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PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

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FEB 05 2015

PUBLIC SERVICE
COMMISSION

In the Matter of:

Proposed Adjustment of the Wholesale)
Water Service Rates of)
the City of Danville)

Case No. 2014-00392

**CITY OF DANVILLE'S RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

1. Refer to the Commission's June 10, 2011 Order in Case No. 2011-00171. In that Order, the Commission granted a Certificate of Public Convenience and Necessity to North Mercer Water District to, among other things, construct or install a connection to Danville's water system.

a. Has Danville entered into an agreement to provide the North Mercer Water District with wholesale water service? If so, provide a copy of the current contract.

b. Has Danville constructed or upgraded any facilities for the purpose of interconnecting with the North Mercer Water District? If so, state and identify the facilities that have been constructed, including the cost of the facilities. If Danville has not yet entered into an agreement to provide the North Mercer Water District with wholesale water service, state whether Danville is or has been in negotiations to supply North Mercer Water District with wholesale water service. Provide a summary of the negotiations, including the current status of the negotiations.

c. Does Danville anticipate construction or upgrading of any facilities for the purpose of serving North Mercer Water District with wholesale water service? If so, state and identify the facilities to be constructed, including the estimated cost of the facilities.

d. Does Danville purchase or plan to purchase water from the North Mercer Water District? If so, explain and provide a copy of the contract.

ANSWER:

a. See attached.

b. To provide a service connection location, Danville did not perform any improvements, nor did Danville expend any funds.

c. To fully and reliably utilize the connection, Danville will need to construct a project known as the Perryville Road Water Tower (estimated project cost, \$4,318,600) which is now in preliminary design. In addition to North Mercer Water District, this tower will provide service to the existing retail customers in the western portion of the Danville system and could also provide an additional connection location for the Parksville Water District. However, since the project is not currently in construction or completed it is not considered within the cost-of-service study nor is it a factor in projecting current rates.

d. Danville currently cannot receive water from the district. Any supply needs would be considered for emergencies only. Any decision related to this service will be determined after the Perryville Road tank construction.

WITNESS: Earl Coffey

2. Refer to Danville's proposed wholesale rates. Identify and explain the steps, if any, that Danville has taken to incorporate revenues and costs for a wholesale water service

agreement with North Mercer Water District in determining its cost of service and in designing rates. If no steps have been taken, explain why not.

ANSWER: Currently, North Mercer Water District will purchase water at the rate identified within the purchase contract. These rates were mutually agreeable as these were the Danville wholesale rates at the time of the agreement. We will seek to amend these charges as we move towards the construction of the Perryville Road Tower. The usage, costs and revenue will be considered in the next COS study completed by Danville.

WITNESS: Earl Coffey

3. At page 5 of his direct testimony, Earl Coffey explains that the wholesale rates are based upon the actual cost to provide service to the individual wholesale customer and states that is why the rate proposed for the Parksville Water District ("Parksville") is higher than the rate to Garrard County Water Association ("Garrard County") and Lake Village Water Association ("Lake Village"). Provide a hydraulic analysis (including a map of the system) and a demand study that supports Danville's assertion.

ANSWER: Statements made during direct testimony are with the benefit of reviewing the final cost-of-service study recommendations. Ultimately we testified the cost to provide service to Parksville is higher than the cost to serve others because the cost-of-service study indicated such. This was predicated based on the fact that Parksville pumps from the Danville system instead of "drafting" as others do.



Illustration: System map

In other words, the water towers on Parkville’s system feed their customers, but the Parkville water system is fed by pumping from Danville’s towers, as shown on the illustration.

Because of the system pipe network the Danville towers in effect operate as sumps (storage) from which Parkville withdraws. This affects Danville’s ability to manage pumping and the rates at which tanks are filled. Simply stated, when Parkville pumps begin pumping, then Danville’s effective filling rate is negatively impacted and Danville’s system then is impacted to a greater degree. When overlain against the Danville system diurnal demand flow rate of 3,602gpm (for the test year) the fill rate is immediately reduced. Specifically, Danville’s effective filling rate into the system reduces from 4,132gpm to 3,682gpm or reduced by 12% when the Parkville pumps are pumping. Further, this “effective” fill rate is at 3,682gpm while

3,602gpm is leaving (demand) the system. This extends the fill time thus increasing costs uniquely and is particularly concerning if Danville is at the lower end of storage volume. If Parksville's demand is 300,000 gallons per day, then the run time for the Parksville pumps is 11 hours.

The cost-of-service study indicated direct-assigned depreciation allocations based on the pipe network shown. The Tower Hill tower was constructed to improve service and stabilize water availability for the system and specifically to the customers between the towers shown. This is further detailed in response to Item 19.

Beyond storage, Parksville impacts 3.34% of the distribution system as shown in the attached model results. However, looking only at pressure variation is an incomplete assessment which is why we are not taking the position that pressure drop is the indicator of cost. Specifically, the KYDOW design guidelines for a water distribution system require certain pressures to be maintained as the system is expanded. A well-balanced and properly designed system will not "lose pressure" when a station such as Parksville's is activated. The system must be stable with limited pressure variation caused by demand, rather the available pressure should only vary with tank levels which is why the Danville fill rate is significant. To properly analyze impact one must consider the balance of the system.

WITNESS: Earl Coffey

4. Provide justification of allocation factors of water facilities jointly used in both retail and whole systems' cost-of-service study. Include all assumptions and work papers.

ANSWER: See attached.

WITNESS: Connie Allen

5. At page 3 of his direct testimony, Mr. Coffey refers to the requirement in Danville's Water System Master Plan that its treatment plant be renovated and the treatment plant capacity be increased to 12 million gallons per day.

a. Provide a copy of Danville's Water System Master Plan ("Master Plan") completed by Bell Engineering in 2009. Include citations in the Master Plan that discuss the treatment plant renovations. If the Master Plan is available in Microsoft Word format, copies of the Master Plan can be provided electronically rather than by paper.

b. Provide a detailed description of the renovation and expansion of Danville's water treatment plant. Include the date construction was completed and the date it was placed into service.

ANSWER: a. An electronic copy of the Danville Water System Master Plan ("WSMP") is attached.

b. For a description of the water plant Project, please find attached an electronic copy of the Preliminary Engineering Report prepared by HDR Engineers prior to design initiation. This provided both validation of the WSMP and previous studies by Danville and subsequently provided direction for the final treatment design direction. The improvements at the raw water intake and new treatment capacity or processes will be online in summer 2015. Secondary improvements such as the renovation to the existing filter building for administrative space, the additional chemical feed building and the enhanced treatment components will be complete in 2016.

WITNESS: Earl Coffey

6. In its response to Item 5(a) of Appendix B to the Commission's Order dated November 14, 2014, Danville provided a copy of the July 14, 2014 Kentucky Infrastructure Authority ("KIA") Conditional Commitment Letter (F13-011 (Increase #2)).

a. On page 1 of the letter is the following statement: "The total cost of the project shall not exceed \$28,608,171 of which the Authority loan shall provide \$12,467,849 of the funding." However, in the commitment section at the bottom of page 1 of the letter, paragraph 1 states, "The Authority project loan shall not exceed \$4,000,000." Provide an explanation for the apparent discrepancy between the two statements.

b. Paragraph 2 on page 2 of the letter states that the loan shall contain principal forgiveness in the amount of \$400,000 and that the actual loan amortization and forgiveness amounts will be based upon the "actual project costs drawn from the Authority." Provide a copy of the final KIA amortization schedule that includes the principal forgiveness.

c. Confirm that the KIA loan will bear an interest rate of 1.75 percent per annum as listed in KIA loan, paragraph 3. If the actual KIA interest rate is different, provide written documentation from KIA of the actual interest rate.

d. In Attachment A there are two schedules, Project Budget and Project Funding. Provide updated schedules to reflect the actual cost and funding of the treatment plant renovation and expansion project.

ANSWER: (a) KIA had two separate loan numbers for this project. It has committed total loans in the amount of \$12,467,849, of which \$4,000,000 is from KIA Loan Number F13-011. It appears that the statement in the commitment section at the bottom of page 1 of the letter, paragraph 1 may only be in reference to Loan Number F13-011. Otherwise, KIA may have

simply failed to update the \$4,000,000 figure in that sentence.

(b) KIA has not provided a copy of the final amortization schedule. Currently, KIA is treating the loan as a construction loan, and interest is paid on the draws that are made.

(c) Yes, the KIA loan will have an interest rate of 1.75 percent per annum (plus a loan servicing fee of 0.25% of the annual outstanding loan balance).

(d) There are no changes to the Project Budget and Project Funding schedules that are reflected in Attachment A of the Conditional Commitment Letter (F13-011 (Increase #2)).

WITNESS: Michele Gosser

7. Provide a copy of the Bond Ordinance for Danville's 2014 United States Department of Agriculture, Rural Development ("USDA-RD") bonds.

ANSWER: See attached.

WITNESS: Michele Gosser

8. In its response to Item 5(d) of Appendix B of the Commission's November 14, 2014 Order, Danville provided a November 24, 2014 electronic correspondence from Denise Pitts to Michele Gosser stating that the estimated annual debt service will be \$747,912. Confirm that the actual KIA debt service is \$747,912. If that figure cannot be confirmed, provide the actual KIA debt service.

ANSWER: Yes, the debt service that KIA has indicated that this project will carry is \$747,912.

WITNESS: Michele Gosser

9. In its response to Item 5(d) of Appendix B of the Commission's November 14, 2014

Order, Danville provided two bond amortization schedules from USDA-RD totaling \$13.6 million in principal. Confirm that these are the actual USDA-RD bond amortization schedules and not estimates. If they are not the actual schedules, provide copies of the actual USDA-RD amortization schedules.

ANSWER: This is the information that was provided by USDA-RD to the City of Danville. No other amortization schedules have been provided by USDA-RD to the City. A final schedule will be provided when the loan is closed. That notwithstanding, the City is currently paying interest on the amount of withdrawals it has taken from financing. The City has already paid interest installment payments of \$167,733.33 and \$136,000.00 on its RD financing.

WITNESS: Michele Gosser

10. In its response to Item 8 of Appendix B of the Commission's November 14, 2014 Order, Danville identified all shared costs and how these costs are allocated to the "utility fund."

a. Provide Danville's definition of the term "utility fund."

b. Danville states that it has used the following formula to allocate overhead, rental, indirect, and miscellaneous expenses to the utility fund: 20.85% of Legislative and Executive expenses+ 35.24% of Finance and Administrative expenses
+ 5% of Utility Operational Revenue.

(1) Provide the analysis, study, or documentation to support the above allocation formula used by Danville.

(2) Identify the amount of the costs allocated to the utility fund by this formula that are allocated to Danville's water division. Provide the analysis, study, or documentation to support the above allocation of the formula costs to Danville's water division.

c. Danville identifies several shared employees and the estimated time each spends for the utility system. For the shared employees listed in the table below, identify the amount of time/salary that is allocated to Danville's water division. Provide the analysis, study, or documentation to support the allocation estimates to the utility system and to the water division.

	<u>Employee Position</u>	<u>Utility System</u>
1)	City Manager	50%
2)	City Engineer	80%
3)	Admin. Assistant to City	80%
4)	City Clerk	40%
5)	City Secretary	30%
6)	City Financial Officer	50%
7)	Finance Officer	50%
8)	Accounts Payable/Payroll Clerk	50%
9)	Accounts Receiving/Billing	85%
10)	Full-time Finance Clerks	85%
11)	Part-time Finance Clerks	80%

ANSWER:

a. The City's Utility Fund consists of the Water and Sewer utility accounts only. Direct expenses are broken down between the water treatment plant, sewer treatment plant, water distribution, sewer distribution, and the Perryville plant.

b. (1) The City of Danville has used this formula for numerous years, dating at least to a 2001 cost-of-service study. A page from that 2001 cost-of-service study is attached. The City has not changed this formula for the purposes of the current rate because, to the extent it may have fluctuated over the years, such changes would only serve to increase the percentages allocated to the Utility Fund. As described in more detail below, the employees whose salaries are allocated to the fund spend significantly more time handling matters for the utility department than their

allocated salary would otherwise suggest.

(2) For FY 2013:

Legislative – $765,452.56 * 20.85\% = 159,596.85$ – direct management of utility department plus commissioners

Finance – $633,932.76 * 35.24\% = 223,397.90$ – billing, collecting and processing of all bills and customer work orders. Customer service is also included in this and it pays all bills, payroll, manages debts, accounting and auditing services. This department buys all billing and collecting supplies and software.

Operational revenue – $7,583,824.37 * 5\% = 379,191.21$ – Normal charge for non-direct, general rental and miscellaneous expenses.

Total for Utility Fund – 762,185.96. (Actually charged by the City 762,185.98)

The Utility Fund is then allocated based on a 55/45 split between the Water and Sewer departments, which is discussed in response to Item 14(i) below.

c. The employees that are listed are all paid directly by the City, and their time allocation was estimated by the City Manager, City Engineer, and City Chief Financial Officer. The water system pays these expenses by paying the interfund charge listed in response to Item 10(b)(2).

Legislative pays the City Manager Salary, The City Engineer Salary, the Admin. Assistant to City Engineer, the City Clerk, and the City Secretary along with their taxes and benefits. In other words, only 20.85% of these employees' salaries are reimbursed from the Utility Fund.

Finance pays the City Chief Financial Officer, Finance Officer, Accounts Payable/Payroll Clerk, Accounts Recivable/Billing Clerk, the full-time finance Clerks and the Part-time Finance Clerks. Only 35.24% of these employees' salaries are reimbursed from the Utility Fund.

WITNESSES: Michele Gosser and Earl Coffey

11. Refer to the spreadsheet "Establishment of Rate-Funded Capital" filed January 5, 2015, by Danville.

a. Danville states that the American Water Works Association M-1 Manual "uses an equation of 2% of the prior year's gross plant investment to establish a funding level for the rate-funded capital improvement program." Is Danville referring to page 35 of the M-1 Manual, where a 2 percent assumption is used in an example?

b. Explain how a 2 percent assumption used in an example in the M-1 Manual documents or supports Danville's proposed rate-funded capital of \$580,000.

c. Provide a schedule listing Danville's capital investment for fiscal years 2009 through 2014 and identify the amount of capital investment that was funded by current revenues and the amount funded by debt. Exclude the treatment plant renovation and expansion from the schedule.

d. Identify the capital projects that the Danville water division has included in the budgets for fiscal years 2014 and 2015.

ANSWER:

a. No, at least not according to the Sixth Edition of Manual M-1. The example to which Connie Allen refers is on page 40 of the Sixth Edition. The reference may be the same content on a different page of a previous edition.

b. The rule of thumb of setting rate-funded capital equal to annual depreciation and the calculation of rate-funded capital using two percent of plant in service (or gross plant investment) are related. The latter assumes an average useful life for all capital assets of 50 years.

Additionally, a straight-line method for calculating depreciation is also assumed. Then, annual depreciation is equal to 2 percent of plant in service. Further, the investment in capital, whether by funding depreciation or by budgeting for rate-funded capital improvements, fulfills the Seller's obligation to recover the replacement and repair expenses of the utility's capital assets, ensuring those assets provide continued and uninterrupted potable water service to the customers.

Danville's long-term goal is to budget rate-funded capital at a level of, at least, annual depreciation. Danville is programming rate-funded capital at a level lower than their long-term goal for two main issues:

- because so many of Danville's capital assets have been fully depreciated, the addition of the water treatment plant additions and improvements creates a plant in service approximately 2½ times the test year number. Danville wishes to gradually achieve their desired capital funding goal rather than impose that increased financial burden on the customers all at once.
- several unknowns exist at the time of the cost-of-service study:
 - GCWA's water demand may decrease in support of a new Lancaster water treatment plant or may decrease in the absence of a new plant;
 - new wholesale demand may change significantly. The implementation schedule for new regulation may increase dependency on the Danville plant over the next three to five years. Demand may increase also related to water availability;
 - unforeseen operational costs of the new water treatment processes; and,
 - possible unforeseen cost savings of the new processes.

Both issues, along with the realization that Danville will perform a new cost-of-service study within the next 2 to 3 years which will more accurately allocate the costs associated with fire protection for the industrial customer classes, give reason to be cautious in near-term efforts

to meet the funding goals of Danville's water utility. In other words, maximizing the rate set as a result of this cost-of-service study might result in the need for a decreased rate resulting from the next cost-of-service study. Danville wants to establish cost-based principles but prefers to be cautious in raising rates. So, even though Danville is not fully funding depreciation or budgeting rate-funded capital at the generally-accepted level (2% of plant in service), Danville included and acknowledged those numbers (\$1,041,000 and \$947,331, respectively) to show that the rate-funded capital number chosen for the cost-of-service study was within the acceptable range and to maintain the highest level of transparency in their rate-setting procedures.

c. See attached. In addition to the information requested and attached, it is also important to recognize other significant capital investments made by the City of Danville from 2002-2008, for which the wholesale customers have not recognized a rate increase.

Miox Chemical Study	1,663,735.66
Compliance Study	611,660.80
SCADA/Electrical upgrade	540,868.00
Carbon Silo Project	<u>449,124.22</u>
Total of these items	3,265,388.68

d. See attached.

WITNESS: Michele Gosser

12. Provide any case citations in which this Commission has used "Rate- Funded Capital" in establishing a wholesale rate for a city water utility.

ANSWER: The City of Danville has not conducted an exhaustive search for Commission decisions approving municipal wholesale water rates. In Case No. 2008-00250, the Frankfort Electric and Water Plant Board (“FEWPB”) proposed wholesale water rates that included “Capital Projects,” which is the another term for rate-funded capital. See Gannett Fleming’s Cost-of-Service Study, Case No. 2008-00250 (filed Aug. 4, 2008 and amended pages filed Aug. 27, 2008). In its final order, the Commission found that the depreciation expense should be used in lieu of the capital projects expense. See Frankfort Elec. and Water Plant Bd., Case No. 2008-00250 at 5 (Apr. 6, 2009)

In response to Item 13 below, Danville has provided a revised cost-of-service study that substitutes depreciation expense for rate-funded capital, which appears to be consistent with the holding in the FEWPB case. This change would result in significantly higher rates for wholesale customers.”

WITNESS: Connie Allen

13. Provide a revised cost-of-service study substituting depreciation expense for the “Rate-Funded Capital.” Provide an electronic copy of the requested cost-of-service study in Microsoft Excel format.

ANSWER: The revised cost-of-service study is attached. In substituting depreciation for rate-funded capital, consider the following:

The new annual depreciation associated with the new treatment plant capital was calculated to be \$1,041,376 based on the estimate from Earl Coffey that only 47 percent of the Work would be complete the first year. Therefore the new annual depreciation calculated for the second year and for the remainder of the new capital’s useful life was \$1,783,530. However, the depreciation substituted in the cost-of-service study is the lower number of \$1,041,376. The lower number is

used largely because Danville is projecting a follow-up cost-of-service study in the next 2 to 3 years.

In order to equitably assign the existing annual depreciation costs to the customer classes, a distribution factor was developed. The factor (ACCM DEP) was developed by calculating the customer class assignment percentages from the accumulated depreciation used in calculating the utility rate base.

The new annual depreciation is associated with the new water treatment capital so it was assigned using the "as treatment" factor.

WITNESS: Connie Allen

14. Refer to the "Pro Forma Adjustments to Test-Year Expenses" filed January 5, 2015 by Danville.

a. For the following pro forma adjustments provide supporting work papers, calculations, and assumptions:

(1) Operation Labor	\$ 104,841
(2) Chemicals	\$ 62,610 (3)
Operating Supply & Expense	\$ 31,955 (4)
Power Cost	\$ 78,611

b. Provide the dates the Class 4 and the uncertified employees were hired.

c. Provide the dates the "COLA" pay raises were granted in fiscal year 2014 and will be granted in fiscal year 2015.

d. Provide the referenced PAC bid and include a comparison of the old chemical costs to the new costs.

e. There are adjustments to chemical expense for "additional polymer for sludge" and for "KMno4 for intake." Provide documentation to support both of the proposed adjustments.

f. Provide documentation to support Danville's assumption concerning the relationship between cost and horsepower.

g. Provide documentation to show the historic relationship between horsepower at Danville's treatment plant and its electric consumption.

h. For each expense listed below, provide a schedule listing each expenditure recorded in this account, a detailed description of each expenditure, and a copy of the supporting invoices:

(1)	Maint. of Distribution Mains	\$ 76,868
(2)	Maint. of Meters	\$ 27,321
(3)	Maint. of Hydrants	\$ 26,206
(4)	Outside Services	\$ 74,373
(5)	Property Insurance	\$ 83,591

i. Provide a complete and detailed description of \$62,382 sales tax portion of the interfund and the 55/45 split.

ANSWER:

a.-g.: Operation Labor – The City Commission has authorized the addition of one Class IV operator for the Water Treatment Plant. This position needs immediate filling. In addition to this position, we expect to hire another operator in FY2016 and FY2017, or as the plant becomes fully operational. We hope to promote a current trainee to the second Class IV position in May of 2015

and then hire a trainee as a newly authorized position. The pro-forma adjustment reflects costs associated with this workforce adjustment. We are actively seeking to fill the first position. In addition to these hires, the labor costs have increased by two separate COLA to the wage rate schedule. These changes became effective on July 1st of 2013 and 2014.

Chemical Costs – An adjustment was made based on known changes to Chemical costs related to current pricing and also new chemicals.

Danville is currently feeding the following chemicals:

- Delpack 801
- Catatonic polymer
- Dry Hydrated Lime
- Powder Activated Carbon
- Hydroflourosilicic Acid
- Miox
- Potassium permanganate

Danville will be feeding the following additional chemicals:

- Corrosion Inhibitor (corrosion control)
- Ferric Sulfate (coagulant, pH adjustment)
- Caustic Soda 15% (pH adjustment)
- GAC (organic removal)
- Sodium permanganate

The addition of Sodium Permanganate will occur at the raw water intake. The benefits of this chemical are discussed in the HDR PER provided. The sodium permanganate can be fed in liquid form which will aid pre-treatment during certain periods of the calendar year.

An adjustment was made based on projected unit costs for each chemical and anticipated usage. In addition, the City will be using a polymer to aid in the dewatering of sludge. This is a new process separate from the construction of the plant. Sludge dewatering requires the addition of a polymer (approx \$4,005/tote/month for 6 months each year). The pond is five acres and is shown in the photo. The cat tails must be maintained with specific treatment in order to remove

the sludge. The dredge is shown which increases operational expenses. The DOW has commented on the requirement to remove and dispose of the sludge properly. Failure to comply will result in a Notice of Violation which may include penalty fines.



While pricing for some chemicals has been stable, chemicals used in process seeing an increase since the test year include:

<i>Chemical</i>	<i>Current \$</i>	<i>FY13 \$</i>
Mississippi Rotary Lime	\$11.16/55lb bag	\$9.38/55lb bag
Powdered Activated Carbon	\$48/50lb bag	\$38/50lb bag
Bulk PAC	\$0.679/lb	\$0.564/lb

Operating Supply and Expenses – The expenses were increased specifically to address the needs required to manage the new building footprints for the plants. In addition, an adjustment was made to provide operational supply for the sludge removal process, again not related to the plant construction, but occurring during the same period.

Power costs – The City is providing the estimate of power costs delivered to Danville from

the consulting firm HDR, the plant design firm. This firm relied upon comments from both sub-consultants (electrical equipment suppliers and technicians) and in-house personnel (electrical engineers) to perform the estimate below:

Calculator for Additional Power Costs City of Danville WTP							
New Pumps /Fixtures/Facilities							
No	Watt	Hp	Hrs/ Day	KW-H/ day	KWH /Ann	KWH Cost	Total Cost
60	120		16	115.2	42,048	\$ 0.075	\$ 3,153.60
1		100	12	896	326,866	\$ 0.075	\$ 24,514.93
4		2.5	12	90	32,687	\$ 0.075	\$ 2,451.49
1		50	1	37	13,619	\$ 0.075	\$ 1,021.46
							\$ 75,990.64
							\$ 107,132.11
							New Exterior and Interior Lighting Fixtures - Exist Buildings
							GAC Pump New
							Chem Feed Equipment New
							Blower for Air Water BW
							New Space Conditioning (see below)
							Annual Power Cost for New Facilities
Existing WTP Building Power Costs							
Lex Ave Bill	KW-H/Mo	KW-H/ day	KWH Cost	KWH Cost	Est Ann KWh	Est Annual Cost	
	173,800	5993	12,450	\$ 0.07	2,187,483	\$ 156,698.28	
Estimated Contribution From Ex Pump/Chem Feed							
No	Watt	Hp	Hrs/ Day	KW-H/ day	KWH /Ann	KWH Cost	Total Cost
1		250	20	3731	1,361,940	\$ 0.075	\$ 102,145.52
1		50	2	75	27,239	\$ 0.075	\$ 2,042.91
8		2.5	20	299	108,955	\$ 0.075	\$ 8,171.64
6		1.5	16	107	39,224	\$ 0.075	\$ 2,941.79
							\$ 115,301.87
							HSP
							BW Pumps
							Flocculators - RM
							Chem Feed Systems
Building Per Square Foot Metric for Heating - Exist Footprint							
Total Power Cost -Estimated 2014						\$ 156,698.28	
Less Pumps/Chemical/Treatment Systems						\$ (115,301.87)	
Estimated Power for Environmental Control						\$ 41,396.41	
Existing Building SF						8800	
Annual Cost per SF for Environmental Control						\$ 4.70	
New Building SF (additional SF Gained)						16,154	
Estimated Annual Cost/ SF for Environmental						\$ 4.70	
Estimated Annual Cost for Environmental - New Bldgs						\$ 75,990.64	

h. See attached.

i. Sales tax is paid on what is collected from commercial and industrial customers. The 55/45 split is the allocation of expenses from the general fund to the Utility Fund that is distributed to Water and Sewer operations. Fifty-five percent of the expenses are allocated to water operations

and 45% are allocated to sewer operations. This allocation is based on income projections, but in FY2013, water operations totaled 57% of the utility system's revenue. In addition, there are approximately 10,500 water customers and 7,000 sewer customers, which represents a 60/40 split. Thus, the 55/45 allocation benefits water customers in the calculation of rates.

WITNESSES: Earl Coffey and Michele Gosser

15. Refer to the Direct Testimony of Connie Allen regarding the peaking factors beginning on page 5.

a. Provide a copy of the information reviewed in determining the appropriate factors used.

b. In her testimony on Page 5, line 16, Ms. Allen states, "2.00- Used for Parksville (wholesale customer) and is calculated based on the pumping capacity of the station that is used to obtain water from the Danville system. The typical diurnal curve is not applicable in Perryville's [sic] case, the pumps are either on or *off* and, when pumping at capacity (450 gpm), constitute the potential peak daily demand. The average daily demand for Parksville (333,000 gallons) was calculated based on test year sales."

(1) Explain these statements.

(2) For the pumping station that is used to obtain water from the

Danville System:

i. Describe the pump station.

ii. Identify who operates and maintains the pump station that

Parksville uses to get water from the Danville System.

iii. Explain in detail how this impacts Danville's system.

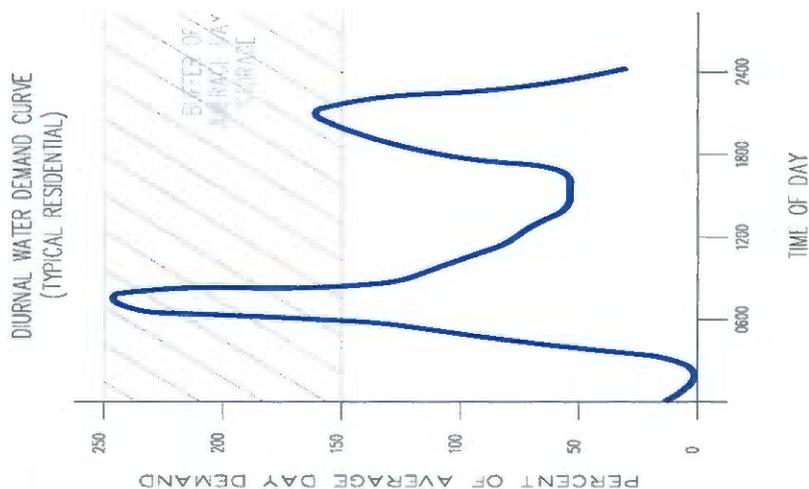
ANSWER:

a. Attached is a chapter from Water Science & Technology, titled Water Supply by S.A. Lucas, et al, 2010. Among many other places, it is what Connie Allen used to identify a diurnal demand curve. (See Figure 3 on page 5 of the document.)

Ms. Allen assumed the wholesale customers under PSC's regulation, as well as Hustonville, would have, at a minimum, effective storage volumes equal to an average daily demand, and based that on 807 KAR 5:066, Section 4 (4).

The specifics of the Parksville pump station are included in the email from Chris Stewart to Earl Coffey dated 7 August 2014. A copy of the email, as forwarded to Connie Allen by Earl Coffey on 8 September 2014, is attached. Additionally, notes from a phone conversation between Earl Coffey and Connie Allen regarding information on the pump station, where Earl Coffey was relaying information he had obtained from Jerry Feathers, is also attached.

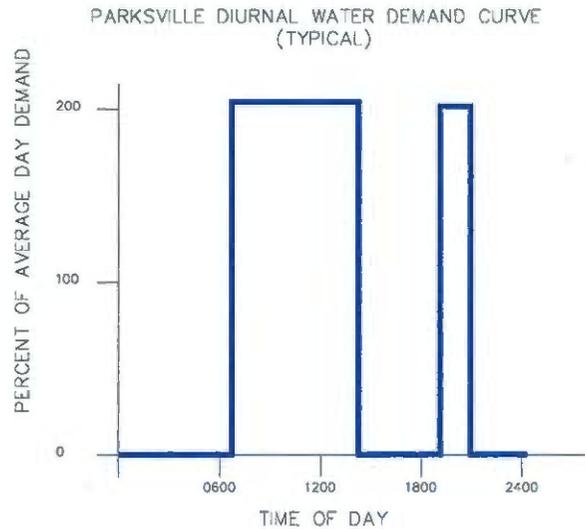
b. Of Danville's wholesale customers ("Buyers"), all except Parksville take water from Danville in response to customer demand, routed through the Buyers' own elevated storage tanks. With the exception of the few customers between the Buyers' master meters and their tanks, the daily diurnal demand curve is buffered by the capacity of the tanks. The effect of the Buyers' peak demands (except Parksville) upon Danville's water system is illustrated below:



Because the Buyers' elevated storage is at least equivalent to an average day's demand (80 KAR 5:066 Sec 4, (4)), and is situated between the Buyers' customer demand and Danville's distribution system, the storage acts to buffer the effect of the peak demands from the Buyers.

In the case of Parksville, however, the demand is imposed in the form of a pumping station with Danville's distribution system connected directly to the suction side of the pumps. Danville does not experience demands from Parksville as a buffered diurnal curve like the other Buyers. Instead, Parksville either takes no water at all, or takes water at the rate of the pumps in the station. Whereas a peak demand from one of the other Buyers can be described as 150% of average demand (250% peak less 100% buffer), Parksville's demand is maximum pumping rate, 450 gallons per minute (gpm), with no buffer between the point it is imposed and Danville's system. Parksville's average daily demand is 330,000 gallons, which equates to 229 gpm. The pump rate is 197%, or approximately 200% of the average demand. Therefore the peaking factor used in the

CAP-1 allocation is 200%, or 2.0, for Parksville and 150%, or 1.5 for all other wholesale customers.



(2) i. The City of Danville does not own, operate, or maintain the station. As such, it does not have complete knowledge of Parksville's pumping station. The City believes that Parksville's station is a below ground station with two identical pumps. The peak flow from the station is 450gpm.

ii. Parksville owns and operates the station used to fill its system.

iii. The impact is described in response to Item 3.

WITNESSES: Connie Allen and Earl Coffey

16. Refer to the Direct Testimony of Connie Allen, regarding the rate design at page 9.

Provide all correspondence, internal memoranda, electronic mail messages, and notes in which the rate design is discussed between Danville and Salt River Engineering.

ANSWER: See attached.

WITNESS: Connie Allen

17. Refer to the cost-of-service study Danville provided in response to Item 21 of Appendix B of the Commission's Order dated November 14, 2014. This cost-of-service study identifies a Tower Hill Water Tank that is stated to serve Parksville Water District.

- a. Provide the date when this Tower Hill Water Tank was built.
- b. Provide the capacity of the Tower Hill Water Tank.
- c. Provide all Board Meeting Minutes where the Tower Hill Water Tank was discussed and approved.

ANSWER:

- a. The tower was brought online in 1987.
- b. The tank stores approximately 3 million gallons. The diurnal use of the tower is approx. 1,350,000 gallons. 1,650,000 gallons is for both fire protection and system pressure normalization.
- c. See attached.

WITNESS: Earl Coffey

18. Refer to Danville's response to Item 21 of Appendix B of the Commission's Order dated November 14, 2014, specifically, the Distribution Section of the narrative of the cost-of-service study. In the discussion, it is stated that in this context the

'customer component' of the calculation refers to the commodity component." Are there distribution main costs allocated to the wholesale customers?

a. If so, provide a detailed explanation as to why distribution main costs should be allocated to the wholesale customers.

b. If there are distribution costs allocated to the wholesale customer, indicate whether Danville is aware that in previous rate case proceedings, the Commission has expressed concerns regarding expenses associated with distribution mains 10-inch or smaller being allocated to the wholesale customers.

ANSWER:

Yes, a portion of the distribution costs is allocated to Danville's wholesale customers. The technique used to determine the percentage of distribution main costs to allocate to the functional categories (for subsequent allocation to customer classes) is the distribution main analysis promoted by AWWA in their rate-making seminar. However, in her description of AWWA's distribution main analysis submitted in the Item 21 response to the 14 Nov 14 Commission's Order, Connie Allen misspoke. In answering items (a) and (b), it is expected that the erroneous description will be clarified/corrected.

a. All customers of Danville's distribution system benefit from distribution lines in the inventory:

- small diameter lines often complete loops within water distribution systems;
- looping dead end lines serve to normalize pressure and avail increased flow volumes;

- looping dead end lines increases water quality by encouraging turnover;
- grids formed by the distribution lines are called upon to move water in a

supplemental role during periods of peak demands and when the larger lines are valved-off for maintenance or repair;

- distribution lines feed the direct customer base which contributes to the economy of scale the wholesale customers enjoy.

AWWA identifies three cost components of distribution mains. The discussion is included in the AWWA participant manual filed contemporaneously herewith in conjunction with a Petition for Confidentiality. Page (or slide) S6-10 of the manual includes an illustration of a cross-section of a water pipe. Three sub-pipes are shown; their functions are customer, capacity and fire protection. The theory is that a portion of the pipe exists to serve customers that basic service. AWWA assigns that portion of the pipe to the "actual customer (AC)" category (this is where Ms. Allen misspoke, before). The pipe area immediately surrounding the customer function is the portion of the pipe that is designed to carry peak domestic flows. The costs associated with that portion of the pipe are assigned to the "capacity (CAP)" category. The remaining area of the pipe is the area available for fire fighting and is assigned to the "fire protection (FPF)" category.

Whereas wholesale customers do not participate in actual customer (AC) and fire protection (FPF) costs, every customer participates in capacity (CAP) costs, according to their CAP-1 factor. AWWA assumes 2-inch pipe is the smallest installed and 6-inch pipe is required for carrying peak domestic flows. The costs associated with 2-inch pipe is assigned to the AC category, the costs for 2 through 6-inch is assigned to CAP and the costs of the larger diameters to FPF. The equations are included in the participant manual. AWWA's distribution analysis recognizes a waterline serves multiple functions and, therefore, has multiple cost components.

The spreadsheets included in the cost-of-service study include a distribution main analysis. The analysis provides an equitable and somewhat expedient way to assign costs of distribution

lines to those customer classes who cause the costs or benefit from the individual functions. In Danville's case, the capacity component is 50 percent. In other words, the wholesale customers participate in only 50 percent of the distribution main costs.

In summary, Danville maintains that costs associated with distribution mains are eligible for allocation to all customers, including wholesale customers. Additionally, Danville realizes that a distribution main serves functions and has associated cost components for which wholesale customers are not responsible. Using AWWA's methodology, Danville has assigned 50 percent of the total cost associated with distribution mains to its wholesale customers in accordance with, and further allocated by, each customers' CAP-1 factor.

b. Yes, Danville is aware that in previous rate case proceedings, the appropriateness of assigning costs associated with distribution lines to wholesale customers has been a major issue. The City is aware, specifically in the case of Frankfort Electric and Water Plant Board, that the assignment of costs associated with distribution mains 10 inches or smaller were allowed to be allocated to wholesale customers.

In Case No. 2008-00250, the Commission found that it was "not unreasonable to allocate to the wholesale customers the costs associated with mains that are less than 10 inches in diameter and that do not directly serve the wholesale customers." The reason the Commission ruled differently in the Frankfort case was that Frankfort used a methodology (base extra-capacity) where "costs of service are generally separated into base costs, extra capacity costs, customer costs, and direct fire protection costs." The Commission further explained that, after the costs had been categorized, Frankfort used "allocation factors to determine the proportional share of the costs assigned to each customer classification." Frankfort's allocation factors took into account the footage for transmission and distribution mains and the maximum hour and maximum day demand

characteristics of the wholesale user class.

