

Erie County Comptroller

Hon. Stefan I. Mychajliw

September 8, 2020

The Honorable Erie County Legislature 92 Franklin Street, 4th Floor Buffalo, NY 14202

Re: Immediate Consideration Requested - Refunding Bond Resolution

Dear Honorable Members:

Attached please find a Bond Refunding Resolution to refund approximately \$29,000,000 County bonds. Also, please find Jefferies', the County's underwriter, analysis estimating approximately \$1,000,000 of net present value savings over its life and approximately \$150,000 of budgetary savings in 2021.

We are asking for immediate consideration due to our schedule to price these bonds, as well as the County's 2020 capital bonds, on October 7 and closing on October 22. In order to meet this calendar and Local Finance Law requirements, we request that this resolution be passed at the September 10, 2020 session.

My Office and the Budget Office are available to answer any of your questions.

Sincerely,

Hon. Stefan I. Mychajliw, Jr. Erie County Comptroller

SIM/GGG

Cc:

Robert Keating, Director of Budget & Management

Erie County Fiscal Stability Authority

C. Todd Miles, Esq

EXTRACT OF MINUTES

Meeting of the County Legislature of

the County of Erie , New York

September 10, 2020

*	*	*

Λ	agular/spacial n	posting of the	County I oa	islatura of	the County o	f Erria Mass
AT	egular/special n	needing of the	County Leg	islature of	the County o	i Elle , New
York, was held at t	he Chambers of	the Erie Cour	nty Legislatu	re, in the E	Erie County H	Iall, Buffalo,
New York, in said	County, on Se	ptember 10, 20	020, at		o'clock P.M	. (Prevailing
Time).						
The	following Legis	lators were pr	esent:			
Ther	e were absent:					
Also	present:	Karen M. N	AcCarthy, C	lerk of the	Legislature	
	:	* *	•	*		
Legi	slator		offered	d the follow	ving resolutio	on and
moved its adoption	:					

RESOLUTION NO. ____ OF 2020

REFUNDING BOND RESOLUTION DATED SEPTEMBER 10, 2020

REFUNDING BOND RESOLUTION OF THE COUNTY OF ERIE, NEW YORK, AUTHORIZING THE REFUNDING OF ALL OR A PORTION OF CERTAIN OUTSTANDING BONDS OF SAID COUNTY, STATING THE PLAN OF REFUNDING, APPROPRIATING AN AMOUNT NOT TO EXCEED \$29,000,000 THEREFOR, AUTHORIZING THE ISSUANCE OF \$29,000,000 REFUNDING BONDS OF SAID COUNTY OR SO MUCH THEREOF AS MAY BE NECESSARY TO FINANCE SAID APPROPRIATION, AND MAKING CERTAIN DETERMINATIONS ALL RELATIVE THERETO.

(Introduced) _______, 2020 (Adopted) _______, 2020

Recitals

Whereas, the County of Erie, New York (herein called "County"), has heretofore issued on (i) August 14, 2012 its \$20,960,000 Public Improvement Serial Bonds – Series 2012A (herein called the "2012A Bonds"), now outstanding in the principal amount of \$11,235,000; (ii) October 30, 2014 its \$24,995,000 Public Improvement Serial Bonds – Series 2014A (herein called the "2014A Bonds"), now outstanding in the principal amount of \$16,080,000; (iii) on October 30, 2014 its \$2,410,000 Sewer District Serial Bonds – Series 2014B (herein called the "2014B Bonds"), now outstanding in the principal amount of \$1,705,000; (iv) October 14, 2015 its \$29,815,000 Public Improvement Serial Bonds – Series 2015A (herein called the "2015A Bonds"), now outstanding in the principal amount of \$22,475,000; and (v) October 14, 2015 its \$24,615,000 Refunding Serial Bonds – Series 2015B (herein called the "2015B Bonds"), now outstanding in the principal amount of \$12,650,000 (the respective outstanding amounts of the 2012A Bonds, 2014A Bonds, 2014B Bonds, 2015A Bonds and 2015B Bonds shall be hereinafter

collectively referred to as the "Outstanding Bonds"); such bonds bearing interest at the rates and on the dates, and being subject to prior redemption as set forth in each such respective bond; and

Whereas, Section 90.10 of the Local Finance Law, constituting Chapter 33-a of the Consolidated Laws of the State of New York (herein called "Law"), permits the County to refund all or a portion of the outstanding unredeemed maturities of such bonds by the issuance of new bonds, the issuance of which will result in present value debt service savings for the County;

now, therefore,

THE COUNTY LEGISLATURE OF THE COUNTY OF ERIE, NEW YORK, HEREBY RESOLVES (by the favorable vote of not less than two-thirds of the voting strength of said Legislature) AS FOLLOWS:

Section 1. In this resolution, the following definitions apply, unless a different meaning clearly appears from the context:

- a. "Bond To Be Refunded" or "Bonds To Be Refunded" means all or a portion of the Outstanding Bonds of the County.
- b. "Escrow Contract" means the contract to be entered into by and between the County and the Escrow Holder pursuant to Section 9 hereof.
- c. "Escrow Holder" means the bank or trust company designated as such pursuant to Section 9 hereof.
- d. "Present Value Savings" means the dollar savings which result from the issuance of the Refunding Bonds computed by discounting the principal and interest payments on both the Refunding Bonds and the Bonds To Be

Refunded from the respective maturities thereof to the date of issue of the Refunding Bonds at a rate equal to the effective interest cost of the Refunding Bonds. The effective interest cost of the Refunding Bonds shall be that rate which is arrived at by doubling the semi-annual interest rate (compounded semi-annually), necessary to discount the debt service payments on the Refunding Bonds from the maturity dates thereof to the date of issue of the Refunding Bonds and to the bona fide initial public offering price including estimated accrued interest, or, if there is no public offering, to the price bid including estimated accrued interest.

- e. "Redemption Date" means (i) April 1, 2022 with respect to the 2012A Bonds to be Refunded, (ii) September 15, 2024 with respect to the 2014A Bonds to be Refunded and the 2014B Bonds to be Refunded, and (iii) September 15, 2025 with respect to the 2015A Bonds to be Refunded, and (iv) June 1, 2025 with respect to the 201BA Bonds to be Refunded, or such later dates as may be determined by the Comptroller in the final refunding financial plan.
- f. "Refunding Bond" or "Refunding Bonds" means all or a portion of the \$29,000,000 bonds of the County of Erie, authorized pursuant to Section 2 hereof.
- g. "Refunding Bond Amount Limitation" means an amount of Refunding
 Bonds sufficient to pay the sum of (i) the principal amount of Bonds To
 Be Refunded, (ii) the aggregate amount of unmatured interest payable on

each Bonds To Be Refunded to and including the applicable Redemption Date, (iii) redemption premiums payable on such Bonds To Be Refunded as of such applicable Redemption Date, as hereinabove referred to in the Recitals hereof, and (iv) costs and expenses incidental to the issuance of the Refunding Bonds, including the development of the refunding financial plan, and of executing and performing the terms and conditions of the Escrow Contract and all fees and charges of the Escrow Holder as referred to in Section 9 hereof.

The Legislature of the County (herein called "Legislature"), hereby Section 2. authorizes the refunding of the Bonds To Be Refunded of the County, more particularly described and referred to in the Recitals hereof, and appropriates an amount not to exceed \$29,000,000 therefor to accomplish such refunding. The plan of financing said appropriation includes the issuance of not to exceed \$29,000,000 Refunding Bonds and the levy and collection of a tax upon all the taxable real property within the County to pay the principal of and interest on said Refunding Bonds as the same shall become due and payable. Bonds of the County in the maximum principal amount not to exceed \$29,000,000 are hereby authorized to be issued pursuant to the provisions of the Law. The proposed financial plan for the refunding in the form attached hereto as Exhibit A (the "refunding financial plan") prepared for the County by Jefferies LLC and hereby accepted and approved, includes the deposit of all the proceeds of said Refunding Bonds with an Escrow Holder pursuant to an Escrow Contract as authorized in Section 9 hereof, the payment of all costs incurred by the County in connection with said refunding from such proceeds, and either (a) the holding of such proceeds in cash, or (b) the investment of a portion of such proceeds by the Escrow Holder in certain obligations, the

principal of and interest, together with the balance of such proceeds to be held uninvested, shall be sufficient to pay (i) the principal of and interest on the Bonds To Be Refunded becoming due and payable on and prior to the Redemption Date and (ii) the principal of and premium on the Bonds To Be Refunded to be called for redemption prior to maturity on the Redemption Date.

Section 3. The Bonds To Be Refunded referred to in Section 1 hereof are the aggregate unmatured outstanding balances of two consolidated issues of bonds originally issued pursuant to various bond resolutions of the County, adopted on their respective dates and authorizing the financing of various County sewer district improvements. In accordance with the refunding financial plan, the Refunding Bonds authorized in the aggregate principal amount not to exceed \$29,000,000 shall mature in amounts and at dates to be determined. The Comptroller, the chief fiscal officer of the County, is hereby authorized to approve all details of the final refunding financial plan not contained herein.

Section 4. The issuance of the Refunding Bonds will not exceed the Refunding Bond Amount Limitation. The maximum period of probable usefulness ("PPU") of the Bonds to be Refunded, commencing at the date of issuance of the Bonds to be Refunded, is as specified in the Bonds to be Refunded Certificates of Determination which are incorporated herein by reference.

Section 5. The aggregate amount of estimated Present Value Savings is set forth in the proposed refunding financial plan attached hereto as Exhibit A.

Section 6. (a) The Refunding Bonds shall be sold at private sale and the Comptroller, the chief fiscal officer of the County, is hereby authorized to execute a purchase contract on behalf of the County for the sale of the Refunding Bonds, provided that the terms and conditions of such sale shall be approved by the State Comptroller, and further providing that

prior to the issuance of the Refunding Bonds the Comptroller shall have filed with the Legislature a certificate approved by the State Comptroller setting forth the Present Value Savings to the County resulting from the issuance of the Refunding Bonds; (b) in connection with such sale, the County hereby authorizes the preparation of an Official Statement and approves its use in connection with such sale, and further, consents to the distribution of a Preliminary Official Statement prior to the date such Official Statement is executed and available for distribution; (c) the Comptroller is hereby further authorized and directed to take any and all actions necessary to accomplish said refunding, and to execute any contracts and agreements for the purchase of and payment for services rendered or to be rendered the County in connection with said refunding including the preparation of the final refunding financial plan referred to in Section 2.

Section 7. Each of the Refunding Bonds authorized by this resolution shall contain the recital of validity prescribed by Section 52.00 of the Law and said Refunding Bonds shall be general obligations of the County payable as to both principal and interest by a general tax upon all the taxable real property within the County. The faith and credit of the County are hereby irrevocably pledged to the punctual payment of the principal of and interest on said Refunding Bonds and provision shall be made annually in the budget of the County for (a) the amortization and redemption of the Refunding Bonds to mature in such year and (b) the payment of interest to be due and payable in such year.

Section 8. Subject to the provisions of this resolution and of the Law, and pursuant to the provisions of Sections 21.00, 50.00, 56.00, 90.10 and 168.00 of the Law, the powers and duties of the Legislature relative to providing for substantially level or declining annual debt service, prescribing the terms, form and contents and as to the sale and issuance of

the Refunding Bonds, authorizing and executing agreements for credit enhancement of the Refunding Bonds, and executing the Escrow Contract described in Section 9 and the Official Statement referred to in Section 6, are hereby delegated to the Comptroller as the chief fiscal officer of the County.

