently receiving benefits	1,093
Inactive plan members entitled to benefits but not yet receiving them	193*
Active plan members	<u>1,231</u>
Total members	<u><u>2,517</u></u>

Source: City of Miami Beach, Florida Comprehensive Annual Financial Report for Fiscal Year Ended September 30, 2019.

* Includes members of the Employee Plan who are enrolled in DROP (as hereinafter defined).

Plan Benefits. The Employee Plan provides retirement benefits as well as death and disability benefits at three (3) different tiers, depending on (i) whether an employee is a member of one of the unions representing employees of the City, (ii) which union the employee is a member of and (iii) when the employee entered the Employee Plan. The first tier membership of the Employee Plan (the “Employee Plan First Tier”) includes any employee who became a member of the Employee Plan prior to the dates which constitute the Employee Plan Second Tier. The second tier membership of the Employee Plan (the “Employee Plan Second Tier”) includes any employee who became a member of the Employee Plan on or after (i) April 30, 1993 (but prior to September 30, 2010) for members of the American Federation of State, County and Municipal Employees (“AFSCME”) bargaining unit; (ii) August 1, 1993 (but prior to September 30, 2010) for members of the Government Supervisors Association of Florida (“GSAF”) bargaining unit and members of the Employee Plan who are not included in any collective bargaining unit; and (iii) February 21, 1994 (but prior to October 27, 2010) for members of the Communications Workers of America (“CWA”) bargaining unit. The third tier membership of the Employee Plan (the “Employee Plan Third Tier”) includes any employee who became a member of the Employee Plan on or after (i) September 30, 2010 for members of AFSCME, GSAF and members of the Employee Plan who are not included in any collective bargaining unit; and (ii) October 27, 2010 for members of CWA.

Classified members under the Employee Plan First Tier are eligible for normal retirement at age fifty (50) and five (5) years of creditable service and are entitled to benefits of three percent (3%) of their final average monthly earnings, multiplied by the first fifteen (15) years of creditable service, plus four percent (4%) of their final average monthly earnings, multiplied by the years of creditable service in excess of fifteen (15) years, with the total not to exceed ninety percent (90%) of the employee’s final average monthly earnings. Employee Plan First Tier unclassified members accrued four percent (4%) of their final average monthly earnings for creditable service before October 18, 1992 and three percent (3%) per year of creditable service after October 18, 1992, with the total not to exceed eighty percent (80%) of their final average monthly earnings.

Classified and unclassified members under the Employee Plan Second Tier are eligible for normal retirement at age fifty-five (55) and five (5) years of creditable service and are entitled to benefits of three percent (3%) of their final average monthly earnings multiplied by the employee’s number of years of creditable service, subject to a maximum of eighty percent (80%) of such employee’s final average monthly earnings.

Classified and unclassified members under the Employee Plan Third Tier are eligible for normal retirement at age fifty-five (55) and at least thirty (30) years of creditable service, or age sixty-two (62) and at least five (5) years of creditable service and are entitled to benefits of two and one-half percent (2.5%) of their final average monthly earnings multiplied by the employee’s number of years of creditable service, subject to a maximum of eighty percent (80%) of such employee’s final average monthly earnings. For elected officials of the City, the City Manager or the City Attorney, the benefit is four percent (4%) of their final average monthly earnings for each year of creditable service as an elected official, city manager or city attorney, plus the retirement benefit as defined above for any other period of City employment, subject to a maximum eighty percent (80%) of such employee’s final average monthly earnings.

Any Employee Plan First Tier member who terminates employment may either request a refund of their own contributions, plus interest, or receive their accrued benefit beginning at age fifty (50), if at least five (5) years of creditable service have been completed. Any Employee Plan Second Tier member who terminates employment after five (5) years of creditable service may either request a refund of their own contributions, plus interest, or receive their accrued benefit beginning at age fifty-five (55). Any Employee Plan Third Tier member who terminates employment after five (5) years of creditable service

but prior to the normal or early retirement date shall be eligible to receive a normal retirement benefit at age sixty-two (62).

A Deferred Retirement Option Plan (“DROP”) for the Employee Plan was enacted by the City Commission on January 28, 2009 pursuant to Ordinance 2009-3626. Under the DROP, first and second tier members of the Employee Plan who have attained eligibility for normal retirement may continue working with the City for up to three (3) years, while receiving a retirement benefit that is deposited into a DROP account. Employee Plan Third Tier members may participate in a DROP account for up to five (5) years. However, effective July 17, 2013, Employee Plan members of CWA who were hired prior to October 27, 2010, and members of the Employee Plan not included in any bargaining unit who were hired prior to September 10, 2010, may elect to retire for the purposes of DROP but continue employment with the City for up to sixty (60) months and have their monthly retirement benefit paid into a DROP account during the DROP period. Effective October 1, 2013, such benefit was also extended to Employee Plan members of GSAF and, effective April 23, 2014, was extended to Employee Plan members of AFSCME who were hired prior to September 30, 2010. The amount of the benefit is calculated as if the participant had retired on the date of DROP commencement. Upon termination with the City, the accumulated value of the DROP account is distributed to the participant and a member’s creditable service, accrued benefit and compensation calculation shall be frozen.

Employee Plan First Tier members and Employee Plan Second Tier members receive an annual cost-of-living adjustment of two and one-half percent (2.5%). The cost-of-living adjustment is not payable while members are in the DROP. For Employee Plan Third Tier members, the annual cost-of-living adjustment is one and one-half percent (1.5%). As of September 30, 2019, there were one hundred twenty-three (123) members of the Employee Plan in the DROP and the value of the DROP investment was \$14,770,820, which is included in the Plan’s net position. The DROP also allows for member loans. Approximately \$155,000 of DROP loans for the Employee Plan were outstanding as of September 30, 2019.

Contributions to the Employee Plan. The City’s policy is to contribute such amounts as are necessary to maintain the actuarial soundness of the Employee Plan and to provide assets sufficient to meet the benefits to be paid to the members of the Employee Plan. All first tier members are required to contribute twelve percent (12%) of their covered salary to the Employee Plan. All second and third tier members are required to contribute ten percent (10%) of their covered salary to the Employee Plan.

For the Fiscal Year ended September 30, 2019, the City was required to make contributions of \$31,864,304 or 37.50% of covered payroll to the Employee Plan in accordance with actuarially determined requirements computed through an actuarial valuation performed as of October 1, 2017. For the Fiscal Year ended September 30, 2019, the employees contributed \$8,512,207 and buybacks were \$1,571,361.

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Net Pension Liability. The City's net pension liability and related ratios for the Employee Plan for the Fiscal Years ended September 30, 2015 through September 30, 2018 are set forth below.

**Employee Plan Schedule of Changes in the
Employer's Net Pension Liability and Related Ratios**

	Fiscal Year Ended September 30			
	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
<u>Total Pension Liability</u>				
Service Cost	\$ 11,795,411	\$ 12,906,811	\$ 13,720,496	\$ 15,232,372
Interest	53,832,182	56,164,518	57,800,541	63,015,047
Changes of Benefit Terms ⁽¹⁾	(1,277,929)	-	-	-
Difference between Actual and Expected Experience	5,603,144	(2,210,692)	(4,242,257)	18,961
Assumption Changes ⁽¹⁾	11,026,357	11,676,037	52,573,659	4,771,684
Benefit Payments	(35,874,016)	(41,900,843)	(44,576,144)	(49,726,168)
Refunds of Contributions	(941,310)	(948,535)	(905,574)	(1,381,297)
Other (Change in Receivables from Excess Benefit Plan)	<u>311,076</u>	<u>-</u>	<u>-</u>	<u>-</u>
Net Change in Total Pension Liability	44,474,915	35,687,296	74,370,721	31,930,599
Total Pension Liability (Beginning of Year)	<u>679,514,531</u>	<u>723,989,446</u>	<u>759,676,742</u>	<u>834,047,463</u>
Total Pension Liability (End of Year) (a)	<u>\$723,989,446</u>	<u>\$759,676,742</u>	<u>\$834,047,463</u>	<u>\$865,978,062</u>
<u>Plan Fiduciary Net Position</u>				
Contributions - Employer	\$ 26,456,580	\$ 27,783,852	\$ 29,358,098	\$ 31,892,485
Contributions - Employees (includes buybacks)	7,310,183	7,341,533	7,871,072	8,242,590
Net Investment Income	(5,048,406)	55,818,905	70,646,599	51,285,893
Benefit Payments	(35,874,016)	(41,900,843)	(44,576,144)	(49,726,168)
Refunds of Contributions	(941,310)	(948,535)	(905,574)	(1,381,297)
Administrative Expense	(706,283)	(677,509)	(703,539)	(730,118)
Other (Adjustment)	<u>-</u>	<u>-</u>	<u>(68,222)</u>	<u>-</u>
Net Change in Plan Fiduciary Net Position	(8,803,252)	47,417,403	61,622,290	39,583,385
Plan Fiduciary Net Position (Beginning of Year)⁽²⁾	<u>516,387,785</u>	<u>507,584,533</u>	<u>555,001,936</u>	<u>616,624,226</u>
Plan Fiduciary Net Position (End of Year) (b)	<u>\$507,584,533</u>	<u>\$555,001,936</u>	<u>\$616,624,226</u>	<u>\$656,207,611</u>
City's Net Pension Liability (End of Year) (a) - (b)	<u>\$216,404,913</u>	<u>\$204,674,806</u>	<u>\$217,423,237</u>	<u>\$209,770,451</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	70.11%	73.06%	73.93%	75.78%
Covered Employee Payroll⁽³⁾	\$ 82,359,302	\$ 71,863,150	\$ 77,013,213	\$ 79,797,583
City's Net Pension Liability as a Percentage of Covered-Employee Payroll	262.76%	284.81%	282.32%	262.88%

Source: Miami Beach Employees' Retirement Plan, A Pension Trust Fund of the City of Miami Beach, Florida, Financial Statements and Accompanying Information for the Fiscal Year Ended September 30, 2018, dated March 19, 2019.