Additionally, the Commission accepted the assertions by Frankfort that:

- some wholesale customers are directly served through meters connected to lines smaller than 10 inches in diameter;
- looped lines (generally 10 inches and smaller in diameter) in Frankfort's system increase the delivery capabilities;
- looped lines increase the water quality by limiting dead ends; and,
- looped lines increase the reliability of service.

In comparing Danville's case with Frankfort's 2008 case, we would anticipate the same conclusion regarding the distribution mains 10 inches in diameter and smaller. Considering the COS methodology, both Frankfort's and Danville's (Gannett Fleming and Salt River Engineering, consulting) are generally-accepted methodologies supported by the AWWA. Both have the same costs of service, base (commodity) costs, extra capacity (capacity) costs, customer costs and fire protection costs. Both recognize base costs associated with total quantity on an average rate of use and capacity costs for above-average usage. Both acknowledge very limited customer costs and no allocation for fire protection costs. Both methodologies use allocation factors, the critical aspect being the relationship of peak flows to average flows. Both differentiate between transmission and distribution functions and both employ an inventory based on pipe size.

The operational assertions by Frankfort read almost identical to those by Danville in 18.a, above. In addition to the benefits listed in 18.a., several of Danville's wholesale master meters are located in lines 10 inches in diameter or smaller including meters for Lake Village Water Association and the City of Hustonville.

Because Danville's methodology is similar to Frankfort's and the two systems have

virtually identical distribution characteristics, we would encourage the Commission to allow participation in the costs associated with the distribution mains by Danville's wholesale customers.

WITNESSES: Connie Allen; Earl Coffey.

19. Refer to the January 6, 2015 electronic correspondence from Todd Osterloh to Ann Ramser containing the Microsoft Excel spreadsheet titled, "explanations."¹ The tab "Rate Base Explanations" has a note #2 "Direct assignments for the distribution reservoirs include an amount associated with P&JC (see calculation in box, above) and an allocation of the Tower Hill Water Tank to Parksville, Hustonville and the industrial customers. The total original cost of Tower Hill Water Tank was 1,743,263.27, of which 65% is allocated to direct assignments (per EC). Of the 65% (1,133,121), Parksville is allocated 35%, Hustonville 38% and industrial customers 26% (EC). Therefore, Parksville is allocated \$396,592, Hustonville \$430,586, and industrial customers \$305,943."

a. Explain in detail how these allocations were derived. Provide all work papers, state all assumptions, and show all calculations used to derive the response.

b. The note states that the Tower Hill Water Tank assignments were "per EC." Explain the "EC" notation.

ANSWER:

a. The towers are designated to three basic uses. Recall Tower Hill stores 3,000,000 gallons. Of this total, approximately 450,000 gallons are Fire Protection (15%), 1,235,000 is required for system stabilization, and 1,315,000 gallons for diurnal demand (85% =

¹ This document was filed in the record of this case on January 5, 2015.

1.2mg+1.35mg). For the study test year and when considered against retail customers the three large customers utilize approximately 65% of the diurnal demand. (Please refer to illustration in response to Item 3. There are approximately 20 Industrial customers, Hustonville, and Parksville in the service area highlighted.) This is summarized and percentages established as shown:

Total Avg Day use (PWD, Hustonville, Industrial)	855,175 gallons (65% of Diurnal)
Parksville Water District	303,550 gallons (35% of avg day)
Hustonville	326,600 gallons (38% of avg day)
Industrial	225,000 gallons (26% of avg day)

b. "EC" stands for Earl Coffey.

WITNESS: Earl Coffey

Respectfully submitted,



M. TODD OSTERLOH
CHARLES D. COLE
STURGILL, TURNER, BARKER & MOLONEY, PLLC
333 W. Vine Street, Suite 1400
Lexington, Kentucky 40507
Telephone No.: (859) 255-8581
tosterloh@sturgillturner.com

ATTORNEYS FOR CITY OF DANVILLE

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served via U.S. Mail, postage prepaid, to the following on February 5, 2014:

Caywood Metcalf
214 Stanford Street
Lancaster, Kentucky 40444

Jeffrey W. Jones
Jeffrey W. Jones, PLLC
1000 East Lexington Avenue, #3
Danville, KY 40422



COUNSEL FOR CITY OF DANVILLE

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COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

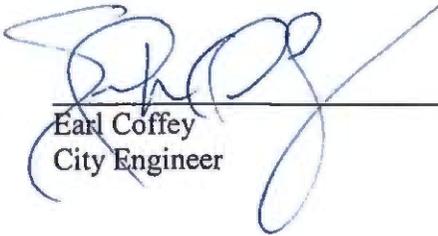
In the Matter of:

Proposed Adjustment of the Wholesale)
Water Service Rates of) Case No. 2014-00392
the City of Danville)

**CERTIFICATION OF RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

This is to certify that I have supervised the preparation of the City of Danville's responses to the requests for information contained in the Commission Staff's First Request for Information, and that the responses are true and accurate to the best of my knowledge, information, and belief after reasonable inquiry.

Date: 2/5/15



Earl Coffey
City Engineer

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Proposed Adjustment of the Wholesale)
Water Service Rates of) Case No. 2014-00392
the City of Danville)

**CITY OF DANVILLE'S RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

Response to Request No. 1

WHOLESALE WATER PURCHASE CONTRACT
(PSC REGULATED CONTRACT)

This contract for the sale and purchase of water (hereinafter, "Agreement") is made and entered into this 28th day of March, 2011, by and between the City of Danville, Kentucky, a municipal corporation of the third class, 445 West Main Street, Danville, Kentucky 40422 (hereinafter, "Seller" or "City"), and North Mercer Water District (hereinafter, "District" or "Purchaser"), a rural water district organized pursuant to Chapter 74 of the Kentucky Revised Statutes, Post Office Box 79, 108 Main Street, Salvisa, Kentucky 40372;

W I T N E S S E T H

WHEREAS, the Seller owns and operates a water supply distribution system and desires to sell water to the Purchaser, as a wholesale customer, upon the terms and conditions of this Agreement; and,

WHEREAS, the Purchaser desires to purchase water from the Seller upon the terms and conditions of this Agreement; and,

WHEREAS, this Agreement has been approved by the Board of Commissioners of the City of Danville, Kentucky, in Resolution No. 2011-03-28-01 and by the Board of Commissioners of the North Mercer Water District, in Resolution dated April 13, 2011 ;

NOW, THEREFORE, in consideration of the foregoing and in further consideration of the mutual promises and agreements contained herein, the parties agree to the following terms and conditions:

1. The term of this contract shall be for a period of 40 years, commencing on the date on which this Agreement is filed with and approved by the Tariff Branch of the Kentucky Public Service Commission, and ending on the fortieth anniversary of the commencement date.

2. The Seller agrees to furnish the Purchaser, at the point of delivery specified and set forth on Addendum A attached hereto and incorporated by reference, treated water suitable for human consumption and meeting applicable purity and safety standards, in a quantity not to exceed 150,000 gallons per day/4,650,000 gallons per month.

3. If a greater pressure than that normally available at the point of delivery is required by the Purchaser, the costs and means of providing such greater pressure shall be the responsibility of the Purchaser. It shall be the expense and the responsibility of the Purchaser to (a) construct and maintain any line or lines beyond the point of delivery, (b) purchase and install a meter pit, water meter, backflow preventers, and necessary appurtenant facilities consistent with the specifications directed by the Seller's City Engineer, and (c) provide the hook-up or connection at the point of delivery, but subject to the supervision and the approval of the Seller's City Engineer.

4. The water purchased and sold under this agreement shall be delivered by Seller at the above-stated point of delivery and shall pass through and be measured by a meter capable and sufficient to measure accurately the quantity of water so delivered. It shall be the expense and responsibility of the Purchaser to furnish, install, and maintain the necessary metering equipment, as determined by the Seller's City Engineer, and any required devices of standard types for properly measuring the quantity of water delivered to the Purchaser and the responsibility of the Seller to calibrate and test for accuracy such metering equipment annually, or at such other times that are reasonably requested by either party. A meter registering not more than 2% above or below the test result shall be deemed to be accurate. The previous readings of any meter disclosed by tests to be inaccurate shall be corrected for the six (6) months previous to such tests in accordance with the percentage of inaccuracy found by such tests. If any meter fails

to register for any period, the amount of water delivered in the corresponding period immediately prior to the failure shall be considered the amount consumed, unless the Seller and Purchaser shall agree upon a different amount. The metering equipment shall be read on a regular basis, but not less than once every month. An appropriate official or representative of the Purchaser shall at all reasonable times have access to the meter for the purpose of verifying its readings.

5. In accordance with City of Danville Code of Ordinances (hereinafter, "CDO") section 18-79(2), the Purchaser agrees to pay to the Seller for water delivered in accordance with the following rate schedule based on monthly consumption:

QUANTITY (CU FT)		RATE (\$/100 CU FT)
First	20,000 cu ft	\$1.68
Next	80,000 cu ft	\$1.44
Next	100,000 cu ft	\$1.20
Next	300,000 cu ft	\$1.06
All Over	500,000 cu ft	\$0.86

6. In addition to the foregoing schedule of rates, the Purchaser shall further pay to Seller (a) a surcharge of twenty percent (20%) to be added to the total water bill (not including any applicable taxes or fees), as required by City of Danville CDO section 18-82(a); and (b) any pass-through taxes, regulatory fees, or other charges, whether existing now or in the future, specifically including but not limited to the existing Kentucky River Authority fee.

In all events, the parties agree that the minimum monthly bill shall be \$448.00, as required by CDO section 18-79(2).

HOWEVER, the parties understand and agree that if at any time during the term of this agreement the rates charged to other wholesale consumers, including other municipalities, independent water districts, or privately-owned water companies, are modified, either increased

or decreased, the rate of charge to the Purchaser shall automatically be modified to conform to such rates; similarly, it is agreed and understood that in the event the amount of the surcharge or minimum monthly charge applicable to all wholesale customers outside the city limits of Seller is modified, then the rate of surcharge or minimum monthly charge unto Purchaser shall automatically be modified to conform with such surcharge or minimum monthly rate. It is understood and agreed by the parties that modification of the water purchase rate, surcharge, and minimum monthly rate shall be at the discretion of the Seller, City of Danville. The City of Danville shall be required to give a written five (5) month advance notice of any rate increase and comply with applicable Public Service Commission rulings, if any.

7. The Purchaser shall not consume more than the daily/monthly limit (which quantity limit shall be considered of the essence) without written permission from the Seller except in the case of an emergency. If an emergency so arises, it shall be the duty of the Purchaser to immediately notify the Seller by telephone of the emergency and its expected duration and then to follow-up the telephonic notice with written notice within 24 hours served by certified mail, return receipt requested. This exception does not apply if the reason for the emergency is due to drought or otherwise lack of rain.

8. Payment for such water delivered shall be made promptly and in accordance with the regular billing policy of the Seller, as shall from time to time be in effect. The Seller shall furnish Purchaser with an itemized statement of the amount of water furnished the Purchaser during the preceding period for which the meter was read.

9. The Seller will at all times operate and maintain its system to the point of delivery to Purchaser in a state of reasonable repair and will take such reasonable action as may be necessary to furnish the Purchaser with the quantities of water heretofore set forth. Temporary

or partial failure to deliver water shall be remedied with all possible dispatch. In the event of an extended shortage of water, or if the supply of water available to the Seller is otherwise diminished over an extended period of time, the supply of water to Purchaser's consumers shall be reduced or diminished in the same ratio or proportion as the supply to Seller's other wholesale customers is reduced or diminished. Seller will afford priority to customers within the City of Danville. The obligation of the Seller to supply water is limited, however, by the understanding that while the Seller shall use reasonable care and diligence in the operation and maintenance of its existing system to prevent and avoid interruptions or fluctuations in supply, that nevertheless the Seller does not guarantee that such interruptions and fluctuations will not occur. The parties agree that the Seller shall not be liable for the curtailment of supply due to emergencies, breaks, leaks, defects, necessary repairs, fires, strikes, acts of God, or other causes of unusual demand upon its system. Further, in the event of fire, storm, war, acts of God, or other emergencies, the Seller's City Manager may, without liability attaching to the Seller, and without notice, reduce or temporarily discontinue such water supply. In the event the Seller's City Manager shall be absent from the City of Danville, or be for any reason incapacitated, his power to order reduction or cessation of supply shall vest in the City of Danville's Fire Chief, or if he shall be absent or incapacitated, then in the Seller's City Engineer. In either event, the official determination of the emergency shall permit such reduction or cessation during the emergency without liability unto the Seller, but with the understanding that same shall be rectified as quickly as is reasonably possible.

10. It is contemplated and understood that the water sold hereunder is for the purpose of providing for the needs of consumers located within the jurisdiction of the Purchaser. It is agreed and understood that the Purchaser shall not circumvent the intent of this contract by the

selling of such water, or any portion thereof, unto other municipalities, water districts, or such other entities providing water to consumers not located within the jurisdiction of the Purchaser herein, without the express written consent of the City of Danville.

11. The parties acknowledge that Seller obtains its raw water from Herrington Lake pursuant to an agreement with Kentucky Utilities Company dated April 14, 1970, under which agreement the sale of water to the Purchaser herein may be subject to the approval or disapproval of said Kentucky Utilities Company. In the event Kentucky Utilities Company fails to grant approval, or in the event Kentucky Utilities Company grants approval but subsequently revokes such approval, or in the event the Kentucky Utility Company undertakes any action to prohibit or limit the sale of water specifically to the Purchaser herein or to the City of Danville, the City of Danville shall have only a good faith duty to negotiate the matter with Kentucky Utilities Company, but shall not be held liable for any cessation or reduction in the amount of water provided to the Purchaser herein which results directly from such action by Kentucky Utilities Company.

12. The City understands that the District's rights and privileges under this contract will be pledged to the United States of America, acting through Department of Agriculture/Rural Development as Lender and/or bondholder, or any other creditor, agency or institution holding the District's bonds, as a part of the security for such indebtedness.

13. This Agreement is subject to all the terms and conditions of any City ordinances and regulations that address or regulate the sale of water to wholesale customers (as amended from time to time), all of which are incorporated herein by reference, as well as any provisions of the Kentucky Revised Statutes, administrative regulations promulgated thereunder, and any applicable requirements of the Kentucky Public Service Commission.

14. The parties' obligations under this Agreement are specifically contingent upon the approval of this Agreement by the Kentucky Public Service Commission and the filing of the Agreement with the Tariff Branch of the Public Service Commission.

15. By execution of this contract, the undersigned parties do hereby acknowledge that all prior contracts or agreements between these parties relative to the sale and purchase of water are hereby rescinded and of no further force and effect.

IN TESTIMONY WHEREOF, the parties hereto, by and through their respective authorized representatives, have executed this agreement effective the date first above written.

[remainder of page left intentionally blank]

SELLER
CITY OF DANVILLE, KENTUCKY

BY: Bernie Hunstad
BERNIE HUNSTAD, MAYOR

ATTEST:

Donna Peek
DONNA PEEK, CITY CLERK

PURCHASER
NORTH MERCER WATER DISTRICT

BY: Gerald Sheperon, Chairman
GERALD SHEPERSON, CHAIRMAN,
BOARD OF COMMISSIONERS

ATTEST:

Tony Best
TONY BEST, SECRETARY
BOARD OF COMMISSIONERS

ADDENDUM A

Following is a description of the expected connection to the City of Danville system, by North Mercer Water District.

1). The connection will occur at a meter pit to be constructed by Purchaser, at its expense, at or near the intersection of Perryville Road (U.S. 68) and Martin Lane (KY. Hwy. 1941), which connection shall be located at or near the Boyle and Mercer County boundary line, with the specific location to be determined by the parties' engineers. Additional connections and meters may be agreed upon by the parties upon proper written exchange of resolutions of the governing bodies.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Proposed Adjustment of the Wholesale)	
Water Service Rates of)	Case No. 2014 00392
the City of Danville)	

**CITY OF DANVILLE'S RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

Response to Request No. 3

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated In ch Miles
DV P 160	169	8	13.13	13.13	0.256060606	0.00	0
DV P 353	568	12	-169.56	171.31	1.290909091	1.75	0.013462135
DV P 73	1,045.00	6	9.45	9.46	1.1875	0.01	0.001255285
DV P 277	82	6	10.23	9.9	0.093181818	0.33	0.003106061
DV P 232	870	6	171	170.09	0.988636364	0.01	5.78116605
DV P 480a	890	4	58.7	58.7	0.674242424	0.00	0
DV P 486	8,073.00	4	5.87	5.87	6.115909091	0.00	0
DV P 333a	820	6	44.49	44.51	0.931818182	0.02	0.000418701
DV P 234e	2,463.00	12	309.11	306.35	5.597727273	2.76	0.050431622
DV P 167b	974	12	54.28	54.28	2.213636364	0.00	0
DV P 41b	277	6	8.66	9.01	0.314772727	0.35	0.013257576
DV P 131	620	16	394.96	395.55	1.878787879	0.59	0.002810774
DV P 34	2,602.00	6	0.29	0.29	2.956818182	0.00	0
DV P 537	401	6	1.8	1.8	0.455681818	0.00	0
DV P 191	1,006.00	6	27.67	28.28	1.143181818	0.61	0.024638448
DV P 619	727	6	3.18	3.21	0.826136364	0.03	0.007720901
DV P 147	337	6	8.22	8.25	0.382954545	0.03	0.001392562
DV P 533	259	6	1.85	1.85	0.294318182	0.00	0
DV P 232h	764	6	-34.41	34.4	0.868181818	0.01	0.000252378
DV P 546	472	6	21.49	21.5	0.536363636	0.01	0.000249471
DV P 563	43	1	1.09	1.06	0.008143939	0.03	0.000218141
DV P 117b	433	6	9.68	9.68	0.492045455	0.00	0
DV P 616	655	6	18.67	18.71	0.744318182	0.04	0.001591274
DV P 146	484	6	49.36	49.43	0.55	0.07	0.000778879
DV P-100	664	6	6.99	6.99	0.754545455	0.00	0
DV P 480	3,105.00	4	46.96	46.96	2.352272727	0.00	0
DV P 828	357	6	21.64	21.65	0.405681818	0.01	0.000187382
DV P 70	1,404.00	6	13.46	13.47	1.595454545	0.01	0.00118445
DV P 69	1,447.00	6	10.75	10.77	1.644318182	0.02	0.003053516
DV P-261	3,371.00	6	19.46	19.43	3.830681818	0.03	0.00589638
DV P-579a	228	6	0.09	0.06	0.259090909	0.03	0.064772727
DV P 415	2,386.00	6	-13.85	13.82	2.711363636	0.03	0.005885739
DV P 168	321	6	28.7	27.62	0.364772727	1.08	0.01322883
DV P 375a	220	6	23.79	22.36	0.25	1.43	0.014175258
DV P 230	701	6	9	9	0.796590909	0.00	0
DV P-250a	840	6	79.24	79.22	0.954545455	0.02	0.000240864
DV P 108	941	6	66.11	66.12	1.069318182	0.01	0.000161724
DV P 315c	697	6	6.64	7.01	0.792045455	0.37	0.046739524
DV P 167	1,612.00	12	170.53	161.6	3.663636364	8.93	0.182303983
DV P 492	4,463.00	4	48.02	48.02	3.381060606	0.00	0
DV P 498	8,160.00	6	36.82	36.83	9.272727273	0.01	0.00251771
DV P 451	1,511.00	6	25.61	25.62	1.717045455	0.01	0.000670197
DV P 132	5,423.00	16	397.86	398.45	16.43333333	0.59	0.024405736
DV P 583	29	6	15.31	15.41	0.032954545	0.10	0.000216664
DV P 8b	1,214.00	12	797.3	805.7	2.759090909	8.40	0.029378075
DV P 425	668	6	118.58	118.73	0.759090909	0.15	0.000959013
DV P-615a	740	6	31.72	31.79	0.840909091	0.07	0.00185164
DV P 232f	672	6	30.83	30.82	0.763636364	0.01	0.000247773
DV P 122c	1,837.00	6	14.39	14.41	2.0875	0.02	0.002897294
DV P 385	714	6	111.48	111.66	0.811363636	0.18	0.001307948
DV P 155	254	6	2.52	2.52	0.288636364	0.00	0
DV P 175	310	6	5.68	5.68	0.352272727	0.00	0
DV P 544	378	6	6.36	6.36	0.423545455	0.00	0
DV P 363	1,347.00	6	8.97	8.39	1.530681818	0.58	0.092962875
DV P 377	42	6	7.49	8.07	0.047727273	0.58	0.004006052
DV P 280	436	12	319.55	309.53	0.990909091	10.02	0.03012686
DV P 91a	635	6	1.74	1.74	0.721590309	0.30	0
DV P 475	561	6	4.15	4.15	0.6375	0.00	0
DV P 337g	282	6	48.14	48.22	0.320454545	0.08	0.000531654
DV P 542b	469	6	6.43	6.43	0.532954545	0.00	0
DV P 495	12,539.00	3	3.43	3.43	7.124431818	0.00	0
DV P 267d	39	12	30.23	24.24	0.088636364	5.99	0.021903128

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV-P 272b	610	4	1 14	1 16	0.462121212	0.02	0.008252165
DV-P 432a	599	6	4.43	4.43	0.680681818	0.00	0
DV-P 292	722	6	33.36	33.14	0.820454545	0.22	0.00544659
DV-P 12	616	6	44.87	45.57	0.7	0.70	0.011093502
DV-P 12a	241	6	58.51	59.21	0.273863636	0.70	0.003316114
DV-P 348	623	6	41.2	41	0.707954545	0.20	0.00342007
DV-P 364	812	6	1.03	1.03	0.922727273	0.00	0
DV-P 357	320	10	39.63	40.65	0.606060606	1.02	0.015207425
DV-P 281	183	12	415.61	403.14	0.415909091	12.47	0.012113461
DV-P 279	1,054.00	6	45.44	44.4	1.197727273	1.04	0.026799405
DV-P 226	924	6	39.6	33.6	1.05	0.00	0
DV-P 75	1,313.00	6	0.29	0.29	1.492045455	0.00	0
DV-P 621	628	2	1.9	1.9	0.237878788	0.00	0
DV-P 67	1,404.00	6	5.53	5.54	1.595454545	0.01	0.002879882
DV-P 600a	769	6	94.48	94.52	0.873863636	0.04	0.000369811
DV-P 173	717	6	1.74	1.81	0.814772727	0.07	0.031510547
DV-P 542	565	6	0.43	0.43	0.642045455	0.00	0
DV-P 490	3,738.00	6	55.79	55.78	4.247727273	0.01	0.000761241
DV-P 497	8,918.00	4	53.97	53.98	6.756060606	0.01	0.001251586
DV-P 414	5,859.00	3	14.35	14.35	3.328977273	0.00	0
DV-P 451a	1,481.00	6	32.01	32.01	1.682954545	0.00	0
DV-P 766	1,931.00	6	36.05	36.06	2.194318182	0.01	0.000608519
DV-P 589c	980	6	4.63	4.1	1.113636364	0.53	0.143957871
DV-P 579	741	6	13.73	13.73	0.842045455	0.00	0
DV-P 50c	145	6	19.85	20.36	0.164772727	0.51	0.004345093
DV-P 5	2,490.00	12	0.24	0.24	5.659090909	0.00	0
DV-P 412	1,354.00	6	1.74	1.74	1.538636364	0.00	0
DV-P 223	314	6	25.2	25.2	0.356818182	0.00	0
DV-P 795	1,862.00	12	356.16	356.15	4.231818182	0.01	0.000118815
DV-P-139	59	6	0.29	0.29	0.067045455	0.00	0
DV-P-137	282	6	6.99	6.99	0.320454545	0.00	0
DV-P-392	1,073.00	6	2.52	2.52	1.219318182	0.00	0
DV-P 162	296	6	1.85	1.85	0.336363636	0.00	0
DV-P 178	227	6	1.8	1.8	0.257954545	0.00	0
DV-P 352	553	6	7.21	6.98	0.628409091	0.23	0.019426625
DV-P-349	602	6	14.65	14.44	0.684090909	0.21	0.009667503
DV-P 838	86	2	0.86	0.86	0.032575758	0.00	0
DV-P 424	405	8	146.02	146.03	0.613636364	0.01	4.20213E 05
DV-P 543	416	6	0.2	0.2	0.472727273	0.00	0
DV-P 106	824	6	20.14	20.14	0.936363636	0.00	0
DV-P 101d	597	6	35.61	35.62	0.678409091	0.01	0.000190457
DV-P-241	1,051.00	6	0.44	0.44	1.194318182	0.00	0
DV-P 215	4,152.00	16	420.19	420.78	12.58181818	0.59	0.017691308
DV-P 220b	56	6	13.63	13.63	0.063636364	0.00	0
DV-P 588	633	6	35.78	35.23	0.719318182	0.55	0.011229776
DV-P 267	776	12	38.17	32.46	1.763636364	5.71	0.310239175
DV-P 38	252	6	18.24	18.75	0.286363636	0.51	0.008237194
DV-P 421	355	12	693.59	701.28	0.806818182	7.69	0.00904568
DV-P 18	1,357.00	8	9.58	10.16	2.056060606	0.58	0.132501684
DV-P 394a	736	6	118.05	118.2	0.836363636	0.15	0.001061375
DV-P 394d	723	6	115.24	115.39	0.821590909	0.15	0.001068018
DV-P 445	1,231.00	6	23.34	23.37	1.398863636	0.03	0.001795717
DV-P 383	370	6	2.17	2.25	0.420454545	0.08	0.016093954
DV-P 340c	561	6	2.95	1.85	0.6375	1.10	0.173148148
DV-P 376	52	6	2.48	2.47	0.059090909	0.01	0.000237313
DV-P 276	74	12	393.27	380.76	0.168181818	12.51	0.005525671
DV-P 399	548	8	65.61	65.62	0.83030303	0.01	0.000126532
DV-P 468	580	6	3.63	3.63	0.659090909	0.00	0
DV-F 320aa	631	6	26.49	25.23	0.717045455	1.26	0.035809642
DV-P 220a	886	2	17.11	17.11	0.335606061	0.00	0
DV-P 576	2,497.00	12	211.67	212.1	5.675	0.43	0.011552026
DV-P 330a	2,035.00	12	209.63	210.06	4.625	0.43	0.009506453

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	A located Inch Miles
DV-P 267c	144	12	47.86	54.22	0.327272727	6.36	0.038389055
DV-P 217	2,304.00	6	1.88	1.88	2.618181818	0.00	0
DV-P 37	288	6	14.69	14.96	0.327272727	0.27	0.00590666
DV-P 35	4,777.00	16	511	511.76	14.47575758	0.76	0.021561571
DV-P 103	509	6	1.85	1.85	0.578409091	0.00	0
DV-P 56	330	6	1.69	1.89	0.375	0.20	0.03968254
DV-P 561	34	1	1.51	1.5	0.006439394	0.01	4.23644E-05
DV-P-387	499	6	0.57	0.57	0.567045455	0.00	0
DV-P 309	1,152.00	6	13.62	13.75	1.309090909	0.13	0.01237686
DV-P 46	248	6	2.37	2.56	0.281818182	0.19	0.020916193
DV-P 209	606	6	0.44	1.45	0.688636364	1.01	1.220215311
DV-P 90	558	6	1.74	1.74	0.634090909	0.00	0
DV-P-36	531	6	1.74	1.74	0.603409091	0.00	0
DV-P 462	361	6	1.85	1.85	0.410227273	0.00	0
DV-P 370	233	8	1.03	1.03	0.353030303	0.00	0
DV-P 231	1,045.00	6	2.45	2.45	1.1875	0.00	0
DV-P 80	304	6	13.17	13.17	0.345454545	0.00	0
DV-P 469	491	6	15.43	15.43	0.557954545	0.00	0
DV-P 64	1,181.00	6	0.27	0.26	1.342045455	0.01	0.047930195
DV-P 439	639	2	1.69	1.69	0.242045455	0.00	0
DV-P 163	281	6	1.85	1.85	0.319318182	0.00	0
DV-P-386	489	6	1.12	1.12	0.555681818	0.00	0
DV-P-84	411	6	0.68	0.68	0.467045455	0.00	0
DV-P 446	821	6	1.85	1.85	0.932954545	0.00	0
DV-P-369	466	6	-39.75	39.96	0.529545455	0.21	-0.002812457
DV-P-345	495	2	4.74	4.74	0.1875	0.00	0
DV-P-525	1,122.00	6	1.84	1.84	1.275	0.00	0
DV-P-265	149	2	1.88	1.88	0.056439394	0.00	0
DV-P-221	94	6	20.59	20.59	0.106818182	0.00	0
DV-P-339	1,166.00	6	7.32	6.58	1.325	0.74	0.121650124
DV-P-567	289	6	-26.92	-29.44	0.328409091	2.52	-0.03391766
DV-P-255	716	6	10.88	10.84	0.813636364	0.04	0.003002348
DV-P-402	948	6	1.8	1.8	1.077272727	0.00	0
DV-P 126	704	6	2.9	2.9	0.8	0.00	0
DV-P 189	1,907.00	6	7.05	7.05	2.167045455	0.00	0
DV-P-404a	34	12	42.93	42.93	0.077272727	0.00	0
DV-P 136e	611	12	376.76	129.85	1.388636364	246.91	0.549759014
DV-P-615	858	6	16.6	16.67	0.975	0.07	0.004094181
DV-P 406b	104	12	1.69	1.69	0.236363636	0.00	0
DV-P 604	374	6	4.71	4.71	0.425	0.00	0
DV-P-227	378	6	46.8	46.8	0.429545455	0.00	0
DV-P-240a	465	6	26.98	25.9	0.528409091	1.08	0.020337912
DV-P 237a	203	6	0.86	0.86	0.230681818	0.00	0
DV-P 316a	441	6	24.32	23.62	0.501136364	0.70	0.014851628
DV-P 546a	183	6	38.01	38.14	0.207954545	0.13	0.000708812
DV-P 562	1,147.00	6	20.83	21.14	1.303409091	0.31	0.019690878
DV-P 203c	169	12	170.67	196.79	0.384090909	26.12	0.069404736
DV-P 356a	397	12	343.6	346.04	0.902272727	2.44	0.006453117
DV-P 228	630	6	1.8	1.8	0.715909091	0.00	0
DV-P 235	1,137.00	12	320.1	317.34	2.584090909	2.76	0.022474604
DV-P 86	591	6	9.25	9.25	0.671590909	0.00	0
DV-P 81a	60	6	0.51	0.51	0.068181818	0.00	0
DV-P 101c	229	6	39.31	39.32	0.260227273	0.01	6.61819E-05
DV-P 94	1,480.00	4	13.69	13.69	1.121212121	0.00	0
DV-P 477	1,830.00	6	105.66	105.66	2.079545455	0.00	0
DV-P 476	2,247.00	6	105.95	105.95	2.553409091	0.00	0
DV-P 72	1,268.00	6	9.28	9.29	1.440909091	0.01	0.001531032
DV-P 234a	1,177.00	12	33.26	30.62	2.675	2.64	0.230633573
DV-P 239a	668	6	0.86	0.86	0.759090909	0.00	0
DV-P 238	1,246.00	12	226.8	215.8	2.831818182	11.00	0.130992431
DV-P 220	1,322.00	6	1.74	1.74	1.502272727	0.00	0
DV-P 756	1,691.00	12	57.26	51.39	3.843181818	5.87	0.438985742

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV-P-270	1,774.00	6	13.63	13.96	2.015909091	0.33	0.047654011
DV-P-54	812	6	2.53	2.36	0.922727273	0.17	0.058097643
DV-P-258b	1,992.00	6	7.87	7.87	2.263636364	0.00	0
DV-P-40a	990	6	1.61	1.61	1.125	0.00	0
DV-P-87	1,677.00	6	9.82	3.82	1.905681818	0.00	0
DV-P-319	1,038.00	6	1.63	1.69	1.179545455	0.00	0
DV-P-33	1,100.00	6	3.77	3.77	1.25	0.00	0
DV-UD-P-388	770	6	12.67	12.75	0.875	0.08	0.005559968
DV-P-530	412	6	73	72.99	0.468181818	0.01	6.41257E-05
DV-P-206	259	2	1.75	1.75	0.098106061	0.00	0
DV-P-456	296	2	1.74	1.74	0.112121212	0.00	0
DV-P-24	1,365.00	6	12.14	12.11	1.551136364	0.03	0.003842617
DV-P-409	4,706.00	4	3.48	3.48	3.865151515	0.00	0
DV-P-44	321	4	7.5	7.78	0.243181818	0.28	0.008752045
DV-P-282	1,401.00	4	6.52	6.49	1.061363636	0.03	0.004861207
DV-P-553	658	6	0.86	0.86	0.747727273	0.00	0
DV-P-569	183	6	0.79	0.93	0.207954545	0.14	0.031304985
DV-P-19	939	12	64.06	70.72	2.134090909	6.66	0.200976321
DV-P-52	1,438.00	6	-1	1.06	1.634090909	0.06	0.104303675
DV-P-521	357	6	2.11	2.11	0.405681818	0.00	0
DV-P-585c	151	6	2.03	2.03	0.171590909	0.00	0
DV-P-400	291	8	1.02	1.02	0.440909091	0.00	0
DV-P-554	42	1	1.69	1.69	0.007954545	0.00	0
DV-P-321	402	6	1.69	1.69	0.456818182	0.00	0
DV-P-517	37	6	1.88	1.88	0.042045455	0.00	0
DV-P-407	729	10	1.69	1.69	1.380681818	0.00	0
DV-P-256	755	6	27.91	27.78	0.857954545	0.13	0.004014906
DV-P-121	438	2	2.9	2.9	0.165909091	0.00	0
DV-P-134	2,951.00	12	403.96	403.94	6.706818182	0.02	0.000332037
DV-P-535	406	6	2.58	2.58	0.461363636	0.00	0
DV-P-196	89	6	10.06	8.57	0.101136364	1.49	0.013047029
DV-P-317	1,118.00	6	25.59	24.52	1.270454545	1.07	0.050989736
DV-P-302	1,229.00	12	143	143.47	2.793181818	0.47	-0.009210661
DV-P-417	816	12	1.74	1.74	1.854545455	0.00	0
DV-P-110	433	6	7.14	7.14	0.492045455	0.00	0
DV-P-471	632	6	0.84	0.84	0.718181818	0.00	0
DV-P-453	212	2	1.74	1.74	0.08030303	0.00	0
DV-P-296	292	6	1.03	1.03	0.331818182	0.00	0
DV-P-201	1,110.00	6	34.36	35.31	1.261363636	0.95	0.035866371
DV-P-278	500	6	1.88	1.88	0.568181818	0.00	0
DV-P-60	897	6	10.34	10.31	1.019318182	0.03	0.002966008
DV-P-482	238	6	5.87	5.87	0.270454545	0.00	0
DV-P-464	881	6	1.85	1.85	1.001136364	0.00	0
DV-P-527	1,663.00	4	3.43	3.43	1.259848485	0.00	0
DV-P-164	583	6	1.85	1.85	0.6625	0.00	0
DV-P-27	1,273.00	4	11.72	11.72	0.964393939	0.00	0
DV-P-558	36	6	57.79	61.75	0.040909091	3.96	-0.003009474
DV-P-107	619	6	1.85	1.85	0.703409091	0.00	0
DV-P-136b	707	12	347.95	101.04	1.606818182	246.91	0.666945966
DV-P-426	91	8	300.57	301.14	0.137878788	0.57	0.000260978
DV-P-384	253	6	3.29	3.23	0.2875	0.06	0.005149254
DV-P-148	411	6	2.52	2.52	0.467045455	0.00	0
DV-P-430	60	12	120.08	120.23	0.136363636	0.15	0.000170128
DV-P-440	165	6	0.29	0.29	0.1875	0.00	0
DV-P-243a	253	6	7.16	7.16	0.2875	0.00	0
DV-P-205a	502	6	0.84	2.07	0.570454545	1.23	1.799125874
DV-P-204d	443	6	4.34	5.57	0.503409091	1.23	0.199097486
DV-P-212	53	6	34.45	36.75	0.060227273	2.30	0.004308638
DV-P-358b	30	6	5.39	6.82	0.034090909	1.43	0.012310606
DV-P-375	377	6	17.49	17.43	0.428409091	0.00	0
DV-P-587	471	12	421.38	408.5	1.070454545	12.88	0.033751419
DV-P-590a	29	6	7.03	7.78	0.032954545	0.75	0.003176852

CEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Mils	Flow Change	Allocated Inch Miles
DV P 76	1,179.00	6	5.87	5.87	1.339772727	0.00	0
DV P 81	382	6	3.29	3.29	0.434090909	0.00	0
DV P 101b	92	6	43.01	43.02	0.104545455	0.01	2.43016E-05
DV P 470a	1,469.00	6	0.26	0.26	1.669318182	0.00	0
DV P 478	7,228.00	4	17.61	17.61	5.475757576	0.00	0
DV P 481	863	4	35.22	35.22	0.653787879	0.00	0
DV P 531	393	6	30.85	30.85	0.446590909	0.00	0
DV P 511b	1,465.00	8	50.7	50.7	2.21969697	0.00	0
DV P 354	538	6	21.92	21.82	0.611363636	0.10	0.002776402
DV P 234d	980	12	210.34	207.69	2.227272727	2.65	0.028418666
DV P 246	1,288.00	6	5.52	5.52	1.463636364	0.00	0
DV P 240	1,135.00	6	0.42	0.42	1.289772727	0.00	0
DV P-187a	1,977.00	12	153.92	145.74	4.493181818	8.18	0.226737984
DV P 161	1,836.00	6	1.55	1.55	2.086363636	0.00	0
DV P 330	1,008.00	12	145.04	145.51	2.290909091	0.47	0.007447792
DV P 578	144	6	43.77	43.55	0.163636364	0.22	0.000818368
DV P 589b	486	6	17.08	16.23	0.552272727	0.85	0.02892371
DV P 53a	2,269.00	6	2.09	2.01	2.578409091	0.08	0.102623247
DV P-267a	410	12	-12.89	6.8	0.931818182	6.09	-0.834525401
DV P 582	36	6	5.91	6.2	0.040909091	0.29	0.002110967
DV P 269	785	6	3.58	3.09	0.892045455	0.49	0.141457046
DV P-264	624	2	5.64	5.64	0.236363636	0.00	0
DV P 258a	286	6	4.11	4.11	0.325	0.00	0
DV P-262b	820	6	20.46	20.5	0.931818182	0.04	0.001818182
DV P-59b	61	6	14.37	14.82	0.069318182	0.45	0.002104803
DV P-42a	1,083.00	6	2.47	2.47	1.230681818	0.00	0
DV P-23a	442	6	11.51	11.63	0.502272727	0.12	-0.005291723
DV P 122	743	6	25.99	26.01	0.844318182	0.02	0.000649226
DV P-332	792	2	5.17	5.17	0.3	0.00	0
DV P-15	228	4	3.41	-3.53	0.172727273	0.12	0.006300083
DV P-32c	77	6	-25.28	-25.63	0.0875	0.35	-0.00122844
DV P-800	586	6	1.65	1.79	0.665909091	0.14	0.052032275
DV P 540	1,478.00	6	17.32	17.32	1.679545455	0.00	0
DV P-193	843	6	14.22	14.93	0.957954545	0.71	0.045555775
DV P-455	708	2	2.31	2.31	0.268181818	0.00	0
DV P-514	1,258.00	1	5.87	5.87	0.238257576	0.00	0
DV P 95	1,961.00	2	1.74	1.74	0.74280303	0.00	0
DV P 219	1,446.00	2	1.74	1.74	0.547727273	0.00	0
DV P 114	1,299.00	6	54.72	54.73	1.476136364	0.01	0.000269712
DV P 526	1,084.00	6	1.59	1.59	1.231818182	0.00	0
DV P 92	874	6	1.74	1.74	0.993181818	0.00	0
DV P-284	1,651.00	6	0.29	0.29	1.876136364	0.00	0
DV P 570	39	6	18.68	18.34	0.044318182	0.34	0.000821602
DV P 624	576	6	2.9	2.9	0.654545455	0.00	0
DV P 460	1,014.00	8	166	166	1.536363636	0.00	0
DV P-198	1,086.00	6	5.22	5.68	1.234090909	0.46	0.119260886
DV P-285	523	6	1.03	1.03	0.594318182	0.00	0
DV P-138	168	1	1.69	1.69	0.031818182	0.00	0
DV P 395	349	6	0.29	0.29	0.396590909	0.00	0
DV P 438	15	1	2.27	2.27	0.002840909	0.00	0
DV P 31	334	6	3.15	3.14	0.379545455	0.01	0.001208743
DV P 594	121	6	1.74	1.74	0.1375	0.00	0
DV P 436	364	4	1.98	1.98	0.275757576	0.00	0
DV P 550	44	8	14.32	14.86	0.066666667	0.54	0.002612482
DV P 454	746	2	1.17	1.17	0.282575758	0.00	0
DV P 323	409	6	1.79	1.79	0.464772727	0.00	0
DV P 442	298	4	1.69	1.69	0.225757576	0.00	0
DV P 574	316	2	1.03	1.03	0.11969697	0.00	0
DV P 342	599	6	1.75	1.75	0.680681818	0.00	0
DV P 283	914	6	21.85	21.38	1.038636364	0.47	0.022832511
DV P 105	791	6	16.12	16.12	0.898863636	0.00	0
DV P 433	649	6	1.61	1.69	0.7375	0.00	0

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Frch Miles	Flow Change	Allocated Inch Miles
DV-P-260	1,546.00	6	15.7	15.67	1.756818182	0.03	0.003330575
DV-P-452	455	6	4.63	4.65	0.517045455	0.00	0
DV-P-422	431	6	1.38	1.5	0.489772727	0.12	0.046645022
DV-P-380	615	6	1.03	1.03	0.698863636	0.00	0
DV-P-79	1,271.00	6	6.18	6.18	1.444318182	0.00	0
DV-P-324	390	6	28.5	27.98	0.443181818	0.52	0.008236403
DV-P-428	764	6	1.5	1.5	0.868181818	0.00	0
DV-P-142	1,594.00	10	5.07	5.07	3.018939394	0.00	0
DV-P-290	790	6	0.29	0.29	0.897727273	0.00	0
DV-P-447	202	6	61.69	62.55	0.229545455	0.86	0.003156021
DV-P-83	778	6	1.22	1.22	0.884090909	0.00	0
DV-P-327	356	6	33.41	32.56	0.404545455	0.85	0.010560922
DV-P-584	102	2	2.03	2.03	0.038636364	0.00	0
DV-P-43	286	4	9.86	10.13	0.216666667	0.27	0.006100104
DV-P-143	601	10	1.69	1.69	1.138257576	0.00	0
DV-P-143a	155	10	1.69	1.69	0.293560606	0.00	0
DV-P-139a	148	6	0.87	0.87	0.168181818	0.00	0
DV-P-389	918	6	10.08	10.08	1.043181818	0.00	0
DV-P-151	873	6	6.79	6.8	0.992045455	0.01	0.00145889
DV-P-147a	349	6	11.51	11.53	0.396590909	0.02	0.000687929
DV-P-158	193	6	8.06	8.06	0.219318182	0.00	0
DV-P-304	114	12	87.59	87.92	0.259090909	0.33	0.00097983
DV-P-340a	162	6	18.47	17.5	0.184090909	0.97	0.010203896
DV-P-346c	485	6	32.94	33.03	0.551136364	0.09	0.001501734
DV-P-585	772	6	18.44	18.84	0.877272727	0.40	0.018625748
DV-P-564b	286	12	58.21	44.36	0.65	13.85	0.124930613
DV-P-289	1,286.00	6	24.71	23.94	1.461363636	0.77	0.044162088
DV-P-87a	333	6	7.37	7.37	0.378409091	0.00	0
DV-P-87b	505	6	10.02	10.02	0.573863636	0.00	0
DV-P-85	552	6	0.74	0.74	0.627272727	0.00	0
DV-P-78c	578	4	-2.58	-2.58	0.437878788	0.00	0
DV-P-98a	401	6	17.56	17.56	0.455681818	0.00	0
DV-P-109b	63	6	14.8	14.8	0.071590909	0.00	0
DV-P-355	978	6	-36.82	-36.88	1.111363636	0.06	0.001813978
DV-P-329c	404	6	10.01	10.01	0.459090909	0.00	0
DV-P-622	711	2	1.9	1.9	0.269318182	0.00	0
DV-P-245a	1,116.00	6	1.87	1.87	1.268181818	0.00	0
DV-P-159	373	12	40.32	40.32	0.847727273	0.00	0
DV-P-159b	798	12	30.41	30.41	1.813636364	0.00	0
DV-P-190	2,446.00	6	16.32	15.57	2.779545455	0.75	0.122124141
DV-P-491	1,796.00	6	21.49	21.48	2.040909091	0.01	0.00094926
DV-P-214b	256	6	27.65	27.65	0.290909091	0.00	0
DV-P-214a	534	6	39.53	39.54	0.606818182	0.01	0.000153469
DV-P-273b	349	6	33.83	33.78	0.396590909	0.05	0.000585288
DV-P-258	238	6	15.96	15.96	0.270454545	0.00	0
DV-P-262a	161	6	16.7	16.74	0.182954545	0.04	0.000437167
DV-P-59a	220	6	10.31	10.76	0.25	0.45	0.01045539
DV-P-607	223	12	62.76	69.65	0.506818182	6.89	0.05013607
DV-P-45b	888	6	7.34	7.66	1.009090909	0.32	0.045998446
DV-P-37a	1,096.00	6	4.83	4.91	1.245454545	0.08	0.020292338
DV-P-50b	267	6	34.12	34.63	0.303409091	0.51	0.004468341
DV-P-57c	1,059.00	6	1.31	0.24	1.203409091	1.07	5.365198864
DV-P-419b	1,672.00	12	201.49	203.39	3.8	2.10	0.039196424
DV-P-6	162	12	285.4	82.32	0.368181818	203.08	0.1530674
DV-P-20c	183	6	2.03	2.03	0.207954545	0.00	0
DV-P-192ff	742	6	20.57	21.62	0.843181818	1.05	0.040950088
DV-P-444	175	12	0.29	0.29	0.397727273	0.00	0
DV-P-115a	691	6	57.12	57.13	0.785227273	0.01	0.000137446
DV-P-416a	247	6	4.98	5.04	0.280681818	0.06	0.003422949
DV-P-418	605	12	36.25	36.55	1.375	0.30	0.01128591
DV-P-437	1,097.00	8	2.85	2.85	1.662121212	0.00	0
DV-P-119	434	6	40.81	40.82	0.493181818	0.01	0.000120819

Label	CEOMETRY		PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV-P 365	1,367.00	6	19.63	20.06	1.553409091	0.43	0.034789891
DV-P 601	2,021.00	6	7.5	7.54	2.296590909	0.04	0.012183506
DV-P 472	151	6	0.38	0.38	0.171590909	0.00	0
DV-P 397	3,516.00	8	253	253	5.327272727	0.00	0
DV-P 483	1,934.00	6	5.87	5.87	2.197727273	0.00	0
DV-P 305	223	12	362.77	363.46	0.506818182	0.69	0.000962154
DV-P 479	1,238.00	1	5.87	5.87	0.234469697	0.00	0
DV-P 11	869	6	10.2	10.2	0.9875	0.00	0
DV-P 396	3,600.00	12	13.58	13.58	8.181818182	0.00	0
DV-P 411	183	6	6.72	6.72	0.207954545	0.00	0
DV-P 48	63	6	10.71	11.33	0.071590909	0.62	0.003917596
DV-P 458	437	12	402.11	402.09	0.993181818	0.02	4.93961E 05
DV-P-82	348	2	1.9	1.9	0.131818182	0.00	0
DV-P 29	360	6	23.48	-23.41	0.409090909	0.07	0.001223253
DV-P 457	734	6	1.74	1.74	0.834090909	0.00	0
DV-P 366	961	6	21.78	22.61	1.092045455	0.83	0.043264808
DV-P 606	73	12	286.78	287.14	0.165909091	0.36	0.00020853
DV-P-350	579	12	151.13	152.68	1.315909091	1.55	0.013635908
DV-P-602	222	6	1.85	1.85	0.252272727	0.00	0
DV-P 216	1,924.00	6	26.03	25.9	2.186363636	0.13	0.010974026
DV-P 504	5,827.00	4	30.66	30.66	4.414393939	0.00	0
DV-P-573	482	6	16.28	16.18	0.547727273	0.10	0.003385212
DV-P-560	237	6	0.86	0.86	0.269318182	0.00	0
DV-P-473	138	6	0.67	0.67	0.156818182	0.00	0
DV-P-96	1,886.00	4	6.73	6.73	1.428787879	0.00	0
DV-P-568	383	6	1.03	1.03	0.435227273	0.00	0
DV-P 341	181	6	12.53	-12.43	0.205681818	0.10	0.001654721
DV-P 17	226	6	1.74	1.74	0.256818182	0.00	0
DV-P 176	466	4	0.29	0.29	0.353030303	0.00	0
DV-P-374	591	6	26.17	25.38	0.671590909	0.79	0.019679407
DV-P-184	630	6	8.52	8.52	0.715909091	0.00	0
DV-P 592	96	6	1.85	1.85	0.109090909	0.00	0
DV-P 248	722	6	3.75	3.75	0.820454545	0.00	0
DV-P-360	1,284.00	6	9.89	10.49	1.459090909	0.60	0.094236227
DV-P-293	204	6	1.03	1.03	0.231818182	0.00	0
DV-P-288	879	6	16.01	15.21	0.998863636	0.80	0.047536639
DV-P 449	485	6	2.17	2.17	0.551136364	0.00	0
DV-P 614	797	6	66.35	14.46	0.905681818	51.89	0.397461346
DV-P-361	343	2	1.03	1.03	0.129524242	0.00	0
DV-P 93	204	4	10.21	10.21	0.154545455	0.00	0
DV-P 591	94	6	1.69	1.69	0.106818182	0.00	0
DV-P-556	37	8	132.06	138.8	0.056060606	6.74	0.002722251
DV-P-382	294	6	80.11	80.31	0.334090909	0.20	0.000836168
DV-P 551	404	6	1.55	1.59	0.459090909	0.04	0.012161349
DV-P 617	483	6	2.52	2.52	0.548863636	0.00	0
DV-P 150a	294	6	2.52	2.52	0.334090909	0.00	0
DV-P-432	657	6	7.81	7.81	0.746590909	0.00	0
DV-P-430a	15	12	267.81	268.17	0.034090909	0.36	4.57647E 05
DV-P 152a	420	6	89.97	90.04	0.477272727	0.07	0.000371047
DV-P 165b	34	6	203.83	195.99	0.038636364	7.84	0.001431044
DV-P 170b	188	12	12.59	14.6	0.427272727	2.01	0.058823163
DV-P 236a	51	10	548.91	535.15	0.096590909	13.76	0.002362114
DV-P-207	409	6	2.62	3.19	0.464772727	0.57	0.083047164
DV-P 313a	1,057.00	6	17.92	18.28	1.201136364	0.36	0.023634764
DV-P 315	673	6	11.21	11.45	0.764772727	0.24	0.016731582
DV-P 312	476	12	159.07	160.22	1.081818182	1.15	0.007877982
DV-P 301a	634	6	28	28.05	0.720454545	0.05	0.001288827
DV-P 123	829	6	8.7	8.7	0.942045455	0.00	0
DV-P 120a	631	6	61.94	61.95	0.717045455	0.01	0.000115746
DV-P 355d	283	6	20.54	20.85	0.321590909	0.31	0.004927987
DV-P 362a	425	6	51.22	51.46	0.482954545	0.24	0.002273619
DV-P 564a	306	12	61.18	47.42	0.695454545	13.76	0.127694883

GEOMETRY			PARKVILLE ON	PARKVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV P 875	473	6	17.31	17.21	0.5375	0.10	0.003123184
DV P 516	102	6	5.64	5.64	0.115909091	0.00	0
DV P 88b	587	6	23.07	23.06	0.667045455	0.01	0.000289014
DV P 78b	790	4	7.77	7.77	0.598484848	0.00	0
DV P 98	237	6	1.9	1.9	0.269318182	0.00	0
DV P 520a	488	6	1.59	1.59	0.554545455	0.00	0
DV P 111	341	6	3.44	3.44	0.3875	0.00	0
DV P 470	904	6	0.29	0.29	1.027272727	0.00	0
DV P 441	693	6	3.38	3.38	0.7875	0.00	0
DV P 542a	1,357.00	6	1.41	1.41	1.542045455	0.00	0
DV P 541b	396	6	6.78	6.78	0.45	0.00	0
DV P 491a	1,816.00	6	54.88	54.88	2.063636364	0.00	0
DV P 488	5,665.00	4	55.98	55.99	4.291666667	0.01	0.000766506
DV P 498a	2,201.00	6	43.68	43.69	2.501136364	0.01	0.000572473
DV P 577	839	12	266.12	260.66	1.906818182	5.46	0.039941791
DV P 610a	1,018.00	12	246.16	241.17	2.313636364	4.99	0.047870985
DV P 608b	260	6	0.37	0.08	0.295454545	0.45	1.661931818
DV P 269a	49	6	7.46	7.25	0.055681818	0.21	0.001612853
DV P 41a	345	6	17.38	-17.97	0.392045455	0.59	0.013776463
DV P 4	340	6	5.55	5.55	0.386363636	0.00	0
DV P 408	5,129.00	6	5.22	5.22	5.828409091	0.00	0
DV P 183b	2,451.00	6	12.45	12.45	2.785227273	0.00	0
DV P 620b	160	6	2.52	2.52	0.181818182	0.00	0
DV P 620a	47	6	79.89	79.96	0.053409091	0.07	4.67563E 05
DV P 620	971	6	48.69	48.74	1.103409091	0.05	0.001131934
DV P 13	831	8	-11.97	-12.42	1.259090909	0.45	0.049183239
DV P 13a	126	8	1.09	1.21	0.190909091	0.12	-0.023617619
DV P 32b	352	6	28.76	-29.11	0.4	0.35	0.004927842
DV P 764	50	6	838.87	813.52	0.056818182	25.35	0.001666637
DV P 548	608	6	26.46	26.44	0.690909091	0.02	0.000521835
DV P 185	1,329.00	6	3.89	3.89	1.510227273	0.00	0
DV P 222	205	2	1.74	1.74	0.077651515	0.00	0
DV P 335	231	6	5.14	5.14	0.2625	0.00	0
DV P 58	1,519.00	6	2.03	2.03	1.726136364	0.00	0
DV P 465	945	6	11.79	11.78	1.073863636	0.01	0.000910054
DV P 572	71	6	1.03	1.03	0.080681818	0.00	0
DV P 623	442	6	2.9	2.9	0.502272727	0.00	0
DV P 559	428	6	3.67	5.1	0.486363636	1.43	0.310491071
DV P 571	87	6	1.03	1.03	0.098863636	0.00	0
DV P 443	791	4	0.29	0.29	0.599242424	0.00	0
DV P 405	5,013.00	6	64.66	12.77	5.696590909	51.89	2.536217094
DV P 21	178	1	2.03	2.03	0.093712121	0.00	0
DV P 401	339	8	1.02	1.02	0.513636364	0.00	0
DV P 252	207	6	175.28	175.27	0.235227273	0.01	1.34193E 05
DV P 344	394	6	14.57	14.47	0.447727273	0.10	0.003094176
DV P 140	311	6	0.29	0.29	0.353409091	0.00	0
DV P 466	799	6	1.85	1.85	0.907954545	0.00	0
DV P 494	2,965.00	2	3.43	3.43	1.123106061	0.00	0
DV P 427	465	6	0.29	0.29	0.528409091	0.00	0
DV P 593	40	6	2.17	2.17	0.045454545	0.00	0
DV P 609	1,300.00	16	1,273.33	1,078.64	3.939393939	194.69	0.522445611
DV P 512	3,065.00	2	3.43	3.43	1.160984848	0.00	0
DV P 9	728	8	64.91	65.77	1.103030303	0.86	0.014423081
DV P 51	1,125.00	8	63.3	64.16	1.704545455	0.86	0.02284771
DV P 118	292	4	2.9	2.9	0.221212121	0.00	0
DV P 474	746	6	2.41	2.41	0.847727273	0.00	0
DV P 172	490	6	1.7	1.63	0.556818182	0.07	0.022021058
DV P 325	316	6	28.34	27.49	0.359090909	0.85	0.011103211
DV P 173	1,280.00	6	5.9	5.9	1.454545455	0.00	0
DV P 403	670	8	108	107.99	1.015151515	0.01	9.39868E 05
DV P 157	174	6	1.85	1.85	0.197727273	0.00	0
DV P 513	7,979.00	3	5.87	5.87	4.533522727	0.00	0

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV P 124	695	6	2.9	2.9	0.78972727	0.00	0
DV P 102	669	6	1.85	1.85	0.760227273	0.00	0
DV P 194	441	6	1.69	1.69	0.501136364	0.00	0
DV P 133	2,534.00	12	409.66	409.64	5.759090909	0.02	0.000281151
DV P 116	421	2	2.9	2.9	0.159469697	0.00	0
DV P 52B	2,841.00	4	3.43	3.43	2.152272727	0.00	0
DV P 166	830	12	228.24	219.31	1.886363636	8.93	0.071023961
DV P 463	322	6	1.85	1.85	0.365909091	0.00	0
DV P 429	209	6	114.67	114.83	0.2375	0.16	0.000330924
DV P 61	268	6	6.25	6.7	0.304545455	0.45	0.020454545
DV P 49	82	12	51.19	57.22	0.186363636	6.03	0.019639509
DV P 89	478	6	1.85	1.85	0.543181818	0.00	0
DV P 224	132	6	1.8	1.8	0.15	0.00	0
DV P 503	6,838.00	4	19.73	-19.73	5.18030303	0.00	0
DV P 311	1,079.00	6	2.33	2.44	1.226136364	0.11	0.060754505
DV P 259	221	6	1.88	1.88	0.251136364	0.00	0
DV P 605	76	12	5.8	5.8	0.172727273	0.00	0
DV P 32B	715	8	172.45	168.13	1.083333333	4.32	0.027835603
DV P 153	148	6	2.52	2.52	0.168181818	0.00	0
DV P 65	254	6	2.9	2.9	0.288636364	0.00	0
DV P 552c	800	6	4.36	4.39	0.909090909	0.03	0.006298551
DV P 197	1,188.00	12	300.26	307.44	2.7	7.18	0.063056206
DV P 549d	284	6	1.75	1.75	0.322727273	0.00	0
DV P 314a	601	6	7.8	7.91	0.682954545	0.11	0.009769181
DV P 338b	433	6	-23.36	-24.98	0.492045455	1.62	0.036665761
DV P 346b	302	6	35.64	35.75	0.343181818	0.11	0.001055944
DV P 68b	953	6	12.74	12.75	1.082954545	0.01	0.000849376
DV P 117a	36	6	28.23	28.23	0.040909091	0.00	0
DV P 113	330	6	48.92	48.93	0.375	0.01	7.66401E 05
DV P 329f	213	6	7.96	7.91	0.242045455	0.05	0.001510895
DV P 379	58	6	-2.81	-4.24	0.065909091	1.43	-0.068297101
DV P 275a	421	6	7.07	6.63	0.478409091	0.44	0.028029294
DV P 182	1,307.00	6	5.4	5.4	1.485227273	0.00	0
DV P 85a	114	6	8.09	8.09	0.129545455	0.00	0
DV P 78a	401	6	3.5	3.5	0.455681818	0.00	0
DV P 99	1,113.00	6	4.86	4.87	1.264772727	0.01	0.002597069
DV P 461c	274	6	3.01	3.02	0.311363636	0.01	0.001031005
DV P 477a	602	6	93.92	93.92	0.684090909	0.00	0
DV P 459b	626	12	224.71	224.71	1.422727273	0.00	0
DV P 459a	529	12	224.68	224.68	1.202272727	0.00	0
DV P 340	402	6	6.23	5.36	0.456818182	0.87	0.055976312
DV P 188b	981	12	367.77	367.33	2.229545455	0.44	0.002664241
DV P 156a	1,126.00	6	5.55	5.55	1.279545455	0.00	0
DV P 156b	2,072.00	6	1.85	1.85	2.354545455	0.00	0
DV P 603a	819	6	3.52	3.52	0.930681818	0.00	0
DV P 610	545	12	339.13	328.21	1.238636364	10.92	0.041211143
DV P 578a	200	6	39.13	38.94	0.227272727	0.19	0.001098215
DV P 273a	516	6	23.22	23.19	0.586363636	0.03	0.000736598
DV P 55	816	6	6.24	6.49	0.927272727	0.25	0.035719288
DV P 267b	1,291.00	12	3.51	10.05	2.934090909	6.54	1.909348711
DV P 254	265	6	9.63	9.58	0.301136364	0.05	0.001571693
DV P 253	736	6	11.66	11.61	0.836363636	0.05	0.003601911
DV P 253a	347	6	20.67	20.61	0.394318182	0.06	0.001147942
DV P 47	894	6	8.57	9.11	1.015909091	0.54	0.060218541
DV P 50a	292	6	37.34	37.85	0.331818182	0.51	0.004470998
DV P 32a	916	6	7.25	7.25	1.040909091	0.00	0
DV P 32	228	6	1.74	1.74	0.259090909	0.00	0
DV P 416	1,458.00	6	37.75	38.1	1.656818182	0.35	0.015220115
DV P 418a	373	8	4.35	4.35	0.568181818	0.00	0
DV P 792	173	6	95.71	95.6	0.196590909	0.11	0.000225684
DV P 793	248	6	1.02	1.02	0.281818182	0.00	0
DV P 225a	1,376.00	6	36	36	1.563636364	0.00	0

CEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	inch M/les	Flow Change	Allocated Inch Miles
DV-P 181	462	6	1.8	1.8	0.525	0.00	0
DV-P 802	293	6	12.82	12.72	0.332954545	0.10	0.002617567
DV-P 534	419	6	3.85	3.85	0.476136364	0.00	0
DV-P 112	1,682.00	6	103.15	103.16	1.311363636	0.01	0.000185281
DV-P 347	196	6	4.74	4.74	0.222727273	0.00	0
DV-P 266	605	1	1.88	1.88	0.114583333	0.00	0
DV-P 467	444	6	4.35	4.35	0.504545455	0.00	0
DV-P 171	856	6	0.86	0.86	0.972727273	0.00	0
DV-P 519a	15	6	18.72	9.39	0.017045455	28.11	0.051027447
DV-P 519	110	6	1.69	1.69	0.125	0.00	0
DV-P 518	1,329.00	6	80	0	1.510227273	80.00	0.755113636
DV-P 518a	856	6	62.97	11.08	0.972727273	51.89	0.439446441
DV-P 613	103	10	579.09	129.09	0.195075758	450.00	0.085302637
DV-P 613a	447	10	596.19	146.19	0.846590909	450.00	0.364146005
DV-P 613b	623	10	596.48	146.48	1.179924242	450.00	0.507382758
DV-P 139c	9	12	364.99	89.09	0.020454545	275.90	0.008805581
DV-P 136a	254	12	346.26	99.35	0.577272727	246.91	0.24029268
DV-P 136c	1,257.00	12	351.33	104.42	2.856818182	246.91	1.179086951
DV-P-136d	844	12	371.16	124.25	1.918181818	246.91	0.766285813
DV-P 135	625	12	1,089.69	878.45	1.420454545	211.24	0.230647935
DV-P 199	442	12	711.24	746.91	1.004545455	35.67	0.053039857
DV-P 199a	936	12	709.55	745.22	2.127272727	35.67	0.11260138
DV-P 199b	420	12	708.14	743.81	0.954545455	35.67	0.050632201
DV-P 199c	18	12	571.01	-599.94	0.040909091	28.93	0.002183257
DV-P 199d	147	12	-701.38	737.05	0.334090909	35.67	0.017901222
DV-P 199e	19	12	-475.17	-508.46	0.043181818	33.29	0.003253197
DV-P 199f	703	12	-173.22	199.34	1.597272727	26.12	0.283702491
DV-P 199g	161	12	171.53	-197.65	0.365909091	26.12	0.065728254
DV-P 555	274	10	1.69	1.69	0.518939394	0.00	0
DV-P 555a	31	10	135.44	142.18	0.058712121	6.74	0.00278323
DV-P-202c	360	6	8.27	8.27	0.409090909	0.00	0
DV-P 202e	177	6	-24.4	25.35	0.201136364	0.95	-0.008148381
DV-P 191a	490	6	17.49	17.98	0.556818182	0.49	0.015174689
DV-P 192	296	6	11.86	11.99	0.336363636	0.13	0.003646979
DV-P 192a	307	6	14.96	15.09	0.348863636	0.13	0.003005452
DV-P 192b	480	6	25.65	26.04	0.545454545	0.39	0.00816925
DV-P 192e	413	6	41.48	41.75	0.469318182	0.27	0.003035112
DV-P 192f	334	6	28.95	28.5	0.379545455	0.45	0.005809369
DV-P 192d	56	6	3.32	3.93	0.063636364	0.61	0.0098774
DV-P 382a	3,447.00	6	29.87	29.85	3.917045455	0.02	0.002620974
DV-P 382b	1,198.00	6	44.97	45.02	1.361363636	0.05	0.001511954
DV-P 426a	745	8	221.96	222.34	1.128787879	0.38	0.001929205
DV-P 426b	1,043.00	8	228.24	228.56	1.58030303	0.32	0.002212535
DV-P 426c	420	8	344.41	344.89	0.636363636	0.48	0.000885658
DV-P 383b	404	6	111.67	111.83	0.459090909	0.16	0.000656841
DV-P 383a	709	6	107.53	107.69	0.805681818	0.16	0.001197039
DV-P 552	664	6	-2.12	2.16	0.754545455	0.04	0.01451049
DV-P 552a	366	6	4.19	-4.23	0.415909091	0.04	0.004008762
DV-P 322b	645	6	14.8	13.84	0.732954545	0.96	0.044646977
DV-P 297e	508	12	4.47	2.98	1.154545455	1.49	0.288636364
DV-P 367a	735	12	237.36	234.9	1.670454545	2.46	0.01713501
DV-P 291	726	12	246.31	243.85	1.65	2.46	0.016316276
DV-P 78	207	6	4.28	4.28	0.235227273	0.00	0
DV-P 612a	1,255.00	12	390.41	7.7	2.852272727	398.11	1.44006277
DV-P 612	5,676.00	12	505.92	107.81	12.9	398.11	5.680805947
DV-P 373	415	6	23.83	23.78	0.471590909	0.05	0.000987418
DV-P 315e	287	6	25.15	25.13	0.326136364	0.02	0.000259559
DV-P 343	156	6	18.07	17.97	0.177272727	0.10	0.000986493
DV-P 343a	476	6	1.75	1.75	0.540909091	0.00	0
DV-P 161b	1,066.00	6	2.15	2.15	1.211363636	0.00	0
DV-P 161c	437	6	5.43	5.43	0.496590909	0.00	0
DV-P 161d	452	6	1.73	1.73	0.513636364	0.00	0

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV F 272a	283	4	6.38	6.36	0.214393939	0.02	0.00069981
DV P 28	1,637.00	6	8.85	8.83	1.860227273	0.02	0.004213425
DV P 538a	141	6	1.02	1.02	0.160227273	0.00	0
DV P 598c	134	6	0.85	0.85	0.220454545	0.00	0
DV P 529	795	6	1.74	1.74	0.903409091	0.00	0
DV P 177d	371	6	9.58	9.58	0.421590909	0.00	0
DV P 804	25	30	0	0	0.142045455	0.00	0
DV P 552b	334	6	6.8	6.85	0.379545455	0.05	0.002811448
DV P 552d	370	6	3.98	4.02	0.420454545	0.04	0.004268574
DV P 552e	200	6	3.05	3.09	0.227272727	0.04	0.003020236
DV P 154	587	6	22.75	22.83	0.667045455	0.08	0.002353932
DV P 154a	499	6	17.71	17.79	0.567045455	0.08	0.002573093
DV P 393a	28	6	9.29	9.31	0.031818182	0.02	6.83527E-05
DV P 393b	27	6	6.28	6.3	0.030681818	0.02	9.74026E-05
DV P 393	991	6	8.8	8.82	1.126136364	0.02	0.002553597
DV P 393c	1,025.00	6	11.32	11.34	1.164772727	0.02	0.002054273
DV P 393d	282	6	32.51	32.56	0.320454545	0.05	0.000492099
DV P 393e	1,298.00	6	14.33	14.35	1.475	0.02	0.002055749
DV P 393f	1,496.00	6	11.81	11.83	1.7	0.02	0.002874049
DV P 149	379	6	2.52	2.52	0.430681818	0.00	0
DV P 150	681	6	1.75	1.76	0.773863636	0.01	0.004396952
DV P 183	59	6	1.69	1.69	0.067045455	0.00	0
DV P 183c	1,089.00	6	22.66	22.66	1.2375	0.00	0
DV P 406a	2,528.00	12	5.07	5.07	5.745454545	0.00	0
DV P 406	659	12	5.36	5.36	1.497727273	0.00	0
DV P 152	505	6	84.93	85	0.573863636	0.07	0.000472594
DV P 186a	717	8	83.46	83.58	1.086363636	0.12	0.001559747
DV P 186b	1,557.00	8	85.15	85.27	2.359090909	0.12	0.003319936
DV P 186	71	8	86.84	86.96	0.107575758	0.12	0.000148449
DV P 186e	41	8	97.37	96.05	0.062121212	1.32	0.000830885
DV P 188a	1,471.00	12	389.68	390.19	3.343181818	0.51	0.004369724
DV P 441a	410	6	5.36	5.36	0.465909091	0.00	0
DV P 186g	592	8	0.29	0.29	0.896969697	0.00	0
DV P 187	70	12	215.54	223.28	0.159090909	7.74	0.005514886
DV P 167a	193	12	173.67	164.74	0.438636364	8.93	0.021451384
DV P 156	196	6	12.11	12.11	0.222727273	0.00	0
DV P 604a	33	6	10.92	10.92	0.0375	0.00	0
DV P 604b	213	6	1.85	1.85	0.242045455	0.00	0
DV P 603	456	6	7.22	7.22	0.518181818	0.00	0
DV P 85b	162	6	2.56	2.56	0.184090909	0.00	0
DV P 86a	70	6	21.17	21.16	0.079545455	0.01	3.75569E-05
DV P 88a	1,084.00	6	26.77	26.76	1.231818182	0.01	0.000459977
DV P 88	566	6	17.34	17.33	0.643181818	0.01	0.00037071
DV P 97	377	6	33.71	33.72	0.428409091	0.01	0.000127049
DV P 97a	1,099.00	6	14.25	14.26	1.248863636	0.01	0.000877011
DV P 99a	354	6	13.76	13.76	0.402272727	0.00	0
DV P 507a	239	2	11.42	11.42	0.090530303	0.00	0
DV P 507	167	1	3.43	3.43	0.031628788	0.00	0
DV P 524	1,355.00	6	3.94	3.94	1.539772727	0.00	0
DV P 541a	1,604.00	6	1.51	1.51	1.822727273	0.00	0
DV P 541	426	6	0.08	0.08	0.484090909	0.00	0
DV P 498b	656	6	50.54	50.55	0.745454545	0.01	0.000147469
DV P 578b	460	6	47.53	47.31	0.522727273	0.22	0.002408377
DV P 273	195	6	1.88	1.88	0.221590909	0.00	0
DV P 589a	647	6	20.84	19.99	0.735227273	0.85	0.03126279
DV P 589	321	6	26.23	25.86	0.364772727	0.37	0.005073906
DV P 608a	330	6	4.32	4.61	0.375	0.29	0.023590022
DV P 608	222	6	12.73	13.26	0.252272727	0.53	0.010083299
DV P 54a	1,103.00	6	2.05	2.08	1.253409091	0.03	0.018078016
DV P 55a	1,037.00	6	2.38	2.43	1.178409091	0.05	0.024247101
DV P 55b	61	6	1.17	1.11	0.069318182	0.06	0.003381375
DV P 53	288	6	0.97	0.86	0.327272727	0.11	0.041860465