Section 9. Prior to the issuance of the Refunding Bonds the County shall contract with a bank or trust company located and authorized to do business in New York State for the purpose of having such bank or trust company act as the Escrow Holder of the proceeds, inclusive of any premium from the sale of the Refunding Bonds, together with all income derived from the investment of such proceeds. The Escrow Contract shall contain such terms and conditions as shall be necessary in order to accomplish the refunding financial plan, including provisions for the Escrow Holder without further authorization or direction from the County, except as otherwise provided therein, (a) to make all required payments of principal, interest and redemption premiums to the appropriate paying agent with respect to the Bonds To Be Refunded, (b) to pay costs and expenses incidental to the issuance of the Refunding Bonds, including the development of the refunding financial plan, and of executing and performing the terms and conditions of the Escrow Contract and all of its fees and charges as the Escrow Holder, (c) at the appropriate time or times to cause to be given on behalf of the County the notices of redemption authorized to be given pursuant to Section 12 hereof, and (d) to either hold the moneys held by it in cash or invest all or a portion of such moneys consistent with the provisions of the final refunding financial plan. The Escrow Contract shall be irrevocable and shall constitute a covenant with the holders of the Refunding Bonds.

Section 10. The proceeds, inclusive of any premium, from the sale of the Refunding Bonds, immediately upon receipt, shall be placed in escrow by the County with the

Escrow Holder in accordance with the Escrow Contract. All moneys held by the Escrow Holder shall be either held in cash or invested only in direct obligations of the United States of America or in obligations the principal of and interest on which are unconditionally guaranteed by the United States of America, which obligations shall mature or be subject to redemption at the option of the holder thereof not later than the respective dates when such moneys will be required to make payments in accordance with the refunding financial plan. Any such moneys remaining in the custody of the Escrow Holder after the full execution of the Escrow Contract shall be returned to the County and shall be applied by the County only to the payment of the principal of or interest on the Refunding Bonds then outstanding.

Section 11. That portion of such proceeds from the sale of the Refunding Bonds, together with interest earned thereon, which shall be required for the payment of the principal of and interest on the Bonds To Be Refunded, including any redemption premiums, in accordance with the refunding financial plan, shall be irrevocably committed and pledged to such purpose and the holders of the Bonds To Be Refunded shall have a lien upon such moneys and the investments thereof held by the Escrow Holder. The pledge and lien provided for herein shall become valid and binding upon the issuance of the Refunding Bonds and the moneys and investments held by the Escrow Holder shall immediately be subject thereto without any further act. Such pledge and lien shall be valid and binding against all parties having claims of any kind in tort, contract or otherwise against the County irrespective of whether such parties have notice thereof. Neither this resolution, the Escrow Contract, nor any other instrument relating to such pledge and lien, need be filed or recorded.

Section 12. In accordance with the provisions of Section 53.00 and of paragraph h of Section 90.10 of the Law, the Legislature hereby elects to call in and redeem all

the Bonds To Be Refunded which are subject to prior redemption according to their terms on the Redemption Date. The sum to be paid therefor on the Redemption Date shall be the par value thereof, the accrued interest to the Redemption Date and the redemption premiums, if any. The Escrow Holder is hereby authorized and directed to cause notice(s) of such calls for redemption to be given in the name of the County by mailing such notice(s) to the registered holders of the Bonds To Be Refunded which are subject to prior redemption at least thirty days prior to such Redemption Date. Upon the issuance of the Refunding Bonds, the election to call in and redeem the Bonds To Be Refunded subject to prior redemption on the Redemption Date and the direction to the Escrow Holder to cause notice thereof to be given as provided in this section shall become irrevocable and the provisions of this section shall constitute a covenant with the holders, from time to time, of the Refunding Bonds, provided that this section may be amended from time to time as may be necessary to comply with the requirements of paragraph a of Section 53.00 of the Law, as the same may be amended from time to time.

Section 13. The validity of the Refunding Bonds may be contested only if:

- Such obligations are authorized for an object or purpose for which said
 County is not authorized to expend money; or
- b. The provisions of law which should be complied with at the date of publication of this resolution are not substantially complied with

and an action, suit or proceeding contesting such validity is commenced within twenty days after the date of such publication; or

c. Such obligations are authorized in violation of the provisions of the Constitution.

	Section 14.	This resolution	shall	take effect	immediately	upon approva	ıl of the
County Execu	itive.						
		*	*	*			
		*	*	*			
The ac	doption of the	foregoing resolu	tion w	vas seconde	ed by Legisla	ator	
	an	nd duly put to a v	ote on	roll call, w	hich resulted	l as follows:	
	AYES:						
	NOES:						
	THE R	ESOLUTION W	AS D	ECLARED	ADOPTED		

Dated: Buffalo, New York,	
, 2020	
The foregoing Bond Resolution is hereby approved	
	County Executive
I, Robert Graber, HEREBY CERTIFY	that the County Executive of Erie County
approved a Bond Resolution of which the foregoin	g is a certified copy and returned the same for
filing in the office of the Erie County Legislature.	
, 2020.	
	Robert Graber Clerk of the Erie County Legislature
APPROVED AS TO CONTENT:	
ByErie County Comptroller	
APPROVED AS TO FORM:	
ByErie County Attorney	

Legislator	offered the following resolution and moved its
adoption:	
RESOLVED BY THE COUNTY L	EGISLATURE OF THE COUNTY OF ERIE, NEW
YORK, AS FOLLOWS:	
The Clerk of the Erie County Legisl	lature is hereby directed to publish the foregoing bond
resolution, in full, in the	
	and the
the official newspapers of the County for so	uch publication, together with a notice in substantially
the form prescribed in Section 81.00 of the	Local Finance Law of the State of New York.
This resolution shall take effect imn	nediately.

The adoption of the foregoing resolution was seconded by								
and duly put to a vote on roll call, which resulted as follows:								
AYES:								
NOES:								
The resolution was declared adopted.								

Exhibit A

Proposed Refunding Financial Plan

CERTIFICATE

I, Robert Graber, Clerk of the Erie County Legislature, State of New York, HEREBY CERTIFY that the foregoing annexed extract from the minutes of a meeting of the Erie County Legislature duly called and held on September 10, 2020, has been compared by me with the original minutes as officially recorded in my office in the Minute Book of said County Legislature and is a true, complete and correct copy thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said County this ____ day of September, 2020.

Robert Graber Clerk of the Erie County Legislature

NOTICE

The refunding bond resolution, a summary of which is published herewith, has been adopted by the County Legislature on the 10th day of September, 2020, and the validity of the obligations authorized by such resolution may be hereafter contested only if such obligations were authorized for an object or purpose for which the County of Erie, New York, is not authorized to expend money or if the provisions of law which should have been complied with as of the date of publication of this Notice were not substantially complied with, and an action, suit or proceeding contesting such validity is commenced within twenty days after the publication of this Notice, or such obligations were authorized in violation of the provisions of the Constitution.

Robert Graber
Clerk of the Legislature

RESOLUTION NO. ____ OF 2020

REFUNDING BOND RESOLUTION DATED SEPTEMBER 10, 2020

REFUNDING BOND RESOLUTION OF THE COUNTY OF ERIE, NEW YORK, AUTHORIZING THE REFUNDING OF ALL OR A PORTION OF CERTAIN OUTSTANDING BONDS OF SAID COUNTY, STATING THE PLAN OF REFUNDING, APPROPRIATING AN AMOUNT NOT TO EXCEED \$29,000,000 THEREFOR, AUTHORIZING THE ISSUANCE OF \$29,000,000 REFUNDING BONDS OF SAID COUNTY OR SO MUCH THEREOF AS MAY BE NECESSARY TO FINANCE SAID APPROPRIATION, AND MAKING CERTAIN DETERMINATIONS ALL RELATIVE THERETO.

object or purpose:

to finance the cost of refunding all or a portion of the outstanding unredeemed maturities of the County's Public Improvement Serial Bonds – Series 2012A, Public Improvement Serial Bonds – Series 2014A, Sewer District Serial Bonds, Series 2014B, Public Improvement Serial Bonds – Series 2015A and Refunding Serial Bonds – Series 2015B by the issuance of new bonds, the issuance of which will result in present value debt service savings for the County, all as more particularly described in the refunding financial plan prepared for the County by Jefferies LLC

amount of obligations to be issued: not to exceed \$29,000,000

A complete copy of the Refunding Bond Resolution and the refunding financial plan summarized above shall be available for public inspection during normal business hours at the office of the Clerk of the County Legislature, in Buffalo, New York.

Dated: September ___, 2020

Buffalo, New York

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SOURCES AND USES OF FUNDS

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

Dated Date 10/22/2020 Delivery Date 10/22/2020

Sources:	Series 2012A Refunding	Series 2014A Refunding	Series 2014B Refunding	Series 2015A Refunding	Series 2015B Refunding	Total
Bond Proceeds:						
Par Amount	8,505,000.00	6,210,000.00	1,020,000.00	7,335,000.00	2,530,000.00	25,600,000.00
	8,505,000.00	6,210,000.00	1,020,000.00	7,335,000.00	2,530,000.00	25,600,000.00
	Series 2012A	Series 2014A	Series 2014B	Series 2015A	Series 2015B	
Uses:	Refunding	Refunding	Refunding	Refunding	Refunding	Total
Refunding Escrow Deposits:						
Cash Deposit	0.76	0.08	0.73	0.16	0.48	2.21
SLGS Purchases	8,434,094.00	6,156,447.00	1,013,161.00	7,271,243.00	2,506,831.00	25,381,776.00
	8,434,094.76	6,156,447.08	1,013,161.73	7,271,243.16	2,506,831.48	25,381,778.21
Delivery Date Expenses:						
Cost of Issuance	49,833.98	36,386.72	5,976.56	42,978.52	14,824.22	150,000.00
Underwriter's Discount	20,038.75	15,237.50	2,626.25	19,588.75	6,747.50	64,238.75
	69,872.73	51,624.22	8,602.81	62,567.27	21,571.72	214,238.75
Other Uses of Funds:						
Additional Proceeds	1,032.51	1,928.70	-1,764.54	1,189.57	1,596.80	3,983.04
	8,505,000.00	6,210,000.00	1,020,000.00	7,335,000.00	2,530,000.00	25,600,000.00

SUMMARY OF REFUNDING RESULTS

Dated Date	10/22/2020
Delivery Date	10/22/2020
Arbitrage yield	0.999172%
Escrow yield	0.206760%
Value of Negative Arbitrage	626,075.89
Bond Par Amount	25,600,000.00
True Interest Cost	1.046217%
Net Interest Cost	1.046374%
Average Coupon	1.000847%
Average Life	5.512
Par amount of refunded bonds	21,780,000.00
Average coupon of refunded bonds	5.000000%
Average life of refunded bonds	5.687
PV of prior debt to 10/22/2020 @ 0.999172%	26,697,488.36
Net PV Savings	1,101,471.40
Percentage savings of refunded bonds	5.057261%
Percentage savings of refunding bonds	4.302623%

BOND SUMMARY STATISTICS

Dated Date	10/22/2020
Delivery Date	10/22/2020
First Coupon	03/15/2021
Last Maturity	09/15/2029
Arbitrage Yield	0.999172%
True Interest Cost (TIC)	1.046217%
Net Interest Cost (NIC)	1.046374%
All-In TIC	1.156635%
Average Coupon	1.000847%
Average Life (years)	5.512
Duration of Issue (years)	5.367
Par Amount	25,600,000.00
Bond Proceeds	25,600,000.00
Total Interest	1,412,183.57
Net Interest	1,476,422.32
Total Debt Service	27,012,183.57
Maximum Annual Debt Service	5,416,760.00
Average Annual Debt Service	3,036,024.38
Underwriter's Fees (per \$1000)	
Average Takedown	1.759326
Other Fee	0.750000
Total Underwriter's Discount	2.509326
Bid Price	99.749067

