



KENTUCKY INFRASTRUCTURE AUTHORITY

Andy Beshear
Governor

100 Airport Road
Frankfort, Kentucky 40601
(502) 573-0260
kia.ky.gov

Edith Halbleib
Executive Director

April 9, 2020

Representative Walker Thomas, Co-Chair
Capital Projects and Bond Oversight Committee
Room 34, Capitol Annex
702 Capitol Avenue
Frankfort, KY 40601

RE: Kentucky Infrastructure Authority Proposed Loans for Approval by the Capital Projects and Bond Oversight Committee of the Kentucky General Assembly

Dear Chair Thomas,

Thank you for allowing me to present the Kentucky Infrastructure Authority (the "KIA") projects in writing, in lieu of an appearance before the Capital Projects and Bond Oversight Committee ("CPBOC" or "Committee"). I am the Deputy Executive Director of the KIA, Linda Bridwell.

The four projects that we have submitted for your consideration are under three of the KIA infrastructure fund programs:

CLEAN WATER STATE REVOLVING FUND ("SRF") – FUND A

- a. The City of Smithland in Livingston County is requesting a Planning and Design loan from Fund A in the amount of \$246,000. This loan is to fund a Phase III Sewer System Evaluation Study to determine the sources of high levels of Inflow and Infiltration in the wastewater collection system. Construction will be planned based on the results of the study. KIA funding is 100% of the planning and design cost.

The current sewer rate, effective September 15, 2018 is \$45.02 for 4,000 gallons with an additional 28% rate increase to occur in phases between July 1, 2021 and July 1, 2025. The term is 5 years at a 2.50% interest rate.

- b. The Paducah-McCracken County Joint Sewer Agency in McCracken County is requesting a loan from Fund A in the amount of \$5,170,000. This loan is to fund the Long Term Control Plan Project #3, associated with the outfall adjacent to the

Paducah Wastewater Treatment Plant which will allow for use of the Harrison Street Storage tank to capture high Inflow and Infiltration volumes during wet weather. KIA funding is 100% of the project.

The current sewer rate, effective July 1, 2019 is \$23.76 for 4,000 gallons. The term is 20 years at a 0.50% interest rate.

INFRASTRUCTURE REVOLVING FUND – FUND B

- a. The City of Flemingsburg in Fleming County is requesting a Fund B loan in the amount of \$77,405. KIA is funding 30% of the total project cost along with an Appalachian Regional Commission (“ARC”) grant.

This proposed project is for the replacement of approximately 1,650 feet of asbestos cement distribution water lines with 6-inch PVC water lines and 600 feet of cast iron distribution water mains with 2-inch water lines.

The water rate for 4,000 gallons effective April 1, 2019 is \$37.46 for customers inside the City, and \$49.19 for customers outside the City. The term is 20 years at a 0.50% interest rate.

DRINKING WATER SRF – FUND F

- a. The City of Lebanon F/B/O Lebanon Water Works Company, Inc. in Marion County is requesting a Fund F loan in the amount of \$5,238,230. KIA is funding 100% of the total project cost. The project also includes \$1,300,000 in principal forgiveness.

This proposed project will replace 80,000 linear feet of cast iron water lines and galvanized steel water lines of various sizes, along with the accompanying service lines.

The water rate for 4,000 gallons effective July 8, 2019 is \$26.19 for customers inside the City and \$28.82 for customers outside the City. The term is 30 years at a 0.5% interest rate.

Thank you for your consideration. The KIA respectfully requests approval for the mentioned projects.

Sincerely,



Linda C. Bridwell, PE
Deputy Executive Director - KIA

Kentucky Infrastructure Authority Projects for April 2020 Capital Projects Meeting

- Fund A Loan**

| <u>Loan #</u> | <u>Borrower</u> | <u>Amount Requested</u> | <u>Loan Total</u> | <u>County</u> |
|---------------|---|-------------------------|-------------------|---------------|
| A20-024 | City of Smithland (P&D) | \$ 246,000 | \$ 246,000 | Livingston |
| A20-032 | Paducah McCracken County Joint Sewer Agency | \$ 5,170,000 | \$ 5,170,000 | McCracken |

- Fund B Loan**

| <u>Loan #</u> | <u>Borrower</u> | <u>Amount Requested</u> | <u>Loan Total</u> | <u>County</u> |
|---------------|----------------------|-------------------------|-------------------|---------------|
| B20-001 | City of Flemingsburg | \$ 77,405 | \$ 77,405 | Fleming |

- Fund F Loan**

| <u>Loan #</u> | <u>Borrower</u> | <u>Amount Requested</u> | <u>Loan Total</u> | <u>County</u> |
|---------------|--|-------------------------|-------------------|---------------|
| F20-002 | City of Lebanon F/B/O Lebanon Water Works Company Inc. | \$ 5,238,230 | \$ 5,238,230 | Marion |

| | | | | | |
|---|----------------------------------|--|------------------------------|------------------------|------------------|
| EXECUTIVE SUMMARY | | Reviewer | | Meili Sun | |
| KENTUCKY INFRASTRUCTURE AUTHORITY | | Date | | November 7, 2019 | |
| FUND A, FEDERALLY ASSISTED WASTEWATER | | KIA Loan Number | | A20-024 | |
| REVOLVING LOAN FUND | | WRIS Number | | SX21139010 | |
| BORROWER | | CITY OF SMITHLAND LIVINGSTON COUNTY | | | |
| BRIEF DESCRIPTION The City of Smithland is seeking a KIA loan to fund the planning and design portion of the Sewer Rehabilitation project. The purpose of the planning and design work is to identify the major sources of I & I that inundate the City's systems during wet weather events that cause sanitary sewer overflows. This work will consist of a Phase III SSES including flow monitoring, CCTV inspections, and field surveys to locate the soucres of I & I. It also includes evaluation of the City's influent/effluent lift station and force main networks to identify capacity related issues. Following the field studies, design will be performed to outline the scope of work for procurement and the construction portion required to address system deficiencies determined during the Phase III SSES and lift station evaluations. | | | | | |
| PROJECT FINANCING | | PROJECT BUDGET | | RD Fee % | Actual % |
| Fund A Loan P&D | \$246,000 | Administrative Expenses | | | \$5,000 |
| | | Planning | | | \$145,000 |
| | | Eng - Design / Const | | | \$96,000 |
| TOTAL | \$246,000 | TOTAL | | | \$246,000 |
| REPAYMENT | Rate | 2.50% | Est. Annual Payment | | \$53,138 |
| | Term | 5 Years | 1st Payment | 6 Mo. after first draw | |
| PROFESSIONAL SERVICES | Engineer | Rivercrest Engineering Inc | | | |
| | Bond Counsel | Rubin & Hays | | | |
| PROJECT SCHEDULE | Bid Opening | Dec-20 | | | |
| | P&D Start | Mar-20 | | | |
| | P&D Stop | Sep-20 | | | |
| DEBT PER CUSTOMER | Existing | \$361 | | | |
| | Proposed | \$1,706 | | | |
| OTHER DEBT | | See Attached | | | |
| RESIDENTIAL RATES | | <u>Users</u> | <u>Avg. Bill</u> | | |
| | Current | 180 | \$45.02 (for 4,000 gallons) | | |
| | Additional | 0 | \$45.02 (for 4,000 gallons) | | |
| REGIONAL COORDINATION This project is consistent with regional planning recommendations. | | | | | |
| CASHFLOW | Cash Flow Before Debt Service | Debt Service | Cash Flow After Debt Service | | Coverage Ratio |
| Audited 2016 | (8,463) | 4,806 | (13,269) | | -1.8 |
| Audited 2017 | 2,332 | 4,835 | (2,503) | | 0.5 |
| Audited 2018 | 6,647 | 4,759 | 1,888 | | 1.4 |
| Projected 2019 | 18,732 | 4,883 | 13,849 | | 3.8 |
| Projected 2020 | 18,507 | 4,951 | 13,556 | | 3.7 |
| Projected 2021 | 41,229 | 31,520 | 9,709 | | 1.3 |
| Projected 2022 | 67,605 | 58,089 | 9,516 | | 1.2 |
| Projected 2023 | 64,724 | 58,089 | 6,635 | | 1.1 |

Reviewer: Meili Sun
Date: November 7, 2019
Loan Number: A20-024 P&D

**KENTUCKY INFRASTRUCTURE AUTHORITY
WASTEWATER REVOLVING LOAN FUND (FUND A)
CITY OF SMITHLAND, LIVINGSTON COUNTY
PROJECT REVIEW
SX21139010**

I. PROJECT DESCRIPTION

The City of Smithland ("City") is seeking a KIA Fund A loan to fund the planning and design portion of the Sewer Rehabilitation project. The purpose of the planning and design work is to identify the major sources of I&I that cause sanitary sewer overflows and eventually achieve compliance with an agreed order issued by the Division of Water. This project will consist of a Phase III SSES including flow monitoring, CCTV inspections, and field surveys to locate the sources of I&I. It will also include evaluation of the City's influent/effluent lift station and force main networks to identify capacity related issues. Following the field studies, design will be performed to outline the scope of work for procurement and the construction portion required to address system deficiencies determined during the Phase III SSES and lift station evaluations.