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Charge	Allocated Inch Miles
DV P 268	775	4	24.75	24.8	0.587121212	0.05	0.001183712
DV P 269b	1,023.00	6	20.74	20.63	1.1625	0.11	0.006198497
DV P 272	514	4	8.73	8.71	0.389393939	0.02	0.000890043
DV P 264a	86	2	1.88	1.88	0.032575758	0.00	0
DV P 254a	59	6	20.32	20.23	0.067045455	0.09	0.000298274
DV P 254b	730	6	11.46	11.42	0.829545455	0.04	0.002905588
DV P 30	326	6	6.99	6.97	0.370454545	0.02	0.001062997
DV P 30a	375	6	-5.92	5.9	0.426136364	0.02	0.00144453
DV P 30b	754	6	11.1	11.07	0.856818182	0.03	0.002322
DV P 28b	436	6	23.87	23.85	0.435454545	0.02	0.000415476
DV P 28c	250	6	42.32	42.14	0.284090909	0.18	0.001213488
DV P 59	946	6	2.03	2.03	1.075	0.00	0
DV P 62b	307	6	1.87	1.42	0.342863636	0.45	0.067667516
DV P 62a	747	6	2.19	2.64	0.848863636	0.45	0.144692665
DV P 62	408	6	2.03	2.03	0.463636364	0.00	0
DV P 607a	156	12	56.36	62.71	0.354545455	6.35	0.03590119
DV P 41	542	6	21.46	22.05	0.615909091	0.59	0.017411901
DV UD P 775	9,700.00	4	4	4	7.348484848	0.00	0
DV P 778	741	6	2.52	2.52	0.842045455	0.00	0
DV P 337f	467	8	90.14	90.44	0.707575758	0.30	0.002362786
DV P 337h	24	12	-331.08	333.18	0.054545455	2.10	0.000348184
DV P 229c	907	6	111.6	111.59	1.030681818	0.01	9.23467E 05
DV P 539	1,167.00	6	27.68	27.68	1.326136364	0.00	0
DV P 539a	449	6	25.88	25.88	0.510227273	0.00	0
DV P 539b	203	6	41.4	41.4	0.230681818	0.00	0
DV P 223b	268	6	5.4	5.4	0.304545455	0.00	0
DV P 223a	379	6	9	9	0.430681818	0.00	0
DV P 177b	456	6	7.28	7.28	0.518181818	0.00	0
DV P 177c	697	6	5.48	5.48	0.792045455	0.00	0
DV P 180	2,162.00	6	8.42	8.42	2.456818182	0.00	0
DV P 177g	343	6	14.4	14.4	0.389772727	0.00	0
DV P 174d	359	6	-0.01	0.01	0.407954545	0.00	0
DV P 174	377	6	1.8	1.8	0.428409091	0.00	0
DV P 174a	426	6	5.12	5.12	0.484090909	0.00	0
DV P 174c	600	6	1.81	1.81	0.681818182	0.00	0
DV P 174b	290	6	3.32	3.32	0.329545455	0.00	0
DV P 175a	284	6	3.88	3.88	0.322727273	0.00	0
DV P 175b	696	6	1.79	1.79	0.790909091	0.00	0
DV P 225	364	6	1.8	1.8	0.413636364	0.00	0
DV P 230a	306	6	4.75	4.75	0.347727273	0.00	0
DV P 232a	788	6	47.16	47.15	0.895454545	0.01	0.000189836
DV P 232b	478	6	-14.72	14.67	0.543181818	0.05	0.001851335
DV P 232c	620	6	18.3	-18.29	0.704545455	0.01	0.000385208
DV P 232d	214	6	14.56	14.56	0.243181818	0.00	0
DV P 250	480	6	84.94	84.96	0.545454545	0.02	0.000128403
DV P 232e	278	6	21.88	21.87	0.315909091	0.01	0.000144449
DV P 399a	323	8	67.65	67.66	0.489393939	0.01	7.23314E 05
DV P 181b	1,119.00	6	1.8	1.8	1.271590909	0.00	0
DV P 177	353	6	14.98	14.98	0.401136364	0.00	0
DV P 229a	694	6	122.4	122.39	0.788636364	0.01	6.44258E 05
DV P 251	652	6	34.24	34.28	0.740909091	0.04	0.000864538
DV P 251a	468	6	115.28	115.3	0.531818182	0.02	9.22495E 05
DV P 461b	39	6	0.69	0.68	0.044318182	0.01	0.000633117
DV P 461a	354	6	4.39	4.38	0.402272727	0.01	0.000914256
DV P 461	398	6	8.09	8.08	0.452272727	0.01	0.000558361
DV P 101a	254	6	34.29	34.3	0.288636364	0.01	8.41505E 05
DV P 101	347	6	32.12	32.13	0.394318182	0.01	0.000122726
DV P 109j	754	6	5.81	5.81	0.856818182	0.00	0
DV P 109	211	6	1.85	1.85	0.239727272	0.00	0
DV P 520	256	6	1.85	1.85	0.290909091	0.00	0
DV P 111a	236	6	1.85	1.85	0.268181818	0.00	0
DV P 477L	4,789.00	6	82.18	82.18	5.442045455	0.00	0

GEOMETRY			PARKSVILLE CN	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated inch Miles
DV-P-478a	6,153.00	4	5.87	5.87	4.661363636	0.00	0
DV-P-485a	54	6	5.83	5.83	0.061363636	0.00	0
DV-P-485	3,664.00	6	0.04	0.04	4.163636364	0.00	0
DV-P-459	8,273.00	12	1.66	1.66	18.80227273	0.00	0
DV-P-511a	3,359.00	8	40.96	40.95	5.089393939	0.01	0.001242225
DV-P-511	2,638.00	8	34.1	34.09	3.996969697	0.01	0.001171788
DV-P-45a	778	6	11.88	12.39	0.884090909	0.51	0.039655793
DV-P-45	1,051.00	6	6.55	6.78	1.194318182	0.23	0.040515219
DV-P-40	916	6	1.61	1.61	1.040909091	0.00	0
DV-P-50	923	6	22.74	23.09	1.048863636	0.35	0.015898756
DV-P-596	680	6	21.13	21.48	0.772727273	0.35	0.012590994
DV-P-448	939	6	2.17	2.17	1.067045455	0.00	0
DV-P-57b	415	6	2.59	3.21	0.471590909	0.62	0.091006095
DV-P-57a	782	6	6.65	7.27	0.888636364	0.62	0.075784669
DV-P-57	692	6	2.03	2.03	0.786363636	0.00	0
DV-P-10a	539	12	117.09	123.17	1.225	6.08	0.06046927
DV-P-10	412	12	-628.39	635.22	0.936363636	6.83	0.010289214
DV-P-420	300	12	-593.65	599.94	0.681818182	6.29	0.007301547
DV-P-420a	138	12	-102.11	103.51	0.313636364	1.40	0.004359953
DV-P-420b	155	12	104.28	105.68	0.352272727	1.40	0.004793758
DV-P-419a	1,497.00	12	197.15	199.25	3.402272727	2.10	0.035858332
DV-P-419	559	12	90.7	91.4	1.270454545	0.70	0.009729958
DV-P-8	160	12	287.49	84.41	0.363636364	203.08	0.150533609
DV-P-4a	1,640.00	6	1.85	1.85	1.863636364	0.00	0
DV-P-6a	333	12	281.7	78.62	0.756818182	203.08	0.317039969
DV-P-23	441	6	2.66	2.51	0.501136364	0.15	0.029948388
DV-P-20b	750	6	15.57	15.69	0.852272727	0.12	0.006619594
DV-P-20a	616	6	19.63	19.75	0.7	0.12	0.004305484
DV-P-20	981	6	2.03	2.03	1.114772727	0.00	0
DV-P-145	1,624.00	6	28.67	28.7	1.845454545	0.03	0.001929047
DV-P-779	484	12	26.15	26.18	1.1	0.03	0.001260504
DV-P-780	549	12	389.97	390.48	1.247727273	0.51	0.001629638
DV-P-803	50	6	-721.65	703.57	0.056818182	18.08	0.001460086
DV-P-251e	983	6	58.2	58.17	1.117045455	0.03	0.0005755
DV-P-600	264	6	96.28	96.32	0.3	0.04	0.000124585
DV-P-600c	363	6	150.88	150.89	0.4125	0.01	2.73378E-05
DV-P-234	1,282.00	12	44.71	47.06	2.913636364	2.35	0.145496079
DV-P-245	308	6	1.79	1.79	0.35	0.00	0
DV-P-249a	132	6	1.79	1.79	0.15	0.00	0
DV-P-249	465	6	9.2	9.2	0.528409091	0.00	0
DV-P-165a	464	6	30.42	29.34	0.527272727	1.08	0.018077922
DV-P-165	604	6	0.86	0.86	0.686363636	0.00	0
DV-P-170a	190	12	10.87	12.88	0.431818182	2.01	0.067387775
DV-P-170	343	12	8.32	10.39	0.779545455	2.07	0.155308863
DV-P-239	317	6	25.26	24.18	0.360227273	1.08	0.014770139
DV-P-170c	611	12	15.2	17.27	1.388636364	2.07	0.166443386
DV-P-237	123	6	0.86	0.86	0.139727272	0.00	0
DV-P-236	831	10	547.76	534	1.573863636	13.76	0.038567395
DV-P-318a	911	6	17.86	18.7	1.035227273	0.84	0.046502188
DV-P-318	121	6	16.95	19.02	0.1375	2.07	0.014964511
DV-P-205	301	6	1.75	1.75	0.342045455	0.00	0
DV-P-207a	312	6	1.75	1.75	0.354545455	0.00	0
DV-P-211	683	6	4.44	4.49	0.776136364	0.05	0.008839822
DV-P-211a	417	6	11.2	12.22	0.473863636	1.02	0.039553266
DV-P-211b	79	6	1.46	1.46	0.089772727	0.00	0
DV-P-204c	449	6	7.84	9.07	0.510227273	1.23	0.094943955
DV-P-204b	397	6	6.97	7.62	0.451136364	0.65	0.038482761
DV-P-204a	1,005.00	6	10.78	12.02	1.142045455	1.24	0.148441967
DV-P-204	779	6	28.17	30.47	0.885227273	2.30	0.078702077
DV-P-549b	373	8	110.64	108.09	0.565151515	2.55	0.013332745
DV-P-549	600	6	45.29	44.97	0.681818182	0.32	0.004851719
DV-P-319c	75	6	3.38	3.38	0.385227273	0.00	0

CEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (ppm)	Flow (ppm)	Inch Miles	Flow Change	Allocated Inch Miles
DV P 326a	50	6	31.72	30.87	0.056818182	0.85	0.001564479
DV P 326	483	2	1.69	1.63	0.182954545	0.00	0
DV P 322a	79	6	11.92	12.35	0.089772727	0.43	0.003359641
DV P 322	341	6	8.34	8.77	0.3875	0.43	0.021065107
DV P 313	151	6	61.42	61.45	0.171530909	0.03	8.38529E-05
DV P 316	593	6	51.66	49.89	0.673863636	1.77	0.022323388
DV P 315a	367	6	2.14	3.12	0.417045455	0.98	0.352331505
DV P 315f	215	6	21.77	21.75	0.244318182	0.02	0.00022466
DV P 315g	254	6	15.34	15.32	0.288636364	0.02	0.00037681
DV P 315h	104	6	29.85	28.86	0.118181818	0.99	0.004054054
DV P 315i	286	6	29.44	29.39	0.325	0.05	0.000552909
DV P 781	608	12	398.75	399.2	1.381818182	0.45	0.001557661
DV P 782	87	6	43.1	43.99	0.078863636	0.89	0.002000196
DV P 783	82	6	32.67	33.56	0.093181818	0.89	0.002471151
DV P 784	30	6	8.74	8.74	0.034090909	0.00	0
DV P 785	2,373.00	16	395.9	396.62	7.190909091	0.72	0.01310151
DV P 786	343	16	393.08	393.83	1.039393939	0.75	0.001986964
DV P 410a	1,324.00	3	3.4	3.37	0.752272727	0.03	0.00669679
DV P 410b	732	3	0.29	0.29	0.415909091	0.00	0
DV P 789	442	6	23.69	23.81	0.502272727	0.12	0.002531404
DV P 790	140	6	41.39	42.09	0.159090909	0.70	0.00273688
DV P 791	147	8	17.41	17.99	0.221727273	0.58	0.007675687
DV P 263a	1,011.00	2	1.41	1.41	0.382954545	0.00	0
DV P 263	964	1	0.47	0.47	0.182575758	0.00	0
DV P 516a	737	6	1.88	1.88	0.8375	0.00	0
DV P 794	592	6	97.75	97.64	0.672727273	0.11	0.000756182
DV P 795	326	6	141.58	141.55	0.370454545	0.03	7.84806E-05
DV P 796	195	6	137.98	137.95	0.221590909	0.03	4.81684E-05
DV UD P-797	744	6	1.8	1.8	0.845454545	0.00	0
DV P 312a	350	12	-142.63	143.99	0.795454545	1.36	-0.007657805
DV P 312b	42	12	-99.65	-101.2	0.095454545	1.55	-0.001508201
DV P 312c	919	12	-90.06	91.5	2.088636364	1.44	-0.033938573
DV P 314	158	6	1.79	1.79	0.179545455	0.00	0
DV P 297d	313	12	4.56	2.96	0.711363636	1.60	0.184769776
DV P 297c	33	12	14.03	15.63	0.075	1.60	0.009654063
DV P 297b	177	12	100.31	101.95	0.402272727	1.64	0.006471087
DV P 297a	569	12	52.69	51.98	1.293181818	0.71	0.017663699
DV P 297	341	12	412.56	412.54	0.775	0.02	3.75685E-05
DV P 310	166	12	88.7	88.73	0.377272727	0.03	0.000127558
DV P 310a	519	12	102.38	102.62	1.179545455	0.24	0.002758633
DV P 310b	22	12	392.06	392.65	0.05	0.59	7.5357E-05
DV P 304a	27	12	-371.47	372.16	0.061363636	0.69	0.000114194
DV P 545b	550	12	140.1	140.57	1.25	0.47	0.004207549
DV P 545a	432	12	137.2	137.67	0.981818182	0.47	0.003374933
DV P 545	414	12	128.5	128.97	0.940909091	0.47	0.003454091
DV P 212a	506	6	22.48	24.14	0.575	1.66	0.045845341
DV P 212b	157	6	-23.13	-24.78	0.178409091	1.65	0.013704609
DV P 203b	505	12	112.17	134.31	1.147727273	22.14	0.282246827
DV P 203d	20	12	82.88	102.52	0.045454545	19.64	0.014116497
DV P 203a	161	12	140.23	146.03	0.365909091	5.80	0.015787196
DV P 203	1,103.00	12	107.56	112.47	2.506818182	4.91	0.119907231
DV P 338a	236	6	7.29	8.37	0.268181818	1.08	0.034604106
DV P 338	928	6	8.3	9.43	1.054545455	1.13	0.126366528
DV P 357b	437	8	37.91	38.93	0.662121212	1.02	0.017348154
DV P 357a	228	10	38.77	39.79	0.431818182	1.02	0.011069478
DV P 346a	445	6	50.18	50.18	0.505681818	0.00	0
DV P 346	469	6	40.7	40.7	0.532954545	0.00	0
DV P 337d	454	8	24.56	25.8	0.687878788	1.24	0.036576745
DV P 337b	34	8	6.41	7.24	0.051515152	0.83	0.007662648
DV P 337a	527	8	8.43	9.28	0.798484848	0.83	0.086974071
DV P 337	458	8	50.47	52.04	0.693393939	1.57	0.022279854
DV P 301	284	6	12.25	12.2	0.322727273	0.05	0.001311899

GEOMETRY			PARKVILLE ON	PARKVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV-P 299	30	12	83.77	91.21	0.068181818	1.44	0.001111534
DV-P-299a	528	6	93.95	93.9	0.6	0.05	0.000319149
DV-P 299b	97	6	78.8	78.81	0.110227273	0.01	1.39865E 05
DV-P 299c	72	6	49.44	49.46	0.081818182	0.02	3.30846E 05
DV-P 127d	241	6	46.54	46.56	0.273863636	0.02	0.000117639
DV-P 127c	453	6	40.74	40.76	0.514772727	0.02	0.000252587
DV-P 127b	432	6	52.22	52.27	0.490909091	0.05	0.00046959
DV-P 68a	392	6	20.59	20.62	0.445454545	0.03	0.000648091
DV-P 68	326	6	12.16	12.18	0.370454545	0.02	0.0006083
DV-P 123a	156	6	2.9	2.9	0.177272727	0.00	0
DV-P 120	235	6	56.14	56.15	0.267045455	0.01	4.75593E 05
DV-P 117	125	6	29.39	29.4	0.142045455	0.01	4.83148E 05
DV-P 115	627	6	62.92	62.93	0.7125	0.01	0.000113221
DV-P-113a	28	6	2.9	2.9	0.031818182	0.00	0
DV-P 831	583	6	32.58	32.59	0.6625	0.01	0.000203283
DV-P 329b	250	6	17.22	17.22	0.284090909	0.00	0
DV-P 329a	363	6	55.36	55.33	0.4125	0.03	0.000223416
DV-P 329	433	6	62.54	62.51	0.492045455	0.03	0.000235918
DV-P-355b	63	6	14.52	14.36	0.071590909	0.16	0.000780282
DV-P 356	1,725.00	12	107.27	112.18	3.920454545	4.91	0.188056192
DV-P-371	448	6	-27.46	27.47	0.509090909	0.01	0.000185461
DV-P 371a	1,060.00	6	18.54	18.55	1.204545455	0.01	0.000650052
DV-P-585a	479	6	9.4	9.21	0.544318182	0.19	0.010784198
DV-P 585b	422	6	29.89	30.13	0.479545455	0.24	0.003819811
DV-P-368a	1,081.00	6	-4.87	-4.64	1.228409091	0.23	-0.050890968
DV-P 564	831	12	62.9	49.14	1.888636364	13.76	0.338998648
DV-P 247	344	2	1.79	1.79	0.13030303	0.00	0
DV-P-531a	625	6	1.74	1.74	0.710227273	0.00	0
DV-P 799	2,250.00	12	231.78	57.68	5.113636364	174.10	2.193466273
DV-P-362	432	6	32.62	32.43	0.490909091	0.19	0.002842814
DV-P-367	728	12	245.28	242.82	1.654545455	2.46	0.016429248
DV-P-565	12	1	2.11	2.2	0.002272727	0.09	9.29752E-05
DV-P-358a	236	6	34.09	33.34	0.268181818	0.75	0.005773145
DV-P-358	895	6	11.46	9.88	1.017045455	1.58	0.123230968
DV-P 378d	15	12	40.35	41.02	0.034090909	0.67	0.000556824
DV-P-379a	378	6	-1.95	-3.38	0.429545455	1.43	-1.18125
DV-P 379b	591	6	1.09	2.52	0.671590909	1.43	2.824632353
DV-UD P-294a	192	6	1.1	0.96	0.218181818	0.14	0.031818182
DV-P 291a	25	12	248.37	245.91	0.056818182	2.46	0.000557241
DV-P 575h	34	12	45.93	40.03	0.077272727	5.90	0.008796239
DV-P 575g	43	12	45.07	39.17	0.097727273	5.90	0.011312358
DV-P 575i	216	12	46.96	41.06	0.490909091	5.90	0.054793107
DV-P 872	24	12	49.02	43.12	0.054545455	5.90	0.005859763
DV-P-575k	256	12	51.08	45.18	0.581818182	5.90	0.060244424
DV-P-575l	37	12	52.11	46.21	0.084090909	5.90	0.008552601
DV-P 575m	464	12	53.43	47.53	1.054545455	5.90	0.104867996
DV-P-295	454	6	20.17	20.05	0.515909091	0.12	0.003051212
DV-P 295a	473	6	-19.14	19.02	0.5375	0.12	0.003391167
DV-P 295b	42	6	34.39	34.17	0.047727273	0.22	0.000307287
DV-P 876	281	6	38.51	38.29	0.319318182	0.22	0.001813839
DV-P 877	270	6	40.57	40.35	0.306818182	0.22	0.001654817
DV-P 878	534	6	41.89	41.67	0.606818182	0.22	0.003170268
DV-P 286	287	8	35.99	34.11	0.434848485	1.88	0.021587408
DV-P 286a	655	8	26.98	25.3	0.992424242	1.08	0.038197369
DV-P 280a	162	12	348.58	337.49	0.368181818	11.09	0.011352452
DV-P 515b	269	6	3.76	3.76	0.305681818	0.00	0
DV-P 515c	904	6	1.88	1.88	1.027272727	0.00	0
DV-P 275b	1,043.00	6	30.79	29.88	1.185227273	0.91	0.034023874
DV-P 279a	597	6	32.28	31.24	0.678409091	1.04	0.022584682
DV-P 515	549	6	11.28	11.28	0.623863636	0.00	0
DV-P 280b	993	12	368.29	356.87	2.256818182	11.42	0.067875125
DV-P 286b	651	6	28.01	26.93	0.739772727	1.08	0.027464921

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV P 575	1,906.00	12	104.11	11.03	4.331818182	13.08	0.483489904
DV P 33a	381	6	1.74	1.74	0.432954545	0.00	0
DV UD P 892	30	8	1.43	1.45	0.045454545	0.00	0
JC P 37	50	4	2.63	2.63	0.037878788	0.00	0
JC P 123	51	6	1.06	1.06	0.057954545	0.00	0
JC P 87	67	6	19.8	19.8	0.076136364	0.00	0
JC P 117	93	8	3.03	3.03	0.140909091	0.00	0
JC P-46	97	4	4.48	4.48	0.073484848	0.00	0
JC P 124	89	8	253.94	253.94	0.134848485	0.00	0
JC P 125	102	6	26.73	26.73	0.115909091	0.00	0
JC P-13	106	2	7.58	7.58	0.040151515	0.00	0
JC P 47	110	4	12.1	12.1	0.083333333	0.00	0
JC P 81	111	10	126.6	126.6	0.210227273	0.00	0
JC P 100	114	8	48.67	48.67	0.172727273	0.00	0
JC P 175	127	2	0.93	0.93	0.048106061	0.00	0
JC P 51	156	4	1.18	1.18	0.118181818	0.00	0
JC P 50	154	4	1.18	1.18	0.116666667	0.00	0
JC P 104	159	6	2.51	2.51	0.180681818	0.00	0
JC P-10	175	6	17.01	17.01	0.198863636	0.00	0
JC P 134	176	6	27.61	27.61	0.2	0.00	0
JC P-140	206	4	0.81	0.81	0.156060606	0.00	0
JC P-170	208	6	0.82	0.82	0.236363636	0.00	0
JC P-83	210	10	125.78	125.78	0.397727273	0.00	0
JC P-11	218	4	0.81	0.81	0.165151515	0.00	0
JC P-98	227	8	44.04	44.04	0.343939394	0.00	0
JC P-105	227	6	14.18	14.18	0.257954545	0.00	0
JC P-96	228	8	55.31	55.31	0.345454545	0.00	0
JC P-28	234	6	1.06	1.06	0.265909091	0.00	0
JC P-147	234	8	2.26	2.26	0.354545455	0.00	0
JC P-116	235	2	1.86	1.86	0.089015152	0.00	0
JC P-14	238	8	38.93	38.93	0.360606061	0.00	0
JC P-3	241	6	2.43	2.43	0.273863636	0.00	0
JC P-115	241	6	0.93	0.93	0.273863636	0.00	0
JC P-149	247	6	7.29	7.29	0.280681818	0.00	0
JC P-39	250	8	46.13	46.13	0.378787879	0.00	0
JC P-1	253	4	0.81	0.81	0.191666667	0.00	0
JC P-183	268	6	2.51	2.51	0.304545455	0.00	0
JC P 91	269	6	9.06	9.06	0.305681818	0.00	0
JC P-26	269	6	3.18	3.18	0.305681818	0.00	0
JC P 6	262	6	3.25	3.25	0.297727273	0.00	0
JC P 2	274	4	0.49	0.49	0.207575758	0.00	0
JC P-25	280	6	4.13	4.13	0.318181818	0.00	0
JC P 110	289	4	0.93	0.93	0.218939394	0.00	0
JC P 148	294	4	1.13	1.13	0.222727273	0.00	0
JC P-78	298	6	20.55	20.55	0.338636364	0.00	0
JC P-74	299	6	23.02	23.02	0.339772727	0.00	0
JC P-76	301	8	59.38	59.38	0.456060606	0.00	0
JC P-59	301	10	10.34	10.34	0.570075758	0.00	0
JC P 68	304	6	20.34	20.34	0.345454545	0.00	0
JC P 128	305	6	2.51	2.51	0.346590909	0.00	0
JC P 67	306	6	16	16	0.347727273	0.00	0
JC P 62	313	4	2.94	2.94	0.237121212	0.00	0
JC P-36	316	4	2.63	2.63	0.239393939	0.00	0
JC P-80	316	8	60	60	0.478787879	0.00	0
JC P 92	325	10	139.81	139.81	0.615530303	0.00	0
JC P 45	349	4	2.56	2.56	0.264393939	0.00	0
JC P 61	330	10	16.46	16.46	0.625	0.00	0
JC P 168	298	4	3.62	3.62	0.225757576	0.00	0
JC P 118	336	4	2.79	2.79	0.254545455	0.00	0
JC P 137	342	6	5.67	5.67	0.388636364	0.00	0
JC P 141	356	4	2.09	2.09	0.26969697	0.00	0
JC P 132	356	2	2.51	2.51	0.134848485	0.00	0

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
JC P 20	359	3	1.06	1.06	0.203977273	0.00	0
JC P 49	369	4	1.7	1.7	0.279545455	0.00	0
JC P 48	365	4	1.72	1.72	0.276515152	0.00	0
JC P 171	492	2	0.82	0.82	0.186363636	0.00	0
JC P 60	370	6	5.29	5.29	0.420454545	0.00	0
JC P 79	371	10	63.32	63.32	0.702651515	0.00	0
JC P 57	528	4	1.24	1.24	0.4	0.00	0
JC P-72	381	6	8.52	8.52	0.432354545	0.00	0
JC P 85	383	6	7.53	7.53	0.435227273	0.00	0
JC P 120	385	4	0.93	0.93	0.291666667	0.00	0
JC P 70	388	6	9.07	9.07	0.440909091	0.00	0
JC P 77	388	6	0.19	0.19	0.440909091	0.00	0
JC P-73	397	6	3.48	3.48	0.451136364	0.00	0
JC P-32	397	6	17.58	17.58	0.451136364	0.00	0
JC P 135	405	6	32.63	32.63	0.460227273	0.00	0
JC P 142	407	4	1.02	1.02	0.308333333	0.00	0
JC P 66	408	10	41.95	41.95	0.772727273	0.00	0
JC P-33	418	8	41.54	41.54	0.633333333	0.00	0
JC-P-122	428	4	4.65	4.65	0.324242424	0.00	0
JC P-71	552	6	22.75	22.75	0.627272727	0.00	0
JC P 106	1,051.00	6	2.51	2.51	1.194318182	0.00	0
JC P 65	435	10	24.31	24.31	0.823863636	0.00	0
JC P 111	444	4	0.93	0.93	0.336363636	0.00	0
JC P 112	445	4	0.93	0.93	0.337121212	0.00	0
JC-P-69	445	6	8.65	-8.65	0.505681818	0.00	0
JC-P-108	447	8	27.72	-27.72	0.677272727	0.00	0
JC P-109	448	6	5.58	5.58	0.509090909	0.00	0
JC-P 129	451	6	2.51	2.51	0.5125	0.00	0
JC-P-55	455	6	10.45	10.45	0.517045455	0.00	0
JC-P-113	460	6	2.79	2.79	0.522727273	0.00	0
JC-P-44	813	8	14.82	14.82	1.231818182	0.00	0
JC P 5	466	4	0.81	0.81	0.353030303	0.00	0
JC-P-42	475	6	17.23	17.23	0.539772727	0.00	0
JC P-95	480	8	105.67	105.67	0.727272727	0.00	0
JC P-138	488	6	7.29	7.29	0.554545455	0.00	0
JC-P-63	492	10	18.92	18.92	0.931818182	0.00	0
JC P-30	543	8	39.99	39.99	0.822727273	0.00	0
JC P 119	689	4	0.93	0.93	0.521969697	0.00	0
JC P 107	624	6	6.65	6.65	0.709090909	0.00	0
JC P 185	513	6	0.82	0.82	0.582954545	0.00	0
JC P 84	542	3	0.82	0.82	0.307954545	0.00	0
JC P-27	556	6	1.06	1.06	0.631818182	0.00	0
JC P 64	559	6	0.82	0.82	0.635227273	0.00	0
JC P 177	564	2	2.51	2.51	0.213636364	0.00	0
JC P 43	566	8	42.99	42.99	0.857575758	0.00	0
JC P 4	567	6	0.81	0.81	0.644318182	0.00	0
JC-P-15	590	6	40.56	40.56	0.670454545	0.00	0
JC P-158	724	4	0.64	0.64	0.548484848	0.00	0
JC P 35	595	2	1.13	1.13	0.225378788	0.00	0
JC P 139	597	4	4.05	4.05	0.452272727	0.00	0
JC P 151	602	6	2.29	2.29	0.684090909	0.00	0
JC P 22	639	6	3.29	3.29	0.726136364	0.00	0
JC P-102	612	8	47.85	47.85	0.927272727	0.00	0
JC P 17	621	8	13.26	13.26	0.940909091	0.00	0
JC P 146	621	4	0.67	0.67	0.470454545	0.00	0
JC P 164	622	2	2.86	2.86	0.235606061	0.00	0
JC P 38	801	4	4.2	4.2	0.606818182	0.00	0
JC P 40	659	6	15.11	15.11	0.748863636	0.00	0
JC P 58	680	4	8.29	8.29	0.515151515	0.00	0
JC P 181	671	6	0.81	0.81	0.7625	0.00	0
JC P 182	676	6	0.81	0.81	0.768181818	0.00	0
JC P 172	683	10	145.76	145.76	1.293560606	0.00	0

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
JC P 34	693	6	3.53	3.53	0.7875	0.00	0
JC P 82	865	10	124.14	124.14	1.638257576	0.00	0
JC P 31	721	4	0.49	0.49	0.546212121	0.00	0
JC P 75	731	8	46.46	46.46	1.107575758	0.00	0
JC P 93	736	10	142.32	142.32	1.393939394	0.00	0
JC P 143	743	4	0.26	0.26	0.562878788	0.00	0
JC P 130	750	6	2.51	2.51	0.852272727	0.00	0
JC P 41	788	2	1.06	1.06	0.298484848	0.00	0
JC P 29	768	6	17.01	17.01	0.872727273	0.00	0
JC P 162	772	6	4.05	4.05	0.877272727	0.00	0
JC P 152	779	8	4.2	4.2	1.18030303	0.00	0
JC P 145	941	4	0.6	0.6	0.712878788	0.00	0
JC P 97	787	2	2.11	2.11	0.298106061	0.00	0
JC P-167	809	6	1.06	1.06	0.919318182	0.00	0
JC P 155	801	6	42.67	42.67	0.910227273	0.00	0
JC P 154	819	6	7.53	7.53	0.930681818	0.00	0
JC P 101	830	8	43.16	43.16	1.257575758	0.00	0
JC P 16	864	6	24.61	24.61	0.981818182	0.00	0
JC-P 23	1,066.00	2	1.06	1.06	0.403787879	0.00	0
JC P 127	875	8	39.02	39.02	1.325757576	0.00	0
JC P 7	882	6	0.81	0.81	1.002272727	0.00	0
JC P 144	1,118.00	4	1.15	1.15	0.846969697	0.00	0
JC P 24	929	6	0.11	0.11	1.055681818	0.00	0
JC P 19	1,004.00	4	6.56	6.56	0.760606061	0.00	0
JC P-56	925	4	-4.88	-4.88	0.700757576	0.00	0
JC-P 90	944	10	128.24	128.24	1.787878788	0.00	0
JC-P 9	977	4	0.81	0.81	0.740151515	0.00	0
JC P 186	1,032.00	2	0.24	0.24	0.390909091	0.00	0
JC-P 94	1,046.00	2	0.93	0.93	0.396212121	0.00	0
JC-P-86	1,082.00	6	20.62	20.62	1.229545455	0.00	0
JC-P-54	1,272.00	4	4.75	4.75	0.963636364	0.00	0
JC P-114	1,233.00	8	-31.86	-31.86	1.868181818	0.00	0
JC P 121	1,240.00	4	0.93	0.93	0.939393939	0.00	0
JC P-150	1,265.00	4	0.81	0.81	0.958333333	0.00	0
JC P-136	1,285.00	6	9.64	9.64	1.460227273	0.00	0
JC-P-176	1,682.00	6	8.67	8.67	1.911363636	0.00	0
JC P-99	1,360.00	6	2.51	2.51	1.545454545	0.00	0
JC P 52	1,403.00	6	1.06	1.06	1.594318182	0.00	0
JC P-161	1,505.00	6	0.81	0.81	1.710227273	0.00	0
JC P 166	1,510.00	6	2.23	2.23	1.715909091	0.00	0
JC P 53	1,534.00	6	0.24	0.24	1.743181818	0.00	0
JC P-103	1,646.00	8	44.41	44.41	2.493939394	0.00	0
JC P 173	2,063.00	6	8.02	8.02	2.344318182	0.00	0
JC P 153	1,966.00	6	2.51	2.51	2.234090909	0.00	0
JC P 187	1,901.00	6	14.88	14.88	2.160227273	0.00	0
JC P 18	2,041.00	8	9.34	9.34	3.092424242	0.00	0
JC P 8	2,314.00	6	18.63	18.63	2.629545455	0.00	0
JC P-165	3,001.00	6	0.31	0.31	3.410227273	0.00	0
JC P 157	2,768.00	2	2.51	2.51	1.048484848	0.00	0
JC P 126	2,554.00	4	0.93	0.93	1.934848485	0.00	0
JC P 89	3,015.00	6	8.06	8.06	3.426136364	0.00	0
JC P 178	4,136.00	8	0.81	0.81	6.266666667	0.00	0
JC P 156	4,225.00	8	0.24	0.24	6.401515152	0.00	0
PV-P-49	1,813.00	6	0.4	0.4	2.060227273	0.00	0
PV-P 189	5	4	1.36	1.36	0.003787879	0.00	0
PV-P 188	10	4	1.36	1.36	0.007575758	0.00	0
PV-P 183	8	4	1.36	1.36	0.006060606	0.00	0
PV-P 187	13	4	2.72	2.72	0.009848485	0.00	0
PV-P 172	44	4	1.06	1.06	0.033333333	0.00	0
PV-P 45	44	8	101.15	101.34	0.066666667	0.19	0.000124992
PV-P 145	43	6	22.98	23.03	0.048863636	0.05	0.000196087
PV-P 180	48	4	4.08	4.08	0.036363636	0.00	0

CEOMETRY			PARKSV LLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
PV-P 182	94	4	1.36	1.36	0.071212121	0.00	0
PV-P 181	98	4	1.36	1.36	0.074242424	0.00	0
PV-P 48	125	4	15.84	15.87	0.09469697	0.03	0.000179691
PV-P 156	124	2	1.06	1.06	0.046969697	0.00	0
PV-P 91	175	4	2.49	2.49	0.132575758	0.00	0
PV-P 92	193	4	0.19	0.19	0.146212121	0.00	0
PV-P 99	217	6	1.06	1.06	0.246590909	0.00	0
PV-P 84	196	4	3.19	-3.19	0.148484848	0.00	0
PV-P 50	187	6	2.68	2.68	0.2125	0.00	0
PV-P 78	213	6	3.69	3.69	0.242045455	0.00	0
PV-P 157	217	2	1.06	1.06	0.08219697	0.00	0
PV-P 98	225	6	2.12	2.12	0.255681818	0.00	0
PV-P 43	269	6	23.15	23.19	0.305681818	0.04	0.000527265
PV-P 146	278	2	3.68	3.69	0.10530303	0.01	0.000286929
PV-P 67	294	4	5.93	5.94	0.222727273	0.01	0.000376229
PV-P 110	315	6	7.98	7.98	0.357954545	0.00	0
PV-P 72	316	4	2.12	2.12	0.239393939	0.00	0
PV-P 71	325	6	48.71	48.87	0.369318182	0.16	0.001209145
PV-P-100	328	6	12.45	12.45	0.372727273	0.00	0
PV-P 73	327	6	9.54	9.54	0.371590909	0.00	0
PV-P 66	335	4	1.06	1.06	0.253787879	0.00	0
PV-P 153	352	6	7.42	7.42	0.4	0.00	0
PV-P 93	337	4	15.36	15.4	0.25530303	0.04	0.000666588
PV-P-55	338	4	-10.56	10.59	0.256060606	0.03	0.000729517
PV-P-160	338	2	3.18	3.18	0.128030303	0.00	0
PV-P 61	344	4	22.61	22.67	0.260606061	0.06	0.000689738
PV-P 109	368	6	9.04	9.04	0.418181818	0.00	0
PV-P 154	444	2	1.06	1.06	0.168181818	0.00	0
PV-P-159	353	4	5.3	5.3	0.267424242	0.00	0
PV-P-147	357	2	-1.15	-1.15	0.135227273	0.00	0
PV-P-161	359	2	-1.06	1.06	0.135984848	0.00	0
PV-P-33	360	8	245.59	246.18	0.545454545	0.59	0.001307247
PV-P 114	443	2	1.27	1.27	0.16780303	0.00	0
PV-P-76	389	6	29.14	-29.14	0.442045455	0.00	0
PV-P 59	388	4	11.26	-11.29	0.293939394	0.03	0.000785234
PV-P-64	388	4	-16.28	16.33	0.293939394	0.05	0.000905543
PV-P 58	391	8	44.86	44.96	0.592424242	0.10	0.00131767
PV-P 150	445	2	4.59	4.6	0.168560606	0.01	0.000368036
PV-P 62	397	4	15.18	15.22	0.300757576	0.04	0.000794604
PV-P 102	400	4	1.06	1.06	0.303030303	0.00	0
PV-P 77	401	6	13.51	13.51	0.455681818	0.00	0
PV-P 60	403	8	27.97	28.03	0.610606061	0.06	0.001307041
PV-P-169	358	3	1.27	1.27	0.203409091	0.00	0
PV-P 40	414	6	174.22	174.85	0.470454545	0.63	0.001707393
PV-P 74	419	4	3.18	3.18	0.317424242	0.00	0
PV-P 56	598	8	59.25	59.37	0.906060606	0.12	0.00183135
PV-P-149	485	4	1.34	1.34	0.367424242	0.00	0
PV-P 63	475	6	35.11	-35.21	0.539772727	0.10	-0.001541767
PV-P 103	477	6	10.6	10.6	0.542045455	0.00	0
PV-P 95	488	6	2.63	2.63	0.554545455	0.00	0
PV-P 65	488	4	10.1	10.12	0.36969697	0.02	0.000733526
PV-P 106	506	6	56.69	56.69	0.575	0.00	0
PV-P 101	704	4	7.41	7.41	0.533333333	0.00	0
PV-P 88	510	4	7.21	7.21	0.386363636	0.00	0
PV-P 112	1,406.00	2	0.11	0.11	0.532575758	0.00	0
PV-P 148	509	2	1.34	1.34	0.19280303	0.00	0
PV-P 158	528	2	1.06	1.06	0.2	0.00	0
PV-P 90	713	2	1.34	1.34	0.270075758	0.00	0
PV-P 13	556	8	256.16	256.66	0.842424242	0.50	0.001641129
PV-P 11	567	4	40.35	40.43	0.429545455	0.08	0.000849954
PV-P 82	577	4	5.87	5.87	0.437121212	0.00	0
PV-P 57	567	2	1.64	1.64	0.214772727	0.00	0