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Serial Bonds	25,600,000.00	100.000	1.001%	5.512	13,573.10
	25,600,000.00			5.512	13,573.10
	5	ГІС	All-Ir TIC	=	Arbitrage Yield
Par Value + Accrued Interest + Premium (Discount)	25,600,000	0.00	25,600,000.00)	25,600,000.00
- Underwriter's Discount - Cost of Issuance Expense - Other Amounts	-64,238	3.75	-64,238.75 -150,000.00		
Target Value	25,535,761	.25	25,385,761.25	5	25,600,000.00
Target Date Yield	10/22/20 1.04621		10/22/2020 1.156635%		10/22/2020 0.999172%

BOND PRICING

Bond Component	Maturity Date	Amount	Rate	Yield	Price
Serial Bonds:					
	09/15/2021	720,000	0.490%	0.490%	100.000
	09/15/2022	695,000	0.540%	0.540%	100.000
	09/15/2023	2,470,000	0.630%	0.630%	100.000
	09/15/2024	2,490,000	0.680%	0.680%	100.000
	09/15/2025	5,220,000	0.830%	0.830%	100.000
	09/15/2026	5,260,000	0.930%	0.930%	100.000
	09/15/2027	4,035,000	1.120%	1.120%	100.000
	09/15/2028	4,045,000	1.220%	1.220%	100.000
	09/15/2029	665,000	1.500%	1.500%	100.000
		25,600,000			
Da	ted Date		10/22/2020		
De	livery Date		10/22/2020		
	st Coupon	(03/15/2021		
	r Amount iginal Issue Discount	25,	600,000.00		
	oduction		600,000.00	100.000000%	
Un	derwriter's Discount		-64,238.75	-0.250933%	
	rchase Price crued Interest	25,	535,761.25	99.749067%	
Ne	t Proceeds	25,:	535,761.25		

BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021	720,000	0.490%	212,223.57	932,223.57
12/31/2022	695,000	0.540%	233,006.00	928,006.00
12/31/2023	2,470,000	0.630%	229,253.00	2,699,253.00
12/31/2024	2,490,000	0.680%	213,692.00	2,703,692.00
12/31/2025	5,220,000	0.830%	196,760.00	5,416,760.00
12/31/2026	5,260,000	0.930%	153,434.00	5,413,434.00
12/31/2027	4,035,000	1.120%	104,516.00	4,139,516.00
12/31/2028	4,045,000	1.220%	59,324.00	4,104,324.00
12/31/2029	665,000	1.500%	9,975.00	674,975.00
	25,600,000		1,412,183.57	27,012,183.57

SAVINGS

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Present Value to 10/22/2020 @ 0.9991725%
12/31/2020	50,625.00		50,625.00	50,570.37
12/31/2021	1,089,000.00	932,223.57	156,776.43	157,227.14
12/31/2022	1,089,000.00	928,006.00	160,994.00	159,695.91
12/31/2023	2,863,500.00	2,699,253.00	164,247.00	169,347.91
12/31/2024	2,865,125.00	2,703,692.00	161,433.00	165,236.10
12/31/2025	5,577,000.00	5,416,760.00	160,240.00	162,726.95
12/31/2026	5,578,125.00	5,413,434.00	164,691.00	165,349.37
12/31/2027	4,170,750.00	4,139,516.00	31,234.00	31,554.13
12/31/2028	4,132,250.00	4,104,324.00	27,926.00	27,918.93
12/31/2029	681,625.00	674,975.00	6,650.00	7,861.54
	28,097,000.00	27,012,183.57	1,084,816.43	1,097,488.36

Savings Summary

PV of savings from cash flow	1,097,488.36
Plus: Refunding funds on hand	3,983.04
Net PV Savings	1,101,471.40

SAVINGS

Date	Prior Debt Service	Refunding Debt Service	Savings	Annual Savings	Present Value to 10/22/2020 @ 0.9991725%
12/01/2020	50,625.00		50,625.00		50,570.37
12/31/2020				50,625.00	
03/15/2021	297,375.00	93,956.57	203,418.43		202,614.68
04/01/2021	196,500.00		196,500.00		195,636.90
06/01/2021	50,625.00		50,625.00		50,318.98
09/15/2021	297,375.00	838,267.00	-540,892.00		-536,076.65
10/01/2021	196,500.00		196,500.00		194,664.39
12/01/2021	50,625.00		50,625.00		50,068.84
12/31/2021				156,776.43	
03/15/2022	297,375.00	116,503.00	180,872.00		178,370.65
04/01/2022	196,500.00		196,500.00		193,696.70
06/01/2022	50,625.00		50,625.00		49,819.95
09/15/2022	297,375.00	811,503.00	-514,128.00		-504,497.53
10/01/2022	196,500.00		196,500.00		192,733.83
12/01/2022	50,625.00		50,625.00		49,572.29
12/31/2022				160,994.00	
03/15/2023	297,375.00	114,626.50	182,748.50		178,433.88
04/01/2023	2,016,500.00		2,016,500.00		1,968,019.31
06/01/2023	50,625.00		50,625.00		49,325.87
09/15/2023	297,375.00	2,584,626.50	-2,287,251.50		-2,222,148.90
10/01/2023	151,000.00		151,000.00		146,637.08
12/01/2023	50,625.00		50,625.00	164 247 00	49,080.67
12/31/2023	207 275 00	106.046.00	100.520.00	164,247.00	104 105 76
03/15/2024	297,375.00	106,846.00	190,529.00		184,185.76
04/01/2024	2,066,000.00		2,066,000.00		1,996,332.60
06/01/2024	50,625.00	2 506 946 99	50,625.00		48,836.69
09/15/2024	297,375.00	2,596,846.00	-2,299,471.00		-2,211,865.04
10/01/2024	103,125.00		103,125.00		99,152.18
12/01/2024 12/31/2024	50,625.00		50,625.00	161,433.00	48,593.92
03/15/2025	297,375.00	98,380.00	198,995.00	101,433.00	190,462.10
04/01/2025	2,113,125.00	90,300.00	2,113,125.00		2,021,618.59
06/01/2025	50,625.00		50,625.00		48,352.36
09/15/2025	3,012,375.00	5,318,380.00	-2,306,005.00		-2,196,151.95
10/01/2025	52,875.00	3,310,300.00	52,875.00		50,333.85
12/01/2025	50,625.00		50,625.00		48,112.00
12/31/2025	50,025.00		20,022.00	160,240.00	10,112.00
03/15/2026	229,500.00	76,717.00	152,783.00	,	144,781.44
04/01/2026	2,167,875.00	, ,,, -,,,,	2,167,875.00		2,053,429.16
06/01/2026	50,625.00		50,625.00		47,872.83
09/15/2026	3,079,500.00	5,336,717.00	-2,257,217.00		-2,128,368.91
12/01/2026	50,625.00	, ,	50,625.00		47,634.85
12/31/2026	ŕ		•	164,691.00	•
03/15/2027	158,250.00	52,258.00	105,992.00		99,444.88
06/01/2027	730,625.00		730,625.00		684,053.46
09/15/2027	3,248,250.00	4,087,258.00	-839,008.00		-783,269.38
12/01/2027	33,625.00		33,625.00		31,325.18
12/31/2027				31,234.00	
03/15/2028	81,000.00	29,662.00	51,338.00		47,689.16
06/01/2028	713,625.00		713,625.00		661,510.93
09/15/2028	3,321,000.00	4,074,662.00	-753,662.00		-696,615.47
12/01/2028	16,625.00		16,625.00	25.02.66	15,334.31
12/31/2028				27,926.00	

SAVINGS

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Annual Savings	Present Value to 10/22/2020 @ 0.9991725%
03/15/2029 06/01/2029	681,625.00	4,987.50	-4,987.50 681,625.00		-4,587.07 625,581.55
09/15/2029 12/31/2029	,	669,987.50	-669,987.50	6,650.00	-613,132.94
	28,097,000.00	27,012,183.57	1,084,816.43	1,084,816.43	1,097,488.36

Savings Summary

PV of savings from cash flow	1,097,488.36
Plus: Refunding funds on hand	3,983.04
Net PV Savings	1,101,471.40

PRIOR BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2020			50,625	50,625
12/31/2021			1,089,000	1,089,000
12/31/2022			1,089,000	1,089,000
12/31/2023	1,820,000	5.000%	1,043,500	2,863,500
12/31/2024	1,915,000	5.000%	950,125	2,865,125
12/31/2025	4,725,000	5.000%	852,000	5,577,000
12/31/2026	4,965,000	5.000%	613,125	5,578,125
12/31/2027	3,770,000	5.000%	400,750	4,170,750
12/31/2028	3,920,000	5.000%	212,250	4,132,250
12/31/2029	665,000	5.000%	16,625	681,625
	21,780,000		6,317,000	28,097,000

SUMMARY OF BONDS REFUNDED

	Maturity	Interest	Par	Call	Call
Bond	Date	Rate	Amount	Date	Price
Public Improvement	Serial Bonds, 2012	A:			
SERIAL	04/01/2023	5.000%	1,820,000.00	04/01/2022	100.000
	04/01/2024	5.000%	1,915,000.00	04/01/2022	100.000
	04/01/2025	5.000%	2,010,000.00	04/01/2022	100.000
	04/01/2026	5.000%	2,115,000.00	04/01/2022	100.000
		_	7,860,000.00		
Public Improvement	Serial Bonds, 2014	A:			
SERIAL	09/15/2025	5.000%	2,520,000.00	09/15/2024	100.000
	09/15/2026	5.000%	2,645,000.00	09/15/2024	100.000
		_	5,165,000.00		
Sewer District Seria	l Bonds, 2014B:				
SERIAL	09/15/2025	5.000%	195,000.00	09/15/2024	100.000
	09/15/2026	5.000%	205,000.00	09/15/2024	100.000
	09/15/2027	5.000%	220,000.00	09/15/2024	100.000
	09/15/2028	5.000%	230,000.00	09/15/2024	100.000
		_	850,000.00		
Public Improvement	Serial Bonds, 2015	A:			
SERIAL	09/15/2027	5.000%	2,870,000.00	09/15/2025	100.000
	09/15/2028	5.000%	3,010,000.00	09/15/2025	100.000
			5,880,000.00		
Refunding Serial Bo	onds, 2015B:				
SERIAL	06/01/2027	5.000%	680,000.00	06/01/2025	100.000
	06/01/2028	5.000%	680,000.00	06/01/2025	100.000
	06/01/2029	5.000%	665,000.00	06/01/2025	100.000
		_	2,025,000.00		
			21,780,000.00		
			21,780,000.00		

SAVINGS BY MATURITY

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

					Nominal
.	Maturity	Interest	Par	Nominal	Savings
Bond	Date	Rate	Amount	Savings	Percent
2012AREF, Public	Improvement Seria	al Bonds, 2012	A:		
SERIAL	04/01/2023	5.000%	1,820,000.00	50,784.16	2.790%
	04/01/2024	5.000%	1,915,000.00	131,080.86	6.845%
	04/01/2025	5.000%	2,010,000.00	206,161.73	10.257%
	04/01/2026	5.000%	2,115,000.00	288,715.65	13.651%
			7,860,000.00	676,742.42	
2014AREF, Public	Improvement Seria	al Bonds, 2014	A:		
SERIAL	09/15/2025	5.000%	2,520,000.00	9,795.23	0.389%
	09/15/2026	5.000%	2,645,000.00	98,947.39	3.741%
			5,165,000.00	108,742.61	
2014BREF, Sewer I	District Serial Bon	ds, 2014B:			
SERIAL	09/15/2025	5.000%	195,000.00	657.86	0.337%
	09/15/2026	5.000%	205,000.00	7,715.73	3.764%
	09/15/2027	5.000%	220,000.00	13,624.20	6.193%
	09/15/2028	5.000%	230,000.00	20,722.60	9.010%
			850,000.00	42,720.40	
2015AREF, Public	Improvement Seria	al Bonds, 2015	A:		
SERIAL	09/15/2027	5.000%	2,870,000.00	50,725.36	1.767%
	09/15/2028	5.000%	3,010,000.00	136,491.73	4.535%
			5,880,000.00	187,217.09	
2015BREF, Refund	ing Serial Bonds, 2	2015B:			
SERIAL	06/01/2027	5.000%	680,000.00	13,691.48	2.013%
	06/01/2028	5.000%	680,000.00	32,974.81	4.849%
	06/01/2029	5.000%	665,000.00	38,960.87	5.859%
			2,025,000.00	85,627.17	
			21,780,000.00	1,101,049.69	