The City is the county seat of Livingston County. It purchases 100% of its water supply from Crittenden-Livingston County Water District ("CCWD") to serve approximately 180 customers within the service area. The CCWD's wholesale water rate is regulated by the Kentucky Public Service Commission.

II. PROJECT BUDGET

| | Total |
|---------------------------|-------------------|
| Administrative Expenses | \$ 5,000 |
| Planning | 145,000 |
| Engineering Fees – Design | 96,000 |
| Total | \$ 246,000 |

III. PROJECT FUNDING

| | Amount | % |
|-----------------------|------------|------|
| KIA Fund A Loan (P&D) | \$ 246,000 | 100% |

IV. KIA DEBT SERVICE

| | |
|-------------------------------|------------------|
| Planning & Design Loan | \$ 246,000 |
| Principal Forgiveness | 0 |
| Amortized Loan Amount | \$ 246,000 |
| Interest Rate | 2.50% |
| Loan Term (Year) | 5 |
| Estimated Annual Debt Service | \$ 52,646 |
| Administrative Fee (0.20%) | 492 |
| Annual Debt Service | \$ 53,138 |

V. PROJECT SCHEDULE

| | |
|-----------------------------------|----------------|
| P&D Start | March 2020 |
| P&D Completion | September 2020 |
| Estimated Bid Opening | December 2020 |
| Estimated Construction Start | January 2021 |
| Estimated Construction Completion | July 2021 |

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

| | |
|-------------|---------|
| | Current |
| Residential | 131 |
| Commercial | 49 |
| Industrial | |
| Total | 180 |

B) Rates

| | Water Rates | |
|--------------------------------|-------------|----------|
| Date of Last Rate Increase | 09/15/18 | 06/15/13 |
| Minimum 2,000 Gallons | \$26.24 | \$23.85 |
| Next 3,000 Gallons | 7.51 | 6.83 |
| Next 5,000 Gallons | 6.77 | 6.15 |
| Cost for 4,000 gallons | \$41.26 | \$37.51 |
| Increase % | 10.0% | |
| Affordability Index (Rate/MHI) | 1.5% | |

| Date of Last Rate Increase | Sewer Rates | |
|--------------------------------|-------------|----------|
| | Current | Prior |
| | 09/15/18 | 06/15/13 |
| Minimum 2,000 Gallons | \$28.62 | \$23.85 |
| Next 3,000 Gallons | 8.20 | 6.83 |
| Next 5,000 Gallons | 7.38 | 6.15 |
| Cost for 4,000 gallons | \$45.02 | \$37.51 |
| Increase % | 20.0% | |
| Affordability Index (Rate/MHI) | 1.6% | |

| Date of Last Rate Increase | Purchased Water | | | |
|---|-----------------|----------|----------|----------|
| | Phase III | Phase II | Current | Prior |
| | 05/23/21 | 05/23/20 | 05/23/19 | 05/01/15 |
| Crittenden-Livingston WD (per 1,000 Gallons) | 3.34 | 3.08 | 2.83 | 2.58 |
| Increase % | 8.44% | 8.83% | 9.69% | |

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 335 with a Median Household Income (MHI) of \$33,125. The median household income for the Commonwealth is \$46,535. A five year loan term at 2.5% interest rate will be applied to this loan as planning and design loans are not eligible for the non-standard rate. Should the City return with the same disadvantaged community status for a construction loan after completion of the planning and design phase, the project will qualify for the non-standard rate and term and possibly up to 50% principal forgiveness.

| Year | Population | | County | % Change | County Unemployment | |
|--------------|------------|----------|--------|----------|---------------------|-------|
| | City | % Change | | | Date | Rate |
| 1980 | 512 | | 9,219 | | June 2005 | 5.9% |
| 1990 | 384 | -25.0% | 9,062 | -1.7% | June 2010 | 11.8% |
| 2000 | 401 | 4.4% | 9,804 | 8.2% | June 2015 | 7.0% |
| 2010 | 301 | -24.9% | 9,519 | -2.9% | June 2019 | 5.7% |
| Current | 278 | -7.6% | 9,288 | -2.4% | | |
| Cumulative % | | -45.7% | | 0.7% | | |

As part of the City's plan to retain population and encourage future growth, the City has started a talk with Livingston County to move the county middle school from Burna to Smithland. This project will not only assure the capacity and quality of the sewer system to facilitate potential commercial and institutional customers but also improve services for the existing customers.

VIII. 2019 CAPITALIZATION GRANT EQUIVALENCIES

Additional Subsidization – This project does not qualify for additional subsidization.

IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions is not applicable as the City does not participate in the County Employees Retirement System (CERS).

HISTORY

Combined water and sewer revenues decreased 4.2% from \$ 183,073 in 2016 to \$175,264 in 2018 due to declined population while operating expenses decreased 11.9% from \$191,596 in 2016 to \$168,674 in 2018 attributable to personnel cuts. Non-recurring repair and contracted service expenses/revenues had been removed from the 2016 Statement of Revenues, Expenses, and Change in Net Position. In 2016, the state highway department contracted out the water line relocation portion of the highway 453 project to the City. The City brought in \$75,000 contracted service revenues while incurring \$60,000 expenses associated with the contract. Another reason for the higher expenses in 2016 was due to additional repair costs caused by flood damage. The debt coverage ratio was (1.8), 0.5, and 1.4 for 2016, 2017, and 2018 respectively.

The balance sheet reflects a current ratio of 0.5, debt to equity ratio of 0.5, 38.0 days sales in accounts receivable, and 3.2 months of operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Total revenues will go up 14% in FY2020 from the previously approved rate increases.
- 2) Expenses will increase 2% each year for inflation.
- 3) After a special condition of additional 28% rate increase is met, debt service coverage is 1.2 in FY2022 when full year principal and interest repayments for the planning and design loan begin.

- 4) The City will be able to support a total loan amount of approximately \$0.7 million without further rate increases should the City return to pursue a construction loan from KIA after the planning and design work is completed.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

REPLACEMENT RESERVE

Replacement reserve is not required for a planning and design loan.

X. DEBT OBLIGATIONS

| | Outstanding | Maturity |
|-------------------------|-------------|----------|
| USDA Bonds 92-03 Series | \$ 64,900 | 2040 |

XI. CONTACTS

Legal Applicant

| | |
|---------------------|---|
| Name | City of Smithland |
| Address | 310 Wilson Ave, PO Box 287 Smithland, KY 42081 |
| County | Livingston |
| Authorized Official | William Hesser, Mayor |
| Phone | (270) 928-2446 |
| Email | smithland@vci.net |

Project Contact - Applicant

| | |
|--------------|---|
| Name | Mary Wheatley, City Clerk |
| Organization | City of Smithland |
| Address | 310 Wilson Ave, PO Box 287 Smithland, KY 42081 |
| Phone | (270) 928-2446 |
| Email | smithland@vci.net |

Project Administrator

| | |
|--------------|--|
| Name | Kyle Cunningham |
| Organization | Pennyrile ADD |
| Address | 300 Hammond Dr Hopkinsville, KY 42240 |
| Phone | (270) 886-9484 |
| Email | kyle.cunningham@ky.gov |

Consulting Engineer

| | |
|---------|---|
| Name | Rory Brian Flynn |
| Firm | Rivercrest Engineering Inc |
| Address | 3519 State Route 440 Hickory, KY 42051 |
| Phone | (270) 519-7675 |
| Email | bflynn@rivercresteng.com |

XII. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions and one special condition:

1. The City shall pass an ordinance to raise both water and sewer rates by 28% equivalent to \$55,000 on or before July 1, 2021.