Footnotes set forth below for the table on the immediately preceding page.

- (1) For a detailed description of the changes made in the benefits and assumptions for the Employee Plan, reference is made to the source of the table set forth above and to the City of Miami Beach Employees' Retirement Plan Actuarial Valuation Report as of October 1, 2017, prepared by Gabriel, Roeder, Smith and Company, dated April 9, 2018. A copy of such documents may be obtained from the City by contacting the City's Chief Financial Officer, 1700 Convention Center Drive, Miami Beach, Florida 33139, Telephone number: (305) 673-7466, Facsimile number: (305) 673-7795, Email address: www.miamibeachfl.gov/finance.
- (2) A difference of \$68,222 exists between the amount provided for Fiscal Year 2017 and the net position held in trust for pension benefits amount of \$554,933,714 reported in the Statement of Fiduciary Net Position on page 9 of the source of the table set forth above, as of the beginning of the year. The difference is due to an accounting adjustment to receivables of the Employee Plan made subsequent to the availability of the GASB 67 report provided by the actuary for the Employee Plan.
- (3) Expected total covered payroll for the Fiscal Year ended September 30, 2018 was estimated based on the expected pensionable payroll from the October 1, 2017 actuarial valuation for the Employee Plan.

Police and Firefighters' Retirement Plan

Plan Description. The pension fund for police officers and fire fighters employed by the City (the "Police and Firefighters' Plan") is officially named the City Pension Fund for Firefighters and Police Officers in the City of Miami Beach. The Police and Firefighters' Plan is a defined benefit pension plan covering substantially all police officers and firefighters of the City, as established by Chapter 23414, Laws of Florida, Special Acts of 1945, as amended. Members of the Police and Firefighters' Plan are divided into four (4) tiers, based on whether they were hired prior to July 14, 2010 ("Police and Firefighters' Plan Tier One"), on or after July 14, 2010 but prior to September 30, 2013 ("Police and Firefighters' Plan Tier Two"), on or after September 30, 2013 but prior to June 8, 2016 for firefighters and prior to July 20, 2016 for police officers ("Police and Firefighters' Plan Tier Three"), or on or after June 8, 2016 for firefighters and on or after July 20, 2016 for police officers ("Police and Firefighters' Plan Tier Four").

Membership in the Police and Firefighters' Plan consisted of the following as of September 30, 2019, the date of the latest accrual valuation:

Police and Firefighters' Plan Membership

Active members		525
Deferred vested members		19
Retired members		
a. Service	715*	
b. Disabled	<u>57</u>	
	772	<u>772</u>
Total members		<u><u>1,316</u></u>

Source: City of Miami Beach, Florida Comprehensive Annual Financial Report for Fiscal Year Ended September 30, 2019.

* Includes members of the Police and Firefighters' Plan who are enrolled in DROP.

Plan Benefits. Police and Firefighters' Plan Tier One members who were eligible to retire prior to September 30, 2013 may retire on a service retirement pension upon the attainment of age fifty (50) or,

if earlier, the date when age and length of creditable service equals to at least seventy (70) years. Police and Firefighters' Plan Tier One members eligible to retire on or after September 30, 2013 may retire on a service retirement pension upon the attainment of age fifty (50) or, if earlier, the date when the member attains the age of forty-seven (47) and the length of creditable service equals to at least seventy (70) years.

Upon retirement, Police and Firefighters' Plan Tier One members who were eligible to retire prior to September 30, 2013 will receive a monthly pension, payable for life, equal to three percent (3%) of the member's average monthly salary, as defined in the Police and Firefighters' Plan ordinance, for each of the first fifteen (15) years of creditable service and four percent (4%) of the member's average monthly salary for each year of creditable service in excess of fifteen (15) years; provided, however, that the pension benefit shall not exceed ninety percent (90%) of the member's average monthly salary. Police and Firefighters' Plan Tier One members eligible to retire on or after September 30, 2013 will receive a monthly pension, payable for life, equal to three percent (3%) of the member's average monthly salary, as defined in the Police and Firefighters' Plan ordinance, for each of the first twenty (20) years of creditable service and four percent (4%) of the member's average monthly salary for each year of creditable service in excess of twenty (20) years; provided, however, that the pension benefit does not exceed eighty-five percent (85%) of the member's average monthly salary. All Police and Firefighters' Plan members and beneficiaries receiving a monthly pension as of September 30, 2010 will receive a 2.5% increase in benefits on October 1 of each year. Members that retire on or after September 30, 2010 will receive a 2.5% increase in benefits annually on the anniversary date of the member's retirement.

Any Police and Firefighters' Plan Tier Two member may retire on a service retirement pension upon the attainment of age fifty (50) or, if earlier, the date when the member attains age forty-eight (48) and the length of creditable service equals to at least seventy (70) years. Upon retirement, a Police and Firefighters' Plan Tier Two member will receive a monthly pension, payable for life, equal to three percent (3%) of the member's average monthly salary, as defined in the Police and Firefighters' Plan ordinance, for each of the first twenty (20) years of creditable service and four percent (4%) of the member's average monthly salary for each year of creditable service in excess of twenty (20) years; provided, however, that the pension benefit shall not exceed eighty-five percent (85%) of the member's average monthly salary. The average monthly salary of a Police and Firefighters' Plan Tier Two member is computed based on such member's salary for the three (3) highest paid years prior to the date of retirement or the average of the last three (3) paid years to such member prior to the date of retirement, whichever produces the greater benefit after consideration of overtime limitations. All Police and Firefighters' Plan Tier Two retirees and beneficiaries will receive a 1.5% increase in benefits annually on the anniversary date of the member's retirement.

The benefits for Police and Firefighters' Plan Tier Three members are the same as the ones described in the immediately preceding paragraph for Police and Firefighters' Plan Tier Two members, except the average monthly salary of a Police and Firefighters' Plan Tier Three member is computed based on such member's salary for the five (5) highest paid years prior to the date of retirement or the average of the last three (3) paid years to such member prior to the date of retirement, whichever produces the greater benefit after consideration of overtime limitations.

The benefits for Police and Firefighters' Plan Tier Four members are the same as the ones described in the immediately preceding paragraph for Police and Firefighters' Plan Tier Three members, except (i) the average monthly salary of a Police and Firefighters' Plan Tier Four member is computed based on such member's average of the five (5) highest paid years prior to the date of retirement, taking into consideration the overtime limit, and (ii) the normal retirement eligibility is the earlier of the attainment of age 52, with five (5) years of creditable service or the length of creditable service equals to at least seventy (70) years, but the member must have at least attained the age of 48.

Any member of the Police and Firefighters' Plan who becomes totally and permanently disabled at any time as a result of illness or injury suffered in the line of duty may be retired on an accidental disability pension. For a service connected disability, the minimum pension payable is eighty-five percent (85%) of the member's monthly salary at the time of disability retirement, less any offset for worker's compensation. Any Police and Firefighters' Plan member who becomes totally or permanently disabled after five (5) years of creditable service as a result of illness or injury not suffered in the line of duty may be retired on an ordinary disability retirement pension. Upon disability retirement, a Police and Firefighters' Plan member receives a monthly pension equal to such member's service retirement benefits. For a non-service connected disability, the pension benefit is the accrued benefit after five (5) years of the member's creditable service. The Police and Firefighters' Plan also provides death benefits for beneficiaries or members for service connected and non-service connected death.

If a Police and Firefighters' Plan member resigns or is lawfully discharged before retirement, such member's contributions, with three percent (3%) interest per annum, are returned to that member. The Police and Firefighters' Plan also provides a special provision for vested benefits for members who terminate their employment after five (5) years of service. In the alternative and in lieu of the normal form of benefit, the Police and Firefighters' Plan member may, at any time prior to retirement, elect to receive a lifetime retirement benefit with one hundred twenty (120) monthly payments guaranteed. If the Police and Firefighters' Plan member should die before one hundred twenty (120) monthly payments are made, benefits will continue to be paid to the member's designated beneficiary for the balance of the one hundred twenty (120) month period. If the retired Police and Firefighters' Plan member is living after one hundred twenty (120) monthly payments are made, the payments shall be continued for the member's remaining lifetime. In case of termination of the Police and Firefighters' Plan, benefits accrued to members of the Police and Firefighters' Plan are not subject to forfeit.