Note: Calculated Using Remaining Maturities

ESCROW REQUIREMENTS

Period		Principal	
Ending	Interest	Redeemed	Total
12/01/2020	50,625.00		50,625.00
03/15/2021	297,375.00		297,375.00
04/01/2021	196,500.00		196,500.00
06/01/2021	50,625.00		50,625.00
09/15/2021	297,375.00		297,375.00
10/01/2021	196,500.00		196,500.00
12/01/2021	50,625.00		50,625.00
03/15/2022	297,375.00		297,375.00
04/01/2022	196,500.00	7,860,000.00	8,056,500.00
06/01/2022	50,625.00		50,625.00
09/15/2022	297,375.00		297,375.00
12/01/2022	50,625.00		50,625.00
03/15/2023	297,375.00		297,375.00
06/01/2023	50,625.00		50,625.00
09/15/2023	297,375.00		297,375.00
12/01/2023	50,625.00		50,625.00
03/15/2024	297,375.00		297,375.00
06/01/2024	50,625.00		50,625.00
09/15/2024	297,375.00	6,015,000.00	6,312,375.00
12/01/2024	50,625.00		50,625.00
03/15/2025	147,000.00		147,000.00
06/01/2025	50,625.00	2,025,000.00	2,075,625.00
09/15/2025	147,000.00	5,880,000.00	6,027,000.00
	3,768,750.00	21,780,000.00	25,548,750.00

ESCROW DESCRIPTIONS

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

	Type of Security	Type of SLGS	Maturity Date	First Int Pmt Date	Par Amount	Rate	Max Rate
Oct 22, 20	Oct 22, 2020:						
	SLGS	Certificate	12/01/2020	12/01/2020	50,021	0.070%	0.070%
	SLGS	Certificate	03/15/2021	03/15/2021	285,583	0.100%	0.100%
	SLGS	Certificate	04/01/2021	04/01/2021	191,777	0.110%	0.110%
	SLGS	Certificate	06/01/2021	06/01/2021	47,846	0.110%	0.110%
	SLGS	Certificate	09/15/2021	09/15/2021	282,390	0.120%	0.120%
	SLGS	Certificate	10/01/2021	10/01/2021	191,051	0.120%	0.120%
	SLGS	Note	12/01/2021	12/01/2020	47,878	0.120%	0.120%
	SLGS	Note	03/15/2022	03/15/2021	282,695	0.130%	0.130%
	SLGS	Note	04/01/2022	04/01/2021	8,051,266	0.130%	0.130%
	SLGS	Note	06/01/2022	12/01/2020	47,907	0.130%	0.130%
	SLGS	Note	09/15/2022	03/15/2021	282,878	0.130%	0.130%
	SLGS	Note	12/01/2022	12/01/2020	47,938	0.130%	0.130%
	SLGS	Note	03/15/2023	03/15/2021	283,062	0.140%	0.140%
	SLGS	Note	06/01/2023	12/01/2020	47,969	0.150%	0.150%
	SLGS	Note	09/15/2023	03/15/2021	283,260	0.150%	0.150%
	SLGS	Note	12/01/2023	12/01/2020	48,005	0.160%	0.160%
	SLGS	Note	03/15/2024	03/15/2021	283,472	0.170%	0.170%
	SLGS	Note	06/01/2024	12/01/2020	48,044	0.180%	0.180%
	SLGS	Note	09/15/2024	03/15/2021	6,298,713	0.190%	0.190%
	SLGS	Note	12/01/2024	12/01/2020	48,086	0.210%	0.210%
	SLGS	Note	03/15/2025	03/15/2021	139,323	0.220%	0.220%
	SLGS	Note	06/01/2025	12/01/2020	2,073,137	0.240%	0.240%
	SLGS	Note	09/15/2025	03/15/2021	6,019,475	0.250%	0.250%
					25,381,776		

SLGS Summary

SLGS Rates File	24AUG20
Total Certificates of Indebtedness	1,048,668.00
Total Notes	24,333,108.00
Total original SLGS	25,381,776.00

ESCROW COST

Type of Security	Maturity Date	Par Amount	Rate	Total Cost
	Date	Milount	Rate	
SLGS	12/01/2020	50,021	0.070%	50,021.00
SLGS	03/15/2021	285,583	0.100%	285,583.00
SLGS	04/01/2021	191,777	0.110%	191,777.00
SLGS	06/01/2021	47,846	0.110%	47,846.00
SLGS	09/15/2021	282,390	0.120%	282,390.00
SLGS	10/01/2021	191,051	0.120%	191,051.00
SLGS	12/01/2021	47,878	0.120%	47,878.00
SLGS	03/15/2022	282,695	0.130%	282,695.00
SLGS	04/01/2022	8,051,266	0.130%	8,051,266.00
SLGS	06/01/2022	47,907	0.130%	47,907.00
SLGS	09/15/2022	282,878	0.130%	282,878.00
SLGS	12/01/2022	47,938	0.130%	47,938.00
SLGS	03/15/2023	283,062	0.140%	283,062.00
SLGS	06/01/2023	47,969	0.150%	47,969.00
SLGS	09/15/2023	283,260	0.150%	283,260.00
SLGS	12/01/2023	48,005	0.160%	48,005.00
SLGS	03/15/2024	283,472	0.170%	283,472.00
SLGS	06/01/2024	48,044	0.180%	48,044.00
SLGS	09/15/2024	6,298,713	0.190%	6,298,713.00
SLGS	12/01/2024	48,086	0.210%	48,086.00
SLGS	03/15/2025	139,323	0.220%	139,323.00
SLGS	06/01/2025	2,073,137	0.240%	2,073,137.00
SLGS	09/15/2025	6,019,475	0.250%	6,019,475.00
		25,381,776		25,381,776.00

Purchase Date	Cost of Securities	Cash Deposit	Total Escrow Cost
10/22/2020	25,381,776	2.21	25,381,778.21
	25,381,776	2.21	25,381,778.21

ESCROW CASH FLOW

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

Date	Principal	Interest	Net Escrow Receipts
12/01/2020	50,021.00	604.25	50,625.25
03/15/2021	285,583.00	11,792.24	297,375.24
04/01/2021	191,777.00	4,722.53	196,499.53
06/01/2021	47,846.00	2,778.91	50,624.91
09/15/2021	282,390.00	14,985.08	297,375.08
10/01/2021	191,051.00	5,449.39	196,500.39
12/01/2021	47,878.00	2,746.90	50,624.90
03/15/2022	282,695.00	14,680.56	297,375.56
04/01/2022	8,051,266.00	5,233.32	8,056,499.32
06/01/2022	47,907.00	2,718.17	50,625.17
09/15/2022	282,878.00	14,496.80	297,374.80
12/01/2022	47,938.00	2,687.03	50,625.03
03/15/2023	283,062.00	14,312.92	297,374.92
06/01/2023	47,969.00	2,655.87	50,624.87
09/15/2023	283,260.00	14,114.78	297,374.78
12/01/2023	48,005.00	2,619.89	50,624.89
03/15/2024	283,472.00	13,902.33	297,374.33
06/01/2024	48,044.00	2,581.49	50,625.49
09/15/2024	6,298,713.00	13,661.38	6,312,374.38
12/01/2024	48,086.00	2,538.25	50,624.25
03/15/2025	139,323.00	7,677.60	147,000.60
06/01/2025	2,073,137.00	2,487.76	2,075,624.76
09/15/2025	6,019,475.00	7,524.34	6,026,999.34
	25,381,776.00	166,971.79	25,548,747.79

Escrow Cost Summary

Purchase date Purchase cost of securities 10/22/2020 25,381,776.00

ESCROW SUFFICIENCY

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

Date	Escrow Requirement	Net Escrow Receipts	Excess Receipts	Excess Balance
10/22/2020		2.21	2.21	2.21
12/01/2020	50,625.00	50,625.25	0.25	2.46
03/15/2021	,		0.23	
04/01/2021	297,375.00	297,375.24	-0.47	2.70
	196,500.00	196,499.53		2.23
06/01/2021	50,625.00	50,624.91	-0.09	2.14
09/15/2021	297,375.00	297,375.08	0.08	2.22
10/01/2021	196,500.00	196,500.39	0.39	2.61
12/01/2021	50,625.00	50,624.90	-0.10	2.51
03/15/2022	297,375.00	297,375.56	0.56	3.07
04/01/2022	8,056,500.00	8,056,499.32	-0.68	2.39
06/01/2022	50,625.00	50,625.17	0.17	2.56
09/15/2022	297,375.00	297,374.80	-0.20	2.36
12/01/2022	50,625.00	50,625.03	0.03	2.39
03/15/2023	297,375.00	297,374.92	-0.08	2.31
06/01/2023	50,625.00	50,624.87	-0.13	2.18
09/15/2023	297,375.00	297,374.78	-0.22	1.96
12/01/2023	50,625.00	50,624.89	-0.11	1.85
03/15/2024	297,375.00	297,374.33	-0.67	1.18
06/01/2024	50,625.00	50,625.49	0.49	1.67
09/15/2024	6,312,375.00	6,312,374.38	-0.62	1.05
12/01/2024	50,625.00	50,624.25	-0.75	0.30
03/15/2025	147,000.00	147,000.60	0.60	0.90
06/01/2025	2,075,625.00	2,075,624.76	-0.24	0.66
09/15/2025	6,027,000.00	6,026,999.34	-0.66	
	25,548,750.00	25,548,750.00	0.00	

ESCROW STATISTICS

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

Escrow	Total Escrow Cost	Modified Duration (years)	Yield to Receipt Date	Yield to Disbursement Date	Perfect Escrow Cost	Value of Negative Arbitrage	Cost of Dead Time
Series 2012A Refund	ing, Global Proceed	ds Escrow:					_
	8,434,094.76	1.406	0.129764%	0.129764%	8,331,866.18	102,228.57	0.01
Series 2014A Refund	C,		0.10660604	0.10660604	5 050 415 56	177 021 21	0.01
	6,156,447.08	3.601	0.186686%	0.186686%	5,979,415.76	177,031.31	0.01
Series 2014B Refund	ing, Global Proceed	ls Escrow:					
	1,013,161.73	3.601	0.186685%	0.186685%	984,027.76	29,133.95	0.02
Series 2015A Refund	ing, Global Proceed	ds Escrow:					
	7,271,243.16	4.439	0.242470%	0.242470%	7,031,758.32	239,484.81	0.03
Series 2015B Refund	ing. Global Proceed	ls Escrow:					
	2,506,831.48	4.151	0.233330%	0.233330%	2,428,634.20	78,197.25	0.03
	25,381,778.21				24,755,702.22	626,075.89	0.10

Delivery date 10/22/2020 Arbitrage yield 0.999172%

AVERAGE TAKEDOWN

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

Dated Date 10/22/2020 Delivery Date 10/22/2020

Bond Component	Maturity Date	Par Amount	Takedown \$/Bond	Takedown Amount
Serial Bonds:				
	09/15/2021	720,000	1.2500	900.00
	09/15/2022	695,000	1.2500	868.75
	09/15/2023	2,470,000	1.5000	3,705.00
	09/15/2024	2,490,000	1.5000	3,735.00
	09/15/2025	5,220,000	1.7500	9,135.00
	09/15/2026	5,260,000	1.7500	9,205.00
	09/15/2027	4,035,000	2.0000	8,070.00
	09/15/2028	4,045,000	2.0000	8,090.00
	09/15/2029	665,000	2.0000	1,330.00
		25,600,000	1.7593	45,038.75