CITY OF SMITHLAND
FINANCIAL SUMMARY (JUNE YEAR END)

| | Audited 2016 | Audited 2017 | Audited 2018 | Projected 2019 | Projected 2020 | Projected 2021 | Projected 2022 | Projected 2023 |
|--|-------------------------|-------------------------|-------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Balance Sheet | | | | | | | | |
| Assets | | | | | | | | |
| Current Assets | 62,142 | 57,221 | 71,025 | 86,715 | 100,871 | 113,580 | 126,096 | 132,731 |
| Other Assets | 701,439 | 686,986 | 657,126 | 622,233 | 587,340 | 798,447 | 763,554 | 728,661 |
| Total | <u>763,581</u> | <u>744,207</u> | <u>728,151</u> | <u>708,948</u> | <u>688,211</u> | <u>912,027</u> | <u>889,650</u> | <u>861,392</u> |
| Liabilities & Equity | | | | | | | | |
| Current Liabilities | 115,466 | 133,672 | 150,558 | 150,910 | 151,203 | 200,701 | 201,003 | 201,309 |
| Long Term Liabilities | 87,480 | 85,565 | 83,990 | 82,033 | 82,033 | 276,685 | 225,236 | 173,679 |
| Total Liabilities | <u>202,946</u> | <u>219,237</u> | <u>234,548</u> | <u>232,943</u> | <u>233,236</u> | <u>477,386</u> | <u>426,238</u> | <u>374,989</u> |
| Net Assets | <u>560,635</u> | <u>524,970</u> | <u>493,603</u> | <u>476,005</u> | <u>454,975</u> | <u>434,641</u> | <u>463,412</u> | <u>486,403</u> |
| Cash Flow | | | | | | | | |
| Revenues | 183,073 | 178,883 | 175,264 | 193,215 | 199,198 | 228,496 | 257,696 | 257,696 |
| Operating Expenses | 191,596 | 176,604 | 168,674 | 174,540 | 180,748 | 187,324 | 190,148 | 193,029 |
| Other Income | 60 | 53 | 57 | 57 | 57 | 57 | 57 | 57 |
| Cash Flow Before Debt Service | <u>(8,463)</u> | <u>2,332</u> | <u>6,647</u> | <u>18,732</u> | <u>18,507</u> | <u>41,229</u> | <u>67,605</u> | <u>64,724</u> |
| Debt Service | | | | | | | | |
| Existing Debt Service | 4,806 | 4,835 | 4,759 | 4,883 | 4,951 | 4,951 | 4,951 | 4,951 |
| Proposed KIA Loan | 0 | 0 | 0 | 0 | 0 | 26,569 | 53,138 | 53,138 |
| Total Debt Service | <u>4,806</u> | <u>4,835</u> | <u>4,759</u> | <u>4,883</u> | <u>4,951</u> | <u>31,520</u> | <u>58,089</u> | <u>58,089</u> |
| Cash Flow After Debt Service | <u>(13,269)</u> | <u>(2,503)</u> | <u>1,888</u> | <u>13,849</u> | <u>13,556</u> | <u>9,709</u> | <u>9,516</u> | <u>6,635</u> |
| Ratios | | | | | | | | |
| Current Ratio | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.6 | 0.6 | 0.7 |
| Debt to Equity | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 1.1 | 0.9 | 0.8 |
| Days Sales in Accounts Receivable | 38.0 | 41.0 | 38.0 | 38.0 | 37.9 | 37.9 | 37.8 | 37.8 |
| Months Operating Expenses in Unrestricted Cash | 2.7 | 2.5 | 3.2 | 4.0 | 4.8 | 5.3 | 5.8 | 6.1 |
| Debt Coverage Ratio | (1.8) | 0.5 | 1.4 | 3.8 | 3.7 | 1.3 | 1.2 | 1.1 |

| | | | | | |
|---|----------------------------------|---|------------------------------|------------------------|----------------|
| EXECUTIVE SUMMARY | | Reviewer | | Ashley Adams | |
| KENTUCKY INFRASTRUCTURE AUTHORITY | | Date | | March 5, 2020 | |
| FUND A, FEDERALLY ASSISTED WASTEWATER | | KIA Loan Number | | A20-032 | |
| REVOLVING LOAN FUND | | WRIS Number | | SX21145034 | |
| BORROWER | | PADUCAH MCCRACKEN COUNTY JOINT SEWER AGENCY MCCRACKEN COUNTY | | | |
| BRIEF DESCRIPTION | | | | | |
| This is phase one of project #3 of the approved Long Term Control Plan associated with the outfall located adjacent to the Paducah WWTP. It will fund the pumping and fine screening sapability of 77 MGD at Outfall 003. Construction includes the shell of the pump station, two of the four 20 MGD pumps, screening prior to the pump station, a new structure over the existing 102 inch combined sewer with modulating valve, along with various electrical and piping components. | | | | | |
| PROJECT FINANCING | | PROJECT BUDGET | | RD Fee % | Actual % |
| Fund A Loan | \$5,170,000 | Legal Expenses | | | \$2,000 |
| | | Planning | | | 40,000 |
| | | Eng - Design / Const | 6.8% | 6.6% | 310,000 |
| | | Eng - Insp | 3.6% | 1.9% | 90,000 |
| | | Eng - Other | | | 28,000 |
| | | Construction | | | 4,090,000 |
| | | Contingency | | | 610,000 |
| TOTAL | \$5,170,000 | TOTAL | | | \$5,170,000 |
| REPAYMENT | Rate | 0.50% | Est. Annual Payment | | \$282,303 |
| | Term | 20 Years | 1st Payment | 6 Mo. after first draw | |
| PROFESSIONAL SERVICES | Engineer | J.R. Wauford & Company | | | |
| | Bond Counsel | Rubin & Hays | | | |
| PROJECT SCHEDULE | Bid Opening | Jun-20 | | | |
| | Construction Start | Aug-20 | | | |
| | Construction Stop | Oct-21 | | | |
| DEBT PER CUSTOMER | Existing | \$1,387 | | | |
| | Proposed | \$2,130 | | | |
| OTHER DEBT | | See Attached | | | |
| OTHER STATE-FUNDED PROJECTS LAST 5 YRS | | See Attached | | | |
| RESIDENTIAL RATES | | Users | Avg. Bill | | |
| | Current | 19,024 | \$23.76 (for 4,000 gallons) | | |
| | Additional | 0 | \$23.76 (for 4,000 gallons) | | |
| REGIONAL COORDINATION This project is consistent with regional planning recommendations. | | | | | |
| CASHFLOW | Cash Flow Before Debt Service | Debt Service | Cash Flow After Debt Service | | Coverage Ratio |
| Audited 2017 | 3,395,483 | 1,556,594 | 1,838,889 | | 2.2 |
| Audited 2018 | 4,774,436 | 1,604,158 | 3,170,278 | | 3.0 |
| Audited 2019 | 4,903,413 | 1,681,385 | 3,222,028 | | 2.9 |
| Projected 2020 | 4,987,675 | 1,804,002 | 3,183,673 | | 2.8 |
| Projected 2021 | 4,895,468 | 2,556,018 | 2,339,450 | | 1.9 |
| Projected 2022 | 4,801,416 | 3,180,343 | 1,621,074 | | 1.5 |
| Projected 2023 | 4,705,483 | 3,386,333 | 1,319,150 | | 1.4 |
| Projected 2024 | 4,607,632 | 3,282,001 | 1,325,631 | | 1.4 |

Reviewer: Ashley Adams
Date: March 5, 2020
Loan Number: A20-032

**KENTUCKY INFRASTRUCTURE AUTHORITY
WASTEWATER REVOLVING LOAN FUND (FUND A)
PADUCAH-MCCRACKEN COUNTY JOINT SEWER AGENCY
MCCRACKEN COUNTY
PROJECT REVIEW
SX21145034**

I. PROJECT DESCRIPTION

The Paducah-McCracken County Joint Sewer Agency is requesting a Fund A loan in the amount of \$5,170,000 for the LTCP Project #3 - Outfall 003 Fine Screening - Phase One project. The project is phase one of Project #3 of the approved Long Term Control Plan (LTCP) for the Paducah JSA, associated with the outfall (EPA Outfall 003) located adjacent to the Paducah Wastewater Treatment Plant. The project will be constructed next to the recently completed 15 MG combined sewer wet weather tank (SX21145023), and will allow for the tank to be placed in service. The full scope of Project #3 is the pumping and fine screening capability of 77 MGD at Outfall 003. This phase will construct the shell of the pump station, two of the four 20 MGD pumps, screening prior to the pump station, a new structure over the existing 102 inch combined sewer with modulating valve, along with various electrical and piping components.