Label	GEOMETRY		PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated inch Miles
PV P 89	630	8	65.6	65.74	0.954545455	0.14	0.002032801
PV P 135	657	6	13.29	-13.29	0.746590909	0.00	0
PV P 32	657	8	256.95	257.58	0.995454545	0.63	0.002434725
PV P 138	638	6	12.22	12.22	0.725	0.00	0
PV P 46	825	6	19.13	19.17	0.9375	0.04	0.001936182
PV P 168	737	3	1.27	1.27	0.41875	0.00	0
PV P 163	709	6	1.06	1.06	0.805681818	0.00	0
PV P 124	728	6	17.57	17.57	0.827272727	0.00	0
PV P 52	770	4	3.81	3.81	0.583333333	0.00	0
PV P 7	952	4	1.36	1.36	0.721212121	0.00	0
PV P 9	849	8	261.97	262.48	1.286363636	0.51	0.002499411
PV P 170	888	3	1.27	1.27	0.504545455	0.00	0
PV P 105	961	4	6.36	6.36	0.728030303	0.00	0
PV P 22	1,062.00	8	308.63	309.26	1.609090909	0.63	0.003277913
PV P 8	1,176.00	4	1.27	1.27	0.890909091	0.00	0
PV P 85	1,096.00	4	1.34	1.34	0.83030303	0.00	0
PV P 86	1,002.00	4	4.53	4.53	0.759090909	0.00	0
PV P 129	1,267.00	3	1.27	1.27	0.719886364	0.00	0
PV P 10	1,136.00	4	-6.45	6.46	0.860606061	0.01	0.001336345
PV P 12	1,156.00	6	41.63	41.71	1.313636364	0.08	0.002519561
PV P 118	1,856.00	4	1.27	1.27	1.406060606	0.00	0
PV P 36	1,186.00	4	1.36	1.36	0.898484848	0.00	0
PV P 44	1,282.00	2	5.8	5.82	0.485606061	0.02	0.001668749
PV P 127	1,277.00	3	-1.27	1.27	0.725568182	0.00	0
PV P 70	1,270.00	6	46.6	-46.77	1.443181818	0.17	0.005284103
PV P 39	1,265.00	6	40.39	40.58	1.4375	0.19	0.006794154
PV P 3	1,363.00	4	-0.44	0.44	1.032575758	0.00	0
PV P 120	1,383.00	4	4.22	4.22	1.047727273	0.00	0
PV P-17	1,819.00	4	33.26	33.32	1.378030303	0.06	0.002481447
PV P-151	1,371.00	2	1.27	1.27	0.519318182	0.00	0
PV P-119	1,453.00	4	2.95	2.95	1.100757576	0.00	0
PV P-35	1,430.00	4	12.72	12.75	1.093333333	0.03	0.00254902
PV P 38	1,751.00	4	-15.44	15.47	1.326515152	0.03	0.002582444
PV P-171	1,472.00	2	1.27	1.27	0.557575758	0.00	0
PV P-121	1,593.00	3	1.27	1.27	0.905113636	0.00	0
PV P 134	1,492.00	6	-16.87	-16.87	1.695454545	0.00	0
PV P 144	1,512.00	6	51.06	51.25	1.718181818	0.19	0.006369845
PV P 16	1,548.00	8	298.43	299	2.345454545	0.57	0.004471268
PV P-174	1,877.00	6	4.8	4.8	2.132954545	0.00	0
PV P 25	1,855.00	8	305.91	306.54	2.810606061	0.63	0.005776348
PV P 24	1,877.00	4	1.36	1.36	1.421969697	0.00	0
PV P-15	2,068.00	8	299.07	299.64	3.133333333	0.57	0.005960486
PV P 184	2,147.00	4	13.6	13.6	1.626515152	0.00	0
PV P 133	2,234.00	6	12.62	12.62	2.538636364	0.00	0
PV P 37	2,175.00	8	262.39	263.02	3.295454545	0.63	0.007893454
PV P 83	2,251.00	4	0.51	0.51	1.70530303	0.00	0
PV P 167	2,534.00	3	1.27	1.27	1.439772727	0.00	0
PV P-21	2,337.00	2	-1.36	-1.36	0.885227273	0.00	0
PV P 4	2,455.00	4	1.27	1.27	1.859848485	0.00	0
PV P 164	3,035.00	2	1.27	1.27	1.149621212	0.00	0
PV P 140	2,459.00	6	58.21	58.21	2.794318182	0.00	0
PV P 34	2,474.00	8	263.75	264.38	3.748484848	0.63	0.008932391
PV P-128	2,753.00	4	7.54	7.54	2.085606061	0.00	0
PV P 28	2,701.00	8	269.19	269.82	4.092424242	0.63	0.00955536
PV P 116	3,155.00	4	0.86	0.86	2.390151515	0.00	0
PV P 19	3,157.00	6	0.64	0.64	3.5875	0.00	0
PV P 26	3,390.00	4	29.92	29.92	2.568181818	0.00	0
PV P 141	3,651.00	4	4.86	4.86	2.763909091	0.00	0
PV P 125	4,485.00	6	21.46	21.46	5.096590909	0.00	0
PV P 5	4,532.00	3	2.1	2.1	2.575	0.00	0
PV P 1	4,499.00	3	1.27	1.27	2.55625	0.00	0
PV P 130	4,828.00	4	10.08	10.08	3.657575758	0.00	0

CEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCLATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
PV P 42	4,459.00	8	255.59	256.22	6.756060606	0.63	0.016611567
PV P 131	4,720.00	6	1.27	1.27	5.363636364	0.00	0
PV P 142	4,995.00	4	4.64	4.64	3.784090909	0.00	0
PV P 122	5,528.00	6	6.76	6.76	6.281818182	0.00	0
PV P 165	5,720.00	4	1.36	1.36	4.333333333	0.00	0
PV P 30	6,809.00	4	1.36	1.36	5.158333333	0.00	0
PV P 37	5,864.00	4	0.51	0.51	4.442424242	0.00	0
Perryville Water Lines 6	5,871.00	6	44.2	44.25	6.671590909	0.05	0.007538521
PV P 117	6,035.00	4	0.41	0.41	4.571969697	0.00	0
PV P 51	7,484.00	4	2.54	2.54	5.66969697	0.00	0
PV P 132	6,728.00	4	2.98	2.98	5.096969697	0.00	0
PV P 14	8,380.00	3	24.2	24.25	4.761363636	0.05	0.009817245
PV P 53	6,853.00	6	-5.08	5.08	7.7875	0.00	0
PV P-2	8,327.00	4	1.27	1.27	6.308333333	0.00	0
PV P 166	9,092.00	4	1.36	1.36	6.887878788	0.00	0
PV P 137	8,875.00	6	42.37	42.37	10.08522727	0.00	0
PV P 31	9,714.00	3	1.36	1.36	5.519318182	0.00	0
PV P 123	10,280.00	6	9.54	9.54	11.68181818	0.00	0
JC P 879	1,015.00	6	4.24	4.24	1.153409091	0.00	0
JC P 881	22	6	3.18	3.18	0.025	0.00	0
PV P 882	37	6	-0.94	0.94	0.042045455	0.00	0
JC P 883	250	6	1.06	1.06	0.284090909	0.00	0
JC P 885	175	6	1.06	1.06	0.198863636	0.00	0
PV P 887	10	6	173.71	174.34	0.011363636	0.63	4.1064E 05
JC P 889	6	6	-256.45	-256.45	0.006818182	0.00	0
JC P 890	79	6	-27.54	27.54	0.089772727	0.00	0
DV P 891	19	8	2.9	2.9	0.028787879	0.00	0
DV UD P 892	15	6	0	0	0.017045455	0.00	0
JC P 894	922	6	0.81	0.81	1.047727273	0.00	0
JC P 897	1,515.00	6	0.81	-0.81	1.721590909	0.00	0
JC P 898	52	6	0	0	0.059090909	0.00	0
JC P 899	47	6	0	0	0.053409091	0.00	0
PV P 900	1,600.00	6	57.75	57.75	1.818181818	0.00	0
PV P 901	1,145.00	6	71.7	71.7	1.301136364	0.00	0
PV P 902	11	6	130.51	-130.51	0.0125	0.00	0
DV P 903	270	1	2.3	2.3	0.051136364	0.00	0
DV P 904	170	1	3.43	3.43	0.03219697	0.00	0
DV P 905	31	1	4.56	4.56	0.005871212	0.00	0
DV P 906	514	6	-10.57	10.57	0.584090909	0.00	0
DV P 907	140	6	1.85	1.85	0.159090909	0.00	0
DV P 908	3	6	14.27	14.27	0.003409091	0.00	0
JC P 909	164	6	18.98	18.98	0.186363636	0.00	0
JC P 910	106	6	16.52	16.52	0.120454545	0.00	0
JC P 911	6	6	1.64	1.64	0.006818182	0.00	0
JC P 912	6	6	5.3	5.3	0.006818182	0.00	0
JC P 913	298	4	10.04	10.04	0.225757576	0.00	0
JC P 914	484	4	22.59	22.59	0.366666667	0.00	0
JC P 915	237	2	-2.51	2.51	0.089772727	0.00	0
JC P 917	11	2	5.02	5.02	0.004166667	0.00	0
JC P 918	8	2	5.02	5.02	0.003030303	0.00	0
JC P 919	346	6	1.41	1.41	0.393181818	0.00	0
JC P 920	476	6	1.99	1.99	0.540909091	0.00	0
JC P 921	8	6	1.52	1.52	0.009090909	0.00	0
JC P 923	830	6	1.73	1.73	0.943181818	0.00	0
JC P 924	17	6	1.45	1.45	0.019318182	0.00	0
JC P 925	256	6	0.52	0.52	0.290909091	0.00	0
JC P 926	634	6	2.75	2.75	0.720454545	0.00	0
JC P 927	7	6	2.34	2.34	0.007954545	0.00	0
JC P 928	649	6	2.51	2.51	0.7375	0.00	0
JC P 929	435	6	2.51	2.51	0.494318182	0.00	0
JC P 930	2	6	7.53	7.53	0.002272727	0.00	0
JC P 931	327	6	7.05	7.05	0.371590909	0.00	0

Label	GEOMETRY		PARKVILLE ON		PARKVILLE OFF		CALCULATIONS		
	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles		
JC P 932	925	6	2.45	2.45	1.051136364	0.00	0		
JC P 933	6	6	3.68	3.68	0.006818182	0.00	0		
JC P 934	920	6	0.93	0.93	1.045454545	0.00	0		
JC P 935	343	6	0.8	0.8	0.389772727	0.00	0		
JC P 936	6	6	1.06	1.06	0.006818182	0.00	0		
JC P 937	560	6	12.96	12.96	0.636363636	0.00	0		
JC P 938	1,063.00	6	15.39	15.39	1.207954545	0.00	0		
JC P 939	4	6	1.62	1.62	0.004545455	0.00	0		
JC P 940	1,125.00	8	25.35	25.35	1.704545455	0.00	0		
JC P 941	611	8	8.61	8.61	0.925757576	0.00	0		
JC P 942	17	6	15.81	15.81	0.019318182	0.00	0		
JC P 943	256	6	13.02	13.02	0.290909091	0.00	0		
JC P 944	1,211.00	6	4.11	4.11	1.376136364	0.00	0		
JC P 945	7	6	7.98	-7.98	0.007954545	0.00	0		
PV-P 946	21	6	2.68	2.68	0.023863636	0.00	0		
PV P 947	22	6	1.34	1.34	0.025	0.00	0		
PV P 950	46	6	1.06	1.06	0.052272727	0.00	0		
PV P 951	5	6	55.63	55.63	0.005681818	0.00	0		
PV-P-952	104	8	-2.12	-2.12	0.157575758	0.00	0		
PV P 955	183	8	6.36	6.36	0.277272727	0.00	0		
PV P 956	5	8	3.18	3.18	0.007575758	0.00	0		
PV-P 957	4	8	5.3	5.3	0.006060606	0.00	0		
PV-P 958	168	8	111.87	112.06	0.254545455	0.19	0.000431587		
PV-P-959	114	8	251.57	252.2	0.172727273	0.63	0.000431476		
PV-P 960	6	6	138.35	-138.8	0.006818182	0.45	-2.22493E 05		
PV-P-961	259	4	3.6	3.6	0.196212121	0.00	0		
PV P 962	14	4	7.41	7.41	0.010606061	0.00	0		
PV P 963	7	2	2.54	2.54	0.002651515	0.00	0		
PV-P 964	277	6	8.76	8.76	0.314772727	0.00	0		
PV-P-965	48	6	-0.78	-0.78	0.054545455	0.00	0		
PV-P-966	7	6	-8.48	-8.48	0.007954545	0.00	0		
PV P 967	19	2	2.12	-2.12	0.00719697	0.00	0		
PV-P 968	5	2	-2.68	-2.68	0.001893939	0.00	0		
PV-P 969	319	6	39.73	39.73	0.3625	0.00	0		
PV P 971	10	2	2.12	2.12	0.003787879	0.00	0		
PV-P-972	36	6	42.91	42.91	0.040909091	0.00	0		
PV-P 973	111	6	8.48	8.48	0.126136364	0.00	0		
PV P 974	9	6	52.45	52.45	0.010227273	0.00	0		
PV P 975	466	6	6.92	6.92	0.529545455	0.00	0		
PV P 977	8	6	5.86	5.86	0.009090909	0.00	0		
PV-P 978	11	8	102.49	102.68	0.016666667	0.19	3.08402E 05		
PV-P-979	529	8	86.04	86.19	0.801515152	0.15	0.00139491		
PV-P 980	7	6	17.79	17.83	0.007954545	0.04	1.78453E 05		
PV P 981	15	6	24.49	24.53	0.017045455	0.04	2.77953E 05		
PV-P 983	246	6	5.36	5.36	0.279545455	0.00	0		
PV-P 984	4	4	2.68	2.68	0.003030303	0.00	0		
PV-P-985	28	2	-2.91	2.91	0.010606061	0.00	0		
PV-P-986	764	2	1.33	1.33	0.289393939	0.00	0		
PV P 987	9	4	5.3	5.3	0.006818182	0.00	0		
PV-P 988	352	2	1.85	1.85	0.133333333	0.00	0		
PV P 989	518	2	0.16	0.16	0.196212121	0.00	0		
PV P 990	6	2	0.95	0.95	0.002272727	0.00	0		
PV P 991	8	6	2.12	-2.12	0.009090909	0.00	0		
PV-P 992	984	8	74.15	74.29	1.490909091	0.14	0.002809628		
PV P 993	309	8	99.81	100	0.468181818	0.19	0.000889545		
PV P 994	7	6	24.32	24.37	0.007954545	0.05	1.63204E 05		
PV-P 995	392	4	13.46	13.49	0.296969697	0.03	0.000663372		
PV P 996	859	4	14.5	14.53	0.650757576	0.03	0.001349186		
PV-P 997	6	2	0.3	0.3	0.002272727	0.00	0		
PV-P 998	702	4	28.56	28.56	0.531818182	0.00	0		
PV-P 1000	4	4	14.96	14.96	0.003030303	0.00	0		
PV-P 1001	1,000.00	4	12.24	12.24	0.757575758	0.00	0		

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
PV-P-1003	6	4	5.44	5.44	0.004545455	0.00	0
PV-P-1004	350	4	5.44	5.44	0.265151515	0.00	0
PV-P-1005	8	4	1.36	1.36	0.006060606	0.00	0
PV-P-1006	4	4	2.72	2.72	0.003030303	0.00	0
PV-P-1007	783	4	12.24	12.24	0.593181818	0.00	0
PV-P-1008	1,613.00	4	6.8	6.8	1.221969697	0.00	0
PV-P-1009	5	4	4.08	4.08	0.003787879	0.00	0
PV-P-1010	2,023.00	6	6.35	6.35	2.298863636	0.00	0
PV-P-1011	701	6	10.16	10.16	0.796590909	0.00	0
PV-P-1012	10	2	2.54	2.54	0.003787879	0.00	0
PV-P-1015	5	6	3.74	3.74	0.005681818	0.00	0
PV-P-1017	4,129.00	6	2.68	2.68	4.692045455	0.00	0
PV-P-1018	6	6	-1.34	-1.34	0.006818182	0.00	0
PV-P-1019	164	8	315.43	316.06	0.248484848	0.63	0.000495303
PV-P-1021	10	4	2.72	2.72	0.007575758	0.00	0
PV-P-1022	5,438.00	6	27.81	27.81	6.179545455	0.00	0
PV-P-1023	1,177.00	6	24	24	1.3375	0.00	0
PV-P-1024	7	3	2.54	2.54	0.003977273	0.00	0
PV-P-1025	5,381.00	4	5.44	5.44	4.076515152	0.00	0
PV-P-1026	4	4	1.36	1.36	0.003030303	0.00	0
PV-P-1027	2	4	-2.72	2.72	0.001515152	0.00	0
PV-P-1028	5,194.00	4	10.76	-10.76	3.934848485	0.00	0
PV-P-1029	5,521.00	4	14.57	14.57	4.182575758	0.00	0
PV-P-1030	19	3	2.54	2.54	0.010795455	0.00	0
PV-P-1031	92	4	-31.28	31.28	0.06969697	0.00	0
PV-P-1032	10,788.00	4	35.36	35.36	8.172727273	0.00	0
PV-P-1033	25	4	2.72	-2.72	0.018939394	0.00	0
PV-P-1034	4,120.00	4	5	5	3.121212121	0.00	0
PV-P-1036	13	6	-2.54	-2.54	0.014772727	0.00	0
PV-P-1037	6,554.00	4	1.19	1.19	4.965151515	0.00	0
PV-P-1038	6,876.00	4	-2.62	-2.62	5.209090909	0.00	0
PV-P-1039	28	6	2.54	2.54	0.031818182	0.00	0
DV-P-1040	861	6	10.78	10.98	0.978409091	0.20	0.017821659
DV-P-1041	501	6	18.6	18.93	0.569318182	0.33	0.009924723
DV-P-1042	11	6	10.72	10.85	0.0125	0.13	0.00014977
JC-P-JRF1043	741	6	13.95	13.95	0.842045455	0.00	0
JC-P-1044	759	6	1.64	1.64	0.8625	0.00	0
JC-P-1045	919	6	0.82	0.82	1.044318182	0.00	0
JC-P-JRF1047	857	6	1.64	1.64	0.973863636	0.00	0
PV-P-1048	322	2	1.06	1.06	0.121969697	0.00	0
PV-P-1050	19	4	8.2	8.2	0.014393939	0.00	0
PV-P-1051	382	4	2.9	2.9	0.289393939	0.00	0
PV-P-1053	216	2	1.06	1.06	0.081818182	0.00	0
PV-P-1054	6	2	2.12	2.12	0.002272727	0.00	0
PV-P-1055	8	2	2.12	2.12	0.003030303	0.00	0
PV-P-1057	887	6	134.33	134.78	1.007954545	0.45	0.003365333
PV-P-1060	41	6	137.01	137.46	0.046590909	0.45	0.000152524
PV-P-1061	7	6	135.67	136.12	0.007954545	0.45	2.6297E-05
DV-P-1064	4,416.00	3	41.16	41.16	2.509090909	0.00	0
DV-P-1065	1,553.00	3	3.43	3.43	0.882386364	0.00	0
DV-P-1066	1,598.00	3	34.3	34.3	0.907954545	0.00	0
DV-P-1067	1,012.00	3	30.87	30.87	0.575	0.00	0
DV-P-1068	926	3	27.44	27.44	0.526136364	0.00	0
DV-P-1069	165	3	24.01	24.01	0.09375	0.00	0
DV-P-1070	284	3	20.58	20.58	0.161363636	0.00	0
DV-P-1071	210	3	17.15	17.15	0.119318182	0.00	0
DV-P-1072	509	3	13.72	13.72	0.289204545	0.00	0
DV-P-1073	228	3	10.29	10.29	0.129545455	0.00	0
DV-P-1074	469	3	6.86	6.86	0.266477273	0.00	0
DV-P-1075	406	3	3.43	3.43	0.230681818	0.00	0
DV-P-1076	844	6	23.48	23.48	0.953090909	0.00	0
DV-P-1077	2,083.00	6	11.74	11.74	2.367045455	0.00	0

GEOMETRY		PARKSVILLE ON		PARKSVILLE OFF		CALCULATIONS	
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV UD P 1078	2,512.00	6	5.87	5.87	2.854545455	0.00	0
DV UD P 1079	1,644.00	1	0.57	0.57	0.311363636	0.00	0
DV P 1080	473	1	17.15	17.15	0.089583333	0.00	0
DV P 1082	9,177.00	6	26.87	26.87	10.428409090	0.00	0
DV UD P 1083	807	6	20.01	20.01	0.917045455	0.00	0
DV UD P 1084	1,833.00	6	11.42	11.42	2.085227273	0.00	0
DV P 1085	1,670.00	6	12.02	12.02	1.897272727	0.00	0
DV P 1086	2,776.00	8	10.09	10.08	4.206060606	0.01	0.00164416
DV P 1087	2,105.00	8	3.23	3.22	3.189393939	0.01	0.009843808
DV UD P 1088	1,569.00	2	3.43	3.43	0.594318182	0.00	0
DV UD P 1090	804	6	13.64	13.63	0.913636364	0.01	0.00669331
DV UD P 1091	180	6	15.49	15.48	0.204545455	0.01	0.000131965
DV P 1092	488	12	227.19	227.18	1.109090909	0.01	4.88156 05
DV P 1093	444	12	272.73	272.72	1.009090909	0.01	3.69838 05
DV UD P 1094	728	6	47.28	47.28	0.827272727	0.00	0
DV UD P 1095	382	6	1.74	1.74	0.434090909	0.00	0
DV UD P 1096	407	6	50.76	50.76	0.4625	0.00	0
DV UD P 1097	506	6	1.74	1.74	0.575	0.00	0
DV UD P 1098	411	6	54.24	54.24	0.467045455	0.00	0
DV P 1099	387	6	69.52	69.51	0.439727272	0.01	6.324938 05
DV P 1100	839	6	1.74	1.74	0.953409091	0.00	0
DV UD P 1101	404	6	66.04	66.03	0.459090909	0.01	6.95066 05
DV UD P 1102	965	6	93.4	93.4	1.095590909	0.00	0
DV P 1103	1,312.00	6	24.99	25.04	1.490909091	0.05	0.002988992
DV P 1104	443	6	-27.32	-27.37	0.503409091	0.05	0.00923009
DV UD P 1105	1,166.00	8	0.29	0.29	1.766666667	0.00	0
DV P 1106	1,344.00	8	81.42	81.43	2.036363636	0.01	0.000250075
DV P 1107	997	8	69.69	69.7	1.510606061	0.01	0.00021673
DV UD P 1108	323	6	152.14	152.15	0.367045455	0.01	2.412398 05
DV UD P 1109	300	6	78.85	78.86	0.340909091	0.01	4.322978 05
DV UD P 1110	652	6	1.02	1.02	0.740909091	0.00	0
DV UD P 1111	1,256.00	6	80.89	80.9	1.427272727	0.01	0.000176424
DV UD P 1112	1,805.00	6	74.3	74.31	2.051136364	0.01	0.000276024
DV UD P 1113	1,533.00	6	156.22	156.23	1.742045455	0.01	0.000111505
DV P 1114	3,578.00	6	14.23	14.25	4.065909091	0.02	0.005706539
DV P 1115	1,012.00	6	8.99	9.02	1.15	0.03	0.003824834
DV UD P 1116	269	6	20.32	20.37	0.305681818	0.05	0.000750324
DV UD P 1117	343	6	136.18	136.15	0.389727272	0.03	8.584678 05
DV UD P 1118	865	6	13	13	0.982954545	0.00	0
DV P 1119	378	6	7.56	7.56	0.429545455	0.00	0
DV P 1120	428	6	2.52	2.52	0.486363636	0.00	0
DV P 1121	98	6	2.52	2.52	0.11363636	0.00	0
DV P 1122	20	6	1.5	1.5	0.022272727	0.00	0
DV P 1123	88	8	8.49	8.43	0.133333333	0.06	0.000935673
DV P 1124	403	8	92.42	92.54	0.610606061	0.12	0.000791795
DV UD P 1125	1,355.00	8	85.62	85.79	2.053030303	0.17	0.00406825
DV UD P 1126	175	6	18.74	18.77	0.265151515	0.57	0.001814144
DV UD P 1127	905	6	19.59	-18.9	1.028409091	0.69	0.037545094
DV P 1129	520	6	21.47	20.78	0.590909091	0.69	0.018399245
DV UD P 1130	1,309.00	4	1.74	1.74	0.991666667	0.00	0
DV P 1131	1,943.00	16	117.63	117.64	5.887878788	0.01	0.0005005
DV UD P 1132	135	16	21.31	21.31	0.409090909	0.00	0
DV UD P 1135	4,458.00	12	94.58	94.58	10.13181818	0.00	0
DV UD P 1136	7,228.00	8	87.72	87.72	10.95151515	0.00	0
DV UD P 1137	279	12	3.43	3.43	0.634090909	0.00	0
DV P 1138	155	4	77.14	77.14	0.117424242	0.00	0
DV P 1139	4,912.00	4	3.43	3.43	3.721212121	0.00	0
DV UD P 1140	246	8	84	84	0.372727273	0.00	0
DV P 1141	262	12	344.57	366.15	0.595454545	246.91	0.248569152
DV P 1142	767	12	366.15	90.25	1.743181818	275.90	0.749075405
DV UD P 1143	875	8	23.27	5.71	1.325757576	28.98	6.728626015
DV UD P 1144	78	8	1.69	1.69	0.118181818	0.00	0

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV P 1145	2,461.00	10	44.93	15.35	4.660984848	28.98	1.827565153
DV P 1146	424	10	1.54	1.34	0.803030303	0.00	0
DV UD P 1147	1,074.00	8	26.65	2.33	1.627272727	28.98	20.23964105
DV P 1148	619	8	11.07	11.13	0.937878788	0.06	0.00505595
JC P 1150	664	6	12.66	12.66	0.754545455	0.00	0
JC P 1151	250	6	6.51	6.51	0.284090909	0.00	0
DV UD P 1152	527	6	3.98	3.98	0.598863636	0.00	0
DV UD P 1153	1,235.00	6	0.97	0.97	1.403409091	0.00	0
DV UD P 1154	816	6	1.2	1.2	0.927272727	0.00	0
DV P 1155	1,161.00	12	473.86	270.78	2.638636364	203.03	0.791583113
DV UD P 1157	1,555.00	6	74.39	47.47	1.767045455	26.92	0.469537693
DV P 1158	182	8	170	170	0.275757576	0.00	0
DV P 1160	1,309.00	12	397.3	221.13	2.975	176.17	0.913920083
DV P 1161	2,270.00	12	294.89	91.81	5.159090909	203.08	2.103958435
DV UD P 1163	333	8	2.17	2.17	0.504545455	0.00	0
JC P 1164	4	6	4.34	4.34	0.004545455	0.00	0
DV UD P 1165	309	8	95.9	122.82	0.468181818	26.92	0.102617282
JC P 1166	176	6	1.61	1.61	0.2	0.00	0
DV P 1167	319	6	13.42	13.45	0.3625	0.03	0.00080855
DV P 1168	85	6	9.66	9.69	0.096590909	0.03	0.000299043
JC P 1169	594	6	1.88	1.88	0.675	0.00	0
DV P 1170	410	6	34.36	34.26	0.465909091	0.10	0.001359921
DV P 1171	856	6	42.58	42.45	0.972727273	0.13	0.002978906
DV UD P 1174	299	4	6.19	6.15	0.226515152	0.04	0.001473269
DV UD P 1175	74	4	-2.03	-2.03	0.056060606	0.00	0
DV UD P 1176	281	4	16.41	16.26	0.212878788	0.15	0.001963826
DV P 1177	861	6	5.27	3.84	0.978409091	1.43	0.208824627
DV P 1178	265	6	1.41	0.13	0.301136364	1.28	0.143291653
DV UD P 1179	245	6	2.99	2.85	0.278409091	0.14	0.012452803
DV P 1180	648	6	38.15	38.07	0.736363636	0.08	0.001540913
DV P 1181	1,571.00	6	-25.22	-25.26	1.785227273	0.04	-0.002835945
DV UD P 1182	276	6	92.82	92.71	0.313636364	0.11	0.000371247
DV UD P 1183	1,108.00	6	40.7	40.68	1.259090909	0.02	0.000618414
PV P 1185	26	6	0	0	0.029545455	0.00	0
PV P 1186	22	6	0	0	0.025	0.00	0
PV P 1188	391	8	1.34	-1.34	0.592424242	0.00	0
PV P 1190	332	6	1.34	1.34	0.377272727	0.00	0
PV P 1192	396	6	1.34	1.34	0.45	0.00	0
PV P 1194	121	6	1.34	1.34	0.1375	0.00	0
DV P 1196	746	12	68.98	57.77	1.695454545	11.21	0.237012663
DV P 1197	199	4	5.09	5.06	0.150757576	0.03	0.00089382
DV P 1198	1,638.00	4	10.11	-10.08	1.240909091	0.03	0.003693182
DV P 1199	532	6	39.36	39.7	0.604545455	0.34	0.005177467
DV P 1200	1,174.00	6	34.97	35.31	1.334090909	0.34	0.013098207
DV P 1201	275	6	4.89	4.89	0.3125	0.00	0
DV P 1202	864	6	1.69	1.69	0.981818182	0.00	0
DV P 1203	803	12	39.55	39.55	1.825	0.00	0
DV P 1205	1,211.00	12	35.61	35.61	2.752272727	0.00	0
DV P 1206	1,762.00	12	3.38	3.38	4.004545455	0.00	0
DV P 1207	26	8	167.49	163.17	0.039393939	4.32	0.001042972
DV P 1208	139	8	168.95	164.63	0.210606061	4.32	0.005526442
DV P 1209	683	6	3.5	3.5	0.776136364	0.00	0
DV P 1210	883	6	1.71	1.71	1.003409091	0.00	0
DV P 549a	734	6	38.75	37.98	0.834090909	0.77	0.016910216
DV P 549aa	322	8	75.54	73.84	0.487878788	1.70	0.011232312
DV P 320a	406	6	30.03	29.09	0.461363636	0.94	0.014908278
DV P 320	356	6	5.07	5.07	0.404545455	0.00	0
DV P 324a	367	6	30.19	29.67	0.417045455	0.52	0.007303189
DV P 210	991	6	7.99	9.01	1.126136364	1.02	0.164800443
DV P 210a	384	6	6.12	6.69	0.436363636	0.57	0.037178965
DV P 208	422	6	1.62	1.19	0.479545455	0.43	0.100387383
DV P 208a	313	2	1.75	1.75	0.118560606	0.00	0

Label	GEOMETRY		PARKSVILLE ON		PARKSVILLE OFF		CALCULATIONS	
	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles	
DV-P 1220	13	6	23.56	23.54	0.014772727	0.02	1.25299E 05	
DV-P 347a	145	6	5.32	5.37	0.164772727	0.05	0.001563309	
DV-P 300	712	6	35.51	35.51	0.809090909	0.00	0	
DV-P 300a	16	6	32.61	32.61	0.018181818	0.00	0	
DV-P 355a	286	6	15.03	15.14	0.325	0.11	0.002396113	
DV-P 355aa	246	6	16.58	16.42	0.279545455	0.16	0.00267188	
DV-P 371b	419	6	44.47	44.46	0.476136364	0.01	0.000107045	
DV-P 371a	391	6	10.82	10.86	0.444318182	0.04	0.001636531	
DV-P 315j	178	6	27.65	27.6	0.202272727	0.05	0.000366436	
DV-P 346d	482	6	19.25	19.14	0.547727273	0.11	0.003147858	
DV-P 346e	850	6	15.24	15.37	0.965909091	0.13	0.00831027	
DV-P 337f	452	8	12.22	12.57	0.684848485	0.35	0.019068971	
DV-P 337e	897	8	27.22	27.36	1.359090909	0.14	0.007026319	
DV-P-355cc	947	6	18.48	18.79	1.076136364	0.31	0.018360059	
DV-P 351	579	6	1.38	2.32	0.657954545	0.94	1.405630165	
DV-P 351a	566	6	10.14	10.83	0.643181818	0.69	0.046962482	
DV-P 351c	431	6	29.01	28.8	0.489772727	0.21	0.003519927	
DV-P 351d	376	6	9.58	9.61	0.427272727	0.03	0.001342218	
DV-P-329e	289	6	3.22	3.17	0.328409091	0.05	0.005021546	
DV-P-329ee	410	6	0.31	0.34	0.465909091	0.03	0.049918831	
DV-P 337i	933	6	41.49	41.52	1.060227273	0.03	0.00076606	
DV-P 337ii	1,061.00	6	44.73	44.75	1.205681818	0.02	0.000538852	
DV-P 547b	644	6	24.38	24.34	0.731818182	0.04	0.001198719	
DV-P 547c	448	6	4.27	4.24	0.509090909	0.03	0.003551797	
DV-333b	227	6	47.62	47.64	0.257954545	0.02	0.000108293	
DV-P-333a	423	6	75.44	75.45	0.480681818	0.01	6.37087E 05	
DV-P 331b	647	6	31.13	31.13	0.735227273	0.00	0	
DV-P 331	464	6	25.59	25.61	0.527272727	0.02	0.000411771	
DV-P 331a	2,528.00	6	31.42	31.42	2.872727273	0.00	0	
DV-P-336a	564	6	61.09	61.11	0.640909091	0.02	0.000209756	
DV-P-336	505	6	2.04	2.04	0.573863636	0.00	0	
DV-P-368c	429	6	66.65	66.69	0.4875	0.04	0.000292398	
DV-P-368b	367	6	43.59	43.57	0.417045455	0.02	0.000191437	
DV-P 355c	463	6	56.04	56.17	0.526136364	0.13	0.001217691	
DV-P 355bb	163	6	12.46	12.3	0.185227273	0.16	0.002348365	
DV-P-287a	354	12	302.51	293.29	0.804545455	9.22	0.023795942	
DV-P 287	324	12	27.3	25.86	0.736363636	1.44	0.036895046	
DV-P 1195	279	12	69.84	58.63	0.634090909	11.21	0.087700914	
DV-P 1195a	449	12	204.33	207.77	1.020454545	3.44	0.017474059	
DV-P 1269	38	6	3.68	3.68	0.043181818	0.00	0	
DV-P 318b	387	6	5.98	4.07	0.439772727	1.91	0.106459558	
DV-P-1272	17	6	6.55	-7.68	0.019318182	1.13	0.004027591	
DV-P-1273	1,578.00	6	36.05	37	1.793181818	0.95	0.048533411	
DV-P 1274	589	6	138.86	138.86	0.669318182	0.00	0	
DV-P 557	528	6	47.92	49.35	0.6	1.43	0.018455582	
DV-P 1276	28	6	224.52	226.9	0.031818182	2.38	0.000333747	
DV-P 42	745	6	3.22	3.22	0.846590909	0.00	0	
DV-P-42a	1,430.00	6	0.39	0.39	1.625	0.00	0	
DV-P 1279	30	6	1.22	1.22	0.034090909	0.00	0	
JC P 1286	44	6	0	0	0.05	0.00	0	
JC P 1287	47	6	0	0	0.053409091	0.00	0	
DV-P 893	216	6	0	0	0.245454545	0.00	0	
PV-P-1295	324	6	1.06	1.06	0.368181818	0.00	0	
PV-P 1297	1,059.00	4	1.06	1.06	0.802272727	0.00	0	
PV-P 1298	8	6	53.51	53.51	0.009090909	0.00	0	
PV-P 1299	7	6	53.51	53.51	0.007954545	0.00	0	
DV-P 1300	80	18	2.3	2.9	0.272727273	0.00	0	
DV-P 1301	19	12	0	0	0.043181818	0.00	0	
DV-P 1302	25	30	0	0	0.142045455	0.00	0	
DV-P 1303	19	10	0	0	0.035984848	0.00	0	
DV-P 47b	787	5	8.37	8.72	0.894318182	0.35	0.039028848	
DV-P 47a	1,094.00	6	8.37	8.72	1.243181818	0.35	0.049898353	