An active Police and Firefighters' Plan Tier One member may enter into a DROP on the first day of any month after becoming eligible to retire. Upon becoming eligible to participate in the DROP, a Police and Firefighters' Plan Tier One member may elect to enter that program for a period not to exceed thirty-six (36) months. Police and Firefighters' Plan Tier One members who enter the DROP on or after September 1, 2012 shall be eligible to participate for a period not to exceed sixty (60) months. All Police and Firefighters' Plan Tier One members shall receive a 2.5% cost of living adjustment increase in benefits annually on the anniversary date of the member's retirement. The exception is for Police and Firefighters' Plan Tier One members who entered the DROP on or after September 1, 2012 and before September 30, 2013. Those members shall receive a zero percent (0%) cost of living adjustment for the third and fourth annual adjustment dates, regardless of whether the member remains in the DROP for the maximum sixty (60) month period. Further, any member who exits the DROP within six (6) months following the date of DROP entry shall be eligible to receive the 2.5% cost of living adjustment.

An active Police and Firefighters' Plan Tier Two member or Police and Firefighters' Plan Tier Three member may enter into the DROP on the first day of any month after attainment of age fifty (50) or, if earlier, the date when the member attains age forty-eight (48) and the age and length of creditable service equals to at least seventy (70) years. Upon becoming eligible to participate in the DROP, a Police and Firefighters' Plan Tier Two member or Police and Firefighters' Plan Tier Three member may elect to enter that program for a period not to exceed sixty (60) months. All of such members shall receive a 1.5% cost of living adjustment increase in benefits annually on the anniversary date of the member's retirement.

Beginning October 1, 2016, Police and Firefighters' Plan members already participating in the DROP are permitted to extend their DROP participation to 96 months but no cost of living adjustment will be paid during the extended years of participation. Police and Firefighters' Plan members who elect the

DROP after October 1, 2016 can participate for up to 96 months but no cost of living adjustment will be provided for the first through the fourth year of the DROP participation.

At September 30, 2019, \$25,499,534, the total amount of the DROP payable, represents the balance of the self-directed participants as all of the participants are now in the self-directed DROP.

Contributions to the Police and Firefighters' Plan. The City is required to contribute an actuarially determined amount to the Police and Firefighters' Plan that, when combined with members' contributions, will fully provide for all benefits as they become payable. All Police and Firefighters' Plan Tier One members and Police and Firefighters' Plan Tier Two members are required to contribute ten percent (10%) of their salary to the Police and Firefighters' Plan, while all Police and Firefighters' Plan Tier Three members and Police and Firefighters' Plan Tier Four members are required to contribute ten and one-half percent (10.5%) of their salary to the Police and Firefighters' Plan. The actual contribution from the City and from the State for active employees for the Fiscal Year ended September 30, 2019, was \$39,626,600 and \$120,549, respectively. Covered payroll, excluding DROP members, was \$64,181,403. The contribution required from the City and the State for the Fiscal Year ended September 30, 2019 was actuarially determined by the October 1, 2017 valuation to be \$39,747,149.

Net Pension Liability. The City's net pension liability and related ratios for the Police and Firefighters' Plan for the Fiscal Years ended September 30, 2015 through September 30, 2018 are set forth in the table on the following page.

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**Police and Firefighters' Plan
Schedule of Changes in the Employer's
Net Pension Liability and Related Ratios**

	Fiscal Year Ended September 30			
	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
<u>Total Pension Liability</u>				
Service Cost	\$ 16,098,560	\$ 17,803,602	\$ 17,530,982	\$ 18,462,961
Interest	78,415,039	82,627,847	87,422,136	91,544,984
Changes of Benefit Terms ⁽¹⁾	–	–	(9,686,441)	–
Difference between Actual and Expected Experience	12,428,547	14,588,712	141,740	11,814,591
Assumption Changes ⁽¹⁾	5,686,196	2,447,885	34,969,254	6,951,570
Benefit Payments (including Refunds of Contributions)	<u>(62,686,716)</u>	<u>(54,861,660)</u>	<u>(58,574,937)</u>	<u>(75,460,821)</u>
Net Change in Total Pension Liability	49,941,626	62,606,386	71,800,734	53,313,285
Total Pension Liability (Beginning of Year)	<u>991,506,019</u>	<u>1,041,447,645</u>	<u>1,104,054,031</u>	<u>1,175,854,766</u>
Total Pension Liability (End of Year) (a)	<u><u>\$1,041,447,645</u></u>	<u><u>\$1,104,054,031</u></u>	<u><u>\$1,175,854,765</u></u>	<u><u>\$1,229,168,051</u></u>
<u>Plan Fiduciary Net Position</u>				
Contributions - City and State	\$ 33,149,388	\$ 34,970,641	\$ 35,367,866	\$ 37,639,937
Contributions - Employees	5,944,414	5,984,397	6,198,244	6,593,715
Net Investment Income	5,689,333	70,539,300	85,791,174	82,094,851
Benefit Payments (including Refunds of Contributions)	(62,686,716)	(54,861,660)	(58,574,937)	(75,460,821)
Administrative Expense	<u>(777,493)</u>	<u>(826,044)</u>	<u>(769,079)</u>	<u>(802,106)</u>
Net Change in Plan Fiduciary Net Position	(18,681,074)	55,806,634	68,013,268	50,065,576
Plan Fiduciary Net Position (Beginning of Year)	<u>769,298,572</u>	<u>750,617,498</u>	<u>806,424,132</u>	<u>874,437,400</u>
Plan Fiduciary Net Position (End of Year) (b)	<u><u>\$750,617,498</u></u>	<u><u>\$806,424,132</u></u>	<u><u>\$874,437,400</u></u>	<u><u>\$924,502,976</u></u>
City's Net Pension Liability (End of Year) (a) - (b)	<u><u>\$290,830,147</u></u>	<u><u>\$297,629,899</u></u>	<u><u>\$301,417,365</u></u>	<u><u>\$304,665,075</u></u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	72.07%	73.04%	74.37%	75.21%
Covered Employee Payroll⁽²⁾	\$ 56,545,113	\$ 56,759,632	\$ 59,907,167	\$ 64,126,115
City's Net Pension Liability as a Percentage of Covered-Employee Payroll	514.33%	524.37%	503.14%	475.10%

Source: City Pension Fund for Firefighters and Police Officers in the City of Miami Beach Financial Statements for the Years Ended September 30, 2018 and 2017, dated March 21, 2019.

Footnotes for the immediately preceding table are set forth on the following page.

- (1) For a detailed description of the changes made in the benefits and assumptions for the Police and Firefighters' Plan, reference is made to the source of the table set forth above, to the City Pension Fund for Firefighters and Police Officers in the City of Miami Beach Actuarial Valuation as of October 1, 2016, prepared by Gabriel, Roeder, Smith and Company, dated May 3, 2017 and to the City Pension Fund for Firefighters and Police Officers in the City of Miami Beach Actuarial Valuation as of October 1, 2017, prepared by Gabriel, Roeder, Smith and Company, dated April 16, 2018. A copy of such documents may be obtained from the City by contacting the City's Chief Financial Officer, 1700 Convention Center Drive, Miami Beach, Florida 33139, Telephone number: (305) 673-7466, Facsimile number: (305) 673-7795, Email address: www.miamibeachfl.gov/finance.
- (2) Expected total covered payroll for the Fiscal Year ended September 30, 2018 was estimated based on the expected pensionable payroll from the October 1, 2017 actuarial valuation for the Police and Firefighters' Plan.

Other Retirement and Compensation Plans

Firemen's and Police Relief and Pension Funds

The City's firefighters and police officers are members of two (2) separate non-contributory money purchase benefit plans established under the provisions of Florida Statutes, Chapters 175 and 185, respectively. These plans are funded solely from proceeds of certain excise taxes levied by the City and imposed upon property and casualty insurance coverage within City limits. The excise taxes, which are collected from insurers by the State, are remitted to the Plans' Boards of Trustees. The City is under no obligation to make any further contributions to the plans.

The excise taxes received from the State and remitted to the plans for the Fiscal Year ended September 30, 2019 were \$1,391,602 for firefighters and \$720,876 for police officers. These payments were recorded on the City's books as revenues and expenditures during the fiscal year. Plan benefits are allocated to participants based upon their service during the year and the level of funding received during the year. Participants are fully vested after ten (10) years of service with no benefits vested prior to ten (10) years of service, except those prior to June 1983. All benefits are paid in a lump sum format, except for the Police Relief Funds, where participants may also elect not to withdraw, or to partially withdraw, his or her retirement funds.

Defined Contribution Retirement Plan - 401(a)

The City has a defined contribution retirement plan (the "Defined Contribution Plan") that was created in accordance with Section 401(a) of the Internal Revenue Code of 1986, as amended (the "Code"). The Defined Contribution Plan provides retirement and other related benefits for eligible employees as an option to the other retirement systems sponsored by the City. However, effective March 19, 2006, the Defined Contribution Plan was no longer offered to new employees of the City. Current employees are still participating in the Defined Contribution Plan.

The Defined Contribution Plan is administrated by a Board of Trustees, which has the general responsibility for the Plan's proper operation and management. The Defined Contribution Plan complies with the provisions of section 401(a) of the Code and may be amended by the City Commission. The City has no fiduciary responsibility for the Defined Contribution Plan. Consequently, amounts accrued for benefits are not recorded in the fiduciary fund.

Employees in the Defined Contribution Plan hired prior to February 21, 1994 are required to contribute ten percent (10%) of their salary while employees hired after February 21, 1994 are required to contribute eight percent (8%) of their salary. The City matches the employee's contribution one hundred percent (100%). The Defined Contribution Plan of each employee is the immediate property of the

employee. Employees have a choice of plan administrators and are responsible for the investment of their funds amongst choices of investment vehicles offered by their selected plan administrator.