Project #3 is required by the approved Long Term Control Plan for the Paducah JSA. By performing this project in phases, JSA can realize increased capture volumes related to their LTCP at Outfall 003 with the expedited use of the Harrison Street Phase One 15 MG Storage Tank. Increased capture volumes promote public health by reducing Combined Sewer Overflow volumes and pollutants to the Ohio River.

The next phase of Project #3 will include installing the final two pumps for the pump station, increasing its ultimate capacity to 80 MGD, additional fine screening, and discharge piping to the Ohio River. The final component related to Outfall 003 is listed as Project #5 and includes the disinfection component.

II. PROJECT BUDGET

| | <u>Total</u> |
|---------------------------------|---------------------|
| Legal Expenses | \$ 2,000 |
| Planning | 40,000 |
| Engineering Fees - Design | 260,000 |
| Engineering Fees - Construction | 50,000 |
| Engineering Fees - Inspection | 90,000 |
| Engineering Fees - Other | 28,000 |
| Construction | 4,090,000 |
| Contingency | 610,000 |
| Total | \$ 5,170,000 |

III. PROJECT FUNDING

| | <u>Amount</u> | <u>%</u> |
|--------------|---------------------|-------------|
| Fund A Loan | \$ 5,170,000 | 100% |
| Total | \$ 5,170,000 | 100% |

IV. KIA DEBT SERVICE

| | |
|--|-------------------|
| Construction Loan | \$ 5,170,000 |
| Less: Principal Forgiveness | 0 |
| Amortized Loan Amount | \$ 5,170,000 |
| Interest Rate | 0.50% |
| Loan Term (Years) | 20 |
| Estimated Annual Debt Service | \$ 271,963 |
| Administrative Fee (0.20%) | 10,340 |
| Total Estimated Annual Debt Service | \$ 282,303 |

V. PROJECT SCHEDULE

| | |
|--------------------|--------------|
| Bid Opening | June 2020 |
| Construction Start | August 2020 |
| Construction Stop | October 2021 |

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

| | <u>Current</u> |
|-------------------------------------|----------------|
| Residential/ Commercial/ Industrial | 19,024 |
| Total | 19,024 |

B) Rates

| | Current | Prior |
|---------------------------------|----------------|----------------|
| Date of Last Rate Increase | 07/01/19 | 07/01/17 |
| Minimum (3,000 gallons) | \$17.82 | \$17.49 |
| Each Additional (1,000 gallons) | 5.94 | 5.83 |
| Cost for 4,000 gallons | \$23.76 | \$23.32 |
| Increase % | 1.9% | |
| Affordability Index (Rate/MHI) | 0.8% | |

The Board may elect to adjust rates according to CPI-U annually.

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 34,452 with a Median Household Income (MHI) of \$37,195. The median household income for the Commonwealth is \$46,535. The project will qualify for a 0.50% interest rate based on MHI.

| Year | Population | | County | % Change | County Unemployment | |
|--------------|------------|----------|--------|----------|---------------------|------|
| | City | % Change | | | Date | Rate |
| 1980 | 29,315 | | 61,310 | | June 2005 | 6.3% |
| 1990 | 27,256 | -7.0% | 62,879 | 2.6% | June 2010 | 9.0% |
| 2000 | 26,307 | -3.5% | 65,514 | 4.2% | June 2015 | 5.8% |
| 2010 | 25,024 | -4.9% | 65,565 | 0.1% | June 2019 | 5.4% |
| Current | 25,046 | 0.1% | 65,285 | -0.4% | | |
| Cumulative % | | -14.6% | | 6.5% | | |

VIII. 2019 CAPITALIZATION GRANT EQUIVALENCIES

- 1) Green Project Reserve - This project does not qualify for Green Project Reserve (GPR) funding.
- 2) Additional Subsidization – This project does not qualify for additional subsidization.

IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2017 through June 30, 2019. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2017-2019 operating expenses and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has been removed from 2018 and

2019 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

HISTORY

Revenues have increased 15.6% from \$7.9 million in 2017 to \$9.1 million in 2019 mostly due to rate increases. Expenses have declined 1% from \$4.56 million in 2017 to \$4.51 million in 2019. Debt coverage was 2.2 in 2017, 3.0 in 2018, and 2.9 in 2019. Cash flow before debt service averaged \$4.3 million for the observed time period.

The balance sheet reflects a current ratio of 4.3, a debt to equity ratio of 0.6, 49.8 days sales in accounts receivable, and 18.3 months operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will remain flat throughout the forecast. The JSA Board has the ability to raise rates according to the CPI-U but does not do so automatically therefore this assumption was not made in the forecast.
- 2) Expenses will increase 2% based on inflation.
- 3) Debt service coverage is 1.4 in 2023 when full principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

REPLACEMENT RESERVE

The Agency currently has designated reserves of \$3,000,000. The reserves are specifically for high dollar capital equipment purchases, for emergencies, or for rate stabilization in the event of a loss of a substantial revenue stream. No additional reserves will be required.

X. DEBT OBLIGATIONS

| | Outstanding | Maturity |
|-----------------------------------|--------------------|-----------------|
| Sewer Revenue Bonds (Series 2012) | \$ 3,938,500 | 2051 |
| Sewer Revenue Bonds (Series 2014) | 3,290,000 | 2031 |
| KIA Loan A03-01 | 335,514 | 2023 |
| KIA Loan A03-08 | 458,456 | 2026 |
| KIA Loan A04-03 | 291,789 | 2025 |
| KIA Loan A08-01 | 839,989 | 2029 |
| KIA Loan A09-02 | 4,524,331 | 2033 |
| KIA Loan A12-08 | 6,119,644 | 2035 |
| KIA Loan A16-072 | 2,142,109 | 2038 |

| | | |
|------------------------------------|----------------------|-----------------|
| | Outstanding | Maturity |
| KIA Loan A19-044 i/a/o \$2,314,500 | | TBD |
| KIA Loan A19-039 i/a/o \$5,193,000 | | TBD |
| Total | \$ 26,378,288 | |

XI. CONTACTS

Legal Applicant

| | |
|---------------------|---|
| Entity Name | Paducah McCracken County Joint Sewer Agency |
| Authorized Official | Justin Hancock (Board Chairman) |
| County | McCracken |
| Email | justin@hancocks-paducah.com |
| Phone | 270-575-0056 |
| Address | 621 Northview St Paducah, KY 42001 |

Project Administrator

| | |
|--------------|---|
| Name | John Hodges |
| Organization | Paducah McCracken County Joint Sewer Agency |
| Email | jhodges@jointsewer.com |
| Phone | 270-575-0056 |
| Address | 621 Northview St Paducah, KY 42001 |

Consulting Engineer

| | |
|-----------|--------------------------------------|
| PE Name | J. Gregory Davenport |
| Firm Name | J.R. Wauford & Company |
| Email | gregd@jrwauford.com |
| Phone | 615-883-3242 |
| Address | PO Box 140350 Nashville, TN 37214 |

XII. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard.

PADUCAH MCCRACKEN COUNTY JOINT SEWER AGENCY
FINANCIAL SUMMARY (JUNE YEAR END)