GEOMETRY			PARKSVILLE ON	PARKSVILLE OFF	CALCULATIONS		
Label	Length (ft)	Diameter (in)	Flow (gpm)	Flow (gpm)	Inch Miles	Flow Change	Allocated Inch Miles
DV P 1149	526	12	1.69	1.69	1.195454545	0.00	0
DV-F 1149a	444	12	1.69	1.69	1.003090909	0.00	0
DV-UD P 1184	944	6	0.29	0.29	1.072727273	0.00	0
DV UD-P 1184a	460	6	0.29	0.29	0.522727273	0.00	0
DV-P 524c	519	6	20.58	20.58	0.589772727	0.00	0
DV P 524a	620	6	20.58	20.58	0.704545455	0.00	0
DV P 524b	454	6	20.58	20.58	0.515909091	0.00	0
PV P 97a	1,316.00	4	1.57	1.57	0.996969697	0.00	0
PV P 96a	845	4	1.57	1.57	0.640151515	0.00	0
PV P 96	610	4	1.57	1.57	0.462121212	0.00	0
PV P 162a	733	8	1.06	1.06	1.110606061	0.00	0
PV P 162	869	8	1.06	1.06	1.316666667	0.00	0
P 1321	1,298.00	8	311.35	311.98	1.966666667	0.63	0.003971408
P 1324	30	16	0	0	0.090909091	0.00	0
P 1325	27	16	0	0	0.081818182	0.00	0
P 1326	608	12	389.39	389.9	1.381818182	0.51	0.001807456
P 1327	92	12	389.39	389.9	0.209090909	0.51	0.000273497
P 1334	96	8	318.15	318.78	0.145454545	0.63	0.00028746
P 1335	3,303.00	8	318.15	318.78	5.004545455	0.63	0.009890406
P 1341	1,423.00	8	311.35	311.98	2.156060606	0.63	0.004353863
P 1342	639	8	311.35	311.98	0.968181818	0.63	0.001955108
P 1348	14	8	294.59	295.16	0.021212121	0.57	4.09639E-05
P 1349	3,175.00	8	294.59	295.16	4.810606061	0.57	0.009290031
P 1351	62	8	318.15	318.78	0.093939394	0.63	0.000185651
P 1352	3,110.00	8	318.15	318.78	4.712121212	0.63	0.009312493
P 1356	4,143.00	12	15.43	15.43	9.415909091	0.00	0
P 1357	1,408.00	12	15.43	15.43	3.2	0.00	0
P 1368	814	8	266.47	267.1	1.233333333	0.63	0.002909023
P 1369	2,607.00	8	266.47	267.1	3.95	0.63	0.009316735
P 1381	3,048.00	12	0	0	6.927272727	0.00	0
P 1382	16	6	0	0	0.018181818	0.00	0
P 1395	55	6	0	0	0.0625	0.00	0
P 1396	6	6	0	0	0.006818182	0.00	0
P 1397	6,092.00	8	0.29	0.29	9.23030303	0.00	0
P 1398	28	8	0.29	0.29	0.042424242	0.00	0
P 1399	4,008.00	8	0	0	6.072727273	0.00	0
TOTAL	30960.69				1657.44072		55.38164747

TOTAL ALLOCATED PERCENTAGE

3.34%

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Proposed Adjustment of the Wholesale)
Water Service Rates of) Case No. 2014-00392
the City of Danville)

**CITY OF DANVILLE'S RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

Response to Request No. 4

Bill of Materials for the Utility

Plant

Page 10 of 11

account description	basis of classification	where basis was obtained/derived
intangible		
organization & franchises	as factor ST&D ^{note 1}	AWWA; as w/ %s of the combined supply, treatment & distribution
source of supply		COMM is sales w/line loss respon; CAP is peak hr contrib by class
land & land rights	65 COMM/35 CAP ^{note 2}	AWWA COS; IAW example pg S5-37; 65% to COMM; 35% to CAP
structures & improvements	65 COMM/35 CAP	AWWA COS; IAW example pg S5-37
collect/impound reservoirs	65 COMM/35 CAP	AWWA COS; IAW example pg S5-37
other source plant	65 COMM/35 CAP	AWWA COS; IAW example pg S5-37
water treatment		COMM is sales w/line loss respon; CAP is peak hr contrib by class
land & land rights	65 COMM/35 CAP	AWWA COS; IAW example pg S5-37; 65% to COMM; 35% to CAP
structures & improvements	65 COMM/35 CAP	AWWA COS; IAW example pg S5-37
treatment equipment	65 COMM/35 CAP	AWWA COS; IAW example pg S5-37
other treatment	65 COMM/35 CAP	AWWA COS; IAW example pg S5-37
transmission & distribution		
land & land rights	as other trans & distr	AWWA COS; IAW example pg S5-37; see Note 3
structures - transmission	100 CAP less DA ^{note 5}	AWWA COS; IAW example pg S5-37
distribution reservoirs	85 CAP/15 PFP - DA	AWWA COS; IAW example pg S5-37
distribution mains	dist main analysis	AWWA COS; IAW guidance on pg S6-10 thru S6-12; see Note 4
services	100 WCMS	AWWA COS; IAW example pg S5-37; a customer cost
meters	100 WCMS	AWWA COS; IAW example pg S5-37; a customer cost
hydrants	100 PFP	AWWA COS; IAW example pg S5-37; a fire protection cost
other distribution plant	as other trans & distr	AWWA COS; IAW example pg S5-37; see Note 3
total supply, treat & T&D plant		
% total supply, treat & T&D	factor "ST&D"	after assignments are made, resulting overall % becomes a factor
general plant		
structures	as factor ST&D	AWWA COS; IAW example pg S5-38; these general plant costs are assumed to be assigned in accordance with the percentages that result from the more specific assignments included in the distribution of supply, transmission and distribution in the sections above. the resulting overall percentages make up the factor "ST&D", above
office equipment	as factor ST&D	
vehicles	as factor ST&D	
tools & shop equipment	as factor ST&D	
lab equipment	as factor ST&D	
communication equipment	as factor ST&D	
misc equipment	as factor ST&D	
total plant in service		
% of total plant in service	factor "plant in service"	if intangibles were identified, would incorp them w/factor ST&D

Financial Management Fundamentals
Rate Plan

Page 10

account description	basis of classification	where basis was obtained/derived
less accumulated depreciation		
intangible plant	as intangible plant	ensures depreciation is consistent with plant in service assets
source of supply plant	as source of supply plant	ensures depreciation is consistent with plant in service assets
water treatment plant	as water treatmt plant	ensures depreciation is consistent with plant in service assets
trans & distribution plant	as trans & distr plant	ensures depreciation is consistent with plant in service assets
general plant	as general plant	ensures depreciation is consistent with plant in service assets
less contributions in aid		
distribution mains	as distr mains	ensures CIAC is subtracted IAW the assignment of assets
meters & services	as meters & services	ensures CIAC is subtracted IAW the assignment of assets
less grants in aid		
treatment plant	as water treatmt plant	ensures grants received for assets are credited to those assets
transmission	as trans mains	ensures grants received for assets are credited to those assets
distribution & storage	as distr mains	ensures grants received for assets are credited to those assets
plus working capital		
materials & supplies	as plant in service	AWWA COS; IAW example pg S5-38
prepayments	as plant in service	AWWA COS; IAW example pg S5-38
1/8 O&M	as O&M expense	AWWA COS; IAW example pg S5-38
total rate base		
% total rate base	factor RATE BASE	factor created from %s resulting from application of all other factors

Note 1: Unless otherwise noted, references to "AWWA COS" indicate a reference to the participant handbook of the AWWA-sponsored seminar, Financial Management: Cost of Service Rate Making, copyright 2014 American Water Works Association. The handbook is included for the readers' reference.

Note 2: For FY13 (the Test Year), Danville produced an average of 4.7 MGD w/a peak day of 6.8 MGD. Commodity costs (COMM) are associated with average customer usage and capacity (CAP) with peak usage. The average production, 4.7 MGD is approx 69% of the peak production, leaving approx 31% to represent the volume above average produced on the peak day. Therefore AWWA's example split of 65% COMM to 35% CAP is a reasonable factor to use in distributing expenses between commodity and capacity costs.

Note 3: AWWA uses a factor, created from the resulting percentages of the individual categories, that is designed to assign the referenced amount to the categories in the same manner as all other accounts (collectively) in that subsection of assets/expenses. In this case, "land & land rights" is assigned to the categories at the top of the spreadsheet in the same manner as the composite of all other accounts in the "transmission & distribution" subsection.

account description	basis of classification	where basis was obtained/derived
source of supply		
operating labor & expense	as "source of supply"	AWWA COS; IAW example pg S5-39; as with rate base
operating supply & expense	as "source of supply"	AWWA COS; IAW example pg S5-39; as with rate base
pump power cost	100% COMM	AWWA COS; IAW example pg S5-39; as with rate base
maintenance source plant	as "source of supply"	AWWA COS; IAW example pg S5-39; as with rate base
water treatment		
operation labor	as "treatment plant"	AWWA COS; IAW example pg S5-39; as with rate base
chemicals	100% COMM	AWWA COS; IAW example pg S6-3 thru 5
operating supply & expense	as "treatment plant"	AWWA COS; IAW example pg S5-39; as with rate base
power cost	100% COMM	AWWA COS; IAW example pg S6-5 combined method
maintenance trmt plant	as "treatment plant"	AWWA COS; IAW example pg S5-39; as with rate base
transmission expense		
operation labor	as "transmission lines"	AWWA COS; IAW example pg S5-39; as with rate base
pump power cost	as "transmission lines"	AWWA COS; IAW example pg S5-40; this is not production power
operating supply & expense	as "transmission lines"	AWWA COS; IAW example pg S5-39; as with rate base
maint of trans mains	as "transmission lines"	AWWA COS; IAW example pg S5-39; as with rate base
distribution expense		
operation labor	as "total T&D"	AWWA COS; IAW example pg S5-39; see Note 1
operating supply & expense	as "total T&D"	AWWA COS; IAW example pg S5-39; as with rate base
maint of reservoirs	as "reservoirs"	AWWA COS; IAW example pg S5-39; see Note 2
maint of distribution mains	as "distribution mains"	AWWA COS; IAW guidance on pg S6-10 thru 12; see Note 3
maint of services	100% WCMS	AWWA COS; IAW example pg S5-39; a customer cost
maint of meters	100% WCMS	AWWA COS; IAW example pg S5-39; a customer cost
maint of hydrants	100% PFP	AWWA COS; IAW example pg S5-39; a fire protection cost
other maintenance	as factor ST&D	AWWA COS; IAW example pg S5-39; see Note 4
customer accounting		
meter reading	100% WCA	AWWA COS; IAW example pg S5-40; weighted customer expense
accounting & collection	90% WCA, 10% AC	AWWA COS; IAW example pg S5-40; collection is actual cust cost
uncollectable accounts	100% AC	AWWA COS; IAW example pg S5-40; all actual customer cost
percent total operation & maintenance and customer accounts expense	factor "O&M"	AWWA COS; IAW example pg S5-40; a factor is created by assigning composite percentages to all categories in accordance with their splits from the functions above

List of Allocation of Functional Costs
Expense

2/3/00

account description	basis of classification	where basis was obtained/derived
admin & general expenses		
admin and general salaries	as factor O&M	AWWA COS; IAW example pg S5-40
office supplies expense	as factor O&M	AWWA COS; IAW example pg S5-40
outside services	as factor O&M	AWWA COS; IAW example pg S5-40
property insurance	as factor rate base	AWWA COS; IAW example pg S5-40; b/c it deals with physical asset
employee benefits	as factor O&M	AWWA COS; IAW example pg S5-40
misc general expense	as factor O&M	AWWA COS; IAW example pg S5-40
taxes		
state and local taxes	100% RR	AWWA COS; IAW example pg S5-40; directly related to revenue
Social Security	as factor O&M	AWWA COS; IAW example pg S5-40
Kentucky River Authority	100% COMM (cla)	a per raw gallon cost so treat as other direct prod cost
debt service		
principal expense	as total plant in service	the test year remaining debt encompassed parts of whole system
interest expense	as total plant in service	the test year remaining debt encompassed parts of whole system
rate-financed capital		
treatment plant	as treatment	should allocate costs as capital is allocated; see Note 5
reservoirs	as reservoir maint	should allocate costs as capital is allocated
distribution	as distribution	should allocate costs as capital is allocated
less miscellaneous revenues		
other operating	66% RR/34% COMM	34% other op rev is KRA so it is as KRA above; other is rev related
non-operating	as rate base	if non operating, better to use rate base than expense related
miscellaneous		not used this COS
jobbing - net		not used this COS

Note 1: The allocation, composite, from the transmission and distribution functions on the rate base is used as a factor and is used here to ensure consistency in distributing the rate base costs and expenses.

Note 2: AWWA suggest determining the percentage of distribution reservoir cost to assign to fire protection by dividing typical fire flow requirements by total system storage. Used 4000 gpm for 180 minutes for fore flow and 5.25 million gallons for storage. Did not include tanks serving only Perryville and Junction City in storage total.

Note 3: AWWA uses a distribution main analysis to suggest an equitable way of assigning portions of rate base or expenses to the applicable categories. Discussion of the allocation of distribution lines is included in greater depth in the response to Question #18.

Basis of Allocation of Functional Expenses

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account description	basis of classification	where basis was obtained/derived
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Note 4: Uses the factor that is created in the rate base by assessing the composite percentages resulting from the assignments in the source of supply, the treatment and transmission and distribution functions.

Note 5: With rate funded capital, the costs will be assigned just as rate base (capital) is assigned. When, in accordance with direction from the PSC, depreciation is substituted for rate funded capital, the costs will be assigned based on the percentages of treatment plant, reservoirs and distribution (and transmission) in the rate base.

Basis of Allocation Factors

The distribution factors spread the functionalized costs among the customers. The factors follow the examples set forth in AWWA's rate making and cost of service seminar.

The commodity factor (COMM-1) distributes costs associated with providing average service to all customers. It signifies total consumption over a specific period of time, in this case, Fiscal Year 2013 which is Danville's test year.

The COMM-1 uses total water purchased/sold metered water. Every water utility must recover the costs associated with non-revenue water. The COMM-1 factor multiplies the water sold by the water loss percentage to recover the cost of the non-revenue water. Non-revenue water includes the following:

Direct Customers

distribution line losses
service leaks
under-registering meters
fire fighting
hydrant tests
storage tank leaks and overflows
irrigation for parks & other government property
water features
street cleaning

All Customer Classes

transmission losses
system use (WTP use & flushing)

Whereas, the percentage of water loss for the total system is known (15.6%), the percentage allocated to the wholesale customers is an estimate (10%). The estimate for the wholesale customers is intended to include transmission and a portion of distribution losses, WTP process water, flushing for water quality and a portion of the unknown or undiscovered losses.

The capacity factor (CAP-1) distributes the costs associated with meeting the customer classes' maximum demand. The CAP-1 factor uses the total water produced (obtained from adding the losses to the water sold, as in COMM-1) and a peaking factor to estimate the customer classes' potential peak day based on peak hour demand. The proportions are shown as percentages and are used to distribute the costs associated with capacity functions. Said another way, the CAP-1 factor provides an assignment of the costs caused by the potential peak demands of the individual customer classes upon the Danville water distribution system. Without a formal system-wide demand study, SRE relied on generally accepted peaking factors, adjusted for customer-specific demand characteristics. The peaking factors are estimated as follows:

- 2.50—a generally-accepted peaking factor for residential customers in a community with a population similar to Danville
- 2.25—used for Perryville and Junction City since they are largely residential but have storage facilities isolated to their service areas, buffering the larger, primary distribution system from their peak demands
- 2.00—used for Danville's industrial customers as their peaks do not follow residential diurnal patterns; industrial peaks are tied to production or wash-down activities
- 2.00—used for Parksville (wholesale customer) and is calculated based on the pumping capacity of the station that is used to obtain water from the Danville system. The typical diurnal curve is not applicable in Parksville's¹ case; the pumps are either on or off and, when pumping at capacity (450 gpm), constitute the potential peak daily demand. The average daily demand for Parksville (333,000 gallons) was calculated based on test year sales.

¹ Earlier written correspondence erroneously had "Perryville" here.

The peaking factor used to calculate the maximum day demand is obtained by dividing the maximum day demand by the average day demand:

$$\text{MDD} \div \text{ADD} = 648000 \div 330000 = 1.96 \approx 2.0$$

1.50—three of the four wholesale customers draw water from the Danville system without the requirement for pumping. Their demand, as seen from the Danville system, resembles the typical residential diurnal curve. It is assumed that the storage capacity of their systems is adequate in volume and effectively managed to meet the average daily demand of their direct customers. The peaking factor used to calculate the maximum day demand is obtained by subtracting the credit for their storage from the typical maximum day peaking factor:

$$2.5 - 1 = 1.5$$

Customer costs are those various costs associated with having a customer on the distribution system. Three factors are used to distribute customer costs:

- CUST-1 is calculated based on actual number of meters per customer class;
- CUST-2 adds weighting for level of effort to serve the customer class with regard to operation and maintenance, billing and customer service; and,
- CUST-3 attempts to create a distribution factor that reflects the actual material costs of providing the meters and services.

Public Fire Protection mostly pertains to direct customer classes, usually owner customers, but in Danville's case, some non-owner customers as well. The factor is calculated as follows:

- For owner and non owner Residential/Commercial customers, the fire protection requirement was set at 1000 gallons per minute for a duration of 60 minutes;
- For owner and non-owner Industrial, a requirement of 5000 gallons per minute for a duration of 240 minutes;
- For Perryville and Junction City, since they have dedicated hydrants and storage tanks, their percentage was calculated just as the Residential/Commercial Class;
- Wholesale customers typically do not use the Seller's distribution system for fire protection and therefore are not assigned any costs associated with fire protection. However, two of Danville's wholesale customers do cause a small public fire protection cost. Volunteer firefighting teams, on their way to a fire in the Parksville community, stop and draft off Danville hydrants to fill their pumper trucks. The requirement was equated to the flow (250 gallons per minute) from the hydrant and the duration was estimated to be 12 minutes. Similarly, Hustonville's volunteer fire department drafts off Danville hydrants and the same rate for approximately 15 minutes.

The Revenue Factor (REV-1) is based on total revenues from metered water sales from each customer class. The factor is used to allocate costs such as taxes, which vary just as the volume of water sold or purchased.

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Proposed Adjustment of the Wholesale)
Water Service Rates of) Case No. 2014-00392
the City of Danville)

**CITY OF DANVILLE'S RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

Response to Request No. 5

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Proposed Adjustment of the Wholesale)
Water Service Rates of) Case No. 2014-00392
the City of Danville)

**CITY OF DANVILLE'S RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

Response to Request No. 7

SERIES 2015 BOND ORDINANCE

SERIES 2015 BOND ORDINANCE AUTHORIZING THE ISSUANCE OF \$8,600,000 PRINCIPAL AMOUNT OF WATER AND SEWER REVENUE BONDS, SERIES 2015A AND \$5,000,000 PRINCIPAL AMOUNT OF WATER AND SEWER REVENUE BONDS, SERIES 2015B OF THE CITY OF DANVILLE, KENTUCKY; DESIGNATING THE PAYING AGENT AND REGISTRAR IN RESPECT THEREOF; PROVIDING FOR THE SALE OF SUCH BONDS TO THE LOWEST AND BEST BIDDER; AND AUTHORIZING THE EXECUTION OF DOCUMENTS ON BEHALF OF THE CITY.

WHEREAS, the City of Danville, Kentucky (the "City"), pursuant to the provisions of Chapter 58 and Section 96.190 of the Kentucky Revised Statutes, has, under date of September 23, 2013, authorized and adopted its "2013 General Bond Ordinance," authorizing the issuance of and securing Water and Sewer Revenue Bonds (the "General Bond Ordinance") pursuant to which the City is authorized to issue its Water and Sewer Revenue Bonds from time to time, the proceeds of which, in whole or in part, are to be used for the purposes described with particularity in the General Bond Ordinance; and

WHEREAS, the General Bond Ordinance authorizes the issuance of such Water and Sewer Revenue Bonds in one or more series pursuant to one or more Series Ordinances and authorizes the issuance and sale of such series of Water and Sewer Revenue Bonds; and

WHEREAS, the City has determined that it is necessary and desirable that the City issue at this time a Series of Water and Sewer Revenue Bonds, to be designated "City of Danville, Kentucky Water and Sewer Revenue Bonds, Series 2015A" (the "Series 2015A Bonds") and a Series of Water and Sewer Revenue Bonds, to be designated "City of Danville, Kentucky Water and Sewer Revenue Bonds, Series 2015B" (the "Series 2015B Bonds," and together with the Series 2015A Bonds, the "Series 2015 Bonds") to provide moneys (i) to pay a portion of the costs of the construction of additions and improvements (the "Project") to the City's combined and consolidated water and sanitary sewer system (the "System"), (ii) to retire interim financing (the "Interim Obligations") of the City issued to provide funds to pay on an interim basis a portion of the costs of the Project and (iii) to pay the costs of issuing the Series 2015 Bonds.

NOW, THEREFORE, BE IT ORDAINED by the City of Danville, Kentucky, that pursuant to the General Bond Ordinance authorizing the issuance of and securing Water and Sewer Revenue Bonds, this Series 2015 Bond Ordinance is adopted, as follows:

ARTICLE I

AUTHORITY AND DEFINITIONS

101. Short Title. This ordinance may hereafter be cited by the City and is hereinafter sometimes referred to as the "Series 2015 Bond Ordinance."

102. Defined Words and Terms.

(1) All words and terms which are defined in the General Bond Ordinance, which General Bond Ordinance is incorporated herein by reference, shall have the same and

identical meanings respectively in this Series 2015 Bond Ordinance as such terms are given in Article I of the General Bond Ordinance.

(2) "Depreciation Reserve Requirement" means, during any period the Series 2015 Bonds remain Outstanding, the sum of \$3,335 multiplied by the number of months between the July 1 of the first year the Project becomes operational and the final maturity date of the Series 2015 Bonds, to be used as a reserve for repairs or replacements of the System.

(3) "Financial Advisor" means Civic Finance Advisors, LLC, Lexington, Kentucky.

(4) "KIA Loan" means a loan from the Kentucky Infrastructure Authority to the City evidenced by an assistance agreement or agreements, the proceeds of which are to be applied toward the total cost of the Project.

(5) "RUS Grant" means a United States Department of Agriculture Rural Utility Service Grant in an amount not to exceed \$1,400,000 to be applied toward the total cost of the Project.

(6) "Series 2015 Bonds" means, collectively, the Series 2015A Bonds and Series 2015B Bonds.

(7) "Series 2015A Bonds" means the City of Danville, Kentucky Water and Sewer Revenue Bonds, Series 2015A which are authorized by Article II of this Series 2015 Bond Ordinance.

(8) "Series 2015B Bonds" means the City of Danville, Kentucky Water and Sewer Revenue Bonds, Series 2015B which are authorized by Article II of this Series 2015 Bond Ordinance.

103. Authority. This Series 2015 Bond Ordinance is adopted pursuant to authority of Article II, Section 204 of the General Bond Ordinance, and pursuant to authority contained in the Act.

104. Determination by City that Series 2015 Bonds Be Issued. It is hereby determined by the City that it is necessary and desirable that \$8,600,000 principal amount of Water and Sewer Revenue Bonds, Series 2015A and \$5,000,000 principal amount of Water and Sewer Revenue Bonds, Series 2015B be authorized and issued by the City for the purpose of (i) paying a portion of the costs of the construction of the "Project, (ii) providing funds to retire interim financing of the City issued to provide funds to pay on an interim basis a portion of the costs of the Project and (iii) paying the costs of issuing the Series 2015 Bonds.

105. Determination of Depreciation Reserve Requirement. It is hereby determined by the City that, so long as the Series 2015 Bonds are Outstanding, the Depreciation Reserve Requirement, as defined in the General Bond Ordinance, shall be the Depreciation Reserve Requirement, as defined in this Series 2015 Bond Ordinance.

106. Deposits to Debt Service Reserve. As provided in Section 506(2) of the General Bond Ordinance in connection with the issuance of USDA Bonds, the City shall make monthly

deposits to the Debt Service Reserve from the Revenue Fund equal to the greater of (i) \$5,040 or (ii) one-sixtieth (1/60) of the Aggregate Debt Service Requirement, with such deposits to commence on the July 1 following the date the Project is fully operational.

107. Authorization to Execute Documents and Accept Bids. The City hereby authorizes the Authorized Officers to execute all necessary documents including the Official Statement and authorizes Authorized Officers to accept the best bid for the Series 2015 Bonds.

ARTICLE II

AUTHORIZATION AND TERMS OF SERIES 2015 BONDS

201. Authorization of Series 2015 Bonds; Principal Amount; Designation; Form. In order to provide sufficient funds necessary for refunding the Prior Bonds, funding the Debt Service Reserve and paying the costs of issuance of the Series 2015 Bonds in accordance with and subject to the terms, conditions and limitations established in the Act, the General Bond Ordinance and this Series 2015 Bond Ordinance, two series of Water and Sewer Revenue Bonds are hereby authorized to be issued in the aggregate principal amount of \$8,600,000 and \$5,000,000, respectively. As stated aforesaid, the City is of the opinion and hereby determines that the issuance of the Series 2015 Bonds in such principal amount is necessary to provide funds for the construction of the Project and retirement of interim financing related to the construction of the Project. As provided by Article II, Section 204 of the General Bond Ordinance, in addition to the designation "Water and Sewer Revenue Bonds," such Series of Bonds hereby authorized shall bear the additional designations "Series 2015A" and "Series 2015B," respectively, and each Bond as so designated shall be a "Water and Sewer Revenue Bond, Series 2015A" and a "Water and Sewer Revenue Bond, Series 2015B," respectively. The Series 2015 Bonds shall be issued in fully registered form.

202. Purpose for Issue of Series 2015 Bonds. The purpose for which the Series 2015 Bonds are being issued is to provide funds for deposit in the Series 2015 Cost of Issuance Account, the Series 2015 Construction and Acquisition Account and the Note Redemption Fund, all to the extent and in the amounts or subject to the determinations provided in Article III of this Series 2015 Bond Ordinance.

203. Issue Date. The Issue Date for the Series 2015 Bonds shall be the date of their issuance and delivery.

204. Maturities. The Series 2015A Bonds shall be issued as term bonds subject to mandatory sinking fund redemption on February 1 of the years and in the principal amounts, as follows:

<u>YEAR</u>	<u>PRINCIPAL AMOUNT</u>	<u>YEAR</u>	<u>PRINCIPAL AMOUNT</u>
2018	\$121,000	2037	\$217,500
2019	125,000	2038	224,000
2020	129,000	2039	231,000
2021	133,000	2040	238,500
2022	137,000	2041	245,500
2023	141,000	2042	253,500
2024	145,500	2043	261,500

2025	\$150,000	2044	269,500
2026	155,000	2045	278,000
2027	159,500	2046	286,500
2028	164,500	2047	295,500
2029	170,000	2048	305,000
2030	175,000	2049	314,500
2031	180,500	2050	324,000
2032	186,500	2051	334,500
2033	192,000	2052	344,500
2034	198,000	2053	355,500
2035	204,500	2054	366,500
2036	210,500	2055	377,000

The Series 2015B Bonds shall be issued as term bonds subject to mandatory sinking fund redemption on February 1 of the years and in the principal amounts, as follows:

<u>YEAR</u>	<u>PRINCIPAL AMOUNT</u>	<u>YEAR</u>	<u>PRINCIPAL AMOUNT</u>
2018	\$76,000	2037	\$127,500
2019	78,500	2038	131,000
2020	80,500	2039	134,500
2021	82,500	2040	138,500
2022	85,000	2041	142,000
2023	87,500	2042	146,000
2024	89,500	2043	150,000
2025	92,000	2044	154,500
2026	94,500	2045	158,500
2027	97,500	2046	163,000
2028	100,000	2047	167,500
2029	102,500	2048	172,000
2030	105,500	2049	176,500
2031	108,500	2050	181,500
2032	111,500	2051	186,500
2033	114,500	2052	191,500
2034	117,500	2053	197,000
2035	121,000	2054	202,500
2036	124,000	2055	211,000

205. Interest Payment Date; Rates. The Series 2015 Bonds shall bear interest from their Issue Date, payable semi-annually on February 1 and August 1 of each year, commencing with the February 1 or August 1 next succeeding the date of issuance and delivery of the series 2015 Bonds, at the rates set out in the successful bid.

206. Denominations, Numbers and Letters. The Series 2015 Bonds shall be issued in the denomination of Five Thousand Dollars (\$5,000) or any integral multiple of \$1,000 in excess thereof, not exceeding, however, the aggregate principal amount of Series 2015 Bonds maturing in the year of maturity of the Bond for which the denomination is to be specified. The Series 2015A Bonds shall be lettered and numbered separately consecutively from RA-1 upwards and

the Series 2015B Bonds shall be lettered and numbered separately consecutively from RB-1 upwards.

207. Place of Payment and Designation of Paying Agent and Registrar. The principal and Redemption Price on the Series 2015 Bonds shall be payable in lawful money of the United States of America at the principal office of the City in Danville, Kentucky, the City being hereby designated as the Paying Agent and Registrar for the Series 2015 Bonds, unless the Series 2015 Bonds shall not constitute USDA Bonds, in which case the Paying Agent and Registrar designated as such hereunder shall be Farmers National Bank, Danville, Kentucky. The Mayor and City Clerk of the City are hereby authorized to enter into an agreement between the City and the Paying Agent and Registrar hereby appointed. Interest on Series 2015 Bonds will be paid by wire transfer, authorized electronic withdrawal or check or draft mailed to the registered owner as of the fifteenth day of the month preceding the date on which a payment of interest is due at such address as shall be shown by the registration records of the Registrar, in accordance with the provisions of Article III of the General Bond Ordinance.

208. Redemption of Series 2015 Bonds; Redemption Terms and Prices. The Series 2015 Bonds shall be subject to optional redemption, in whole or in part, on any date at a redemption price equal to the principal amount to be redeemed, plus interest accrued to the date of redemption, without premium. Notice of redemption of Series 2015 Bonds, in whole or in part, shall be given by regular United States mail to the Bondholders to be redeemed not less than thirty (30) days prior to the date fixed for redemption. Notwithstanding any of the foregoing provisions as to redemption, Series 2015 Bonds may be redeemed at any time from the proceeds of said Series 2015 Bonds remaining unused at the time the Construction Project is complete upon thirty (30) days written notice to the Registered Owner.

ARTICLE III

DISPOSITION OF PROCEEDS OF SERIES 2015 BONDS

301. Note Redemption Fund. Upon issuance of the Series 2015 Bonds there shall first be deposited in the Note Redemption Fund (or any other redemption account to be subsequently established with respect to Interim Obligations issued as Subordinated Debt) amounts sufficient to redeem and retire the Interim Obligations in full, all as to be set forth in an order (the "Order") of an Authorized Officer regarding the delivery of the Series 2015 Bonds.

302. Series 2013 Construction and Acquisition Account. After making the deposits required under Section 301 hereof, there shall next be deposited in the Series 2013 Construction and Acquisition Account to be established in connection with the issuance of the Interim Obligations the amounts necessary to pay the remaining costs of the Project, as set forth in the Order of an Authorized Officer regarding the delivery of the Series 2015 Bonds. Amounts in the Series 2013 Construction and Acquisition Account shall be used only to pay the costs of the Project specifically identified in the Order. Any amounts remaining in the Series 2013 Construction and Acquisition Account after completion of the Project shall be used to pay other permissible expenses of the City, subject to the requirements of the preceding sentence, or transferred to the Bond Fund, as determined by an Authorized Officer.

Upon any deposit in said Series 2013 Construction and Acquisition Account of an amount in excess of \$250,000, the Depository shall secure the amount in excess of \$250,000 by pledging

collateral with the Federal Reserve Bank in an amount not less than the excess in accordance with 7 CFR, 1902.7(a). All monies received in connection with the Project from an RUS Grant, a KIA Loan, the proceeds of the Interim Obligations and cash contributions by the City shall be deposited in said Series 2013 Construction and Acquisition Account and shall be applied to meet the costs incident to said Project.

All requests for disbursements from the Series 2013 Construction and Acquisition Account shall be accompanied by one or more vouchers (Partial Payment Estimates in a form satisfactory to the United States Department of Agriculture ("USDA") executed by a representative of the engineers in charge of said Project certifying that the amount requested represents a sum actually earned by and due to contractors under a contract with the City for work performed or for materials furnished to the City in connection with said Project. Each such voucher shall be approved by the duly authorized representative of USDA. To the extent a requested disbursement from said Series 2013 Construction and Acquisition Account shall be for items not relating to construction contracts, a voucher (in a form satisfactory to USDA) for such disbursement signed only by an Authorized Officer and approved by the duly authorized representative of USDA shall be submitted stating that the requested advance represents an expenditure which may be properly made under the terms of the USDA Loan Resolution and is eligible for payment by the City from the proceeds of the Series 2015 Bonds herein authorized.

Disbursements from the Series 2013 Construction and Acquisition Account shall be made by check signed by an Authorized Officer countersigned by the duly authorized representative of USDA and shall be made only upon the Authorized Officer's receipt of such voucher.

The position of the Authorized Officer (or those officials of the City charged with the responsibilities for the Series 2013 Construction and Acquisition Account) shall be covered by a fidelity bond (a "Fidelity Bond") in the amount of not less than \$720,000 with a surety company approved by USDA; the City and USDA - Rural Development shall be named co-obligees in such Fidelity Bond, and the amount thereof shall not be reduced without the written consent of USDA. Should the aggregate total of the deposits in the various accounts authorized to be maintained under the provisions hereof equal more than \$720,000 at any one time during the year, the Fidelity Bond of the Authorized Officer will be increased to cover the larger amount so accumulated and if USDA so requests, a special fidelity bond shall be written to cover the Series 2013 Construction and Acquisition Account.

303. Series 2015 Costs of Issuance Account. All amounts remaining after deposit of the amounts required to be deposited in the Note Redemption Fund (or any other redemption account to be subsequently established with respect to Interim Obligations issued as Subordinated Debt) and the Series 2015 Construction and Acquisition Account pursuant to sections 301 and 302 above shall be deposited in a cost of issuance account, hereby created, known as the "Series 2015 Cost of Issuance Account." Amounts in the Series 2015 Cost of Issuance Account shall be used only to pay the costs of issuance specifically identified in the Order regarding the delivery of the Series 2015 Bonds. Any amounts remaining in the Series 2015 Cost of Issuance Account after payment of all costs of issuance shall be transferred to the series 2013 Construction and Acquisition Account or shall be transferred to the Bond Fund, as determined by an Authorized Officer.

ARTICLE IV

ISSUANCE AND SALE OF THE SERIES 2015 BONDS

401. Award of Series 2015 Bonds to Lowest and Best Bidders. The Series 2015 Bonds shall be awarded to the lowest and best bidders (collectively, the "Purchasers") in accordance with the Official Terms and Conditions of Bond Sale. The Mayor or any other Authorized Officer shall, in a certificate of award to be executed on the date of the public sale of the Series 2015 Bonds, accept the bids which the Mayor or such other Authorized Officer determines to be the best bids for each of the Series 2015A Bonds and Series 2015B Bonds in accordance with the Official Terms and Conditions of Sale; shall in accepting the successful bids, determine the exact rates of interest which the Series 2015 Bonds shall bear; and shall evidence such acceptance and determination by the completion and execution of the Official Bid Form submitted by the successful bidders.

402. General Authorization. The Mayor, the City Clerk and each other Authorized Officer, are hereby authorized to do and perform any act or sign any and all documents required by the General Bond Ordinance, and perform any other acts or sign and execute any other documents necessary or convenient in connection with the authorization, sale, delivery and issuance of the Series 2015 Bonds. The Series 2015 Bonds shall be executed, authenticated and delivered pursuant to the General Bond Ordinance and supplemental ordinances not inconsistent therewith, provided that the attestation shall be by an Authorized Officer.

403. Delivery of Series 2015 Bonds. The Mayor, the City Clerk and all Authorized Officers are hereby severally authorized, after execution of the Series 2015 Bonds to deliver the Series 2015 Bonds to or upon the order of the Purchasers thereof, to receive the proceeds of sale of the Series 2015 Bonds and give a written receipt thereof on behalf of the City, to apply the proceeds and any other moneys in accordance with the terms of the General Bond Ordinance and this Series 2015 Bond Ordinance, and in such manner as is required to cause the conditions to the issuance of the Series 2015 Bonds as stipulated in the General Bond Ordinance to be complied with and to do and perform, or cause to be done and performed, for and on behalf of the City, all acts and things that constitute conditions to the authentication and delivery of the Series 2015 Bonds, or that are otherwise required to be done and performed by or on behalf of the City prior to, or simultaneously with, the delivery of the Series 2015 Bonds.

ARTICLE V

EFFECTIVE DATE

501. Effective upon Adoption and Publication. This Series 2015 Bond Ordinance and any supplement thereto shall be in full force and effect from and after its adoption and publication of a summary thereof.

Introduced and given first reading at a meeting held on October 28, 2013. Introduced and given second reading and adopted on November 12, 2013.

APPROVED:

Bernie Heenrotel

Mayor

ATTEST:

D. Au

City Clerk

CERTIFICATION

I, the undersigned, the duly appointed and qualified City Clerk of City of Danville, Kentucky, do hereby certify that the foregoing Ordinance is a true, accurate and complete copy of a certain Ordinance duly adopted by the City Commission of the City at a duly and properly convened or recessed meeting of the City Commission held on November 12, 2013, on the same occasion signed in open session by the Mayor attested under seal by the City Clerk, and declared to be in full force and effect upon publication of a summary thereof.

IN WITNESS WHEREOF I have hereunto set my hand this 3rd day of December, 2013.



City Clerk, City of Danville, Kentucky

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GENERAL BOND ORDINANCE

GENERAL BOND ORDINANCE OF THE CITY OF DANVILLE,
KENTUCKY PROVIDING FOR THE ESTABLISHMENT OF RULES,
REGULATIONS AND CONDITIONS FOR THE ISSUANCE FROM TIME TO
TIME BY SAID CITY OF WATER AND SEWER REVENUE BONDS AND
PROVIDING FOR THE COLLECTION, SEGREGATION AND
DISTRIBUTION OF THE REVENUES OF THE COMBINED AND
CONSOLIDATED WATER AND SEWER SYSTEM.