UNDERWRITER'S DISCOUNT

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

Underwriter's Discount	\$/1000	Amount
Average Takedown Underwriter's Discount	1.75933 0.75000	45,038.75 19,200.00
	2.50933	64,238.75

COST OF ISSUANCE

County of Erie, New York Refunding Serial Bonds, Series 2020C -- Rates as of 8/24/2020 --

Cost of Issuance	\$/1000	Amount
Costs of Issuance	5.85938	150,000.00
	5.85938	150,000.00

SOURCES AND USES OF FUNDS

County of Erie, New York
Taxable Advance Refunding of Series 2012A
-- Rates as of 8/24/2020 --

Dated Date 10/22/2020 Delivery Date 10/22/2020

Bond Proceeds:	
Par Amount	8,505,000.00
	8,505,000.00
Uses:	
Refunding Escrow Deposits:	
Cash Deposit	0.76
SLGS Purchases	8,434,094.00
	8,434,094.76
Delivery Date Expenses:	
Cost of Issuance	49,833.98
Underwriter's Discount	20,038.75
	69,872.73
Other Uses of Funds:	
Additional Proceeds	1,032.51
	8,505,000.00

SUMMARY OF REFUNDING RESULTS

Dated Date	10/22/2020
Delivery Date	10/22/2020
Arbitrage yield	0.999172%
Escrow yield	0.129764%
Value of Negative Arbitrage	102,228.57
Bond Par Amount	8,505,000.00
True Interest Cost	0.849580%
Effective Interest Cost	0.792931%
Net Interest Cost	0.848914%
Average Coupon	0.793445%
Average Life	4.248
Par amount of refunded bonds	7,860,000.00
Average coupon of refunded bonds	5.000000%
Average life of refunded bonds	4.004
PV of prior debt to 10/22/2020 @ 0.999172%	9,112,254.60
Net PV Savings	680,965.51
Percentage savings of refunded bonds	8.663683%
Percentage savings of refunding bonds	8.006649%

BOND SUMMARY STATISTICS

Dated Date	10/22/2020
Delivery Date	10/22/2020
First Coupon	03/15/2021
Last Maturity	09/15/2026
Arbitrage Yield	0.999172%
True Interest Cost (TIC)	0.849580%
Net Interest Cost (NIC)	0.848914%
All-In TIC	0.991171%
Average Coupon	0.793445%
Average Life (years)	4.248
C G	4.181
Duration of Issue (years)	4.101
Par Amount	8,505,000.00
Bond Proceeds	8,505,000.00
Total Interest	286,638.77
Net Interest	306,677.52
Total Debt Service	8,791,638.77
Maximum Annual Debt Service	2,059,359.50
Average Annual Debt Service	1,490,810.15
Underwriter's Fees (nor \$1000)	
Underwriter's Fees (per \$1000)	1.606114
Average Takedown	
Other Fee	0.750000
Total Underwriter's Discount	2.356114
Bid Price	99.764389

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Serial Bonds	8,505,000.00	100.000	0.793%	4.248	3,509.55
	8,505,000.00			4.248	3,509.55
		TIC	All-Ir TIC	-	Arbitrage Yield
Par Value + Accrued Interest + Premium (Discount)	8,505,000	0.00	8,505,000.00)	8,505,000.00
- Underwriter's Discount - Cost of Issuance Expense - Other Amounts	-20,038	8.75	-20,038.75 -49,833.98		
Target Value	8,484,96	1.25	8,435,127.27	7	8,505,000.00
Target Date Yield	10/22/2 0.84958		10/22/2020 0.991171%		10/22/2020 0.999172%

BOND PRICING

Bond Componer	Maturity nt Date	Amount	Rate	Yield	Price
Serial Bonds:					
	09/15/2021	225,000	0.490%	0.490%	100.000
	09/15/2022	220,000	0.540%	0.540%	100.000
	09/15/2023	1,995,000	0.630%	0.630%	100.000
	09/15/2024	2,010,000	0.680%	0.680%	100.000
	09/15/2025	2,020,000	0.830%	0.830%	100.000
	09/15/2026	2,035,000	0.930%	0.930%	100.000
		8,505,000			
Г	Dated Date		10/22/2020		
_	Delivery Date		10/22/2020		
	First Coupon		03/15/2021		
-	Par Amount Original Issue Discount	8,	505,000.00		
F	Production	8,	505,000.00	100.000000%	
J	Inderwriter's Discount		-20,038.75	-0.235611%	
=	Purchase Price Accrued Interest	8,	484,961.25	99.764389%	
1	Net Proceeds	8,4	484,961.25		

BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021	225,000	0.490%	57,618.27	282,618.27
12/31/2022	220,000	0.540%	63,116.00	283,116.00
12/31/2023	1,995,000	0.630%	61,928.00	2,056,928.00
12/31/2024	2,010,000	0.680%	49,359.50	2,059,359.50
12/31/2025	2,020,000	0.830%	35,691.50	2,055,691.50
12/31/2026	2,035,000	0.930%	18,925.50	2,053,925.50
	8,505,000		286,638.77	8,791,638.77

SAVINGS

County of Erie, New York Taxable Advance Refunding of Series 2012A -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Present Value to 10/22/2020 @ 0.9991725%
12/31/2021	393,000.00	282,618.27	110,381.73	110,072.76
12/31/2022	393,000.00	283,116.00	109,884.00	108,463.07
12/31/2023	2,167,500.00	2,056,928.00	110,572.00	116,124.95
12/31/2024	2,169,125.00	2,059,359.50	109,765.50	114,464.80
12/31/2025	2,166,000.00	2,055,691.50	110,308.50	114,104.69
12/31/2026	2,167,875.00	2,053,925.50	113,949.50	116,702.74
	9,456,500.00	8,791,638.77	664,861.23	679,933.00

Savings Summary

PV of savings from cash flow	679,933.00
Plus: Refunding funds on hand	1,032.51
Net PV Savings	680,965.51

SAVINGS

County of Erie, New York Taxable Advance Refunding of Series 2012A -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Annual Savings	Present Value to 10/22/2020 @ 0.9991725%
03/15/2021		25,509.02	-25,509.02		-25,408.23
04/01/2021	196,500.00		196,500.00		195,636.90
09/15/2021		257,109.25	-257,109.25		-254,820.31
10/01/2021	196,500.00		196,500.00		194,664.39
12/31/2021				110,381.73	
03/15/2022		31,558.00	-31,558.00		-31,121.57
04/01/2022	196,500.00		196,500.00		193,696.70
09/15/2022		251,558.00	-251,558.00		-246,845.90
10/01/2022	196,500.00		196,500.00		192,733.83
12/31/2022				109,884.00	
03/15/2023		30,964.00	-30,964.00		-30,232.95
04/01/2023	2,016,500.00		2,016,500.00		1,968,019.31
09/15/2023		2,025,964.00	-2,025,964.00		-1,968,298.49
10/01/2023	151,000.00		151,000.00		146,637.08
12/31/2023				110,572.00	
03/15/2024		24,679.75	-24,679.75		-23,858.09
04/01/2024	2,066,000.00		2,066,000.00		1,996,332.60
09/15/2024		2,034,679.75	-2,034,679.75		-1,957,161.89
10/01/2024	103,125.00		103,125.00		99,152.18
12/31/2024				109,765.50	
03/15/2025		17,845.75	-17,845.75		-17,080.53
04/01/2025	2,113,125.00	2 02 2 0 4 7 7 7	2,113,125.00		2,021,618.59
09/15/2025		2,037,845.75	-2,037,845.75		-1,940,767.22
10/01/2025	52,875.00		52,875.00	110 200 50	50,333.85
12/31/2025		0.460.77	0.460.75	110,308.50	0.065.15
03/15/2026	0.165.055.00	9,462.75	-9,462.75		-8,967.17
04/01/2026	2,167,875.00	2 044 462 77	2,167,875.00		2,053,429.16
09/15/2026		2,044,462.75	-2,044,462.75	112 040 50	-1,927,759.25
12/31/2026				113,949.50	
	9,456,500.00	8,791,638.77	664,861.23	664,861.23	679,933.00

Savings Summary

679,933.00
1,032.51
680,965.51

PRIOR BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021			393,000	393,000
12/31/2022			393,000	393,000
12/31/2023	1,820,000	5.000%	347,500	2,167,500
12/31/2024	1,915,000	5.000%	254,125	2,169,125
12/31/2025	2,010,000	5.000%	156,000	2,166,000
12/31/2026	2,115,000	5.000%	52,875	2,167,875
	7,860,000		1,596,500	9,456,500

SUMMARY OF BONDS REFUNDED

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Public Improvement	Serial Bonds, 2012	A:			
SERIAL	04/01/2023	5.000%	1,820,000.00	04/01/2022	100.000
	04/01/2024	5.000%	1,915,000.00	04/01/2022	100.000
	04/01/2025	5.000%	2,010,000.00	04/01/2022	100.000
	04/01/2026	5.000%	2,115,000.00	04/01/2022	100.000
			7,860,000.00		

ESCROW REQUIREMENTS

Period Ending	Interest	Principal Redeemed	Total
04/01/2021	196,500.00		196,500.00
10/01/2021	196,500.00		196,500.00
04/01/2022	196,500.00	7,860,000.00	8,056,500.00
	589,500.00	7,860,000.00	8,449,500.00

SOURCES AND USES OF FUNDS

County of Erie, New York
Taxable Advance Refunding of Series 2014A
-- Rates as of 8/24/2020 --

Dated Date 10/22/2020 Delivery Date 10/22/2020

Bond Proceeds:	
Par Amount	6,210,000.00
	6,210,000.00
Uses:	
Refunding Escrow Deposits:	
Cash Deposit	0.08
SLGS Purchases	6,156,447.00
	6,156,447.08
Delivery Date Expenses:	
Cost of Issuance	36,386.72
Underwriter's Discount	15,237.50
	51,624.22
Other Uses of Funds:	
Additional Proceeds	1,928.70
	6,210,000.00

SUMMARY OF REFUNDING RESULTS

Dated Date	10/22/2020
Delivery Date	10/22/2020
Arbitrage yield	0.999172%
Escrow yield	0.186686%
Value of Negative Arbitrage	177,031.31
Bond Par Amount	6,210,000.00
True Interest Cost	0.919160%
Effective Interest Cost	0.869069%
Net Interest Cost	0.918112%
Average Coupon	0.869316%
Average Life	5.028
Par amount of refunded bonds	5,165,000.00
Average coupon of refunded bonds	5.000000%
Average life of refunded bonds	5.409
PV of prior debt to 10/22/2020 @ 0.999172%	6,276,736.61
Net PV Savings	108,151.59
Percentage savings of refunded bonds	2.093932%
Percentage savings of refunding bonds	1.741571%

BOND SUMMARY STATISTICS

Dated Date	10/22/2020
Delivery Date	10/22/2020
First Coupon	03/15/2021
Last Maturity	09/15/2026
2450 1124041109	03/10/2020
Arbitrage Yield	0.999172%
True Interest Cost (TIC)	0.919160%
Net Interest Cost (NIC)	0.918112%
All-In TIC	1.039362%
Average Coupon	0.869316%
8 1	
Average Life (years)	5.028
Duration of Issue (years)	4.926
,	
Par Amount	6,210,000.00
Bond Proceeds	6,210,000.00
Total Interest	271,459.05
Net Interest	286,696.55
Total Debt Service	6,481,459.05
Maximum Annual Debt Service	2,760,435.50
Average Annual Debt Service	1,099,069.83
Underwriter's Fees (per \$1000)	
Average Takedown	1.703704
Other Fee	0.750000
Total Underwriter's Discount	2.453704