| | Audited 2017 | Audited 2018 | Audited 2019 | Projected 2020 | Projected 2021 | Projected 2022 | Projected 2023 | Projected 2024 |
|--|-------------------------|-------------------------|-------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Balance Sheet | | | | | | | | |
| Assets | | | | | | | | |
| Current Assets | 13,850,539 | 12,978,262 | 12,537,198 | 12,879,403 | 13,113,348 | 13,275,456 | 13,407,371 | 13,539,934 |
| Other Assets | 68,436,117 | 72,089,951 | 78,728,088 | 79,691,631 | 91,100,228 | 92,109,884 | 90,262,809 | 88,421,567 |
| Total | <u>82,286,656</u> | <u>85,068,213</u> | <u>91,265,286</u> | <u>92,571,034</u> | <u>104,213,576</u> | <u>105,385,340</u> | <u>103,670,180</u> | <u>101,961,501</u> |
| Liabilities & Equity | | | | | | | | |
| Current Liabilities | 2,561,594 | 1,831,780 | 2,913,199 | 2,160,947 | 2,477,095 | 3,467,131 | 3,558,833 | 3,382,683 |
| Long Term Liabilities | 24,573,136 | 26,720,572 | 30,310,920 | 27,518,349 | 37,939,961 | 37,757,586 | 34,907,908 | 32,243,980 |
| Total Liabilities | <u>27,134,730</u> | <u>28,552,352</u> | <u>33,224,119</u> | <u>29,679,296</u> | <u>40,417,056</u> | <u>41,224,716</u> | <u>38,466,741</u> | <u>35,626,663</u> |
| Net Assets | <u>55,151,926</u> | <u>56,515,861</u> | <u>58,041,167</u> | <u>62,891,738</u> | <u>63,796,520</u> | <u>64,160,624</u> | <u>65,203,439</u> | <u>66,334,838</u> |
| Cash Flow | | | | | | | | |
| Revenues | 7,948,802 | 9,142,934 | 9,192,706 | 9,367,367 | 9,367,367 | 9,367,367 | 9,367,367 | 9,367,367 |
| Operating Expenses | 4,569,420 | 4,454,330 | 4,519,970 | 4,610,369 | 4,702,576 | 4,796,628 | 4,892,561 | 4,990,412 |
| Other Income | 16,101 | 85,832 | 230,677 | 230,677 | 230,677 | 230,677 | 230,677 | 230,677 |
| Cash Flow Before Debt Service | <u>3,395,483</u> | <u>4,774,436</u> | <u>4,903,413</u> | <u>4,987,675</u> | <u>4,895,468</u> | <u>4,801,416</u> | <u>4,705,483</u> | <u>4,607,632</u> |
| Debt Service | | | | | | | | |
| Existing Debt Service | 1,556,594 | 1,604,158 | 1,681,385 | 1,804,002 | 2,556,018 | 3,039,191 | 3,104,030 | 2,999,698 |
| Proposed KIA Loan | 0 | 0 | 0 | 0 | 0 | 141,152 | 282,303 | 282,303 |
| Total Debt Service | <u>1,556,594</u> | <u>1,604,158</u> | <u>1,681,385</u> | <u>1,804,002</u> | <u>2,556,018</u> | <u>3,180,343</u> | <u>3,386,333</u> | <u>3,282,001</u> |
| Cash Flow After Debt Service | <u>1,838,889</u> | <u>3,170,278</u> | <u>3,222,028</u> | <u>3,183,673</u> | <u>2,339,450</u> | <u>1,621,074</u> | <u>1,319,150</u> | <u>1,325,631</u> |
| Ratios | | | | | | | | |
| Current Ratio | 5.4 | 7.1 | 4.3 | 6.0 | 5.3 | 3.8 | 3.8 | 4.0 |
| Debt to Equity | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 |
| Days Sales in Accounts Receivable | 49.3 | 51.7 | 49.8 | 49.8 | 49.8 | 49.8 | 49.8 | 49.8 |
| Months Operating Expenses in Unrestricted Cash | 17.2 | 13.1 | 18.3 | 18.7 | 19.0 | 19.0 | 18.9 | 18.9 |
| Debt Coverage Ratio | 2.2 | 3.0 | 2.9 | 2.8 | 1.9 | 1.5 | 1.4 | 1.4 |

| | | | | | |
|--|--|--|-------------------------------------|------------------------|-----------------------|
| EXECUTIVE SUMMARY | | Reviewer | | Meili Sun | |
| KENTUCKY INFRASTRUCTURE AUTHORITY | | Date | | March 5, 2020 | |
| FUND B, INFRASTRUCTURE | | KIA Loan Number | | B20-001 | |
| REVOLVING LOAN FUND | | WRIS Number | | WX21069039 | |
| BORROWER | | CITY OF FLEMINGSBURG FLEMING COUNTY | | | |
| BRIEF DESCRIPTION | | | | | |
| This project will replace approximately 1,650 linear feet of asbestos cement distribution mains along East Water Street with 6-inch PVC waterline, and 600 linear feet of cast iron distribution mains along East Main Street and Mills Avenue with 2-inch PVC waterline. The project will also replace and reconnect 32 customer meters . | | | | | |
| PROJECT FINANCING | | PROJECT BUDGET | | RD Fee % | Actual % |
| Fund B Loan | \$77,405 | Administrative Expenses | | | \$12,500 |
| ARC | 180,610 | Eng - Design / Const | | 12.2% | 11.4% |
| | | Eng - Insp | | 10.4% | 9.8% |
| | | Construction | | | 184,150 |
| | | Contingency | | | 18,415 |
| TOTAL | \$258,015 | TOTAL | | | \$258,015 |
| REPAYMENT | Rate | 0.50% | Est. Annual Payment | | \$4,227 |
| | Term | 20 Years | 1st Payment | 6 Mo. after first draw | |
| PROFESSIONAL SERVICES | Engineer | Bluegrass Engineering, PLLC | | | |
| | Bond Counsel | Rubin & Hays | | | |
| PROJECT SCHEDULE | Bid Opening | Jun-20 | | | |
| | Construction Start | Aug-20 | | | |
| | Construction Stop | Nov-20 | | | |
| DEBT PER CUSTOMER | Existing | \$4,325 | | | |
| | Proposed | \$3,979 | | | |
| OTHER DEBT | | See Attached | | | |
| RESIDENTIAL RATES | | <u>Users</u> | <u>Avg. Bill</u> | | |
| | Current | 1,872 | \$37.46 | (for 4,000 gallons) | |
| | Additional | 0 | \$37.46 | (for 4,000 gallons) | |
| REGIONAL COORDINATION | | | | | |
| This project is consistent with regional planning recommendations. | | | | | |
| CASHFLOW | Cash Flow Before Debt Service | Debt Service | Cash Flow After Debt Service | | Coverage Ratio |
| Audited 2017 | 675,733 | 752,277 | (76,544) | | 0.9 |
| Audited 2018 | 716,905 | 499,377 | 217,528 | | 1.4 |
| Audited 2019 | 726,367 | 498,460 | 227,907 | | 1.5 |
| Projected 2020 | 745,728 | 467,285 | 278,443 | | 1.6 |
| Projected 2021 | 764,946 | 476,729 | 288,217 | | 1.6 |
| Projected 2022 | 785,089 | 479,456 | 305,633 | | 1.6 |
| Projected 2023 | 805,635 | 479,563 | 326,072 | | 1.7 |
| Projected 2024 | 826,592 | 480,162 | 346,430 | | 1.7 |

Reviewer: Meili Sun
Date: March 5, 2020
Loan Number: B20-001

**KENTUCKY INFRASTRUCTURE AUTHORITY
INFRASTRUCTURE REVOLVING LOAN FUND (FUND B)
ENTITY, FLEMING COUNTY
PROJECT REVIEW
WX21069039**

I. PROJECT DESCRIPTION

The City of Flemingsburg ("City") is requesting a Fund B loan in the amount of \$77,405 for the E Water St, E Main St, and Mills Ave Waterline Replacement project. This project involves replacement of approximately 1,650 linear feet of asbestos cement distribution mains along East Water Street with 6-inch PVC waterline, and 600 linear feet of cast iron distribution mains along East Main Street and Mills Avenue with 2-inch PVC waterline. The project will also replace and reconnect 32 customer meters.

The City purchases over 80% of its water supply from the Greater Fleming Regional Water Commission and the City of Maysville to serve approximately 1,900 existing customers.

II. PROJECT BUDGET

| | Total |
|---------------------------------|-------------------|
| Administrative Expenses | \$ 12,500 |
| Engineering Fees – Design | 16,150 |
| Engineering Fees – Construction | 6,900 |
| Engineering Fees – Inspection | 19,900 |
| Construction | 184,150 |
| Contingency | 18,415 |
| Total | \$ 258,015 |

III. PROJECT FUNDING

| | Amount | % |
|-----------------|-------------------|-------------|
| KIA Fund B Loan | \$ 77,405 | 30% |
| ARC Grant | 180,610 | 70% |
| Total | \$ 258,015 | 100% |

IV. KIA DEBT SERVICE

| | | |
|--|-----------|--------------|
| Construction Loan | \$ | 77,405 |
| Principal Forgiveness | | 0 |
| Amortized Loan Amount | \$ | 77,405 |
| Interest Rate | | 0.50% |
| Loan Term (Year) | | 20 |
| Estimated Annual Debt Service | \$ | 4,072 |
| Administrative Fee (0.20%) | | 200 |
| Total Estimated Annual Debt Service | \$ | 4,472 |

V. PROJECT SCHEDULE

| | |
|--------------------|---------------|
| Bid Opening | June 2020 |
| Construction Start | August 2020 |
| Construction Stop | November 2020 |

VI. RATE STRUCTURE

A. Customers

| | |
|-------------|---------|
| Customers | Current |
| Residential | 1,626 |
| Commercial | 240 |
| Industrial | 2 |
| Total | 1,872 |