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**GENERAL BOND ORDINANCE
AUTHORIZING THE ISSUANCE OF
AND SECURING WATER AND SEWER REVENUE BONDS OF
CITY OF DANVILLE, KENTUCKY**

This GENERAL BOND ORDINANCE made and adopted as of the 23rd day of September, 2013, by the CITY OF DANVILLE, KENTUCKY (hereinafter sometimes referred to as the "City"), a municipal corporation and political subdivision of the Commonwealth of Kentucky, for the purpose of establishing the rules, regulations and conditions for the issuance from time to time by the City of its Water and Sewer Revenue Bonds:

W I T N E S S E T H:

THAT WHEREAS, the City of Danville, Kentucky (the "City"), pursuant to the provisions of Chapter 58 of the Kentucky Revised Statutes, Section 96.190 of the Kentucky Revised Statutes and Sections 96.350 to 96.510, inclusive, of the Kentucky Revised Statutes, has the authority to plan, design, finance, construct, install, operate, replace and maintain water and sanitary sewer system facilities within the service area of the City; and

WHEREAS, the City has for many years owned and operated its combined and consolidated municipal water and sewer system (the "System") on a revenue-producing basis for the public benefit, welfare and convenience; and

WHEREAS, pursuant to Ordinance No. 1644 adopted on April 14, 2003 (the "Series 2003 Ordinance"), the City heretofore issued its Water and Sewer Refunding Revenue Bonds, Series 2003 (the "Series 2003 Bonds"), the proceeds of which paid the costs of issuance of the Series 2003 Bonds and the costs of refunding an earlier series of bonds, which Series 2003 Bonds were payable from and secured by a first lien on the gross revenues of the System; and

WHEREAS, pursuant to pursuant to an Ordinance No. adopted on March 12, 2009 (the "Series 2009 Ordinance"), the City presently has outstanding it's Water and Sewer Revenue Bonds, Series 2009 (the "Series 2009 Bonds"), the proceeds of which paid the costs of issuance of the Series 2009 Bonds and paid the costs of financing certain system improvements to the System (the "2009 Project"), which Series 2009 Bonds are payable from and secured by a lien on the gross revenues of the System inferior and subordinate to the Series 2003 Bonds; and

WHEREAS, pursuant to pursuant to Ordinance No. 1774 adopted on July 12, 2010 (the "Series 2010 Ordinance"), the City presently has outstanding it's Water and Sewer Revenue Bonds, Taxable Series 2010 (Build America Bonds – Direct Payment to Issuer) (the "Series 2010 Bonds"), the proceeds of which paid the costs of issuance of the Series 2010 Bonds and paid the costs of financing certain system improvements to the System (the "2010 Project"), which Series 2010 Bonds are payable from and secured by a lien on the gross revenues of the System inferior and subordinate to the Series 2003 Bonds; and

WHEREAS, pursuant to an Asset Purchase Agreement dated as of June 30, 2004 between the City and the City of Junction City, Kentucky (the "2004 Asset Purchase Agreement"), the City has assumed the obligations of the City of Junction, City with respect to the City of Junction City, Kentucky Water and Sewer Revenue Bonds, Series 1995 (the "Series

1995 Bonds"), which Series 1995 Bonds are payable from and secured by revenues of the water and sewer system acquired by the City under the 2004 Asset Purchase Agreement and are therefore inferior and subordinate to the pledges granted to the holders of the Series 2003 Bonds with regards to the revenues of the City's System; and

WHEREAS, pursuant to an Asset Purchase Agreement dated as of June 30, 2003 between the City and the City of Perryville, Kentucky (the "2003 Asset Purchase Agreement"), the City has assumed the obligations of the City of Perryville with respect to the City of Perryville, Kentucky Water Revenue Bonds, Series 2000 (the "Series 2000 Bonds"), which Series 2000 Bonds are payable from and secured by revenues of the water and sewer system acquired by the City under the 2003 Asset Purchase Agreement and are therefore inferior and subordinate to the pledges granted to the holders of the Series 2003 Bonds with regards to the revenues of the City's System; and

WHEREAS, the City further has outstanding its Water and Sewer System Revenue Bond Anticipation Notes, Series 2012 (the "Series 2012 Notes"), which are payable from and secured by pledges of the gross revenues of the System ranking inferior and subordinate to the pledges granted to the holders of the Series 2003 Bonds; and

WHEREAS, the City further has outstanding (i) an Assistance Agreement dated as of May 1, 1999, as supplemented, between the City and the Kentucky Infrastructure Authority ("KIA"), and (ii) an Assistance Agreement dated as of April 1, 1993 between the City, as delegee and purchaser of the assets of the water and sewer system of the City of Junction City, Kentucky pursuant to the 2004 Asset Purchase Agreement, and KIA, each of which is payable from and secured by pledges of the gross revenues of the System ranking inferior and subordinate to the pledges granted to the holders of the Series 2003 Bonds (collectively, the "Outstanding Subordinated KIA Loans"); and

WHEREAS, provision for the payment in full of the Series 2003 Bonds has been made and the Series 2003 Bonds have been discharged and satisfied within the meaning of Section 19 of the Series 2003 Ordinance; and

WHEREAS, the City has determined that it will be necessary from time to time to construct additions and improvements to the System and that as a result of the discharge of the Series 2003 Bonds it is necessary and desirable that the City establish updated procedures for the operation of the system and the issuance from time to time of obligations payable from the revenues of the System; and

WHEREAS, the United States Department of Agriculture (the "USDA"), the holder of 100% of the aggregate outstanding principal amount of the Series 2000 Bonds, Series 2005 Bonds, Series 2009 Bonds and Series 2010 Bonds, has agreed with the City, and has provided the City with its written consent to have the Series 2000 Bonds, Series 2005 Bonds, Series 2009 and Series 2010 Bonds secured hereunder on a parity as to security and source of payment with future issues of the City's Water and Sewer Revenue Bonds, as hereinafter defined; and

WHEREAS, KIA, as the sole holder of the Outstanding Subordinated KIA Loans, has agreed with the City, and has provided the City with its written consent to have the Outstanding

Subordinated KIA Loans treated hereunder as Subordinated Debt, as hereinafter defined, secured by a junior and subordinate pledge of the Pledged Receipts, as hereinafter defined; and

WHEREAS, Whitaker Bank, Inc., Lancaster, Kentucky, as the sole holder of the Series 2012 Notes, has agreed with the City, and has provided the City with its written consent to have the Series 2012 Notes treated hereunder as Notes, as hereinafter defined, secured by a junior and subordinate pledge of the Pledged Receipts, as hereinafter defined

WHEREAS, as a result of the foregoing, it is now necessary that the City adopt this General Bond Ordinance in order to secure the rights of those who may become holders of the Water and Sewer Revenue Bonds of the City issued hereunder and to make provision for: (a) the issuance of the City's Water and Sewer Revenue Bonds, Parity Obligations, Notes and Subordinated Debt, each as hereinafter defined (b) providing for the security in respect of such Water and Sewer Revenue Bonds, Parity Obligations, Notes and Subordinated Debt, (c) protecting and enforcing the rights and remedies of the holders thereof, (d) the custody, safeguarding and application of the City's income and revenues derived from the System, (e) the duties and responsibilities of Fiduciaries, as hereinafter defined, and (f) inter alia, all other necessary and desirable provisions with respect to said Water and Sewer Revenue Bonds, Parity Obligations, Notes and Subordinated Debt, including covenants of the City; and

WHEREAS, all acts, conditions and things required by the Constitution and laws of the Commonwealth of Kentucky and by the requirements of the City to happen, to exist, and to be performed precedent to and in the execution and delivery of this General Bond Ordinance have happened, have existed and have been performed as so required in order to make this General Bond Ordinance a valid and binding legal basis for the security of the water and Sewer Revenue Bonds hereinafter authorized and described, in accordance with its terms;

NOW, THEREFORE, THIS GENERAL BOND ORDINANCE WITNESSETH, that in consideration of the premises and of the purchase and acceptance of Water and Sewer Revenue Bonds by the holders thereof, and for the purpose of fixing and declaring the terms and conditions upon which Water and Sewer Revenue Bonds, Parity Obligations, Notes and Subordinated Debt of the City are to be issued, authenticated, delivered, secured and accepted by all persons who shall from time to time be or become holders thereof, and in order to secure the payment of all the Water and Sewer Revenue Bonds, Parity Obligations, Notes and Subordinated Debt at any time issued and Outstanding hereunder and the interest thereon according to their tenor, purport and effect, and in order to secure the performance and observance of all the covenants, agreements and conditions therein and herein contained, the City does hereby enact and has caused to be executed and delivered this General Bond Ordinance, and the City does hereby agree and covenant for the equal and proportionate benefit and security of all and singular the present and future holders of the Water and Sewer Revenue Bonds issued under this General Bond Ordinance, without preference, priority or distinction as to lien or otherwise, except as otherwise hereinafter provided, of any one bond over any other bond by reason or priority in the issue, sale or negotiation thereof or otherwise, as follows:

ARTICLE I
SHORT TITLE, DEFINITIONS, CONSTRUCTION

101. Short Title. This General Bond Ordinance may hereafter be cited by the City, the holders of the Bonds and any Fiduciaries, and is hereinafter sometimes referred to as the "General Bond Ordinance" or the "Ordinance."

102. Definitions. Unless the context clearly indicates some other meaning, the following words and terms shall, for all purposes of the General Bond Ordinance, have the following meanings:

"Account or Accounts or Funds" - means one or more of the separate accounts for each Series of Bonds which are created and established pursuant to the Ordinance.

"Act" - means Chapter 58 of the Kentucky Revised Statutes, Section 96.190 of the Kentucky Revised Statutes and Sections 96.350 to 96.510, inclusive, of the Kentucky Revised Statutes.

"Agent Member" - means a member of, or participant in, the Securities Depository.

"Aggregate Debt Service Reserve Requirement" - means the least of (i) the maximum Annual Debt Service Requirement in any succeeding Fiscal Year or (ii) 125% of the average Annual Debt Service Requirement; provided that not more than 10% of the proceeds of any Series of Bonds shall be required to be deposited in the Debt Service Reserve and, if such amount is so deposited, the amount of such deposit plus the amount of all prior deposits required upon the issuance of Bonds shall constitute the Aggregate Debt Service Reserve Requirement until the earlier of (x) the date the next Series of Bonds is issued or (y) the date such amount equals the requirement set forth in clause (i) above; provided further that the Aggregate Debt Service Reserve Requirement shall not include either the Annual Debt Service Requirement with respect to any Parity Obligations if such Parity Obligations are, by their terms, not payable from amounts on deposit in the Debt Service Reserve, or the Annual Debt Service Requirement with respect to any parity Notes if such parity Notes are, by their terms, being issued in anticipation of the issuance of Bonds or Parity Obligations and are to be retired at or before maturity from the proceeds thereof, and the City shall have received a commitment for the purchase of such Bonds or Parity Obligations at the time of issuance of the parity Notes.

"Annual Budget" - means the annual budget, as amended or supplemented, for a particular fiscal year adopted by the City under the General Bond Ordinance as provided in Section 711.

"Annual Debt Service Requirement" - means, at any given time of determination, the maximum amount of Principal Installments and interest coming due on all Bonds Outstanding and Parity Obligations Outstanding in any Fiscal Year; provided, however, if the terms of any Bonds or Parity Obligations are such that interest thereon for any future period of time is to be calculated at a variable rate, then interest on such Bonds and Parity Obligations for such period shall be computed by assuming that the rate of interest applicable to such period is equal to the average rate of interest (calculated in the manner in which the rate of interest for such period is to

be calculated) which would have been in effect for the 12 months immediately preceding the date of calculation.

"Authorized Newspapers" - means a newspaper of general circulation in the service area of the City which meets the requirements of a qualified newspaper as established by law, a daily newspaper of general circulation in Kentucky, and, where applicable, a newspaper or financial journal printed in the English language, customarily published and circulated, for at least five days (other than legal holidays) in each calendar week, in the Borough of Manhattan, City and State of New York, or as otherwise provided by Kentucky law.

"Authorized Officer" - means the Mayor and City Clerk of the City, and any other of its officers, agents or employees duly authorized by resolution of the City to perform the act or sign the document in question.

"Bond or Bonds" - means any Water and Sewer Revenue Bond or Bonds, or the issue of Bonds, as the case may be, authenticated and delivered under the General Bond Ordinance and authorized and issued pursuant to a Series Ordinance.

"Bond Fund" - means the Bond Fund created by Section 502.

"Bond Proceeds Fund" - means the Fund so designated which is established and created by Section 502.

"Bondholder," or "Holder," or "Holder of Bonds" or any similar term (when used with reference to Bonds) - means the person in whose name a Bond is registered.

"Book-Entry Form" means, with respect to any Bonds, a form or system, as applicable, under which (i) the ownership of beneficial interests in the Bonds and bond service charges may be transferred only through a book entry, and (ii) physical Bond certificates in fully registered form are registered only in the name of a Securities Depository or its nominee as owner, with the physical Bond certificates in the custody of a Securities Depository.

"Certificate" - means a document signed by an Authorized Officer attesting to or acknowledging the circumstances or other matters therein stated.

"City" - means City of Danville, Kentucky, a municipal corporation and political subdivision of the Commonwealth of Kentucky.

"City Commission" - means the duly elected City Commission of the City of Danville, Kentucky.

"Construction" - means and shall include, inter alia, (a) preliminary planning to determine the economic and engineering feasibility of facilities constituting a part of the City's System, now or in the future, the engineering, architectural, legal, fiscal and marketing costs in respect thereto, economic investigations and studies necessary thereto, and surveys, designs, plans, working drawings, specifications, procedures and other actions necessary to the construction of facilities for the System; (b) the erection, building, acquisition, alteration, remodeling, improvement or extension of System facilities; and (c) the inspection and supervision of the

construction of System facilities, and all costs incidental to the acquisition and financing of same; and such term shall also relate to and mean any other physical devices or appurtenances in connection with, or reasonably attendant to, System facilities.

"Construction and Acquisition Account" - means, for each Series of Bonds which has one, the account created by Section 502.

"Consulting Engineer of National Recognition" - means and refers to an Engineer or a firm of Engineers, who, by virtue of experience, reputation and ability, bear a reputation in the field of water and sewer system engineering, which is nationally recognized and known, and upon whose professional judgment sophisticated investors rely in connection with securities which are issued for utility purposes.

"Costs of Issuance" - means only the costs of issuing a Series of Bonds as designated by the City; including, but not being limited to, the fees and charges of the financial advisors or underwriters, bond counsel, trustee, rating agencies, bond and official statement printers credit enhancement charges, and such other fees and expenses normally attendant to an issue of Bonds.

"Costs of Issuance Account" - means, for each Series, the respective Account so designated which is established and created pursuant to Section 502.

"Counsel's Opinion" - means an opinion, including supplemental opinions thereto, signed by such attorney or firm of attorneys of recognized national standing in the field of law relating to municipal bonds and municipal finance as may be selected by the City.

"Debt Service Reserve" - means the reserve for payment of principal of, interest on, and redemption requirements in respect of the Bonds (and Parity Obligations, if applicable), created by Section 502.

"Defeasance Obligations" means:

(a) direct obligations of (including obligations issued or held in book entry form) the United States of America; and

(b) pre-funded municipal obligations defined as follows:

Any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state which are not callable at the option of the obligor prior to maturity or as to which irrevocable instructions have been given by the obligor to call on the date specified in the notice; and (1) which are rated, based on the escrow, in the highest rating category of Standard & Poor's Rating Services, a division of The McGraw Hill Companies, Inc. and Moody's Investors Service, Inc. or any successors thereto; or (2) which are fully secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or obligations described in paragraph (a) above, which fund may be applied only to the payment of such principal and interest and redemption premium, if any, on such bonds or other obligations described in this paragraph on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to above, as appropriate.

"Depreciation Fund" - means the Fund created by Section 502.

"Depreciation Reserve Requirement" - means an amount as shall be set forth in a Series Ordinance to be necessary as a reserve for major repairs or replacements of the System, which amount shall be maintained in the Depreciation Fund.

"Engineer" or "Engineers" - means any firm or firms of consulting engineers who have been or who will be in the future retained by the City for the purpose of preparing plans and specifications for present or future portions of the System.

"Fiduciary" or "Fiduciaries" - means any Paying Agent, any Registrar, and the depositories of all City funds, or any or all of them, as may be appropriate.

"Fiscal Year" - means the period commencing on July 1 of any year and ending on June 30 of the succeeding calendar year, or such other period as shall be determined to be the fiscal year for the City in accordance with the laws of the Commonwealth of Kentucky.

"General Bond Ordinance" - means this General Bond Ordinance of the City adopted September 23, 2013.

"Interest Payment Date" - means, for each Series, the date upon which interest on the Bonds of such Series shall be payable pursuant to Section 302 and for Parity Obligations, the date upon which interest on the Parity Obligations shall be payable in accordance with their terms.

"Investment Obligations" - means and includes any of the following;

(a) Obligations of the United States and of its agencies and instrumentalities, including obligations subject to repurchase agreements, if delivery of these obligations subject to repurchase agreements is taken either directly or through an authorized custodian. These investments may be accomplished through repurchase agreements reached with sources including, but not limited to, national or state banks chartered in Kentucky;

(b) Obligations and contracts for future delivery or purchase of obligations backed by the full faith and credit of the United States or a United States governmental agency, including but not limited to:

- (i) United States Treasury;
- (ii) Export-Import Bank of the United States;
- (iii) Farmers Home Administration;
- (iv) Government National Mortgage Corporation; and
- (v) Merchant Marine bonds;

(c) Obligations of any corporation of the United States government, including but not limited to:

- (i) Federal Home Loan Mortgage Corporation;
- (ii) Federal Farm Credit Banks;

- (iii) Bank for Cooperatives;
- (iv) Federal Intermediate Credit Banks;
- (v) Federal Land Banks;
- (vi) Federal Home Loan Banks;
- (vii) Federal National Mortgage Association; and
- (viii) Tennessee Valley Authority;

(d) Certificates of deposit issued by or other interest-bearing accounts of any bank or savings and loan institution which are insured by the Federal Deposit Insurance Corporation or similar entity or which are collateralized, to the extent uninsured, by any obligations permitted by KRS 41.240(d);

(e) Uncollateralized certificates of deposit issued by any bank or savings and loan institutions rated in one (1) of the three (3) highest categories by a nationally recognized rating agency;

(f) Bankers' acceptances for banks rated in one (1) of the three (3) highest categories by a nationally recognized rating agency;

(g) Commercial paper rated in the highest category by a nationally recognized rating agency;

(h) Bonds or certificates of indebtedness of this state and of its agencies and instrumentalities;

(i) Securities issued by a state or local government, or any instrumentality of agency thereof, in the United States, and rated in one (1) of the three highest categories by a nationally recognized rating agency; and

(j) Shares of mutual funds, each of which shall have the following characteristics:

(i) The mutual fund shall be an open-end diversified investment company registered under the Federal Investment Company Act of 1940, as amended;

(ii) The management company of the investment company shall have been in operation for at least five (5) years; and

(iii) All of the securities in the mutual fund shall be eligible investments described in this definition.

All funds and accounts are to be marked to market valuation conducted on a quarterly basis by the Fiduciary.

"Issue Date" - means, with respect to Bonds of a particular Series, the date of the Bonds of such Series specified and determined by the Series Ordinance authorizing such Bonds.

"KIA" means the Kentucky Infrastructure Authority, an agency of the Commonwealth of Kentucky.

"KRS" - means and refers to the Kentucky Revised Statutes.

"Notes" - means any obligations issued or to be issued by the City pursuant to the Act to provide funds for any lawful City purposes authorized by the Act in anticipation of the issuance of Bonds or Parity Obligations.

"Operation and Maintenance Costs" - means, as of any particular date, the City's operating and maintenance expenses of carrying out and administering the System, and in that regard operating and maintaining the System, and shall include, without limiting the generality of the foregoing, salaries, supplies, utilities, mailing, labor, materials, office rent, maintenance, upkeep, furnishings, equipment, repair of facilities, insurance premiums, legal, accounting, management, consulting and banking services and expenses, the fees and expenses of any regulatory agency having jurisdiction of the City and all other items normally considered operation and maintenance costs under generally accepted accounting principles, but shall exclude allowances for depreciation and deposits to the Depreciation Fund.

"Operation and Maintenance Fund" - means the Fund so designated which is established and created by Section 502.

"Outstanding" - when used with reference to Bonds or Parity Obligations, means, as of any date, all Bonds and Parity Obligations theretofore or then being authenticated and delivered under the General Bond Ordinance, except:

(a) Any Bonds or Parity Obligations cancelled pursuant to the General Bond Ordinance at or prior to such date;

(b) Bonds and Parity Obligations (or portions of Bonds or Parity Obligations) for the payment or redemption of which there shall be held in trust under the General Bond Ordinance (whether at or prior to maturity or Redemption Date) (i) cash, equal to the principal amount or Redemption Price thereof, as the case may be, with interest to the date of maturity or Redemption Date, or (ii) Investment Obligations as defined in clause (a) of the definition of Investment Obligations in such principal amounts, having such maturities and bearing such interest, which, together with cash, if any, shall be sufficient to pay when due, the principal amount or Redemption Price, as the case may be, with interest to the date of maturity or Redemption Date; provided that if such Bonds or Parity Obligations are to be redeemed, notice of such redemption shall have been given as in the General Bond Ordinance provided or satisfactory provisions for the giving of such notice shall have been made;

(c) Bonds or Parity Obligations in lieu of or in substitution for which other Bonds or Parity Obligations have been authenticated and delivered pursuant to the General Bond Ordinance; and

(d) Bonds or Parity Obligations deemed to have been paid as provided in Section 1201.

Outstanding Subordinated KIA Loans – means, collectively, (i) an Assistance Agreement dated as of May 1, 1999, as supplemented, between the City and the Kentucky Infrastructure Authority ("KIA"), and (ii) an Assistance Agreement dated as of April 1, 1993 between the City, as delegee and purchaser of the assets of the water and sewer system of the City of Junction City, Kentucky pursuant to the 2004 Asset Purchase Agreement, and KIA.

"Parity Obligations" – means the Series 2000 Bonds, the Series 2005 Bonds, the Series 2009 Bonds, the Series 2010 Bonds and any obligations issued in the future, which obligations will, pursuant to the provisions of this General Bond Ordinance, rank on a basis of parity with the security provided by the pledges set forth in this General Bond Ordinance for the Bonds, and shall not be deemed to include obligations ranking inferior in security to the pledges set forth in this General Bond Ordinance.

"Paying Agent" - means any bank or trust company designated, and its successor or successors hereafter appointed, as paying agent for the Bonds of any Series in the manner provided in the General Bond Ordinance; provided, however, that with respect to USDA Bonds, the City may be designated as the Paying Agent for the USDA Bonds.

"Person" - means any individual, firm, partnership, association, joint venture, corporation or governmental agency, either State or Federal.

"Pledged Receipts"

(a) means the totality of the Revenues;

(b) shall not mean any State appropriations or Federal Grants specified for use by the City for capital construction purposes in connection with the City's System; and

(c) shall also include all interest earned and gains realized on Investment Obligations unless the General Bond Ordinance specifically requires such interest earned or gains realized to remain in a particular Fund or Account; provided that, any interest or gains on funds held in (i) escrow by a trustee for the payment of previously outstanding bonds or (ii) in a fund in order to rebate such amounts to the United States Treasury in order to comply with requirements of the Internal Revenue Code of 1986, as amended, shall not be included.

"Principal Installment" - for any Fiscal Year means, as of any date of calculation so long as any Bonds, Parity Obligations or Subordinated Debt are Outstanding:

(a) the principal amount of the Outstanding Bonds, Parity Obligations and Subordinated Debt which mature in such Fiscal Year, reduced by the aggregate principal amount of such Bonds, Parity Obligations and Subordinated Debt which would before such Fiscal Year be retired by reason of the payment when due and application in accordance with the General Bond Ordinance of Sinking Fund Installments payable before such Fiscal Year for the retirement of such Bonds, Parity Obligations or Subordinated Debt; plus

(b) the unsatisfied balance of the Sinking Fund Installment, if any, due during such Fiscal Year for the Bonds, Parity Obligations and Subordinated Debt.

"Principal Installment Date" - means the date upon which each Principal Installment on the Bonds, Parity Obligations or Subordinated Debt shall be payable.

"Redemption Date" - means, with respect to any Bonds or Parity Obligations, the principal amount thereof plus the applicable premium, if any, payable upon redemption thereof pursuant to the General Bond Ordinance and the Series Ordinance pursuant to which such Bonds were issued, or, in the case of Parity Obligations, in accordance with the terms of such Parity Obligations.

"Redemption Price" - means, with respect to any Bonds, the principal amount thereof plus the applicable premium, if any, payable upon redemption thereof pursuant to the General Bond Ordinance and the Series Ordinance pursuant to which the same was issued.

"Refunding Bonds" - means all Bonds, whether issued in one or more Series, authenticated and delivered on original issuance pursuant to Section 207 and thereafter authenticated and delivered in lieu of or in substitution for such Bonds pursuant to the General Bond Ordinance.

"Registrar" - means any bank or trust company and its successor or successors, acting as registrar for the Bonds of any Series pursuant to the Series Ordinance for said Bonds; provided, however, that with respect to USDA Bonds, the City may be designated as the Registrar for the USDA Bonds.

"Registrar and Paying Agent Agreement" - means any registrar and paying agent agreement between the City and a bank or trust company that may be authorized by any Series Ordinance.

"Revenue Fund" - means the Revenue Fund created by Section 502.

"Revenues" - means the totality of all water and sewer service rates, rentals and charges of any and all types and varieties imposed, enforced and collected by the City for any water or sewer services rendered by the System of the City, together with other income received by the City, if any, from any agency of government, both federal and state, as representing income or operating subsidies, as distinguished from capital grants, to the extent not otherwise required to be treated and applied and specifically excluding therefrom any funds received which result from assessments or assessment charges.

"Securities Depository" means any securities depository that is a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act, operating and maintaining, with its participants or otherwise, a Book-Entry System to record ownership of beneficial interests in bonds and bond service charges, and to effect transfers of bonds in Book-Entry Form, and means, initially, The Depository Trust Company (a limited purpose trust company), New York, New York.

"Securities Depository Nominee" means any nominee of a Securities Depository and initially means Cede & Co., New York, New York, as nominee of The Depository Trust Company.

"Serial Bonds and Term Bonds" - means such portion of the Bonds designated as Serial Bonds and Term Bonds in a Series Ordinance.

"Series Bonds" - means all of the Bonds authenticated and delivered on original issuance in a simultaneous transaction, and any Bonds thereafter authenticated and delivered in lieu of or in substitution for such Bonds pursuant to this General Bond Ordinance, regardless of variations in maturity, interest rate, Sinking Fund Installments or other provisions.

"Series Ordinance" - means an ordinance of the City authorizing the issuance of a Series of Bonds in accordance with the terms and provisions hereof, adopted by the City in accordance with Section 204.

"Series 2000 Bonds" – City of Perryville, Kentucky Water and Sewer Revenue Bonds, Series 2000, as assumed by the City

"Series 2005 Bonds" – City of Junction City, Kentucky Water and Sewer Revenue Bonds, Series 1995, as assumed by the City

"Series 2009 Bonds" – means the City of Danville, Kentucky Water and Sewer Revenue Bonds, Series 2009.

"Series 2010 Bonds" – means the City of Danville, Kentucky Water and Sewer Revenue Bonds, Taxable Series 2010 (Build America Bonds – Direct Payment to Issuer).

"Series 2012 Notes" – means the City of Danville, Kentucky Water and Sewer System Revenue Bond Anticipation Notes, Series 2012.

"Sinking Fund Installment" - for any Fiscal Year, means as of any date of calculation, and with respect to the Outstanding Bonds, Parity Obligations or Subordinated Debt, the amount of money required to be paid as regular installments of principal for such Bonds, Parity Obligations or Subordinated Debt by redemption, but does not include any amount payable by the City by reason only of the maturity of a Bond, Parity Obligation or Subordinated Debt, and said future date is deemed to be the date when such Sinking Fund Installment is payable and the date of such Sinking Fund Installment, and said Outstanding Bonds, Parity Obligations and Subordinated Debt are deemed to be the Bonds, Parity Obligations and Subordinated Debt entitled to such Sinking Fund Installment.

"Subordinated Debt" means indebtedness of the System issued pursuant to Section 316 hereof which is subordinate to Bonds and Parity Obligations authorized to be issued under Section 314 hereof, including the Outstanding Subordinated Debt and any additional loans from KIA to the City evidenced by an assistance agreement.

"Supplemental Ordinance" - means any ordinance supplemental to or amendatory of this General Bond Ordinance adopted by the City in accordance with Article VIII and Article IX hereof.

"Surplus Fund" - means the Account so designated which is established by Section 502 hereof.

"System" - means (a) the existing sewer collection and treatment facilities of the City, (b) the existing water production, treatment and distribution facilities of the City, and (c) all future additions and extensions such water and sewer facilities.

"USDA Bonds" – means Bonds authorized pursuant to a Series Ordinance which are purchased by and registered solely in the name of the United State Department of Agriculture or its lawful successor.

103. Construction of General Bond Ordinance. In this General Bond Ordinance, unless the context otherwise requires:

Articles and Sections referred to by number means the corresponding Articles and Sections of this General Bond Ordinance.

Words of the masculine gender shall be deemed and construed to include correlative words of the feminine and neuter genders. Words importing the singular number shall include the plural number and vice versa, and words importing persons shall include firms, associations, partnerships (including limited partnerships), trusts, joint ventures, corporations, or other legal entities including public bodies, as well as natural persons.

The terms "hereby," "hereof," "hereto," "herein," "hereunder," and any similar terms, as used in this General Bond Ordinance, refer to this General Bond Ordinance or Sections or subsections of this General Bond Ordinance and the term "hereafter" means after the date of adoption of this General Bond Ordinance.

[End of Article I]

ARTICLE II
AUTHORIZATION AND ISSUANCE OF BONDS

201. Authorization For General Bond Ordinance. This General Bond Ordinance is adopted pursuant to the Act.

202. General Bond Ordinance To Constitute Contract. In consideration of the purchase and acceptance of the Bonds by those who shall purchase and hold the same from time to time, the provisions of the General Bond Ordinance shall be a part of the contract of the City with the Holders of the Bonds and shall be deemed to be and constitute a contract between the City and the Holders from time to time of the Bonds and such provisions are covenants and agreements with such Holders which the City hereby determines to be necessary and desirable for the security and payment thereof. The provisions, covenants and agreements herein set forth to be performed on behalf of the City shall be for the equal and ratable benefit, protection and security of the Holders of any and all of the Bonds, all of which, regardless of the time or times of their issue or maturity, shall be of equal rank without preference, priority or distinction of any of the Bonds over any other thereof except as expressly provided in the General Bond Ordinance.

203. Authorization of Bonds. In order to provide sufficient funds for the System of the City, Bonds of the City, each to be entitled "Water and Sewer Revenue Bond, Series ____" are hereby authorized to be issued from time to time without limitation as to amount except as provided by the rules, conditions and limitations set out with specificity in the General Bond Ordinance, and as may be limited by the Act, and such Bonds shall be issued from time to time subject to the terms, conditions and limitations established in the General Bond Ordinance and in one or more Series as hereinafter provided. All Bonds shall rank on a basis of parity and equality with one another as to security and source of payment (except if expressly issued as Subordinate Debt pursuant to Section 316 hereof), and all Bonds shall be entitled to the benefit of the continuing pledges and liens created by the General Bond Ordinance to secure the full and final payment of the principal of or Redemption Price, if any, and interest on the Bonds and any Sinking Fund Installments for the retirement thereof. Subject to any agreements hereafter made with the holders of any other notes or bonds of the City pledging any particular revenues or assets not pledged under the General Bond Ordinance, if any, the Bonds shall be special obligations of the City, payable only from income, revenues and funds specifically pledged by the City for the payment of the principal of or Redemption Price, if any, and interest on said Bonds, including the Pledged Receipts. The Bonds shall contain on their face a statement that the City is not obligated to pay the principal thereof or the interest thereon except solely from the income and revenues pledged for their payment and that the Bonds do not constitute indebtedness of the City within the meaning of the Constitution of Kentucky.

204. Authorization For Bonds In Series. From time to time when authorized by the General Bond Ordinance and subject to the terms, limitations and conditions established in the General Bond Ordinance, the City may authorize the issuance of a Series of Bonds upon adoption of a Series Ordinance, and the Bonds of any such Series may be issued and delivered upon compliance with the provisions of Article II and Article VIII. The Bonds of each Series shall bear the title "Water and Sewer Revenue Bonds," and, at the option of the City, such other designation as may be necessary to distinguish them from the Bonds of other Series. Bonds of any Series may be authorized to be issued in the form of Serial Bonds or Term Bonds, or both.

Each Series Ordinance authorizing the issuance of a Series of Bonds shall, unless such Bonds are issued solely for the purpose of refunding Outstanding Bonds or Parity Obligations, describe in general terms the Construction of System facilities for which Bonds are being authorized, and shall include a determination by the City to the effect that the principal amount of said Series of Bonds is necessary to provide sufficient funds to be used and expended for the System. Each Series Ordinance shall specify and determine:

- (1) the authorized principal amount of said Series of Bonds;
- (2) the purposes for which each Series of Bonds are being issued, which shall be to provide funds for the purposes authorized by the Act, and in furtherance of the System, including, inter alia, one or more of the following:
 - (a) for deposit in the Cost of Issuance Account, any Construction and Acquisition Account and any Refunding Account established for such Series in the Bond Proceeds Fund for purposes for which such Accounts may be used, all as provided in Section 503;
 - (b) for the redemption of Bonds or Parity Obligations and related purposes as provided in and under the conditions and subject to the provisions and limitations of Section 207, if applicable;
 - (c) for deposit in the Operation and Maintenance Fund, Bond Fund or Debt Service Reserve; and
 - (d) for payment of the principal of or Redemption Price, if any, and interest on any Notes or Subordinated Debt, and in such event, the Series Ordinance shall provide for the establishment of a special account into which the proceeds of sale of such Series Bonds in whole or in part shall be deposited in trust for such payments.
- (3) the title and designation of, the manner of numbering and lettering, and the denomination or denominations of the Bonds of such Series;
- (4) the date or dates of maturity and the amounts thereof and the Issue Date of the Bonds of such Series;
- (5) the interest rate or rates or the manner of determining such rate or rates of the Bonds of such Series and the interest payment dates of such Bonds;
- (6) the Redemption Price or Redemption Prices and the Redemption Date or Redemption Dates and other terms of redemption (if any) of any of the Bonds of such Series;
- (7) the Paying Agent or Paying Agents and the Registrar or Registrars appointed by such Series Ordinance for such Bonds, subject to Section 1102, and the authorization of an agreement or agreements therewith;

(8) the portion of such series that are Serial Bonds and that are Term Bonds, if any, including the amount and date of such Sinking Fund Installment, if any, required by such Series Ordinance to be paid in any event by the City for the retirement of any of such Bonds of like maturity and interest rate, expressed as an amount payable on a Principal Installment Date of such Bonds sufficient to redeem at the Redemption Price thereof applicable on said date a specified principal amount thereof;

(9) the manner in which Bonds of such Series are to be sold and provisions for the sale thereof; and

(10) any other provisions deemed advisable by the City, not in conflict with or in substitution for the provisions of the General Bond Ordinance;

provided that, any of the provisions set forth above for inclusion in a Series Ordinance may, alternatively, be included in a resolution of the City adopted to accept a bid for Bonds if adoption by resolution is determined by the City to be necessary in order to permit the sale of such bonds in a timely or convenient manner.

205. Issuance and Delivery of Bonds. After their authorization by a Series Ordinance, Bonds of a Series may be executed by or on behalf of the City, and upon compliance by the City with the special requirements, if any, set forth in such Series Ordinance and with the requirements of Section 206, such Bonds shall thereupon be issued to or upon the order of the City.