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Serial Bonds	6,210,000.00	100.000	0.869%	5.028	3,034.95
	6,210,000.00			5.028	3,034.95
		TIC	All-Iı TIC	_	Arbitrage Yield
Par Value + Accrued Interest + Premium (Discount)	6,210,00	00.00	6,210,000.00	0	6,210,000.00
- Underwriter's Discount - Cost of Issuance Expense - Other Amounts	-15,23	7.50	-15,237.50 -36,386.72		
Target Value	6,194,762.50		6,158,375.78	8	6,210,000.00
Target Date Yield	10/22/2020 0.919160%		10/22/2020 1.039362%		10/22/2020 0.999172%

BOND PRICING

Bond Compone	Maturity nt Date	Amount	Rate	Yield	Price
Serial Bonds:					
	09/15/2021	195,000	0.490%	0.490%	100.000
	09/15/2022	190,000	0.540%	0.540%	100.000
	09/15/2023	190,000	0.630%	0.630%	100.000
	09/15/2024	190,000	0.680%	0.680%	100.000
	09/15/2025	2,710,000	0.830%	0.830%	100.000
	09/15/2026	2,735,000	0.930%	0.930%	100.000
		6,210,000			
	Dated Date		10/22/2020		
			10/22/2020		
	Delivery Date		03/15/2021		
	First Coupon	'	J3/13/2021		
	Par Amount Original Issue Discount	6,	210,000.00		
	Production	6	210,000.00	100.000000%	
•	Underwriter's Discount		-15,237.50	-0.245370%	
	Onder writer 5 Discount		15,257.50	0.2 133 70 70	
	Purchase Price	6,	194,762.50	99.754630%	
	Accrued Interest	-,	,		
	Net Proceeds	6,	194,762.50		

BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021	195,000	0.490%	47,013.55	242,013.55
12/31/2022	190,000	0.540%	51,443.50	241,443.50
12/31/2023	190,000	0.630%	50,417.50	240,417.50
12/31/2024	190,000	0.680%	49,220.50	239,220.50
12/31/2025	2,710,000	0.830%	47,928.50	2,757,928.50
12/31/2026	2,735,000	0.930%	25,435.50	2,760,435.50
	6,210,000		271,459.05	6,481,459.05

SAVINGS

County of Erie, New York Taxable Advance Refunding of Series 2014A -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Present Value to 10/22/2020 @ 0.9991725%
12/31/2021	258,250.00	242,013.55	16,236.45	16,628.19
12/31/2022	258,250.00	241,443.50	16,806.50	16,998.60
12/31/2023	258,250.00	240,417.50	17,832.50	17,829.30
12/31/2024	258,250.00	239,220.50	19,029.50	18,806.76
12/31/2025	2,778,250.00	2,757,928.50	20,321.50	19,853.77
12/31/2026	2,777,250.00	2,760,435.50	16,814.50	16,106.27
	6,588,500.00	6,481,459.05	107,040.95	106,222.89

Savings Summary

PV of savings from cash flow	106,222.89
Plus: Refunding funds on hand	1,928.70
Net PV Savings	108,151.59

SAVINGS

County of Erie, New York Taxable Advance Refunding of Series 2014A -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Annual Savings	Present Value to 10/22/2020 @ 0.9991725%
03/15/2021	129,125.00	20,814.05	108,310.95		107,882.99
09/15/2021	129,125.00	221,199.50	-92,074.50		-91,254.80
12/31/2021				16,236.45	
03/15/2022	129,125.00	25,721.75	103,403.25		101,973.25
09/15/2022	129,125.00	215,721.75	-86,596.75		-84,974.65
12/31/2022				16,806.50	
03/15/2023	129,125.00	25,208.75	103,916.25		101,462.83
09/15/2023	129,125.00	215,208.75	-86,083.75		-83,633.53
12/31/2023				17,832.50	
03/15/2024	129,125.00	24,610.25	104,514.75		101,035.16
09/15/2024	129,125.00	214,610.25	-85,485.25		-82,228.41
12/31/2024				19,029.50	
03/15/2025	129,125.00	23,964.25	105,160.75		100,651.46
09/15/2025	2,649,125.00	2,733,964.25	-84,839.25		-80,797.69
12/31/2025	, ,	, ,	,	20,321.50	,
03/15/2026	66,125.00	12,717.75	53,407.25	,	50,610.20
09/15/2026	2,711,125.00	2,747,717.75	-36,592.75		-34,503.94
12/31/2026	, ,	, ,	,	16,814.50	
	6,588,500.00	6,481,459.05	107,040.95	107,040.95	106,222.89

Savings Summary

PV of savings from cash flow	106,222.89
Plus: Refunding funds on hand	1,928.70
Net PV Savings	108,151.59

PRIOR BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021			258,250	258,250
12/31/2022			258,250	258,250
12/31/2023			258,250	258,250
12/31/2024			258,250	258,250
12/31/2025	2,520,000	5.000%	258,250	2,778,250
12/31/2026	2,645,000	5.000%	132,250	2,777,250
	5,165,000		1,423,500	6,588,500

SUMMARY OF BONDS REFUNDED

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Public Improvement	Serial Bonds, 2014	·A:			
SERIAL	09/15/2025	5.000%	2,520,000.00	09/15/2024	100.000
	09/15/2026	5.000%	2,645,000.00	09/15/2024	100.000
			5,165,000.00		

ESCROW REQUIREMENTS

Period Ending	Interest	Principal Redeemed	Total
03/15/2021	129,125.00		129,125.00
09/15/2021	129,125.00		129,125.00
03/15/2022	129,125.00		129,125.00
09/15/2022	129,125.00		129,125.00
03/15/2023	129,125.00		129,125.00
09/15/2023	129,125.00		129,125.00
03/15/2024	129,125.00		129,125.00
09/15/2024	129,125.00	5,165,000.00	5,294,125.00
	1,033,000.00	5,165,000.00	6,198,000.00

SOURCES AND USES OF FUNDS

County of Erie, New York
Taxable Advance Refunding of Series 2014B
-- Rates as of 8/24/2020 --

Dated Date 10/22/2020 Delivery Date 10/22/2020

Bond Proceeds:	
Par Amount	1,020,000.00
	1,020,000.00
Uses:	
Refunding Escrow Deposits:	
Cash Deposit	0.73
SLGS Purchases	1,013,161.00
	1,013,161.73
Delivery Date Expenses:	
Cost of Issuance	5,976.56
Underwriter's Discount	2,626.25
	8,602.81
Other Uses of Funds:	
Additional Proceeds	-1,764.54
	1,020,000.00

SUMMARY OF REFUNDING RESULTS

Dated Date	10/22/2020
Delivery Date	10/22/2020
Arbitrage yield	0.999172%
Escrow yield	0.186685%
Value of Negative Arbitrage	29,133.95
Bond Par Amount	1,020,000.00
True Interest Cost	1.080203%
Effective Interest Cost	1.035673%
Net Interest Cost	1.079728%
Average Coupon	1.036782%
Average Life	5.995
Par amount of refunded bonds	850,000.00
Average coupon of refunded bonds	5.000000%
Average life of refunded bonds	6.468
PV of prior debt to 10/22/2020 @ 0.999172%	1,066,643.23
Net PV Savings	42,720.04
S	,
Percentage savings of refunded bonds	5.025887%
Percentage savings of refunding bonds	4.188239%

BOND SUMMARY STATISTICS

Dated Date	10/22/2020
Delivery Date	10/22/2020
First Coupon	03/15/2021
Last Maturity	09/15/2028
Arbitrage Yield	0.999172%
True Interest Cost (TIC)	1.080203%
Net Interest Cost (NIC)	1.079728%
All-In TIC	1.182049%
Average Coupon	1.036782%
Average Life (years)	5.995
Duration of Issue (years)	5.819
Par Amount	1,020,000.00
Bond Proceeds	1,020,000.00
Total Interest	63,400.94
Net Interest	66,027.19
Total Debt Service	1,083,400.94
Maximum Annual Debt Service	237,867.00
Average Annual Debt Service	137,187.60
Underwriter's Fees (per \$1000)	
Average Takedown	1.824755
Other Fee	0.750000
Total Underwriter's Discount	2.574755
Bid Price	99.742525

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Serial Bonds	1,020,000.00	100.000	1.037%	5.995	587.70
	1,020,000.00			5.995	587.70
		TIC	All-I		Arbitrage Yield
Par Value + Accrued Interest + Premium (Discount)	1,020,000).00	1,020,000.00	0	1,020,000.00
- Underwriter's Discount - Cost of Issuance Expense - Other Amounts	-2,626	5.25	-2,626.2. -5,976.5		
Target Value	1,017,373	3.75	1,011,397.1	9	1,020,000.00
Target Date Yield	10/22/2 1.08020		10/22/2020 1.182049%	-	10/22/2020 0.999172%

BOND PRICING

Bond Componen	Maturity t Date	Amount	Rate	Yield	Price
Serial Bonds:					
	09/15/2021	30,000	0.490%	0.490%	100.000
	09/15/2022	25,000	0.540%	0.540%	100.000
	09/15/2023	25,000	0.630%	0.630%	100.000
	09/15/2024	25,000	0.680%	0.680%	100.000
	09/15/2025	225,000	0.830%	0.830%	100.000
	09/15/2026	225,000	0.930%	0.930%	100.000
	09/15/2027	230,000	1.120%	1.120%	100.000
	09/15/2028	235,000	1.220%	1.220%	100.000
		1,020,000			
D	Pated Date	1	10/22/2020		
D	elivery Date		10/22/2020		
	irst Coupon	(03/15/2021		
-	ar Amount Priginal Issue Discount	1,0	020,000.00		
P	roduction	1,0	020,000.00	100.000000%	
Ü	Inderwriter's Discount		-2,626.25	-0.257475%	
_	urchase Price accrued Interest	1,0	017,373.75	99.742525%	
N	let Proceeds	1,0	017,373.75		

BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021	30,000	0.490%	8,983.44	38,983.44
12/31/2022	25,000	0.540%	9,865.50	34,865.50
12/31/2023	25,000	0.630%	9,730.50	34,730.50
12/31/2024	25,000	0.680%	9,573.00	34,573.00
12/31/2025	225,000	0.830%	9,403.00	234,403.00
12/31/2026	225,000	0.930%	7,535.50	232,535.50
12/31/2027	230,000	1.120%	5,443.00	235,443.00
12/31/2028	235,000	1.220%	2,867.00	237,867.00
	1,020,000		63,400.94	1,083,400.94

SAVINGS

County of Erie, New York Taxable Advance Refunding of Series 2014B -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Present Value to 10/22/2020 @ 0.9991725%
12/31/2021	42,500.00	38,983.44	3,516.56	3,570.78
12/31/2022	42,500.00	34,865.50	7,634.50	7,571.48
12/31/2023	42,500.00	34,730.50	7,769.50	7,627.88
12/31/2024	42,500.00	34,573.00	7,927.00	7,704.11
12/31/2025	237,500.00	234,403.00	3,097.00	3,028.20
12/31/2026	237,750.00	232,535.50	5,214.50	4,976.23
12/31/2027	242,500.00	235,443.00	7,057.00	6,627.95
12/31/2028	241,500.00	237,867.00	3,633.00	3,377.94
	1,129,250.00	1,083,400.94	45,849.06	44,484.58

Savings Summary

PV of savings from cash flow	44,484.58
Plus: Refunding funds on hand	-1,764.54
Net PV Savings	42,720.04