B. Rates

| Date of Last Rate Increase | Water Inside City | | Water Outside City | |
|--------------------------------|-------------------|----------|--------------------|----------|
| | Current | Prior | Current | Prior |
| | 04/01/19 | 04/01/18 | 04/01/19 | 04/01/18 |
| First 2,000 Gallons | \$19.32 | \$18.96 | \$24.87 | \$24.41 |
| Next 3,000 Gallons | 9.07 | 8.90 | 12.16 | 11.93 |
| Cost for 4,000 gallons | \$37.46 | \$36.76 | \$49.19 | \$48.27 |
| Increase % | 1.9% | | 1.9% | |
| Affordability Index (Rate/MHI) | 1.3% | 1.3% | 1.8% | 1.7% |

| Date of Last Rate Increase | Sewer Inside City | | Sewer Outside City | |
|--------------------------------|-------------------|----------|--------------------|----------|
| | Current | Prior | Current | Prior |
| | 04/01/19 | 04/01/18 | 04/01/19 | 04/01/18 |
| First 2,000 Gallons | \$23.25 | \$22.82 | \$25.82 | \$25.34 |
| Next 2,000 Gallons | 9.00 | 8.83 | 10.12 | 9.93 |
| Cost for 4,000 gallons | \$41.25 | \$40.48 | \$46.06 | \$45.20 |
| Increase % | 1.9% | | 1.9% | |
| Affordability Index (Rate/MHI) | 1.5% | 1.5% | 1.7% | 1.6% |

The City has adopted a CPI clause since 2003 to automatically adjust rates each year based on the Consumer Price Index.

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 3,014 with a Median Household Income (MHI) of \$33,304. The median household income for the Commonwealth is \$46,535. The project will qualify for a 0.50% interest rate with its Median Household Income below 80% of the State median.

| Year | Population | | County | % Change | County Unemployment | |
|--------------|------------|----------|--------|----------|---------------------|-------|
| | City | % Change | | | Date | Rate |
| 1980 | 2,835 | | 12,323 | | June 2005 | 6.2% |
| 1990 | 3,071 | 8.3% | 12,292 | -0.3% | June 2010 | 11.2% |
| 2000 | 3,010 | -2.0% | 13,792 | 12.2% | June 2015 | 6.5% |
| 2010 | 2,658 | -11.7% | 14,348 | 4.0% | June 2019 | 6.0% |
| Current | 2,869 | 7.9% | 14,515 | 1.2% | | |
| Cumulative % | | 1.2% | | 17.8% | | |

VIII. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2017 through June 30, 2019. The non-cash impacts of GASB 68 - Accounting and Financial Reporting for Pensions and GASB 75 - Other Postemployment Benefit had been removed from operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented. The City of Flemingsburg's Proprietary Fund is comprised of water, sewer, and gas operations, the financial statements are consolidated in this analysis.

HISTORY

Total combined revenues (water, sewer, gas) increased 7.8% from \$2.55 million in 2017 to \$2.75 million in 2019 due to annual CPI rate increases and higher volume of gas services. Operating expenses went up 9.2% from \$1.88 million to \$2.05 million during the same period attributable to higher gas purchase costs to meet the demand. Gas operation contributed an average of \$240,000 cash flow per year to the proprietary fund during the 3 years. The debt coverage ratio was 0.9, 1.6, and 1.5 for 2017, 2018, and 2019 respectively.

The consolidated Balance sheet reflects a current ratio of 4.4, a debt to equity ratio of 0.8, 34.5 days of sales in accounts receivable, and 14.2 months of operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will go up approximately 2% annually due to rate adjustments based on the Consumer Price Index.
- 2) Operating expenses will increase each year by 2% for inflation.
- 3) The City will receive a grant in the amount of \$180,610 from ARC to co-fund the project.
- 4) Debt coverage ratio is 1.6 in 2021 when full year principal and interest repayments are expected to begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund B loan.

REPLACEMENT RESERVE

The replacement reserve will be 5% (\$4,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$200 yearly) each December 1 for 20 years and maintained for the life of the loan.

IX. DEBT OBLIGATIONS

| | Outstanding | Maturity |
|-----------------------------------|---------------------|----------|
| General Obligation Bonds | \$ 1,867,050 | 2054 |
| KIA Loan A11-01 | 6,097,176 | 2035 |
| KIA Loan A12-19 | 131,337 | 2035 |
| KIA Loan B18-005 i.a.o. \$132,046 | | TBD |
| Total | \$ 8,095,563 | |

X. CONTACTS

Legal Applicant

| | |
|---------------------|--|
| Name | City of Flemingsburg |
| Address | 140 W Electric Ave, PO Box 406 Flemingsburg, KY 41056 |
| County | Fleming |
| Authorized Official | Robert Money |
| Phone | (606)845-5951 |
| Email | mayor@flemingsburgky.org |

Project Contact - Applicant

| | |
|--------------|---|
| Name | Cindy Ring |
| Organization | Buffalo Trace Area Development District |
| Address | PO Box 460 Maysville, KY 41056 |
| Phone | (606) 564-6894 |
| Email | cring@btadd.com |

Project Administrator

| | |
|--------------|---|
| Name | Kristie Dodge |
| Organization | Buffalo Trace Area Development District |
| Address | PO Box 460 Maysville, KY 41056 |
| Phone | (606) 564-6894 |
| Email | kdodge@btadd.com |

Consulting Engineer

| | |
|---------|---|
| Name | Matthew Curtis |
| Firm | Bluegrass Engineering, PLLC |
| Address | PO Box 1657, 222 E Main St, Suite 1 Georgetown, KY 40324 |
| Phone | (502) 370-6551 |
| Email | mcurtis@bluegrassengineering.net |

XI. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions.

CITY OF FLEMINGSBURG
FINANCIAL SUMMARY (JUNE YEAR END)

| | Audited 2017 | Audited 2018 | Audited 2019 | Projected 2020 | Projected 2021 | Projected 2022 | Projected 2023 | Projected 2024 |
|--|-------------------------|-------------------------|-------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Balance Sheet | | | | | | | | |
| Assets | | | | | | | | |
| Current Assets | 2,760,638 | 2,602,431 | 2,771,941 | 2,804,900 | 2,838,922 | 2,874,785 | 2,912,793 | 2,952,936 |
| Other Assets | 20,892,494 | 20,818,571 | 20,304,750 | 19,990,692 | 20,093,029 | 20,052,235 | 19,771,821 | 19,510,831 |
| Total | 23,653,132 | 23,421,002 | 23,076,691 | 22,795,592 | 22,931,951 | 22,927,020 | 22,684,614 | 22,463,766 |
| Liabilities & Equity | | | | | | | | |
| Current Liabilities | 695,567 | 621,393 | 631,278 | 637,536 | 654,842 | 661,213 | 668,218 | 673,259 |
| Long Term Liabilities | 9,324,624 | 9,578,560 | 9,336,825 | 8,945,816 | 8,671,847 | 8,339,167 | 7,924,476 | 7,507,145 |
| Total Liabilities | 10,020,191 | 10,199,953 | 9,968,103 | 9,583,352 | 9,326,689 | 9,000,379 | 8,592,694 | 8,180,403 |
| Net Assets | 13,632,941 | 13,221,049 | 13,108,588 | 13,212,240 | 13,605,262 | 13,926,641 | 14,091,920 | 14,283,363 |
| Cash Flow | | | | | | | | |
| Revenues | 2,548,744 | 2,745,816 | 2,750,077 | 2,804,126 | 2,859,256 | 2,915,488 | 2,972,845 | 3,031,349 |
| Operating Expenses | 1,878,455 | 2,036,078 | 2,051,897 | 2,086,585 | 2,122,497 | 2,158,586 | 2,195,397 | 2,232,944 |
| Other Income | 5,444 | 7,167 | 28,187 | 28,187 | 28,187 | 28,187 | 28,187 | 28,187 |
| Cash Flow Before Debt Service | 675,733 | 716,905 | 726,367 | 745,728 | 764,946 | 785,089 | 805,635 | 826,592 |
| Debt Service | | | | | | | | |
| Existing Debt Service | 752,277 | 499,377 | 498,460 | 467,285 | 474,615 | 475,229 | 475,336 | 475,935 |
| Proposed KIA Loan | 0 | 0 | 0 | 0 | 2,114 | 4,227 | 4,227 | 4,227 |
| Total Debt Service | 752,277 | 499,377 | 498,460 | 467,285 | 476,729 | 479,456 | 479,563 | 480,162 |
| Cash Flow After Debt Service | (76,544) | 217,528 | 227,907 | 278,443 | 288,217 | 305,633 | 326,072 | 346,430 |
| Ratios | | | | | | | | |
| Current Ratio | 4.0 | 4.2 | 4.4 | 4.4 | 4.3 | 4.3 | 4.4 | 4.4 |
| Debt to Equity | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 |
| Days Sales in Accounts Receivable | 32.2 | 35.6 | 34.5 | 34.5 | 34.5 | 34.5 | 34.5 | 34.5 |
| Months Operating Expenses in Unrestricted Cash | 16.2 | 13.8 | 14.2 | 14.2 | 14.1 | 14.0 | 14.0 | 13.9 |
| Debt Coverage Ratio | 0.9 | 1.4 | 1.5 | 1.6 | 1.6 | 1.6 | 1.7 | 1.7 |