Defined Contribution Plan information, as of and for the Fiscal Year ended September 30, 2019, is as follows:

Defined Contribution Plan Information

Members in Defined Contribution Plan		23
City’s contribution	\$130,812	
Percentage of covered payroll		7.71%
Employees’ contribution	131,117	
Percentage of covered payroll		7.73

Source: City of Miami Beach, Florida Comprehensive Annual Financial Report for Fiscal Year Ended September 30, 2019.

Other Post Employment Benefits

Plan Description

In accordance with Section 112.0801, Florida Statutes, the City is required to permit eligible retirees and their eligible dependents to participate in the City’s health insurance program at a cost to the retirees that is no greater than the cost at which coverage is available for active employees. Although not required by law, the City pays a portion of such cost of participation for its retirees. The City also provides life insurance to the retirees.

In June 2015, the Governmental Accounting Standard’s Board (“GASB”) issued Statement No. 75, “Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions” (“GASB 75”). GASB 75 replaces the requirements of GASB Statement No. 45, “Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions,” as amended, and GASB Statement No. 57, “OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans.” The objective of GASB 75 is to improve the financial reporting by state and local governments for postemployment benefits other than pensions (“OPEB”) and improve information for OPEB that is provided by other entities. The provisions of GASB 75 are effective beginning with for the financial statements of the City for the Fiscal Year ended September 30, 2018. While GASB 75 requires recognition and disclosure of the unfunded OPEB liability, there is no requirement that the liability of such plan be funded. The City’s single employer OPEB Plan (the “OPEB Plan”) currently provides the following post employment benefits:

- (a) Health and Dental Insurance - Employees of the City hired prior to March 18, 2006 are eligible to receive a fifty percent (50%) health insurance contribution of the total premium cost. At age sixty-five (65), if the retiree is eligible for Medicare Part B, the City contributes fifty percent (50%) of the Medicare Part B payment. Employees hired after March 18, 2006, after vesting in City’s retirement plans, are eligible to receive an offset to the retiree premium equal to \$10 per year of credible service, up to a maximum of \$250 per month until age sixty-five (65) and \$5 per year of credible service up to a maximum of \$125, thereafter.

(b) Life Insurance - Employees of the City are eligible to receive a life insurance benefit of \$1,000 towards the cost of such insurance.

As of September 30, 2008, the City established an OPEB Trust (the “OPEB Trust”) and began funding its OPEB obligation. Stand alone financial statements for the OPEB Trust are not prepared. As of September 30, 2019, the date of the most recent actuarial valuation, OPEB Plan participation consisted of the following:

OPEB Plan Participation

OPEB Plan Participants	2,296
Retirees receiving benefits	<u>1,359</u>
Total	<u><u>3,655</u></u>

Source: City of Miami Beach, Florida Comprehensive Annual Financial Report
for Fiscal Year Ended September 30, 2019.

Funding of OPEB Plan

The City has the authority to establish and amend the funding policy of the OPEB Plan. For the Fiscal Year ended September 30, 2019, the City paid \$11,568,424 in OPEB benefits on a pay-as-go basis and \$_____ to the OPEB Trust. The City’s net OPEB obligation as of September 30, 2019 was \$366,012,523. The City intends to base future OPEB Trust contributions on the annual required contribution in subsequent annual actuarial reports. However, no OPEB Trust contributions are legally or contractually required.

The annual cost (expense) of the OPEB Plan is calculated based on the annual required contribution, an amount actuarially determined in accordance with the parameters of GASB 75. The annual required contribution represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost each year and amortize any unfunded actuarial liability over a period not to exceed thirty (30) years.

The following table shows the components of the net OPEB liability of the City as of September 30, 2019.

Net OPEB Liability

Total OPEB Liability	\$401,713,392
OPEB Plan Fiduciary’s Net Position	<u>35,700,869</u>
Net OPEB Liability	<u><u>\$366,012,523</u></u>
 Plan Fiduciary Net Position as a Percentage of the total OPEB Liability	 8.89%

Source: City of Miami Beach, Florida Comprehensive Annual Financial Report
for Fiscal Year Ended September 30, 2019.

The City's net OPEB liability and related ratios for the Fiscal Years ended September 30, 2017 through September 30, 2019 are set forth in the table below.

**OPEB Schedule of Changes in the City's
Net OPEB Liability and Related Ratios**

	Fiscal Year Ended September 30		
	<u>2017⁽¹⁾</u>	<u>2018</u>	<u>2019</u>
<u>Total OPEB Liability</u>			
Service Cost	\$ 3,074,151	\$ 3,921,508	\$ 6,544,300
Interest	13,700,847	14,345,708	16,033,277
Assumption Changes ⁽²⁾	-	(2,399,422)	65,525,101
Benefit Payments	<u>(10,111,628)</u>	<u>(11,647,331)</u>	<u>(13,507,000)</u>
Net Change in Total OPEB Liability	6,663,370	4,220,463	74,595,628
Total OPEB Liability (Beginning of Year)	173,242,455	179,905,825	184,126,288
Restatement	<u>- 0 -</u>	<u>- 0 -</u>	<u>142,991,476</u>
Total OPEB Liability (Beginning of Year, as restated)	<u>- 0 -</u>	<u>- 0 -</u>	<u>327,117,764</u>
Total OPEB Liability (End of Year) (a)	<u>\$179,905,825</u>	<u>\$184,126,288</u>	<u>\$401,713,392</u>
<u>Plan Fiduciary Net Position</u>			
Contributions - City	\$ 438,000	\$ 1,039,279	\$ 13,996,031
Net Investment Income	3,302,688	2,540,698	886,546
Benefit Payments	- 0 -	- 0 -	(13,507,000)
Administrative Expense	<u>145,690</u>	<u>(65,711)</u>	<u>(88,918)</u>
Net Change in Plan Fiduciary Net Position	3,886,378	3,514,266	1,286,659
Plan Fiduciary Net Position (Beginning of Year)	<u>27,013,566</u>	<u>30,899,944</u>	<u>34,414,210</u>
Plan Fiduciary Net Position (End of Year) (b)	<u>\$30,899,944</u>	<u>\$34,414,210</u>	<u>\$35,700,869</u>
City's Net OPEB Liability (End of Year) (a) - (b)	\$149,005,881	\$149,712,078	\$366,012,523
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	17.18%	18.69%	8.89%
Covered Employee Payroll⁽³⁾	\$142,146,603	\$147,122,000	\$150,737,233
City's Net OPEB Liability as a Percentage of Covered-Employee Payroll⁽³⁾	104.83%	101.76%	242.81%

Source: City of Miami Beach, Florida Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2019.

(1) Fiscal Year 2017 constitutes the first Fiscal Year for which data is available.

- (2) For a detailed description of the changes made in the assumptions for OPEB, reference is made to the source of the table set forth above, a copy of which may be obtained from the City by contacting the City's Chief Financial Officer, 1700 Convention Center Drive, Miami Beach, Florida 33139, Telephone number: (305) 673-7466, Facsimile number: (305) 673-7795, Email address: www.miamibeachfl.gov/finance.
- (3) Employees do not contribute to OPEB.

For more detailed information concerning the Employee Plan, the Police and Firefighters' Plan, the City's other retirement and contribution plans and the OPEB Plan, including actuarial valuations, assumptions about future events and contact information for the acquisition of separate audited financial statements for each plan (except the OPEB Plan, which does not have separate audited financial statements), see "APPENDIX B - Excerpts from Comprehensive Annual Financial Report of the City of Miami Beach, Florida for the Fiscal Year Ended September 30, 2019" and, in particular, Note 16 and, with respect to the OPEB Plan, Note 17 of the Notes to the Financial Statements and the information provided in the Required Supplementary Information.

INVESTMENT CONSIDERATIONS

COVID-19

In December, 2019 a respiratory disease caused by a novel strain of coronavirus was detected in China. The disease has since spread to other countries, including the United States of America, producing sickness and deaths in the places where it has spread. The disease was declared a Public Health Emergency of International Concern on January 30, 2020, named "COVID-19" on February 11, 2020, and declared a pandemic on March 10, 2020, each by the World Health Organization. Currently, no proven cure exists for COVID-19.

To address the health concerns presented by COVID-19, state and local governments implemented unprecedented, formal restrictions to limit human contact. During the month of March, 2020, emergency declarations were issued by the federal government, the State, the County, and the City. Pursuant to such declarations, far-reaching social distancing measures were adopted, which generally required the closure of public areas and facilities, public and private schools, private businesses that are not critical or essential businesses and the prohibition of gatherings involving attendance of more than ten (10) people. Additionally, individuals throughout the County were strongly urged to remain in their homes, other than to engage in essential activities, and to wear facial masks when interacting with others outside their homes. Commercial establishments, government buildings and public areas and facilities were opened in phases in 2020, with restrictions placed on the number of people that may access such establishments, areas and facilities and the manner in which they may be accessed. Certain restrictions on activities throughout the City remain. For additional information and updates on the continuing impact of COVID-19 in the City, see the City's website at: <https://www.miamibeachfl.gov/coronavirus/>.

The outbreak of COVID-19 has affected travel, commerce and financial markets globally, and is widely expected to have a significant impact on economies worldwide. The continued spread of the disease, containment, and efforts designed to mitigate its effects are expected to negatively impact the financial and operating condition of the City. [NOTE: Add brief description of the dollar amount of the impact thus far, measures taken to address or avert losses and amount received, or expected to be received, from federal government and other sources to address such impact.]