SAVINGS

County of Erie, New York Taxable Advance Refunding of Series 2014B -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Annual Savings	Present Value to 10/22/2020 @ 0.9991725%
03/15/2021	21,250.00	3,977.19	17,272.81		17,204.56
09/15/2021	21,250.00	35,006.25	-13,756.25		-13,633.78
12/31/2021				3,516.56	
03/15/2022	21,250.00	4,932.75	16,317.25		16,091.59
09/15/2022	21,250.00	29,932.75	-8,682.75		-8,520.11
12/31/2022				7,634.50	
03/15/2023	21,250.00	4,865.25	16,384.75		15,997.91
09/15/2023	21,250.00	29,865.25	-8,615.25		-8,370.03
12/31/2023				7,769.50	
03/15/2024	21,250.00	4,786.50	16,463.50		15,915.38
09/15/2024	21,250.00	29,786.50	-8,536.50		-8,211.27
12/31/2024				7,927.00	
03/15/2025	21,250.00	4,701.50	16,548.50		15,838.90
09/15/2025	216,250.00	229,701.50	-13,451.50		-12,810.70
12/31/2025				3,097.00	
03/15/2026	16,375.00	3,767.75	12,607.25		11,946.98
09/15/2026	221,375.00	228,767.75	-7,392.75		-6,970.75
12/31/2026				5,214.50	
03/15/2027	11,250.00	2,721.50	8,528.50		8,001.69
09/15/2027	231,250.00	232,721.50	-1,471.50		-1,373.74
12/31/2027				7,057.00	
03/15/2028	5,750.00	1,433.50	4,316.50		4,009.71
09/15/2028	235,750.00	236,433.50	-683.50		-631.76
12/31/2028				3,633.00	
	1,129,250.00	1,083,400.94	45,849.06	45,849.06	44,484.58

Savings Summary

PV of savings from cash flow Plus: Refunding funds on hand	44,484.58 -1,764.54
Net PV Savings	42,720.04

PRIOR BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021			42,500	42,500
12/31/2022			42,500	42,500
12/31/2023			42,500	42,500
12/31/2024			42,500	42,500
12/31/2025	195,000	5.000%	42,500	237,500
12/31/2026	205,000	5.000%	32,750	237,750
12/31/2027	220,000	5.000%	22,500	242,500
12/31/2028	230,000	5.000%	11,500	241,500
	850,000		279,250	1,129,250

SUMMARY OF BONDS REFUNDED

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Sewer District Serial	l Bonds, 2014B:				
SERIAL	09/15/2025	5.000%	195,000.00	09/15/2024	100.000
	09/15/2026	5.000%	205,000.00	09/15/2024	100.000
	09/15/2027	5.000%	220,000.00	09/15/2024	100.000
	09/15/2028	5.000%	230,000.00	09/15/2024	100.000
			850,000.00		

ESCROW REQUIREMENTS

Period Ending	Interest	Principal Redeemed	Total
03/15/2021	21,250.00		21,250.00
09/15/2021	21,250.00		21,250.00
03/15/2022	21,250.00		21,250.00
09/15/2022	21,250.00		21,250.00
03/15/2023	21,250.00		21,250.00
09/15/2023	21,250.00		21,250.00
03/15/2024	21,250.00		21,250.00
09/15/2024	21,250.00	850,000.00	871,250.00
	170,000.00	850,000.00	1,020,000.00

SOURCES AND USES OF FUNDS

County of Erie, New York
Taxable Advance Refunding of Series 2015A
-- Rates as of 8/24/2020 --

Dated Date 10/22/2020 Delivery Date 10/22/2020

Bond Proceeds:	
Par Amount	7,335,000.00
	7,335,000.00
Uses:	
Refunding Escrow Deposits:	
Cash Deposit	0.16
SLGS Purchases	7,271,243.00
	7,271,243.16
Delivery Date Expenses:	
Cost of Issuance	42,978.52
Underwriter's Discount	19,588.75
	62,567.27
Other Uses of Funds:	
Additional Proceeds	1,189.57
_	7,335,000.00

SUMMARY OF REFUNDING RESULTS

Dated Date	10/22/2020
Delivery Date	10/22/2020
Arbitrage yield	0.999172%
Escrow yield	0.242470%
Value of Negative Arbitrage	239,484.81
Bond Par Amount	7,335,000.00
True Interest Cost	1.181231%
Effective Interest Cost	1.139959%
Net Interest Cost	1.180175%
Average Coupon	1.140690%
Average Life	6.764
Par amount of refunded bonds	5,880,000.00
Average coupon of refunded bonds	5.000000%
Average life of refunded bonds	7.409
PV of prior debt to 10/22/2020 @ 0.999172%	7,585,888.89
Net PV Savings	184,797.02
Percentage savings of refunded bonds	3.142806%
Percentage savings of refunding bonds	2.519387%

BOND SUMMARY STATISTICS

Dated Date Delivery Date First Coupon Last Maturity	10/22/2020 10/22/2020 03/15/2021 09/15/2028
Arbitrage Yield True Interest Cost (TIC) Net Interest Cost (NIC) All-In TIC Average Coupon	0.999172% 1.181231% 1.180175% 1.272235% 1.140690%
Average Life (years) Duration of Issue (years)	6.764 6.516
Par Amount Bond Proceeds Total Interest Net Interest Total Debt Service Maximum Annual Debt Service Average Annual Debt Service	7,335,000.00 7,335,000.00 565,909.32 585,498.07 7,900,909.32 3,142,204.00 1,000,466.89
Underwriter's Fees (per \$1000) Average Takedown Other Fee	1.920586 0.750000
Total Underwriter's Discount	2.670586
Bid Price	99.732941

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Serial Bonds	7,335,000.00	100.000	1.141%	6.764	4,733.45
	7,335,000.00			6.764	4,733.45
		TIC	All-Iı TIC	-	Arbitrage Yield
Par Value + Accrued Interest + Premium (Discount)	7,335,00	0.00	7,335,000.00)	7,335,000.00
- Underwriter's Discount - Cost of Issuance Expense - Other Amounts	-19,58	8.75	-19,588.75 -42,978.52		
Target Value	7,315,41	1.25	7,272,432.73	3	7,335,000.00
Target Date Yield	10/22/2 1.1812		10/22/2020 1.272235%		10/22/2020 0.999172%

BOND PRICING

Bond Component	Maturity t Date	Amount	Rate	Yield	Price
Serial Bonds:					
	09/15/2021	200,000	0.490%	0.490%	100.000
	09/15/2022	190,000	0.540%	0.540%	100.000
	09/15/2023	190,000	0.630%	0.630%	100.000
	09/15/2024	195,000	0.680%	0.680%	100.000
	09/15/2025	195,000	0.830%	0.830%	100.000
	09/15/2026	195,000	0.930%	0.930%	100.000
	09/15/2027	3,070,000	1.120%	1.120%	100.000
	09/15/2028	3,100,000	1.220%	1.220%	100.000
		7,335,000			
	ated Date		10/22/2020		
_	elivery Date		10/22/2020		
	irst Coupon		03/15/2021		
	ar Amount riginal Issue Discount	7,	335,000.00		
Pı	roduction	7,:	335,000.00	100.000000%	
U	nderwriter's Discount		-19,588.75	-0.267059%	
	urchase Price ccrued Interest	7,	315,411.25	99.732941%	
N	et Proceeds	7,	315,411.25		

BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021	200,000	0.490%	71,925.82	271,925.82
12/31/2022	190,000	0.540%	79,185.00	269,185.00
12/31/2023	190,000	0.630%	78,159.00	268,159.00
12/31/2024	195,000	0.680%	76,962.00	271,962.00
12/31/2025	195,000	0.830%	75,636.00	270,636.00
12/31/2026	195,000	0.930%	74,017.50	269,017.50
12/31/2027	3,070,000	1.120%	72,204.00	3,142,204.00
12/31/2028	3,100,000	1.220%	37,820.00	3,137,820.00
	7,335,000		565,909.32	7,900,909.32

County of Erie, New York Taxable Advance Refunding of Series 2015A -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Present Value to 10/22/2020 @ 0.9991725%
12/31/2021	294,000.00	271,925.82	22,074.18	22,447.85
12/31/2022	294,000.00	269,185.00	24,815.00	24,876.72
12/31/2023	294,000.00	268,159.00	25,841.00	25,629.29
12/31/2024	294,000.00	271,962.00	22,038.00	21,719.88
12/31/2025	294,000.00	270,636.00	23,364.00	22,770.46
12/31/2026	294,000.00	269,017.50	24,982.50	24,074.56
12/31/2027	3,164,000.00	3,142,204.00	21,796.00	20,865.23
12/31/2028	3,160,500.00	3,137,820.00	22,680.00	21,223.46
	8,088,500.00	7,900,909.32	187,590.68	183,607.45

PV of savings from cash flow	183,607.45
Plus: Refunding funds on hand	1,189.57
Net PV Savings	184.797.02

County of Erie, New York Taxable Advance Refunding of Series 2015A -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Annual Savings	Present Value to 10/22/2020 @ 0.9991725%
03/15/2021	147,000.00	31,843.32	115,156.68		114,701.67
09/15/2021	147,000.00	240,082.50	-93,082.50		-92,253.82
12/31/2021				22,074.18	
03/15/2022	147,000.00	39,592.50	107,407.50		105,922.12
09/15/2022	147,000.00	229,592.50	-82,592.50		-81,045.40
12/31/2022				24,815.00	
03/15/2023	147,000.00	39,079.50	107,920.50		105,372.54
09/15/2023	147,000.00	229,079.50	-82,079.50		-79,743.25
12/31/2023				25,841.00	
03/15/2024	147,000.00	38,481.00	108,519.00		104,906.10
09/15/2024	147,000.00	233,481.00	-86,481.00		-83,186.22
12/31/2024				22,038.00	
03/15/2025	147,000.00	37,818.00	109,182.00		104,500.28
09/15/2025	147,000.00	232,818.00	-85,818.00		-81,729.82
12/31/2025				23,364.00	
03/15/2026	147,000.00	37,008.75	109,991.25		104,230.78
09/15/2026	147,000.00	232,008.75	-85,008.75		-80,156.22
12/31/2026				24,982.50	
03/15/2027	147,000.00	36,102.00	110,898.00		104,047.83
09/15/2027	3,017,000.00	3,106,102.00	-89,102.00		-83,182.60
12/31/2027				21,796.00	
03/15/2028	75,250.00	18,910.00	56,340.00		52,335.65
09/15/2028	3,085,250.00	3,118,910.00	-33,660.00		-31,112.19
12/31/2028				22,680.00	
	8,088,500.00	7,900,909.32	187,590.68	187,590.68	183,607.45

PV of savings from cash flow	183,607.45
Plus: Refunding funds on hand	1,189.57
Net PV Savings	184,797.02

PRIOR BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021			294,000	294,000
12/31/2022			294,000	294,000
12/31/2023			294,000	294,000
12/31/2024			294,000	294,000
12/31/2025			294,000	294,000
12/31/2026			294,000	294,000
12/31/2027	2,870,000	5.000%	294,000	3,164,000
12/31/2028	3,010,000	5.000%	150,500	3,160,500
	5,880,000		2,208,500	8,088,500

SUMMARY OF BONDS REFUNDED

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Public Improvement	Serial Bonds, 2015	A:			
SERIAL	09/15/2027	5.000%	2,870,000.00	09/15/2025	100.000
	09/15/2028	5.000%	3,010,000.00	09/15/2025	100.000
			5,880,000.00		

ESCROW REQUIREMENTS

Period Ending	Interest	Principal Redeemed	Total
03/15/2021	147,000.00		147,000.00
09/15/2021	147,000.00		147,000.00
03/15/2022	147,000.00		147,000.00
09/15/2022	147,000.00		147,000.00
03/15/2023	147,000.00		147,000.00
09/15/2023	147,000.00		147,000.00
03/15/2024	147,000.00		147,000.00
09/15/2024	147,000.00		147,000.00
03/15/2025	147,000.00		147,000.00
09/15/2025	147,000.00	5,880,000.00	6,027,000.00
	1,470,000.00	5,880,000.00	7,350,000.00