| | | | | |
|--|-------------------------------|--|------------------------------|------------------------|
| EXECUTIVE SUMMARY | | Reviewer | | Meili Sun |
| KENTUCKY INFRASTRUCTURE AUTHORITY | | Date | | March 5, 2020 |
| FUND F, FEDERALLY ASSISTED DRINKING WATER | | KIA Loan Number | | F20-002 |
| REVOLVING LOAN FUND | | WRIS Number | | WX21155044 |
| BORROWER | | CITY OF LEBANON F/B/O LEBANON WATER WORKS COMPANY INC MARION COUNTY | | |
| BRIEF DESCRIPTION | | | | |
| The proposed project will improve water quality by removing aging cast iron and potential lead service connections, reducing water loss from leaking lines and improving flow conditions. The elimination of potential lead connections will also help ensure that safe portable water is available to all sections of the City. | | | | |
| PROJECT FINANCING | | PROJECT BUDGET | | |
| Fund F Loan | \$5,238,230 | RD Fee % | Actual % | |
| | | Administrative Expenses | | \$12,500 |
| | | Legal Expenses | | 6,150 |
| | | Planning | | 45,000 |
| | | Eng - Design / Const | 6.8% | 6.2% |
| | | Eng - Insp | 3.6% | 3.3% |
| | | Eng - Other | | 15,000 |
| | | Construction | | 4,281,750 |
| | | Contingency | | 428,200 |
| TOTAL | \$5,238,230 | TOTAL | | \$5,238,230 |
| REPAYMENT | Rate | 0.50% | Est. Annual Payment | \$151,375 |
| | Term | 30 Years | 1st Payment | 6 Mo. after first draw |
| PROFESSIONAL SERVICES | Engineer | Kentucky Engineering Group PLLC | | |
| | Bond Counsel | Rubin & Hays | | |
| PROJECT SCHEDULE | Bid Opening | Jul-20 | | |
| | Construction Start | Nov-20 | | |
| | Construction Stop | Mar-22 | | |
| DEBT PER CUSTOMER | Existing | \$2,463 | | |
| | Proposed | \$4,775 | | |
| OTHER DEBT | | See Attached | | |
| RESIDENTIAL RATES | | <u>Users</u> | <u>Avg. Bill</u> | |
| | Current | 2,626 | \$26.19 (for 4,000 gallons) | |
| | Additional | 0 | \$26.19 (for 4,000 gallons) | |
| REGIONAL COORDINATION This project is consistent with regional planning recommendations. | | | | |
| CASHFLOW | Cash Flow Before Debt Service | Debt Service | Cash Flow After Debt Service | Coverage Ratio |
| Audited 2017 | 923,114 | 423,100 | 500,014 | 2.2 |
| Audited 2018 | 614,268 | 449,894 | 164,374 | 1.4 |
| Audited 2019 | 739,495 | 541,297 | 198,198 | 1.4 |
| Projected 2020 | 781,819 | 569,248 | 212,571 | 1.4 |
| Projected 2021 | 777,105 | 624,381 | 152,724 | 1.2 |
| Projected 2022 | 1,203,866 | 624,379 | 579,487 | 1.9 |
| Projected 2023 | 1,034,142 | 775,755 | 258,387 | 1.3 |
| Projected 2024 | 845,590 | 775,756 | 69,834 | 1.1 |

Reviewer: Meili Sun
Date: March 5, 2020
Loan Number: F20-002

**KENTUCKY INFRASTRUCTURE AUTHORITY
DRINKING WATER STATE REVOLVING FUND (FUND F)
CITY OF LEBANON F/B/O LEBANON WATER WORKS COMPANY INC
MARION COUNTY
PROJECT REVIEW
WX21155044**

I. PROJECT DESCRIPTION

The City of Lebanon ("City") is requesting a Fund F loan in the amount of \$5,238,230 for the Water Main Replacement project. This project will replace old water mains located along Old Calvary Road and other main feed lines through downtown and central supply areas. The scope of work involves 80,000 linear feet of old cast iron lines, galvanized water mains of various sizes, and adjacent old service lines. Many of the older service lines may still have lead gooseneck connections that will be removed. The purpose of this project is to improve water quality and increase flow in areas where pipes are prone to frequent breaks and leaks. The removal of potential lead connections will also ensure safe water distribution to the customers.

The City produces 86% of its water supply and purchases the remainder from the City of Campbellsville ("Campbellsville") to serve approximately 2,600 retail customers and supplies wholesale water to the Marion County Water District (MCWD) which is a PSC regulated utility.

PROJECT BUDGET

| | Total |
|---------------------------------|---------------------|
| Administrative Expenses | \$ 12,500 |
| Legal Expenses | 6,150 |
| Planning | 45,000 |
| Engineering Fees – Design | 205,541 |
| Engineering Fees – Construction | 88,089 |
| Engineering Fees – Inspection | 156,000 |
| Engineering Fees – Other | 15,000 |
| Construction | 4,281,750 |
| Contingency | 428,200 |
| Total | \$ 5,238,230 |

II. PROJECT FUNDING

| | Amount | % |
|-----------------|--------------|------|
| KIA Fund F Loan | \$ 5,238,230 | 100% |

III. KIA DEBT SERVICE

| | |
|--|-------------------|
| Construction Loan | \$ 5,238,230 |
| Principal Forgiveness | 1,300,000 |
| Amortized Loan Amount | \$ 3,938,230 |
| Interest Rate | 0.50% |
| Loan Term (Year) | 30 |
| Estimated Annual Debt Service | \$ 141,530 |
| Administrative Fee (0.25%) | 9,846 |
| Total Estimated Annual Debt Service | \$ 151,375 |

IV. PROJECT SCHEDULE

| | |
|--------------------|---------------|
| Bid Opening | July 2020 |
| Construction Start | November 2020 |
| Construction Stop | March 2022 |

V. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

| Customers | Current |
|-------------|---------|
| Residential | 2,538 |
| Commercial | 47 |
| Industrial | 41 |
| Total | 2,626 |

B) Rates

| | Inside City Water | | Outside City Water | |
|--------------------------------|-------------------|----------|--------------------|----------|
| | Current | Prior | Current | Prior |
| Date of Last Rate Increase | 07/08/19 | 11/15/17 | 07/08/19 | 11/15/17 |
| Meter Charge | \$7.35 | \$7.35 | \$8.09 | \$8.09 |
| Per 100 Cubic Feet | 3.50 | 3.35 | 3.85 | 3.69 |
| Cost for 4,000 gallons | \$26.19 | \$25.38 | \$28.82 | \$27.96 |
| Increase % | 3.2% | | 3.1% | |
| Affordability Index (Rate/MHI) | 1.0% | 1.0% | 1.2% | 1.1% |

| | Wholesale Water to MCWD | | |
|------------------------------|-------------------------|------------|------------|
| | Proposed | Current | Prior |
| Date of Last Rate Increase | 09/15/20 | 11/15/19 | 04/16/18 |
| Rate Case Expense Surcharge* | \$2,000.00 | \$2,000.00 | \$2,000.00 |
| Meter Charge | 7.84 | 7.84 | 7.84 |
| Per 100 Cubic Feet | 3.25 | 3.07 | 2.90 |
| Cost for 4,000 gallons | \$25.22 | \$24.26 | \$23.45 |
| Increase % | 4.0% | 3.4% | |

* Marion County Water District was ordered by the PSC to pay the City a \$2,000 monthly surcharge from July 2018 to June 2020 to reimburse the legal fees incurred by the City for the 2017 rate case.