The total or long-term negative impact on the City of COVID-19 cannot be predicted with any reasonable degree of certainty at this time. The continued spread of the disease, containment, and efforts designed to mitigate its effects could continue to have a negative affect on revenues of the City, including the Net Revenues. No assurance can be given that the changes produced by the outbreak of COVID-19

will not materially adversely impact Net Revenues, which could adversely affect the ability of the City to comply with its covenants under the Bond Resolution, including its covenant to satisfy Principal and Interest Requirements when due. See “SECURITY AND SOURCES OF PAYMENT” herein.

Climate Change

The State of Florida is naturally susceptible to the effects of extreme weather events and natural disasters, including floods, droughts and hurricanes. The occurrence of such events and natural disasters can produce significant negative ecological, environmental and economic impacts. Such impacts can be exacerbated by a longer-term shift in the climate over several decades (commonly referred to as climate change), including increasing global temperatures and rising sea levels.

Numerous scientific studies on global climate change conclude that, among other effects on the global ecosystem, extreme and abnormal temperature fluctuations have occurred globally and, without the implementation of measures to address the phenomenon, will continue to occur. Such occurrences have been determined by scientific studies to be the primary reason for current and projected increases in sea levels and for extreme weather events to occur in higher frequency and intensity. Projected changes in weather and tidal patterns place coastal areas like the City at risk of substantial wind or flood damage over time, affecting private development and public infrastructure, including roads, utilities, emergency services, schools, and parks. As a result, global climate change increases the potential of considerable financial loss to the City, including, without limitation, substantial losses in tax revenues. In addition, many residents, businesses and governmental operations could be severely disabled for significant periods of time or displaced, and the City could be required to mitigate these effects at a potentially material cost.

The City is keenly aware of the risks from hurricanes and sea level rise, as are officials at the County. Consequently, advanced emergency management procedures and more stringent construction codes were implemented by the County and the State to reduce risks from hurricanes and flooding. In the City, since elevation is higher on the east side of the City, capital projects designed to reduce the negative impacts of sea level rise and to control flooding have been prioritized so that installations are initially concentrated on the west side of the City. In addition, to address issues related to climate change, the City developed three (3) areas of concentration: (i) accessing the best available science and engineering; (ii) addressing critical public infrastructure needs of the more vulnerable areas, while taking a deliberate and measured look at longer term strategies that reduce flood risks; and (iii) addressing private infrastructure through land use changes and guidance that reduces flood risks for historic and private property. The City also completed a vulnerability assessment of public assets to identify and prioritize vulnerable assets and develop flexible and responsive adaptations and mitigation measures. More detailed information concerning the City’s climate change assessments, strategies and initiatives is provided on the City’s Rising Above web page at: <http://www.mbrisingabove.com/>.

Science and Engineering

The City conducts infrastructure planning and land use changes based on scientific studies and information most applicable to the City concerning sea level rise and flood projections, along with local tidal and rainfall gauges. The City is a Steering Committee member of the Southeast Florida Regional Climate Change Compact (the “Compact”) and works regionally to collaborate on climate change issues, including sea level rise. The City adopted the Compact’s Unified Sea Level Rise Projection for Southeast Florida and uses such projection when planning, designing and constructing capital projects. The City also relies upon the climate change strategies described in the Compact’s Regional Climate Action Plan. The Compact’s Regional Climate Action Plan may be viewed on the Compact’s website at: <http://southeastfloridaclimatecompact.org/>.

The City is also part of the international 100 Resilient Cities network and is included in the Greater Miami and the Beaches partnership. Through such affiliation, climate change experts have visited the City, like the Urban Land Institute and the Columbia University Resilience Accelerator, for analysis of City programs and projects from a climate change perspective. In addition, the City is creating a resilience strategy with the Greater Miami and the Beaches partnership that is focused on reducing climate change risks. The resilience strategy is expected to be released during the second quarter of this year and the City's strategic plan is expected to be updated to include pertinent actions from the Greater Miami and the Beaches resilience strategy. The County also has a climate change strategic plan that it has adopted. The County's climate change strategic plan is outlined in the GreenPrint link on the County's website at: <http://miamidade.gov/GreenPrint/>.

Public Infrastructure

One of the natural defenses against certain negative impacts of climate change is the County's renourished beaches and extensive coastal dune system on the east side of the City. These serve as a vital buffer between coastal infrastructure and the impacts of wave action and surge during storm events. [During the next two (2) years, the United States Army Corps of Engineers will be working with the County and the City to conduct a feasibility study to prepare for reauthorization for the next fifty (50) years of beach management.] [ANY UPDATE?] Included in the County's beach renourishment program is vegetation management to preserve and grow the dune system. For the past five (5) years the City has operated in an aggressive manner to address the critical infrastructure needs of some of the more vulnerable areas on the west side of the City. Having addressed those most vulnerable areas, the City is currently developing and implementing long-term programs and strategies for more public infrastructure improvements.

The City has installed or retrofitted [twenty-seven (27)] [ANY UPDATE NEEDED?] of what it anticipates will be approximately eighty (80) pumps to alleviate or eliminate flooding throughout the City. Among other sources of funding, in each of 2015 and 2017 the City issued \$100 million of Stormwater Revenue Bonds and in 2017 \$85 million of Water and Sewer Revenue Bonds to implement infrastructure projects that will aid in the fight against the negative impacts of climate change. In 2018 the electors of the City approved the issuance of various series of general obligation bonds; approximately \$200 million of such bonds are expected to be used to fund infrastructure projects that also will aid in the fight against the negative impacts of climate change. In addition, the City expects to utilize approximately \$100 million in tax increment revenue from the County to fund infrastructure projects for sea level rise mitigation. The City is preparing, together with a consulting engineering firm retained for such purpose, an integrated water management plan that will establish a strategy and schedule for the implementation during the next five (5) to ten (10) years of infrastructure improvements designed to alleviate or prevent negative impacts expected to result from climate change.

Recent improvements to the City's stormwater system have significantly increased the system's pipe and pumping capacity, enabling the system to handle more intense rainfall. In addition, roads have been elevated in the lowest lying areas. As a result of recent improvements, the City has avoided numerous tidal flooding incidents in recent years.

Private Property

In recent years the City has adopted numerous land use code amendments in response to concerns emanating from the potential impact of climate change. Efforts have been made to increase resilience for private property as well as to reduce the risk of damage to historic properties. Included among the actions taken are the establishment of (i) a requirement for new homes to be built one (1) to five (5) feet higher

than the Federal Emergency Management Agency (“FEMA”) requirement; (ii) a minimum FEMA freeboard requirement for new construction and significant renovations throughout the City; (iii) sea level rise and resilience review criteria for use by land use boards in the City; (iv) an increase in allowable height of commercial property to provide additional ground floor height for future elevation of the first floor; (v) an increase in the elevation required for seawalls in the City; (vi) an increase in required green space, with more setbacks for increased water permeability; and (vii) an increase in the elevation required for certain land areas.

Projections of the effects of global climate change on the City are complex and depend on many factors that are outside the control of the City. The various scientific studies that forecast climate change and its adverse effects, including severe storms, sea level rise and flooding risks, are based on assumptions contained in such studies. Actual events, however, may vary materially from such forecasts. In addition, the scientific understanding of climate change and its effects continues to evolve. Accordingly, the City is unable to forecast when sea level rise or other adverse effects of climate change (e.g., the occurrence and frequency of 100-year storm events, hurricanes, and king tides) will occur. In particular, the City cannot predict the timing or precise magnitude of adverse economic effects, including, without limitation, material adverse effects on the business operations or financial condition of the City and the local economy during the term of the Series 2021A Bonds. While the effects of climate change may be mitigated by the City’s past and future investment in adaptation strategies, the City can give no assurance about the net effects of those strategies and whether the City will be required to take additional adaptive mitigation measures. If necessary, such additional measures could require significant capital resources in excess of the resources already contemplated by the City to be spent on adaptation strategies.

Cybersecurity

Computer networks and systems used for information transmission and collection are vital to the efficient operations of the City. City systems provide support to departmental operations and constituent services by collecting and storing sensitive information, including intellectual property, security information, proprietary business process information, information regarding suppliers and business partners, and personally identifiable information of customers, constituents and employees (collectively, “Computer Information”). The secure processing, maintenance and transmission of Computer Information is critical to effective departmental operations and the appropriate provision of citizen services. Increasingly, governmental entities are being targeted by cyber-attacks seeking to obtain Computer Information or disrupt critical services. A rapidly changing cyber risk landscape may introduce new vulnerabilities that attackers and hackers can exploit in their efforts to effect breaches or service disruptions. Employee error and/or malfeasance may also contribute to a loss of Computer Information or other system disruptions.

Protocols

A successful cybersecurity approach has multiple layers of protection spread across the computers, networks, programs, and Computer Information that is to be protected. The City endeavors to integrate its employees, computer processes, and technology to create an effective defense against cyber-attacks. The City currently utilizes a global research and advisory firm that specializes in providing technology and computer system consultation to guide the development and growth of its cybersecurity protections. For its core infrastructure, the City relies on, among other protections, a combination of industry leading, enterprise grade firewalls, network access controls, intrusion detection systems, email and web filtering, advanced traffic analysis, endpoint protections, encryption, and digital rights management. There is proactive monitoring of internal and external systems, with real time monitoring solutions and the use of computer security best practices. The City provides yearly mandated security training for all City staff,

ongoing instruction and certifications for technical staff, and participation in industry acknowledged educational conferences and training. The City reviews its cybersecurity protocols on an ongoing basis to stay abreast of emerging and effective procedures and measures.