SOURCES AND USES OF FUNDS

County of Erie, New York
Taxable Advance Refunding of Refunding Series 2015B
-- Rates as of 8/24/2020 --

Dated Date 10/22/2020 Delivery Date 10/22/2020

Bond Proceeds:	
Par Amount	2,530,000.00
	2,530,000.00
Uses:	
Refunding Escrow Deposits:	
Cash Deposit	0.48
SLGS Purchases	2,506,831.00
	2,506,831.48
Delivery Date Expenses:	
Cost of Issuance	14,824.22
Underwriter's Discount	6,747.50
	21,571.72
Other Uses of Funds:	
Additional Proceeds	1,596.80
	2,530,000.00

SUMMARY OF REFUNDING RESULTS

Dated Date	10/22/2020
Delivery Date	10/22/2020
Arbitrage yield	0.999172%
Escrow yield	0.233330%
Value of Negative Arbitrage	78,197.25
Bond Par Amount	2,530,000.00
True Interest Cost	1.285095%
Effective Interest Cost	1.245712%
Net Interest Cost	1.284813%
Average Coupon	1.247369%
Average Life	7.123
Par amount of refunded bonds	2,025,000.00
Average coupon of refunded bonds	5.000000%
Average life of refunded bonds	7.601
PV of prior debt to 10/22/2020 @ 0.999172%	2,655,965.04
Net PV Savings	84,837.24
Percentage savings of refunded bonds	4.189493%
Percentage savings of refunding bonds	3.353251%

BOND SUMMARY STATISTICS

Dated Date	10/22/2020
Delivery Date	10/22/2020
First Coupon	03/15/2021
Last Maturity	09/15/2029
Arbitrage Yield	0.999172%
True Interest Cost (TIC)	1.285095%
Net Interest Cost (NIC)	1.284813%
All-In TIC	1.372057%
Average Coupon	1.247369%
Average Life (years)	7.123
Duration of Issue (years)	6.823
Par Amount	2,530,000.00
Bond Proceeds	2,530,000.00
Total Interest	224,775.49
Net Interest	231,522.99
Total Debt Service	2,754,775.49
Maximum Annual Debt Service	761,869.00
Average Annual Debt Service	309,621.97
Underwriter's Fees (per \$1000)	
Average Takedown	1.916996
Other Fee	0.750000
Total Underwriter's Discount	2.666996
Bid Price	99.733300

Bond Component	Par Value	Price	Average Coupon	Average Life	PV of 1 bp change
Serial Bonds	2,530,000.00	100.000	1.247%	7.123	1,707.45
	2,530,000.00			7.123	1,707.45
		TIC	All-I TIO		Arbitrage Yield
Par Value + Accrued Interest + Premium (Discount)	2,530,000.00		2,530,000.0	0	2,530,000.00
- Underwriter's Discount - Cost of Issuance Expense - Other Amounts	-6,74	7.50	-6,747.5 -14,824.2		
Target Value	2,523,25	2.50	2,508,428.2	8	2,530,000.00
Target Date Yield	10/22/2 1.2850		10/22/202 1.372057%		10/22/2020 0.999172%

BOND PRICING

Bond Component	Maturity Date	Amount	Rate	Yield	Price
Serial Bonds:					
	09/15/2021	70,000	0.490%	0.490%	100.000
	09/15/2022	70,000	0.540%	0.540%	100.000
	09/15/2023	70,000	0.630%	0.630%	100.000
	09/15/2024	70,000	0.680%	0.680%	100.000
	09/15/2025	70,000	0.830%	0.830%	100.000
	09/15/2026	70,000	0.930%	0.930%	100.000
	09/15/2027	735,000	1.120%	1.120%	100.000
	09/15/2028	710,000	1.220%	1.220%	100.000
	09/15/2029	665,000	1.500%	1.500%	100.000
		2,530,000			
Da	ted Date]	10/22/2020		
De	livery Date		10/22/2020		
Fire	st Coupon	(03/15/2021		
	Amount ginal Issue Discount	2,:	530,000.00		
Pro	duction	2,:	530,000.00	100.000000%	
Un	derwriter's Discount	,	-6,747.50	-0.266700%	
1 441	rchase Price crued Interest	2,;	523,252.50	99.733300%	
Ne	t Proceeds	2,:	523,252.50		

BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2021	70,000	0.490%	26,682.49	96,682.49
12/31/2022	70,000	0.540%	29,396.00	99,396.00
12/31/2023	70,000	0.630%	29,018.00	99,018.00
12/31/2024	70,000	0.680%	28,577.00	98,577.00
12/31/2025	70,000	0.830%	28,101.00	98,101.00
12/31/2026	70,000	0.930%	27,520.00	97,520.00
12/31/2027	735,000	1.120%	26,869.00	761,869.00
12/31/2028	710,000	1.220%	18,637.00	728,637.00
12/31/2029	665,000	1.500%	9,975.00	674,975.00
	2,530,000		224,775.49	2,754,775.49

County of Erie, New York Taxable Advance Refunding of Refunding Series 2015B -- Rates as of 8/24/2020 --

Date	Prior Debt Service	Refunding Debt Service	Savings	Present Value to 10/22/2020 @ 0.9991725%
12/31/2020	50,625.00		50,625.00	50,570.37
12/31/2021	101,250.00	96,682.49	4,567.51	4,507.57
12/31/2022	101,250.00	99,396.00	1,854.00	1,786.04
12/31/2023	101,250.00	99,018.00	2,232.00	2,136.49
12/31/2024	101,250.00	98,577.00	2,673.00	2,540.56
12/31/2025	101,250.00	98,101.00	3,149.00	2,969.82
12/31/2026	101,250.00	97,520.00	3,730.00	3,489.57
12/31/2027	764,250.00	761,869.00	2,381.00	4,060.95
12/31/2028	730,250.00	728,637.00	1,613.00	3,317.54
12/31/2029	681,625.00	674,975.00	6,650.00	7,861.54
	2,834,250.00	2,754,775.49	79,474.51	83,240.44

PV of savings from cash flow	83,240.44
Plus: Refunding funds on hand	1,596.80
Net PV Savings	84,837.24

SAVINGS

Date	Prior Debt Service	Refunding Debt Service	Savings	Annual Savings	Present Value to 10/22/2020 @ 0.9991725%
12/01/2020	50,625.00		50,625.00		50,570.37
12/31/2020				50,625.00	
03/15/2021		11,812.99	-11,812.99		-11,766.31
06/01/2021	50,625.00		50,625.00		50,318.98
09/15/2021		84,869.50	-84,869.50		-84,113.94
12/01/2021	50,625.00	ŕ	50,625.00		50,068.84
12/31/2021	,		,	4,567.51	,
03/15/2022		14,698.00	-14,698.00	•	-14,494.74
06/01/2022	50,625.00	,	50,625.00		49,819.95
09/15/2022	,	84,698.00	-84,698.00		-83,111.47
12/01/2022	50,625.00	,	50,625.00		49,572.29
12/31/2022	,		,	1,854.00	,
03/15/2023		14,509.00	-14,509.00	,	-14,166.45
06/01/2023	50,625.00	,	50,625.00		49,325.87
09/15/2023	,	84,509.00	-84,509.00		-82,103.60
12/01/2023	50,625.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	50,625.00		49,080.67
12/31/2023	,		,	2,232.00	. ,
03/15/2024		14,288.50	-14,288.50	_,	-13,812.80
06/01/2024	50,625.00	,	50,625.00		48,836.69
09/15/2024	,	84,288.50	-84,288.50		-81,077.25
12/01/2024	50,625.00	0.,_00.00	50,625.00		48,593.92
12/31/2024	00,020.00		00,020.00	2,673.00	.0,0,0,0,0
03/15/2025		14,050.50	-14,050.50	2,075.00	-13,448.02
06/01/2025	50,625.00	1 1,020.20	50,625.00		48,352.36
09/15/2025	00,020.00	84,050.50	-84,050.50		-80,046.52
12/01/2025	50,625.00	0.,000.00	50,625.00		48,112.00
12/31/2025	00,020.00		00,020.00	3,149.00	.0,112.00
03/15/2026		13,760.00	-13,760.00	3,1 13.00	-13,039.36
06/01/2026	50,625.00	15,700.00	50,625.00		47,872.83
09/15/2026	20,023.00	83,760.00	-83,760.00		-78,978.75
12/01/2026	50,625.00	05,700.00	50,625.00		47,634.85
12/31/2026	30,023.00		30,023.00	3,730.00	17,05 1.05
03/15/2027		13,434.50	-13,434.50	3,730.00	-12,604.65
06/01/2027	730,625.00	15, 15 1.50	730,625.00		684,053.46
09/15/2027	750,025.00	748,434.50	-748,434.50		-698,713.03
12/01/2027	33,625.00	740,434.30	33,625.00		31,325.18
12/31/2027	33,023.00		33,023.00	2,381.00	31,323.10
03/15/2028		9,318.50	-9,318.50	2,301.00	-8,656.19
06/01/2028	713,625.00	7,516.50	713,625.00		661,510.93
09/15/2028	713,023.00	719,318.50	-719,318.50		-664,871.52
12/01/2028	16,625.00	717,516.50	16,625.00		15,334.31
12/01/2028	10,023.00		10,023.00	1,613.00	13,334.31
03/15/2029		4,987.50	-4,987.50	1,013.00	-4,587.07
06/01/2029	681,625.00	7,707.30	681,625.00		625,581.55
09/15/2029	001,023.00	669,987.50	-669,987.50		-613,132.94
12/31/2029		009,707.30	-007,707.30	6,650.00	-013,132.94
12/31/2027				0,050.00	
	2,834,250.00	2,754,775.49	79,474.51	79,474.51	83,240.44

County of Erie, New York
Taxable Advance Refunding of Refunding Series 2015B
-- Rates as of 8/24/2020 --

PV of savings from cash flow	83,240.44
Plus: Refunding funds on hand	1,596.80
Net PV Savings	84.837.24

PRIOR BOND DEBT SERVICE

Period Ending	Principal	Coupon	Interest	Debt Service
12/31/2020			50,625	50,625
12/31/2021			101,250	101,250
12/31/2022			101,250	101,250
12/31/2023			101,250	101,250
12/31/2024			101,250	101,250
12/31/2025			101,250	101,250
12/31/2026			101,250	101,250
12/31/2027	680,000	5.000%	84,250	764,250
12/31/2028	680,000	5.000%	50,250	730,250
12/31/2029	665,000	5.000%	16,625	681,625
	2,025,000		809,250	2,834,250

SUMMARY OF BONDS REFUNDED

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Refunding Serial Bo	onds, 2015B:				
SERIAL	06/01/2027	5.000%	680,000.00	06/01/2025	100.000
	06/01/2028	5.000%	680,000.00	06/01/2025	100.000
	06/01/2029	5.000%	665,000.00	06/01/2025	100.000
			2,025,000.00		

ESCROW REQUIREMENTS

Period Ending	Interest	Principal Redeemed	Total
12/01/2020	50,625.00		50,625.00
06/01/2021	50,625.00		50,625.00
12/01/2021	50,625.00		50,625.00
06/01/2022	50,625.00		50,625.00
12/01/2022	50,625.00		50,625.00
06/01/2023	50,625.00		50,625.00
12/01/2023	50,625.00		50,625.00
06/01/2024	50,625.00		50,625.00
12/01/2024	50,625.00		50,625.00
06/01/2025	50,625.00	2,025,000.00	2,075,625.00
	506,250.00	2,025,000.00	2,531,250.00