VI. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 6,144 with a Median Household Income (MHI) of \$30,025. The median household income for the Commonwealth is \$46,535. The project will qualify for a 0.5% interest rate and \$1,300,000 in principal forgiveness.

| Year | Population | | County | % Change | County Unemployment | |
|--------------|------------|----------|--------|----------|---------------------|-------|
| | City | % Change | | | Date | Rate |
| 1980 | 6,590 | | 17,910 | | June 2005 | 6.2% |
| 1990 | 5,695 | -13.6% | 16,499 | -7.9% | June 2010 | 11.9% |
| 2000 | 5,718 | 0.4% | 18,212 | 10.4% | June 2015 | 5.2% |
| 2010 | 5,539 | -3.1% | 19,820 | 8.8% | June 2019 | 4.4% |
| Current | 5,584 | 0.8% | 19,335 | -2.4% | | |
| Cumulative % | | -15.3% | | 8.0% | | |

VII. 2019 CAPITALIZATION GRANT EQUIVALENCIES

Additional Subsidization – This project qualifies for additional subsidization. Principal forgiveness of 50% of the assistance amount, not to exceed \$1,300,000 will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.

VIII. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2017 through June 30, 2019. The non-cash impacts of GASB 68 – Accounting and Financial Reporting for Pensions and GASB 75 – Other Postemployment Benefit have been removed from the operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

HISTORY

Revenues increased 19.1% from \$2.71 million in 2017 to \$3.23 million in 2019 due to volume and rate increases. Operating expenses increased 42.2% from \$1.79 million to \$2.55 million during the same period. The water purchase costs went up from \$0 in 2017 to \$390,000 in 2019 after the City began to purchase water from Campbellsville in 2018. The Maintenance and Repairs costs were also higher in 2019 due to clear well cleaning, purchase of safety equipment, and repairs or replacements of aged meters. The debt coverage ratio was 2.2, 1.4, and 1.4 in 2017, 2018, and 2019 respectively.

The balance sheet reflects a current ratio of 0.8, a debt to equity ratio of 1.2, 47.5 days of sales in accounts receivable, and 1.4 months operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Total revenues will go up approximately 5% by 2021 due to previously approved retail and wholesale rate increases.
- 2) A new industrial customer, Diageo Distillery, will initiate operations in FY 2021 and contribute at least \$700,000 additional revenues each year to the City.
- 3) Water purchase costs will increase 4% by 2023 to meet the quantity requirement of the Campbellsville service agreement.
- 4) Water treatment costs will increase 3% in 2021 for the additional volume used by Diageo Distillery.
- 5) Operating expenses other than water purchase and treatment costs will increase 2% annually for inflation.
- 6) Debt service coverage is 1.3 in 2023 when full year principal and interest repayments are expected to begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

REPLACEMENT RESERVE

The replacement reserve will be 5% (\$262,000 total) of the final amount borrowed prior to principal forgiveness to be funded annually (\$13,100 yearly) each December 1 for 20 years and maintained for the life of the loan.

IX. DEBT OBLIGATIONS

| | Outstanding | Maturity |
|-------------------------------------|---------------------|----------|
| KIA Loan B08-09 | \$ 350,263 | 2030 |
| KIA Loan F15-057 | 635,784 | 2036 |
| KIA Loan F14-036 | 2,048,266 | TBD |
| KIA Loan F18-006 i.a.o. \$4,497,137 | 623,727 | TBD |
| CNB Note, 2012 | 2,758,144 | 2030 |
| CNB Note, 2013 | 51,546 | 2020 |
| | \$ 6,467,730 | |

X. CONTACTS

Legal Applicant

| | |
|---------------------|---------------------------------|
| Name | City of Lebanon |
| Address | PO Box 840 Lebanon, KY 40033 |
| County | Marion |
| Authorized Official | Gary D. Crenshaw, Mayor |
| Phone | (270) 692-6272 |
| Email | gdcrenshaw@windstream.net |

Project Contact - Applicant

| | |
|--------------|--|
| Name | Daren Thompson |
| Organization | Lebanon Water Works Company |
| Address | 120 S Proctor Knott Ave Lebanon, KY 40033 |
| Phone | (270) 692-2491 |
| Email | daren.thompson@lebanonwaterworks.com |

Project Administrator

| | |
|--------------|-------------------------------------|
| Name | Holly Nicholas |
| Organization | Kentucky Engineering Group, PLLC |
| Address | PO Box 1034 Versailles, KY 40383 |
| Phone | (859) 333-9742 |
| Email | hnicholas@kyengr.com |

Consulting Engineer

| | |
|---------|---|
| Name | James C. Thompson |
| Firm | Kentucky Engineering Group, PLLC |
| Address | 161 North Locust Street Versailles, KY 40383 |
| Phone | (859) 251-4127 |
| Email | jthompson@kyengr.com |

XI. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions.

CITY OF LEBANON F/B/O LEBANON WATER WORKS COMPANY INC
FINANCIAL SUMMARY (JUNE YEAR END)

| | Audited 2017 | Audited 2018 | Audited 2019 | Projected 2020 | Projected 2021 | Projected 2022 | Projected 2023 | Projected 2024 |
|--|-------------------------|-------------------------|-------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Balance Sheet | | | | | | | | |
| Assets | | | | | | | | |
| Current Assets | 1,315,012 | 1,106,450 | 852,765 | 912,155 | 963,900 | 1,157,898 | 1,209,575 | 1,223,542 |
| Other Assets | 14,134,160 | 14,371,184 | 16,137,911 | 15,496,240 | 19,216,676 | 23,901,761 | 23,091,734 | 22,131,570 |
| Total | 15,449,172 | 15,477,634 | 16,990,676 | 16,408,395 | 20,180,576 | 25,059,658 | 24,301,309 | 23,355,112 |
| Liabilities & Equity | | | | | | | | |
| Current Liabilities | 625,652 | 797,732 | 1,122,160 | 1,092,273 | 1,210,258 | 1,364,332 | 1,387,637 | 1,417,180 |
| Long Term Liabilities | 6,918,807 | 7,569,849 | 8,303,231 | 7,897,883 | 10,884,587 | 14,171,510 | 13,510,298 | 12,833,244 |
| Total Liabilities | 7,544,459 | 8,367,581 | 9,425,391 | 8,990,156 | 12,094,845 | 15,535,842 | 14,897,935 | 14,250,423 |
| Net Assets | 7,904,713 | 7,110,053 | 7,565,285 | 7,418,239 | 8,085,731 | 9,523,816 | 9,403,374 | 9,104,688 |
| Cash Flow | | | | | | | | |
| Revenues | 2,708,423 | 3,039,614 | 3,227,184 | 3,356,708 | 3,519,401 | 4,118,771 | 4,118,771 | 4,118,771 |
| Operating Expenses | 1,794,032 | 2,444,908 | 2,551,826 | 2,614,226 | 2,781,633 | 2,954,242 | 3,123,966 | 3,312,518 |
| Other Income | 8,723 | 19,562 | 64,137 | 39,337 | 39,337 | 39,337 | 39,337 | 39,337 |
| Cash Flow Before Debt Service | 923,114 | 614,268 | 739,495 | 781,819 | 777,105 | 1,203,866 | 1,034,142 | 845,590 |
| Debt Service | | | | | | | | |
| Existing Debt Service | 423,100 | 449,894 | 541,297 | 569,248 | 624,381 | 624,379 | 624,380 | 624,381 |
| Proposed KIA Loan | 0 | 0 | 0 | 0 | 0 | 0 | 151,375 | 151,375 |
| Total Debt Service | 423,100 | 449,894 | 541,297 | 569,248 | 624,381 | 624,379 | 775,755 | 775,756 |
| Cash Flow After Debt Service | 500,014 | 164,374 | 198,198 | 212,571 | 152,724 | 579,487 | 258,387 | 69,834 |
| Ratios | | | | | | | | |
| Current Ratio | 2.1 | 1.4 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 |
| Debt to Equity | 1.0 | 1.2 | 1.2 | 1.2 | 1.5 | 1.6 | 1.6 | 1.6 |
| Days Sales in Accounts Receivable | 48.1 | 57.7 | 47.5 | 47.5 | 47.5 | 47.5 | 47.5 | 47.5 |
| Months Operating Expenses in Unrestricted Cash | 4.8 | 1.9 | 1.4 | 1.6 | 1.6 | 2.0 | 2.1 | 2.0 |
| Debt Coverage Ratio | 2.2 | 1.4 | 1.4 | 1.4 | 1.2 | 1.9 | 1.3 | 1.1 |