Threat Response

The City can respond to cybersecurity threats in many ways, depending on the severity and mode of attack. The City has internal internet technology staff that it can use to respond to a cybersecurity threat, including, without limitation, network administrators, database administrators, system administrators and analysts and field technicians. Additionally, the City has internet security vendors on retainer to provide industry expertise that can be quickly accessed to respond to and remedy a cybersecurity incident. Budgetary funds are also available to secure the services of other professional consultants to respond to a cybersecurity incident, if needed. The City's Security Operations Center monitors computer and network logs for cybersecurity issues, constantly scanning infrastructure for vulnerabilities. In addition, the City has other systems to monitor inbound and outbound traffic and to respond automatically with counter measures when cybersecurity abnormalities occur.

The City regularly refines and seeks to improve its cybersecurity risk management policies and procedures and regularly trains employees to comply with cybersecurity regulatory requirements. It also maintains cyber risk insurance to help mitigate its exposure to security attacks that are known to cripple an organization's technology system and/or fraudulently confiscate funds.

While City cybersecurity and operational safeguards are periodically tested, no assurances can be given that such measures will ensure against all cybersecurity threats or attacks. Cybersecurity breaches could damage or compromise the City's computer network and the confidentiality, integrity, or availability of the City's computer system or the Computer Information. The potential disruption, access, modification, disclosure or destruction of Computer Information could result in the interruption of City commerce, the initiation of legal claims or proceedings, liability under laws that protect the privacy of personal information, regulatory penalties, and the loss of confidence in City functions, which could adversely affect City revenues or cause a material disruption in the City's operations or the appropriate provision of City services. The costs of remedying any such damage or protecting against future attacks could be substantial and in excess of the maximum amount of the City's cyber risk insurance policy. Further, the litigation to which the City could be exposed following a cybersecurity breach could be significant, which could cause the City to incur material costs related to such legal claims or proceedings.

TAX MATTERS

General

In the opinion of Squire Patton Boggs (US) LLP, Bond Counsel, under existing law: (i) interest on the Series 2021A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), and is not an item of tax preference for purposes of the federal alternative minimum tax, and (ii) the Series 2021A Bonds and the income thereon are exempt from taxation under the laws of the State of Florida, except estate taxes imposed by Chapter 198, Florida Statutes, as amended, and net income and franchise taxes imposed by Chapter 220, Florida Statutes, as amended. Bond Counsel expresses no opinion as to any other tax consequences regarding the Series 2021A Bonds.

The opinion on federal tax matters will be based on and will assume the accuracy of certain representations and certifications, and continuing compliance with certain covenants, of the City contained

in the transcript of proceedings and that are intended to evidence and assure the foregoing, including that the Series 2021A Bonds are and will remain obligations the interest on which is excluded from gross income for federal income tax purposes. Bond Counsel will not independently verify the accuracy of the City's representations and certifications or the continuing compliance with the City's covenants.

The opinion of Bond Counsel is based on current legal authority and covers certain matters not directly addressed by such authority. It represents Bond Counsel's legal judgment as to exclusion of interest on the Series 2021A Bonds from gross income for federal income tax purposes but is not a guaranty of that conclusion. The opinion is not binding on the Internal Revenue Service ("IRS") or any court. Bond Counsel expresses no opinion about (i) the effect of future changes in the Code and the applicable regulations under the Code or (ii) the interpretation and the enforcement of the Code or those regulations by the IRS.

The Code prescribes a number of qualifications and conditions for the interest on state and local government obligations to be and to remain excluded from gross income for federal income tax purposes, some of which require future or continued compliance after issuance of the obligations. Noncompliance with these requirements by the City may cause loss of such status and result in the interest on the Series 2021A Bonds being included in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2021A Bonds. The City has covenanted to take the actions required of it for the interest on the Series 2021A Bonds to be and to remain excluded from gross income for federal income tax purposes, and not to take any actions that would adversely affect that exclusion. After the date of issuance of the Series 2021A Bonds, Bond Counsel will not undertake to determine (or to so inform any person) whether any actions taken or not taken, or any events occurring or not occurring, or any other matters coming to Bond Counsel's attention, may adversely affect the exclusion from gross income for federal income tax purposes of interest on the Series 2021A Bonds or the market value of the Series 2021A Bonds.

Interest on the Series 2021A Bonds may be subject to a federal branch profits tax imposed on certain foreign corporations doing business in the United States and to a federal tax imposed on excess net passive income of certain S corporations. Under the Code, the exclusion of interest from gross income for federal income tax purposes may have certain adverse federal income tax consequences on items of income, deduction or credit for certain taxpayers, including financial institutions, certain insurance companies, recipients of Social Security and Railroad Retirement benefits, those that are deemed to incur or continue indebtedness to acquire or carry tax-exempt obligations, and individuals otherwise eligible for the earned income tax credit. The applicability and extent of these and other tax consequences will depend upon the particular tax status or other tax items of the owner of the Series 2021A Bonds. Bond Counsel will express no opinion regarding those consequences.

Payments of interest on tax-exempt obligations, including the Series 2021A Bonds, are generally subject to IRS Form 1099-INT information reporting requirements. If a Series 2021A Bond owner is subject to backup withholding under those requirements, then payments of interest will also be subject to backup withholding. Those requirements do not affect the exclusion of such interest from gross income for federal income tax purposes.

Bond Counsel's engagement with respect to the Series 2021A Bonds ends with the issuance of the Series 2021A Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the City or the owners of the Series 2021A Bonds regarding the tax status of interest thereon in the event of an audit examination by the IRS. The IRS has a program to audit tax-exempt obligations to determine whether the interest thereon is includible in gross income for federal income tax purposes. If the IRS does audit the Series 2021A Bonds, under current IRS procedures, the IRS will treat the City as the taxpayer and the

beneficial owners of the Series 2021A Bonds will have only limited rights, if any, to obtain and participate in judicial review of such audit. Any action of the IRS, including but not limited to selection of the Series 2021A Bonds for audit, or the course or result of such audit, or an audit of other obligations presenting similar tax issues, may affect the market value of the Series 2021A Bonds.

Prospective purchasers of the Series 2021A Bonds upon their original issuance at prices other than the respective prices indicated on the inside cover of this Official Statement, and prospective purchasers of the Series 2021A Bonds at other than their original issuance, should consult their own tax advisors regarding other tax considerations such as the consequences of market discount, as to all of which Bond Counsel expresses no opinion.

Risk of Future Legislative Changes and/or Court Decisions

Legislation affecting tax-exempt obligations is regularly considered by the United States Congress and may also be considered by the State legislature. Court proceedings may also be filed, the outcome of which could modify the tax treatment of obligations such as the Series 2021A Bonds. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the Series 2021A Bonds will not have an adverse effect on the tax status of interest on the Series 2021A Bonds or the market value or marketability of the Series 2021A Bonds. These adverse effects could result, for example, from changes to federal or state income tax rates, changes in the structure of federal or state income taxes (including replacement with another type of tax), or repeal (or reduction in the benefit) of the exclusion of interest on the Series 2021A Bonds from gross income for federal or state income tax purposes for all or certain taxpayers.

For example, federal tax legislation that was enacted on December 22, 2017 reduced corporate tax rates, modified individual tax rates, eliminated many deductions, repealed the corporate alternative minimum tax and eliminated the tax-exempt advance refunding of tax-exempt bonds, among other things. Additionally, investors in the Series 2021A Bonds should be aware that future legislative actions might increase, reduce or otherwise change (including retroactively) the financial benefits and the treatment of all or a portion of the interest on the Series 2021A Bonds for federal income tax purposes for all or certain taxpayers. In all such events, the market value of the Series 2021A Bonds may be affected and the ability of holders to sell their Series 2021A Bonds in the secondary market may be reduced.

Investors should consult their own financial and tax advisers to analyze the importance of these risks.

Original Issue Discount and Original Issue Premium

Certain of the Series 2021A Bonds (“Discount Bonds”) as indicated on the inside cover page of this Official Statement may be offered and sold to the public at an original issue discount (“OID”). OID is the excess of the stated redemption price at maturity (the principal amount) over the “issue price” of a Discount Bond. The issue price of a Discount Bond is the initial offering price to the public (other than to bond houses, brokers or similar persons acting in the capacity of underwriters or wholesalers) at which a substantial amount of the Discount Bonds of the same maturity is sold pursuant to that offering. For federal income tax purposes, OID accrues to the owner of a Discount Bond over the period to maturity based on the constant yield method, compounded semiannually (or over a shorter permitted compounding interval selected by the owner). The portion of OID that accrues during the period of ownership of a Discount Bond (i) is interest excluded from the owner’s gross income for federal income tax purposes to the same extent, and subject to the same considerations discussed above, as other interest on the Series 2021A Bonds, and (ii) is added to the owner’s tax basis for purposes of determining gain or loss on the

maturity, redemption, prior sale or other disposition of that Discount Bond. A purchaser of a Discount Bond in the initial public offering at the issue price described above for that Discount Bond who holds that Discount Bond to maturity will realize no gain or loss upon the retirement of that Discount Bond.

Certain of the Series 2021A Bonds (“Premium Bonds”) as indicated on the inside cover page of this Official Statement may be offered and sold to the public at a price in excess of their stated redemption price at maturity (the principal amount). That excess constitutes bond premium. For federal income tax purposes, bond premium is amortized over the period to maturity of a Premium Bond, based on the yield to maturity of that Premium Bond (or, in the case of a Premium Bond callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on that Premium Bond), compounded semiannually. No portion of that bond premium is deductible by the owner of a Premium Bond. For purposes of determining the owner’s gain or loss on the sale, redemption (including redemption at maturity) or other disposition of a Premium Bond, the owner’s tax basis in the Premium Bond is reduced by the amount of bond premium that is amortized during the period of ownership. As a result, an owner may realize taxable gain for federal income tax purposes from the sale or other disposition of a Premium Bond for an amount equal to or less than the amount paid by the owner for that Premium Bond. A purchaser of a Premium Bond in the initial public offering who holds that Premium Bond to maturity (or, in the case of a callable Premium Bond, to its earlier call date that results in the lowest yield on that Premium Bond) will realize no gain or loss upon the retirement of that Premium Bond.

Owners of Discount Bonds and Premium Bonds should consult their own tax advisors as to the determination for federal income tax purposes of the existence of OID or bond premium, the determination for federal income tax purposes of the amount of OID or bond premium properly accruable or amortizable in any period with respect to the Discount Bonds or Premium Bonds, other federal tax consequences in respect of OID and bond premium, and the treatment of OID and bond premium for purposes of state and local taxes on, or based on, income.

FINANCIAL STATEMENTS

Excerpts from the Comprehensive Annual Financial Report of the City of Miami Beach, Florida for the Fiscal Year ended September 30, 2019 and the report of RSM US LLP, independent certified public accountants, in connection therewith, dated June 24, 2020, are included in APPENDIX B to this Official Statement as part of the public records of the City. Such financial statements and report contain information relating to the City and the Water and Sewer Utility. No separate financial statements for the Water and Sewer Utility have been prepared.

The consent of RSM US LLP was not requested for the reproduction of its audit report in this Official Statement. The auditor has performed no services in connection with the preparation of this Official Statement and is not associated with the offering of the Series 2021A Bonds.

CONTINUING DISCLOSURE

The City will covenant for the benefit of the holders of the Series 2021A Bonds to provide certain financial information and operating data relating to the Water and Sewer Utility not later than two hundred forty (240) days following the end of each Fiscal Year, commencing with the Fiscal Year ending September 30, 2021 (the “Annual Report”), and to provide, or cause to be provided, notices of the occurrence of certain enumerated events. The Annual Report and notices of events will be filed with the Municipal Securities Rulemaking Board (the “MSRB”). Digital Assurance Certification, L.L.C. (“DAC”) will act as the initial disclosure dissemination agent for the City. The specific nature of the information to be

contained in the Annual Report and the notices of events is contained in “APPENDIX F - Form of Disclosure Dissemination Agent Agreement.” These covenants have been made in order to assist the Underwriters in complying with Rule 15c2-12 of the Securities and Exchange Commission (the “SEC”).

Documents required to be filed pursuant to the Disclosure Agreements are currently on file and available electronically from the MSRB at <http://emma.msrb.org/>. Information regarding the Series 2021A Bonds and other outstanding bonds of the City may be found at the DAC internet site, “<http://www.dacbond.com>.”

LITIGATION

There is no litigation or controversy of any nature now pending for which the City has received service of process or, to the actual knowledge of the Acting City Attorney, threatened against the City that seeks to restrain or enjoin the issuance or delivery of the Series 2021A Bonds or contesting the proceedings or authority under which they are to be issued or the creation, organization or existence of the City or, if determined adversely to the City, would have a material adverse impact on the ability of the Water and Sewer Utility to generate sufficient Net Revenues to pay debt service on the Series 2021A Bonds.

LEGAL MATTERS

Certain legal matters incident to the issuance of the Series 2021A Bonds and with regard to the tax-exempt status of the interest on the Series 2021A Bonds (see “TAX MATTERS” herein) are subject to the legal opinion of Squire Patton Boggs (US) LLP, Bond Counsel to the City. The signed legal opinion of Bond Counsel, substantially in the form attached hereto as APPENDIX D, dated and premised on law in effect as of the date of issuance of the Series 2021A Bonds, will be delivered on the date of issuance of the Series 2021A Bonds. The actual legal opinion to be delivered may vary from the form attached hereto to reflect facts and law on the date of delivery. The opinion will speak only as of its date, and subsequent distribution of it by recirculation of this Official Statement or otherwise shall create no implication that Bond Counsel has reviewed or expresses any opinion concerning any of the matters referenced in the opinion subsequent to its date of issuance.

While Bond Counsel has participated in the preparation of certain portions of this Official Statement, it has not been engaged by the City to confirm or verify such information. Except as may be set forth in an opinion of Bond Counsel delivered to the Underwriters, Bond Counsel expresses and will express no opinion as to the accuracy, completeness or fairness of any statements in this Official Statement, or in any other reports, financial information, offering or disclosure documents or other information pertaining to the City or the Series 2021A Bonds that may be prepared or made available by the City, the Underwriters or others to the Holders of the Series 2021A Bonds or other parties.

Certain legal matters incident to the issuance of the Series 2021A Bonds relating to disclosure will be passed on for the City by the Law Offices of Steve E. Bullock, P.A., Miami, Florida, whose legal services as Disclosure Counsel have been retained by the City. The signed legal opinion, dated and premised on law in effect as of the date of original delivery of the Series 2021A Bonds, will be delivered to the City by Disclosure Counsel at the time of original delivery of the Series 2021A Bonds.

The proposed text of the form of the legal opinion of Disclosure Counsel is set forth as APPENDIX E to this Official Statement. The actual legal opinion to be delivered may vary from that text if necessary to reflect facts and law on the date of delivery. The opinion will speak only as of its date, and subsequent distribution of it by recirculation of this Official Statement or otherwise shall create no

implication that Disclosure Counsel has reviewed or expresses any opinion concerning any of the matters referenced in the opinion subsequent to its date of issuance.

Certain legal matters will be passed on for the City by Rafael A. Paz, Esquire, Miami Beach, Florida, Acting City Attorney. Bryant Miller Olive P.A., Miami, Florida, is serving as counsel to the Underwriters.

The legal opinions and other letters of counsel to be delivered concurrently with the delivery of the Series 2021A Bonds express the professional judgment of the attorneys rendering the opinions or advice regarding the legal issues and other matters expressly addressed therein. By rendering a legal opinion or advice, the giver of such opinion or advice does not become an insurer or guarantor of the result indicated by that opinion, or the transaction on which the opinion or advice is rendered, or of the future performance of parties to the transaction. Nor does the rendering of an opinion guarantee the outcome of any legal dispute that may arise out of the transaction.

ENFORCEABILITY OF REMEDIES

The remedies available to the owners of the Series 2021A Bonds upon the occurrence of a default under the Resolution are in many respects dependent upon judicial actions which are often subject to discretion and delay. Under existing constitutional and statutory law and judicial decisions, the remedies specified by the Resolution and the Series 2021A Bonds may not be readily available or may be limited. The various legal opinions to be delivered concurrently with the delivery of the Series 2021A Bonds (including Bond Counsel's approving opinion) will be qualified, as to the enforceability of the various legal instruments, by limitations imposed by bankruptcy, reorganization, insolvency or other similar laws affecting the rights of creditors enacted before or after such delivery and to general principles of equity (whether sought in a court of law or equity).

RATINGS

Moody's Investors Service, Inc. ("Moody's") has assigned to the Series 2021A Bonds a rating of "____," [without assigning an outlook,] and S&P Global Ratings, a division of Standard & Poor's Financial Services LLC ("S&P") has assigned a rating of "____," with a "____ outlook." Such ratings and, with respect to S&P, outlook reflect the view of such organizations. An explanation of the significance of such ratings and outlook may be obtained only from Moody's and S&P, respectively. An explanation of the rating assigned by Moody's may be obtained from Moody's at 7 World Trade Center, 250 Greenwich Street, 23rd Floor, New York, New York 10007, (212) 553-0300. An explanation of the rating and outlook assigned by S&P may be obtained from S&P at 55 Water Street, 38th Floor, New York, New York 10041, (212) 438-2124.

Generally, a rating agency bases its rating and outlook, if assigned, on the information and materials furnished to it and on investigations, studies and assumptions of its own. A securities rating and outlook is not a recommendation to buy, sell or hold securities. There is no assurance that the rating provided by Moody's and the rating and outlook provided by S&P, will continue for any given period of time or that they will not be revised downward or withdrawn entirely by such rating agencies if, in their judgment, circumstances so warrant. Any downward revision or withdrawal of such ratings or outlook may have an adverse effect on the market price of the Series 2021A Bonds.

UNDERWRITING

The Series 2021A Bonds are being purchased by PNC Capital Markets LLC and Hilltop Securities Inc. (collectively, the “Underwriters”), subject to certain terms and conditions set forth in the purchase contract between the City and the Underwriters, including the delivery of opinions on certain legal matters relating to the issuance of the Series 2021A Bonds by Bond Counsel and the existence of no material adverse change in the condition of the City or the Water and Sewer Utility from that set forth in the Official Statement.

The Series 2021A Bonds are being purchased at a purchase price of \$_____ (which represents the \$_____ principal amount of the Series 2021A Bonds, [plus / minus a net original issue premium / discount of \$_____,] minus an Underwriters’ discount of \$_____). The Series 2021A Bonds are offered for sale to the public at the prices and yields set forth on the inside cover page of this Official Statement. The Series 2021A Bonds may be offered and sold to certain dealers at prices lower than or yields higher than such offering prices and yields. After the initial public offering, such public offering prices and yields may be changed from time to time by the Underwriters.

The Underwriters may have entered into distribution agreements with other broker-dealers (that have not been designated by the City as an underwriter) for the distribution of the Series 2021A Bonds at the original issue prices. Such agreements generally provide that the relevant underwriter will share a portion of its underwriting compensation or selling concession with such broker-dealers.

Bond Counsel and Disclosure Counsel may, from time-to-time, serve as counsel to one or more of the Underwriters on matters unrelated to the issuance of the Series 2021A Bonds.

FINANCIAL ADVISOR

RBC Capital Markets, LLC, St. Petersburg, Florida, is serving as Financial Advisor to the City and has acted in such capacity with respect to the sale and issuance of the Series 2021A Bonds. The Financial Advisor is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information in this Official Statement. RBC Capital Markets, LLC did not engage in any underwriting activities with regard to the issuance and sale of the Series 2021A Bonds.

CONTINGENT FEES

The City has retained Bond Counsel, Disclosure Counsel and the Financial Advisor with respect to the authorization, sale, execution and delivery of the Series 2021A Bonds. Payment of the fees of such professionals and an underwriting discount to the Underwriters (including the fees of Underwriters’ Counsel) are each contingent upon the issuance of the Series 2021A Bonds.

DISCLOSURE REQUIRED BY FLORIDA BLUE SKY LAWS

Section 517.051, Florida Statutes, as amended, and Rule 3E400.003, Florida Administrative Code, requires the City to disclose each and every default as to payment of principal and interest after December 31, 1975 with respect to obligations issued or guaranteed by the City. Rule 3E400.003 further provides, however, that if the City in good faith believes that such disclosure would not be considered material by reasonable investors, such disclosure may be omitted. The City has not defaulted on the payment of

principal or interest with respect to obligations issued or guaranteed by the City after December 31, 1975 that would be considered material by a reasonable investor.

AUTHORIZATION CONCERNING OFFICIAL STATEMENT

The delivery of this Official Statement has been duly authorized by the City Commission. At the time of the delivery of the Series 2021A Bonds, the Mayor and the City Manager of the City will furnish a certificate to the effect that nothing has come to their attention which would lead them to believe that this Official Statement, as of its date and as of the date of delivery of the Series 2021A Bonds, contains an untrue statement of a material fact or omits to state a material fact which should be included therein for the purpose for which this Official Statement is intended to be used, or which is necessary to make the statements contained herein, in the light of the circumstances under which they were made, not misleading.

A limited number of copies of the final Official Statement will be provided, at the City's expense, on a timely basis.

MISCELLANEOUS

All information included in this Official Statement has been provided by the City, except where attributed to other sources. The summaries of and references to all documents, statutes, reports, and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such reference or summary is qualified in its entirety by reference to each such document, statute, report or other instrument. The information in this Official Statement has been compiled from official and other sources and, while not guaranteed by the City, is believed to be correct. To the extent that any statements made in this Official Statement and the appendices attached hereto involve matters of opinion or of estimates, whether or not expressly stated, they are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized.

This Official Statement has been duly executed and delivered by the Mayor and the City Manager of the City of Miami Beach, Florida.

CITY OF MIAMI BEACH, FLORIDA

DAN GELBER, Mayor

RAUL J.AGUILA, Interim City Manager

APPENDIX A

General Information and Economic Data

Regarding the City of Miami Beach, Florida

and Miami-Dade County, Florida

APPENDIX B

Excerpts from the Comprehensive Annual Financial Report

of the City of Miami Beach, Florida

for the Fiscal Year Ended September 30, 2019

APPENDIX C

The Resolution

APPENDIX D

Proposed Form of Opinion of Bond Counsel

APPENDIX E

Proposed Form of Opinion of Disclosure Counsel

Date of Delivery

Mayor and City Commission of the
City of Miami Beach, Florida
1700 Convention Center Drive
Miami Beach, Florida 33139

\$ _____
CITY OF MIAMI BEACH, FLORIDA
Water and Sewer Revenue Refunding Bonds
Series 2021A

Ladies and Gentlemen:

We have served as Disclosure Counsel in connection with the issuance by the City of Miami Beach, Florida (the “City”) of its \$ _____ in aggregate principal amount of Water and Sewer Revenue Refunding Bonds, Series 2021A (the “Series 2021A Bonds”). The Series 2021A Bonds are being issued with the terms, for the purposes and subject to the conditions set forth in Resolution No. 95-21585 adopted by the Mayor and City Commission of the City (collectively, the “City Commission”) on May 17, 1995 (the “Bond Resolution”), and Resolution No. 21-_____ adopted by the City Commission on _____, 2021 (the “Series 2021A Resolution” and, collectively with the Bond Resolution, the “Resolution”), as described in the Official Statement dated _____, 2021 relating to the Series 2021A Bonds (the “Official Statement”). All capitalized terms used in this opinion that are not defined herein and not normally capitalized shall have the meaning ascribed to such terms in the Official Statement.

In connection with the issuance and delivery of this opinion, we have considered such matters of law and fact and have relied upon such certificates and other information furnished to us as we have deemed appropriate. We are not expressing any opinion or views herein on the authorization, issuance, delivery or validity of the Series 2021A Bonds. To the extent that the opinion expressed herein relates to or is dependent upon the determination that the proceedings and actions related to the authorization, issuance and sale of the Series 2021A Bonds are lawful and valid under the laws of the State of Florida, or that the Series 2021A Bonds are valid and binding obligations of the City enforceable in accordance with their terms, or that interest on the Series 2021A Bonds is excluded from the gross income of the owners thereof for federal income tax purposes, we understand that you are relying upon the opinions delivered on the date hereof of Squire Patton Boggs (US) LLP and no opinion is expressed herein as to such matters.

The scope of our engagement with respect to the issuance of the Series 2021A Bonds was not to establish factual matters and, because of the wholly or partially non-legal character of many of the determinations involved in the preparation of the Official Statement, we are not passing on and do not assume any responsibility for, except as set forth in the following paragraph, the accuracy or completeness of the contents of the Official Statement (including, without limitation, its appendices) and we make no representation that we have independently verified the accuracy, completeness or fairness of such contents. As your counsel, we have participated in the preparation of the Official Statement and in discussions and conferences with officers of the City, Bond Counsel for the City, the Financial Advisor for the City, the Underwriters for the issuance of the Series 2021A Bonds and Bryant Miller Olive P.A., Counsel to the Underwriters, in which the contents of the Official Statement and related matters were discussed.

Solely on the basis of our participation in the preparation of the Official Statement, our examination of certificates, documents, instruments and records relating to the City and the issuance of the Series 2021A Bonds and the above-mentioned discussions, nothing has come to our attention which would lead us to believe that the Official Statement (except for the financial, statistical and demographic data and information in the Official Statement, including, without limitation, the appendices thereto, and the information relating to DTC, its operations and the book-entry only system, as to which no opinion is expressed) contains an untrue statement of a material fact or omits to state a material fact that is necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

In reaching the conclusions expressed herein we have, with your concurrence, assumed and relied on, without independent verification, the genuineness and authenticity of all signatures not witnessed by us, the authenticity of all documents, records, instruments and letters submitted to us as originals, the conformity to originals of all items submitted to us as certified or photostatic copies, the legal capacity and authority of the persons who executed such items, the accuracy of all warranties, representations and statements of fact contained in the documents and instruments submitted to us, and the continuing accuracy on this date of any certificates or other items supplied to us regarding the matters addressed herein. As to questions of fact material to our opinion, we have relied upon and assumed the correctness of the public records and certificates by, and representations of, public officials and other officers, and representatives of the parties to this transaction. We have no actual knowledge of any factual information that would lead us to form a legal opinion that the public records or certificates which we have relied upon contain any untrue statement of a material fact.

The opinion expressed herein is based upon existing law as of the date hereof and we express no opinion herein as of any subsequent date or with respect to any pending legislation. We assume no obligation to supplement this opinion if any applicable laws change after the date hereof or if we become aware of any facts that might change the opinion expressed herein after the date hereof. The opinion expressed herein represents our professional judgment, is not a guarantee of result, and is limited to the laws of the State of Florida and the United States of America.

The opinion expressed herein is furnished by us as Disclosure Counsel to our client, the City, and solely for the use of the addressee named above. Such opinion shall not extend to, and may not be relied upon by, any other persons, firms, or corporations without our express prior written consent. The opinion expressed herein is limited to the matters set forth herein, and to the documents referred to herein, and does not extend to any other agreements, documents or instruments executed by the City. No other opinion should be inferred beyond the matters expressly stated herein.

Respectfully submitted,

LAW OFFICES OF STEVE E. BULLOCK, P.A.

APPENDIX F

Form of Disclosure Dissemination Agent Agreement