206. Conditions Precedent to Authentication and Delivery of Bonds. Except as permitted by Sections 311 and 312, the Bonds authorized to be issued pursuant to this General Bond Ordinance and a Series Ordinance shall be issued only upon condition that the following have been executed:

(1) A copy of the General Bond Ordinance and the applicable Series Ordinance, each certified by an Authorized Officer of the City;

(2) The written order of the City as to the delivery of such Bonds signed by an Authorized Officer describing such Bonds to be authenticated and delivered, designating the purchaser or purchasers to whom such Bonds are to be delivered, and stating the purchase price of such Bonds;

(3) A Counsel's Opinion stating that in the opinion of such Counsel the General Bond Ordinance and the applicable Series Ordinance authorizing the Series of Bonds have been duly and lawfully adopted by the City, that the General Bond Ordinance and the applicable Series Ordinance are in full force and effect and are valid and binding upon the City and enforceable in accordance with their terms; that the General Bond Ordinance creates the valid pledge which it purports to create subject only to the provisions of the General Bond Ordinance permitting the application of the Pledged Receipts for or to the purposes and on the terms and conditions set forth in the General Bond Ordinance; and upon the execution, authentication and delivery thereof, that the Bonds of such Series will be duly

and validly issued and will constitute valid and binding obligations of the City entitled to the benefits of the General Bond Ordinance and such applicable Series Ordinance;

(4) A written order of the City signed by an Authorized Officer directing the deposit in the Debt Service Reserve of so much of the proceeds of the Bonds to be issued, upon their issuance, sale and delivery, as may be required to increase the aggregate amount then held in said Fund to the Aggregate Debt Service Reserve Requirement; provided that the City may obtain, in lieu of such deposit, a Debt Service Reserve Guaranty as permitted under Section 506 hereof; and provided further that the City may, in lieu of such deposit at the time of issuance of such Bonds, determine in such written order, subject to the requirements of Section 506(2) hereof, to fund the balance required to be deposited in the Debt Service Reserve to increase the aggregate amount then held in said Fund to the Aggregate Debt Service Reserve Requirement through monthly deposits from the Revenue Fund over a period not exceeding sixty (60) months;

(5) Except in the case of an issue of Refunding Bonds, a certificate of an Authorized Officer of the City stating that the City is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the General Bond Ordinance;

(6) Such further documents, as are required by the provisions of this Section, Section 207, or Article VII or VIII or any Supplemental Ordinance adopted pursuant to Article VIII; and

(7) As a further condition, such moneys and securities as are required by the provisions of this Section, Section 207, or Article VII or VIII or any Supplemental Ordinance adopted pursuant to Article VIII.

207. Provision For Refunding Issue.

(1) One or more Series of Refunding Bonds may be authenticated and delivered upon original issuance to refund all Outstanding Bonds, Parity Obligations or any Series of Outstanding Bonds or any part of one or more Series of Outstanding Bonds or any Parity Obligations (the "Bonds to be Refunded"). Bonds of the Series of Refunding Bonds shall be issued in a principal amount sufficient, together with other moneys available therefore, to accomplish such refunding and to make such deposits required by the provisions of the Act, this Section and of the Series Ordinance authorizing said Series of Refunding Bonds.

(2) The Bonds of the Series of Refunding Bonds may be authenticated and delivered only upon receipt by the appropriate Fiduciary or Fiduciaries (in addition to the receipt by it or them of the documents required by Section 206) of:

(a) Irrevocable instructions to the Paying Agent and to the Registrar or other applicable party in respect of the Bonds to be Refunded, satisfactory to each of them, to give due notice of redemption of all the Bonds to be Refunded on the Redemption Date specified in such instructions;

(b) Irrevocable instructions to the Paying Agent and to the Registrar or other applicable party in respect of the Bonds to be Refunded, satisfactory to each of them, to give due notice provided for in Section 1201 to the Holders of Outstanding Bonds being refunded;

(c) Either:

(i) moneys in an amount sufficient to effect payment at the applicable Redemption Price of the Bonds to be Refunded, together with accrued interest on such Bonds to the Redemption Date, which moneys shall be held in a separate account irrevocably in trust for and assigned to the respective Holders of the Bonds to be Refunded, or

(ii) Defeasance Obligations in such principal amounts, having such maturities, bearing such interest, and otherwise having such terms and qualifications, as shall be necessary to comply with the provisions of subsection (2) of Section 1201 and any moneys required pursuant to said subsection (with respect to the Bonds to be Refunded) which Defeasance Obligations and moneys shall be held in trust and used only as provided in said subsection; and

(d) A Certificate of an Authorized Officer containing such additional statements as may be reasonably necessary to show compliance with the requirements of this subsection, and the Paying Agent or other applicable party shall be entitled to rely on such Certificate.

(3) The appropriate Paying Agent or other applicable party in respect of the Bonds to be Refunded shall furnish to the City at the time of delivery of the Series of Refunding Bonds a certificate stating that it holds in trust the moneys and/or Investment Obligations required to effect such redemption on the date specified in such Series Ordinance.

(4) Any balance of the proceeds of the Bonds of each such Series shall be deposited in such Funds or Accounts as shall be specified in the Series Ordinance authorizing such Series of Refunding Bonds.

(5) Any moneys received by the City from any source, which receipt is conditioned upon the City using such moneys for the redemption of any Bonds to be Refunded shall be deemed to be and treated as the proceeds of a Series of Refunding Bonds and the City shall deliver to the Paying Agent and Registrar or other applicable party the documents and moneys or obligations required by the provisions of clauses (a), (b) and (c) of subsection (2) hereof and shall do all other acts and things necessary to accomplish the redemption of such Bonds to be Refunded, in accordance with applicable provisions of this Section.

[End of Article II]

**ARTICLE III
GENERAL TERMS AND PROVISIONS OF BONDS**

301. Date of Bonds. Each Bond shall be dated as of, and bear interest from, its Issue Date except as otherwise provided in Section 304.

302. Interest Payment Dates. Interest on each Bond shall be payable as provided in the Series Ordinance authorizing such Bonds.

303. Principal Installment Dates. The date when each Principal Installment with respect to a Series of Bonds is payable shall be as provided in the Series Ordinance authorizing such Bonds.

304. Medium of Payment; Form and Date. The Bonds shall be payable, with respect to principal or Redemption Price, if any, and interest, in any coin or currency of the United States of America which at the time of payment is legal tender for the payment of public and private debts. Interest on the Bonds shall be payable by check or draft mailed to the Holders by first class mail on the applicable interest payment date. The Bonds of each Series shall be issued in the form of fully registered Bonds without coupons.

Bonds of each Series shall be dated as of the date specified in the Series Ordinance authorizing the issuance thereof. Bonds of such Series issued prior to the first interest payment date thereof shall be dated as of the date specified in the Series Ordinance authorizing the issuance thereof. Bonds issued on or subsequent to the first interest payment date shall be dated as of the date six months preceding the interest payment date next following the date of delivery thereof, unless such date of delivery shall be an interest payment date, in which case they shall be dated as of such date of delivery; provided, however, that if, as shown by the records of the Paying Agent, interest on the Bonds of any Series shall be in default, the Bonds of such Series issued in lieu of Bonds surrendered for transfer or exchange may be dated as of the date to which interest has been paid in full on the Bonds surrendered. Bonds of each Series shall bear interest from their date.

305. Legends. The Bonds of each Series may contain or have endorsed thereon such provisions, specifications and descriptive words not inconsistent with the provisions of this Ordinance as may be necessary or desirable to comply with custom, or otherwise, as may be determined by the City prior to the delivery thereof.

306. Execution. The Bonds shall be executed in the name and on behalf of the City by the manual or facsimile signature of the Mayor and attested by the manual or facsimile signature of the City Clerk. In case any one or more of the officers who shall have signed or sealed any of the Bonds shall cease to be such officers before the Bonds so signed and sealed shall have been actually delivered, such Bonds may, nevertheless, be delivered as herein provided, and may be issued as if the persons who signed or sealed such Bonds had not ceased to hold such offices. Any Bond of a Series may be signed and sealed on behalf of the City by such persons as at the actual time of the execution of such Bond shall be duly authorized or hold the proper office in the City, although at the date of the Bonds of such Series such persons may not have been so authorized or have held such office.

307. Negotiability and Registration. All the Bonds issued under this General Bond Ordinance shall be negotiable as provided by the Act, subject to the provisions for registration and transfer contained in this General Bond Ordinance and in the Bonds. So long as any of the Bonds shall remain Outstanding, the Registrar shall maintain and keep books for the registration and transfer of Bonds; and, upon presentation thereof for such purpose to the Registrar, the Registrar shall register or cause to be registered therein, and permit to be transferred thereon any Bond entitled to registration or transfer under such reasonable regulations as it or the City may prescribe.

308. Transfer of Bonds. Each Bond shall be transferable only upon the books of the Registrar, which shall be kept for the purpose at the principal office of the Registrar, at the request of the Holder thereof or by his authorized attorney upon surrender thereof together with an assignment satisfactory to the appropriate Registrar duly executed by the Holder or his duly authorized attorney. Upon the transfer of any such Bond, the City shall issue in the name of the transferee a new Bond or Bonds of the same aggregate principal amount and Series and maturity as the surrendered Bond.

The City and any Fiduciary may deem and treat the person in whose name any Outstanding Bond shall be registered upon the books of the City as the absolute owner of such Bond, whether such Bond shall be overdue or not, for the purpose of receiving payment of, or on account of, the principal or Redemption Price, if any, of and interest on, such Bond and for all other purposes, and all such payments so made to any such Holder or upon his order shall be valid and effectual to satisfy and discharge the liability upon such Bond to the extent of the sum or sums so paid, and neither the City nor any Fiduciary shall be affected by any notice to the contrary. The City agrees to indemnify and save any Fiduciary harmless from and against any and all loss, cost, charge, expense, judgment or liability incurred by it, acting in good faith and without negligence hereunder, in so treating such Holder.

309. Regulations With Respect to Exchanges and Transfers. In all cases in which the privilege of transferring Bonds is exercised, the City shall execute and deliver Bonds in accordance with the provisions of the General Bond Ordinance. All Bonds surrendered in any such transfers shall forthwith be cancelled. The Registrar shall not be obligated to make any such transfer of Bonds of any Series during the fifteen days next preceding an Interest Payment Date on the Bonds of such Series or, in the case of any proposed redemption of Bonds of such Series, next preceding the date for providing notice of such redemption.

310. Bonds Mutilated, Destroyed, Stolen or Lost. In case any Bond shall become mutilated or be destroyed, stolen or lost, the City shall execute and deliver a new Bond of like Series, maturity and principal amount as the Bond so mutilated, destroyed, stolen or lost, in exchange and substitution for such mutilated Bond upon surrender and cancellation of such mutilated Bond, or in lieu of and in substitution for the Bond, destroyed, stolen or lost, upon filing with the Registrar evidence satisfactory to the Registrar that such Bond has been destroyed, stolen or lost and proof of ownership thereof, and upon furnishing the Registrar and the City with indemnity satisfactory to each of them and complying with such other reasonable regulations as the Registrar and the City may prescribe and paying such expenses as the Registrar and the City may incur in connection therewith. All Bonds and so surrendered to the Registrar shall be cancelled by it.

311. Preparation of Definitive Bonds; Temporary Bonds. The definitive Bonds of each Series shall be lithographed or printed on steel engraved borders. Until the definitive Bonds of any Series are prepared, the City may execute, in the same manner as is provided in Section 306, and deliver, in lieu of definitive Bonds, but subject to the same provisions, limitations and conditions as the definitive Bonds, one or more temporary Bonds (which may be registrable as to principal and interest), substantially of the tenor of the definitive Bonds in lieu of which such temporary Bond or Bonds are issued, in denominations of \$5,000 or any multiple thereof authorized by the City, and with such omissions, insertions and variations as may be appropriate to temporary Bonds. The City at its own expense shall prepare and execute and, upon the surrender of such temporary Bonds for exchange and the cancellation, without charge to the Holder thereof, deliver in exchange therefore, at the principal office of the appropriate Registrar, definitive Bonds, of the same aggregate principal amount and series and maturity as the temporary Bonds surrendered. Until so exchanged, the temporary Bonds shall in all respects be entitled to the same benefits and security as definitive Bonds issued pursuant to this Ordinance.

All temporary Bonds surrendered in exchange for a definitive Bond or Bonds shall be forthwith cancelled.

312. Form of Bonds. As may be designated in a Series Ordinance, the Bonds may be registered in the name of the Securities Depository or the Securities Depository Nominee, and ownership thereof may be maintained in Book-Entry Form by the Securities Depository for the account of the Agent Members of the Securities Depository. Initially, the Bonds may be registered in the name of Cede & Co., as the nominee of The Depository Trust Company. Except as provided in paragraph (c) below, the Bonds may be transferred, in whole but not in part, only to the Securities Depository or the Securities Depository Nominee, or to a successor Securities Depository selected or approved by the City or to a nominee of such successor Securities Depository. As to any Bond, the person in whose name such Bond shall be registered shall be the absolute owner thereof for all purposes, and payment of or on account of the principal of and premium, if any, and interest on any such Bond shall be made only to or upon the order of the registered owner thereof or his legal representative.

For any Bonds issued in Book-Entry Form, neither the City, the Registrar or the Paying Agent shall have any responsibility or obligation with respect to (i) the accuracy of the records of the Securities Depository or any Agent Member with respect to any beneficial ownership interest in the Bonds; (ii) the delivery to any Agent Member, any beneficial owner of the Bonds or any other person, other than the Securities Depository, of any notice with respect to the Bonds or the Bond Resolution; or (iii) the payment to any Agent Member, any beneficial owner of the Bonds or any other person, other than the Securities Depository, of any amount with respect to the principal of, premium, if any, or interest on the Bonds.

For any Bonds registered in Book-Entry Form, the City, the Registrar and the Paying Agent may treat the Securities Depository as, and deem the Securities Depository to be, the absolute owner of such Bonds for all purposes whatsoever, including without limitation:

- (1) the payment of principal of, premium, if any, and interest on the Bonds;
- (2) giving notices of redemption and other matters with respect to the Bonds;

- (3) registering transfers with respect to the Bonds;
- (4) the selection of Bonds for redemption;
- (5) for purposes of obtaining consents under the Bond Resolution; and
- (6) notwithstanding the definition of the terms "bondholder" or "holder" or "owner" in the Bond Resolution as referencing the registered owners of the Bonds, the Registrar and Paying Agent shall be entitled to rely upon written instructions from a majority of the beneficial owners of the Bonds with reference to consent, if any, required from the owners of the Bonds pursuant to the terms of this Bond Resolution.

If at any time the Securities Depository notifies the City that it is unwilling or unable to continue as Securities Depository with respect to any Bonds, or if at any time the Securities Depository shall no longer be registered or in good standing under the Securities Exchange Act or other applicable statute or regulation and a successor Securities Depository is not appointed by the City within 90 days after the City receives notice or becomes aware of such condition, as the case may be, then this Section shall no longer be applicable, and the City shall execute and the Trustee shall authenticate and deliver certificates representing the affected Bonds to the owners of such Bonds as otherwise provided in this Article III.

Payment of the principal of, premium, if any, and interest on any Bonds not registered in Book-Entry Form shall be made as provided in Section 304 hereof.

The principal of, premium, if any, and interest on the Bonds registered in Book-Entry Form in the name of the Securities Depository or the Securities Depository Nominee shall be payable by wire transfer from the Trustee to the Securities Depository or the Securities Depository Nominee, as the case may be.

313. Securities Depository; Ownership of Bonds. The form of Bonds issued under this General Bond Ordinance shall be such form or forms prescribed by the applicable Series Ordinance.

314. Parity Bond and Parity Obligation Provisions. From and after the issuance and delivery of any of the Bonds authorized or permitted to be issued by this General Bond Ordinance, said General Bond Ordinance shall constitute the sole and exclusive method for the issuance of any Bonds by the City, and any further Series of Bonds of the City payable from the Pledged Receipts shall be authorized and issued solely pursuant to authority of this General Bond Ordinance; provided that Parity Obligations may be issued, as provided in this Section.

Except as may be provided in a Series Ordinance, the Bonds authorized to be issued by this General Bond Ordinance and from time to time Outstanding, together with any additional Bonds and any Parity Obligations ranking on a parity therewith issued under the conditions and restrictions of this section, shall not be entitled to priority one over the other in the application of the Pledged Receipts or the security for payment thereof, regardless of the time or times of their issuance it being the intention that there shall be no priority among such Bonds or Parity

Obligations regardless of the fact that they may be actually issued and delivered at different times.

The City hereby reserves the right and privilege of issuing additional Series of Bonds and Parity Obligations from time to time payable from the Pledged Receipts of the System on a basis of parity and equality with all other parity Bonds and Parity Obligations authorized to be issued by this General Bond Ordinance in order to (a) reconstruct, repair and improve the City's System; (b) make, acquire, construct and install additions, extensions, betterments, or improvements thereto; (c) acquire existing utility facilities and systems from any person, if said System facilities and systems are revenue-producing; and (d) refund any Bonds Outstanding or Parity Obligations outstanding, provided in each instance that:

(i) the facility or facilities to be acquired, constructed, reconstructed or improved from the proceeds of the additional parity Bonds and Parity Obligations is or are made an integral part of the City's System and its or their income and revenues are pledged as additional security for the additional parity Bonds, the additional Parity Obligations and the Outstanding Bonds and the outstanding Parity Obligations; and

(ii) the City is in compliance with all covenants and undertakings in connection with all of its Bonds and Parity Obligations then Outstanding and payable from the Pledged Receipts;

(iii) the net annual income and revenues of the System for a period of twelve (12) consecutive months of the eighteen (18) months immediately prior to the issuance of said parity Bonds or Parity Obligations, are certified in writing by an independent firm of state-licensed Certified Public Accountants (subject to adjustments as hereinafter provided) to have been equal to at least one and twenty hundredths (1.20) times the maximum Annual Debt Service Requirement coming due in any future Fiscal Year on all Bonds and Parity Obligations Outstanding and payable from Pledged Receipts, together with the Parity Bonds and Parity Obligations then to be issued; and

(iv) the net annual income and revenues of the System for a period of twelve (12) consecutive months of the eighteen (18) months immediately prior to the issuance of said Parity Bonds or Parity Obligations, are certified in writing by an independent firm of state-licensed Certified Public Accountants (subject to adjustments as hereinafter provided) to have been equal to at least one (1.00) times the maximum Annual Debt Service Requirement coming due in any future Bond Fiscal Year on all Bonds, Parity Obligations and Subordinated Debt outstanding payable from Pledged Receipts, together with the parity Bonds or Parity Obligations then to be issued.

The words "net annual income and revenues," as used in this Section and Section 316 hereof, are defined as Pledged Receipts less Operation and Maintenance Costs for the same period.

With reference to the requirements of subparagraphs (iii) and (iv) of this Section 314, the amount of Pledged Receipts, and the "net annual income and revenues" of the System as that term is herein defined, may be adjusted in writing by a firm of independent state-licensed

Certified Public Accountants, which firm shall be the firm performing the certification required by subparagraphs (iii) and (iv) of this Section 314, to reflect and take into account for the historical period being tested, any revision legally adopted to the schedule of rates, rentals and charges being then actually imposed and billed by the City at the time of issuance of such additional parity Bonds or Parity Obligations and, where Bonds or Parity Obligations are refunded, the additional available "net income and revenues" of the System released as a result thereof.

The amount of Pledged Receipts and the "net annual income and revenues" of the System, as that term is herein defined, may also be adjusted in writing by a Consulting Engineer of National Recognition, to take into account and reflect for the historical period being tested, the amount of additional net income and revenues to be realized by the City by virtue of the acquisition by the City of existing and operating System facilities. A further adjustment may be made by adding thereto an estimate of the said engineer of the increase in operating revenues anticipated to be derived from the additions, extensions, replacements and betterments to be financed by the additional Parity Bonds and Parity Obligations then being authorized, for the first twelve months following the date such additions, extensions, replacements and betterments are placed in service, less said engineer's estimate of any additional expenses of operation and maintenance during said twelve months. Additionally, an adjustment thereunder may take into consideration revenues to be generated by virtue of contractual relationships between the City and other municipal corporations or other entities, either governmental or private, which contracts must extend for the life of the Bonds and Parity Obligations, where such income and revenues are historically determinable, for the period being tested, namely, 12 consecutive months of the 18 months immediately prior to issuance of parity Bonds and Parity Obligations. Provided, however, that any such adjustment by such Consulting Engineer of National Recognition shall take into account only such income and revenues as would have been derived during the historical period being tested had the valid and lawful schedule of rates, rentals and charges of the City which is in effect at the time of issuance of parity Bonds and Parity Obligations been charged during such historical period being tested, and such adjustments shall also take into account all Operations and Maintenance Costs for such historical period being tested.

The City hereby covenants and agrees that in the event additional Series of parity Bonds or additional Parity Obligations are issued, it shall:

(a) adjust the monthly deposits into the Bond Fund on the basis prescribed in the General Bond Ordinance to reflect the Annual Debt Service on the Parity Bonds and Parity Obligations; and

(b) adjust the prescribed amount to be accumulated in the Debt Service Reserve in accordance with the provisions of this General Bond Ordinance so that an amount equal to the Aggregate Debt Service Reserve Requirement will be maintained therein.

The additional Parity Bonds and Parity Obligations (sometimes herein referred to as "permitted" to be issued) the issuance of which is herein conditioned and restricted, shall be understood to mean Bonds and Parity Obligations payable from the Pledged Receipts on a basis of parity and equality with the Bonds and Parity Obligations initially issued pursuant to, and

Parity Obligations permitted by, the General Bond Ordinance, and shall not be construed to include other bonds or obligations, the security and source of payment of which are subordinate and subject to the priority of the Bonds and Parity Obligations herein authorized to be issued. The City expressly reserves the right to issue Subordinated Debt pursuant to Section 316 hereof payable from the Revenues herein pledged and not ranking on a basis of equality and parity with the Bonds and Parity Obligations herein otherwise described, but only if such Subordinated Debt is issued to provide for additions, betterments, extensions or improvements of the System, and only if the same are issued in express recognition of the priorities, liens and rights created and existing for the security and source of payment and protection of the Bonds and Parity Obligations herein authorized and permitted to be issued. In the event any of such subordinate lien securities are issued, the City reserves the right to authorize and issue Subordinated Debt to refund same.

Nothing in this Section is intended or shall be construed as a restriction upon the ordinary refunding of the Parity Bonds and Parity Obligations which may be issued and are Outstanding under any of the provisions of the General Bond Ordinance if such refunding does not operate to increase amortization requirements in any year to and including the final maturity of Bonds and Parity Obligations outstanding and not to be refunded, if any.

It is hereby acknowledged that the City has previously issued, or assumed the obligations represented by, the Series 2000 Bonds, the Series 2005 Bonds, the Series 2009 Bonds and the Series 2010 Bonds, that its obligations thereunder are hereby ratified and affirmed, and that in accordance with the consent of USDA, such obligations shall be and will constitute Parity Obligations hereunder.

315. Notes. Whenever the City shall have authorized or made provision for the authorization of, the issuance of a Series of Bonds or Parity Obligations, the City may by resolution or ordinance authorize the issuance of Notes in anticipation of the sale of such Bonds or Parity Obligations in a principal amount not exceeding the principal amount of such Bonds or Parity Obligations. The principal or any interest on such Notes and renewals thereof may be payable from and secured by a pledge of Revenues that is (i) subordinate to the pledge of such Revenues as security for outstanding Bonds and Parity Obligations or (ii) on a parity with the pledge of such Revenues securing outstanding Bonds and Parity Obligations, but, as to any parity pledge, only if the requirements set forth in Section 314 hereof for the issuance of additional and Parity Bonds and Parity Obligations would be satisfied assuming the principal amount of such Notes would be amortized over twenty (20) years on a level payment basis at prevailing market interest rates existing at the time of the issuance of the Notes; provided, however, that if the Notes are to be issued in anticipation of the issuance of Bonds or Parity Obligations and are to be retired at or before maturity from the proceeds thereof, and the City shall have received a commitment for the purchase of such Bonds or Parity Obligations at the time of issuance of the Notes, then the assumption regarding the amortization of the principal amount of such Notes may be modified to reflect the actual term over which such Bonds or Parity Obligations are to be amortized. The principal on such Notes shall also be payable from the proceeds of the sale of the Series of Bonds or Parity Obligations in anticipation of which such Notes are issued. Such proceeds may be pledged for the payment of the principal of such Notes and such pledge shall have priority over any other pledge created by this General Bond Ordinance. The proceeds of sale of such Notes shall be applied to the purposes for which such Notes are authorized, and, if

the resolution or ordinance or resolutions or ordinances authorizing such Notes so provide, to the payment of interest and other costs in connection with the sale and issuance of such Notes.

Upon issuance of any Notes, there shall be established a separate and distinct "Note Redemption Fund" for the payment of the principal of, interest and any redemption premium on such Notes. There shall be deposited in such Note Redemption Fund (i) any accrued interest received upon the sale of such Notes, (ii) such amounts as may be necessary to pay principal of or interest on such Notes which may become due during the period that the Notes are Outstanding, in the same manner and priority as set forth in Section 504 for transfers to the Bond Fund; and (iii) sufficient proceeds of the Series of Bonds or Parity Obligations authorized to be issued at the time of issuance of such Notes to provide for the payment-in-full of such Notes. Amounts shall be disbursed from a Note Payment Fund to pay the principal of, interest and any redemption premium on the Notes for which such Fund was established, as and when the same shall become due and payable. Amounts on deposit in a Note Payment Fund shall be invested and reinvested in the same manner prescribed under Section 505 for the Bond Fund.

It is hereby acknowledged that the City has previously issued the Series 2012 Notes, that its obligations thereunder are hereby ratified and affirmed, and that in accordance with the consent of Whitaker Bank, Inc., such obligations shall be and will constitute Notes Outstanding hereunder.

316. Subordinated Debt. The City may issue its Subordinated Debt payable from the revenues herein pledged and not ranking on a basis of equality and parity with the parity Bonds and Parity Obligations authorized to be issued pursuant to Section 314 hereof, but only if such Subordinated Debt is issued to provide for additions, betterments, extensions or improvements of the System, and only if the same is issued in express recognition of the priorities, liens and rights created and existing for the security and source of payment and protection of all Outstanding parity Bonds and Parity Obligations herein authorized and permitted to be issued; and provided further that:

(i) the facility or facilities to be acquired, constructed, reconstructed or improved from the proceeds of the Subordinated Debt is or are made an integral part of the System and its or their income and revenues are pledged as additional security for all Subordinated Debt, Bonds and Parity Obligations then Outstanding;

(ii) the City is in compliance with all covenants and undertakings in connection with this General Bond Ordinance and all of its Bonds and Parity Obligations then Outstanding and payable from the Pledged Receipts; and

(iii) the net annual income and revenues of the System for a period of twelve (12) consecutive months of the eighteen (18) months immediately prior to the issuance of said Subordinated Debt are certified in writing by an Authorized Officer (subject to adjustments as hereinafter provided) to have been equal to at least one (1.00) times the maximum annual debt service requirement on all Outstanding Bonds, Parity Obligations and Subordinated Debt payable from the Pledged Receipts, together with the Subordinated Debt then to be issued.

With reference to the requirements of subparagraph (iii) of this Section 316, the amount of Pledged Receipts, and the "net annual income and revenues" of the System, may be adjusted in writing by a firm of independent certified public accountants an engineer with expertise in the field of water and sewer system engineering, to reflect and take into account for the historical period being tested, any revision in the schedule of rates and charges either (i) being actually imposed and billed by the City at the time of issuance of such Subordinated Debt and, (ii) where outstanding Subordinated Debt is refunded, the additional available "net income and revenues" of the System released as a result thereof.

The amount of Pledged Receipts and the "net income and revenues" of the System may also be adjusted in writing by an engineer with expertise in the field of water and sewer system engineering to take into account and reflect for the historical period being tested, the amount of additional net income and revenues to be realized by the City by virtue of the acquisition by the City of existing and operating System facilities. A further adjustment may be made by adding thereto an estimate of said engineer of the increase in Pledged Receipts anticipated to be derived from the additions, extensions, replacements and betterments to be financed by the Subordinated Debt then being authorized, for the first twelve months following issuance of said Subordinated Debt, less said engineer's estimate of any additional expenses of operation and maintenance during said twelve months. Additionally, an adjustment thereunder may take into consideration revenues to be generated by virtue of contractual relationships between the City and other municipal corporations or other entities, either governmental or private, where such income and revenues are historically determinable, for the period being tested, namely, 12 consecutive months of the 18 months immediately prior to issuance of Subordinated Debt. Provided, however, that any such adjustment by such engineer shall take into account only such income and revenues as would have been derived during the historical period being tested had the valid and lawful schedule of rates, rentals and charges of the City which is in effect at the time of issuance of the Subordinated Debt been charged during such historical period being tested, and such adjustments shall also take into account all Operation and Maintenance Costs for such historical period being tested.

The City hereby covenants and agrees that in the event Subordinated Debt is issued, it shall adjust the monthly deposits into the Bond Fund, including the subaccounts therein to be established upon the issuance of Subordinated Debt (the "Subordinated Debt Accounts"), on the basis prescribed herein to reflect the annual debt service on all Subordinated Debt then outstanding.

In the event any such Subordinated Debt is issued, the City may authorize and issue subordinated debt to refund same, pursuant to the same terms and conditions as set forth in Section 314 hereof for the refunding of parity Bonds and Parity Obligations.

It is hereby acknowledged that the City has entered into, or assumed the obligations represented by, the Outstanding Subordinated KIA Loans, that its obligations thereunder are hereby ratified and affirmed and that, in accordance with the consent of KIA, such Outstanding Subordinated KIA Loans.

[End of Article III]

**ARTICLE IV
APPLICATION OF BOND PROCEEDS**

401. Application of Bond Proceeds.

(1) All proceeds of the Bonds of any Series to be issued, upon their issuance, sale and delivery, shall be deposited in the applicable Funds or Accounts specified, in accordance with the provisions of the Series Ordinance authorizing the issuance of the Bonds of such Series. Such proceeds shall be applied solely for purposes for which amounts in said Funds or Accounts, respectively, may be applied in accordance with the provisions of the Series Ordinance and the General Bond Ordinance.

(2) Accrued interest and capitalized interest, if any, received upon delivery of any Series of Bonds shall be deposited in the Series Interest Account of the Bond Fund. The amount, if any, received as a premium over the principal amount of any Series of Bonds upon delivery of such Series shall be applied as provided in the Series Ordinance authorizing such Series.

[End of Article IV]

**ARTICLE V
ESTABLISHMENT OF FUNDS AND ACCOUNTS
APPLICATION OF PLEDGED RECEIPTS**

501. The Pledge Effected by the General Bond Ordinance.

(1) There are hereby pledged for the payment of the principal of or Redemption Price, if any, and interest on the Bonds and Parity Obligations, and the Sinking Fund Installments for the retirement thereof, in accordance with their terms and the provisions of the General Bond Ordinance, subject only to the provisions of the General Bond Ordinance permitting the application thereof for or to the purposes and on the terms and conditions set forth in the General Bond Ordinance, (a) the proceeds of sale of the Bonds to the extent not required to be utilized for payment of Notes, (b) Investment Obligations acquired by Bond proceeds or by application of funds derived from the Revenues, (c) the Pledged Receipts, and (d) all Funds created and established pursuant to the General Bond Ordinance, including Accounts thereof and moneys and securities therein; provided, however, that the pledges set forth in clause (a) shall not apply to Parity Obligations other than the Series 2000 Bonds, the Series 2005 Bonds, the Series 2009 Bonds, the Series 2010 Bonds and the pledge of amounts on deposit in the Debt Service Reserve shall only apply if, under the terms of such Parity Obligations, the Debt Service Reserve is pledged and the debt service on such Parity Obligations is included in the determination of the Debt Service Reserve Requirement.

(2) The proceeds of sale of the Bonds, the Investment Obligations, the Pledged Receipts and all Funds created and established pursuant to the General Bond Ordinance, including Accounts thereof created and established pursuant to the General Bond Ordinance and moneys and securities therein, hereby pledged, shall immediately be subject to the lien of the pledge of Section 501 without any physical delivery thereof or further act, and the lien of said pledge shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the City, irrespective of whether such parties have notice thereof.

502. Funds And Accounts For Bonds Authorized By This General Bond Ordinance.
The City hereby establishes and creates the following special trust funds and accounts:

- (1) Bond Proceeds Fund;
- (2) Revenue Fund;
- (3) Bond Fund;
 Within the Bond Fund an
 Interest Account and a
 Principal Account;
- (4) Debt Service Reserve;
- (5) Operation and Maintenance Fund;
- (6) Depreciation Fund; and
- (7) Surplus Fund.

Such Funds and Accounts shall be maintained by the City and shall apply to any Bonds, Parity Obligations or Notes issued under the terms of this General Bond Ordinance. All

limitations and requirements of such Funds and Accounts shall continue to be met for so long as any of the Bonds are Outstanding.

The above identified Funds and Accounts shall be held and maintained by the City in financial institutions (being hereinafter sometimes referred to as "depositories," and each being a Fiduciary as defined in the General Bond Ordinance) from time to time appointed by the City in a Series Ordinance or by other action of the City.

503. Bond Proceeds Fund.

(1) There is hereby created the Bond Proceeds Fund-General Bond Ordinance (the "Bond Proceeds Fund"). The City shall establish and create within the Bond Proceeds Fund, beginning with the issue of the first Series of Bonds or Notes hereunder, a separate (a) Cost of Issuance Account, and a separate (b) Construction and Acquisition Account, for each Series of Bonds or Notes Outstanding, (provided, that in the event that Bond or Note proceeds are to be used in whole or in part for the payment, or provision therefore, of outstanding debt obligations, a different suitable name and purpose for such separate account may be employed such as "_____ Refunding Account") and shall identify each separate Account by inserting in the designation therefore the year, letter or other designation of the Bonds of such Series.

(2) There shall be deposited from time to time in the Cost of Issuance Account established for each Series the amount of moneys necessary to pay the costs of issuance of such Series from either:

(a) the proceeds of the Bonds of such Series as specified and determined in the Series Ordinance authorizing the issuance of such Series, or

(b) moneys from time to time received by the City from any other source, and determined by the City to be deposited in such Account, unless required to be otherwise applied as provided by the Ordinance.

To the extent not otherwise provided for, the Cost of Issuance of a Series of Bonds shall be paid only from the moneys credited to the Cost of Issuance Account established for such Series of Bonds.

(3) The depository shall from time to time pay out, or permit the withdrawal, of moneys credited to any Cost of Issuance Account, free and clear of any lien or pledge or assignment in trust created by this Article, for the purpose of paying in the manner herein authorized any Costs of Issuance of the Bonds of the Series for which such Account was established, upon receipt by said depository of a check or other bill of exchange drawn upon such Account, signed by an Authorized Officer stating with respect to each payment to be made:

- (a) the item for which payment is to be made,
- (b) the name of the person or party to whom the payment is to be made, and
- (c) the amount to be paid.

(4) Upon receipt of a Certificate signed by an Authorized Officer to the effect that all Costs of Issuance of the applicable Series of Bonds have been paid, the depository, upon such direction of the City, taken by similar action, shall transfer any moneys remaining in said Cost of Issuance Account to the Construction and Acquisition Account established for such Series.

(5) Upon the deposit of the proceeds of the Bonds of a Series or other moneys in the manner hereinabove prescribed in any Cost of Issuance Account, the City shall direct the depository to invest and reinvest the moneys in said identified Account in Investment Obligations, so that the maturity date or date of redemption at the option of the holder of such Investment Obligations shall coincide as nearly as practicable with the times at which moneys are needed by the City to be expended. The Investment Obligations purchased shall be physically held by the depository and shall be deemed at all times to be part of such Cost of Issuance Account and the depository shall deliver to the City a safekeeping certificate as to the identity and amount of all such investments. The City shall sell at the best price obtainable or present for redemption, any obligations purchased by it as an investment whenever it shall be necessary in order to provide moneys to meet any payment from the Cost of Issuance Account.

(6) There shall be deposited into the applicable Construction and Acquisition Account, such amounts of the proceeds of the Bonds of any Series required to be deposited therein as shall be specified and determined by the Series Ordinance authorizing such Series of Bonds, in accordance with and subject to the provisions of Article IV.

(7) Moneys credited to the Construction and Acquisition Account shall be expended only for the payment of Construction costs of the System subject to the provisions and restrictions of this Section.

(8) Except as may be expressly limited by the purposes for which a Series of Bonds is issued as set forth in the Series Ordinance authorizing such Series, amounts in any Construction and Acquisition Account shall be expended and applied by the depository upon issuance of a check or other bill of exchange drawn upon such Account, signed by an Authorized Officer. Such checks shall be issued in connection with the System work for which such Series of Bonds is issued, in order to make disbursements required to be made by the City pursuant to the terms and provisions of construction and acquisition contracts to which the City is a party relating to the System. The City shall keep and maintain complete and detailed records with respect to said Construction and Acquisition Account.

(9) Upon the deposit of the proceeds of the Bonds of a Series or other moneys in the manner hereinabove prescribed in the Construction and Acquisition Account, the City shall invest and reinvest the moneys in said Account in Investment Obligations so that the maturity date or date of redemption at the option of the holder of such Investment Obligations shall coincide as nearly as practicable with the times at which moneys are required by the City to be expended on account of construction and acquisition contracts in respect of the System. All Investment Obligations purchased shall be physically held in the custody of the depository and shall be deemed at all times to be part of such Construction and Acquisition Account, and the depository shall deliver to the City a safekeeping

certificate as to the identity and amount of all such investments. The City shall, by order signed by an Authorized Officer, sell at the best price obtainable, or present for redemption, any Investment Obligations purchased by it as an investment whenever it shall be necessary in order to provide moneys to meet any authorized payment from such Construction and Acquisition Account.

(10) The City shall from time to time pay out or permit the withdrawal of moneys from any Construction and Acquisition Account for the purpose of making disbursements and payments to contractors, material suppliers, fabricators and others rendering services pursuant to the System, pursuant to the terms of contracts between the City and such persons upon issuance of a check or other bill of exchange drawn upon such Account signed by an Authorized Officer, accompanied by a written voucher executed by the Engineers, if Engineers have been retained, which voucher shall contain the following with respect to each payment or disbursement to be made:

(a) the name of the person or party to whom the payment or disbursement is to be made;

(b) the amount to be paid to such person or party;

(c) the applicable construction, acquisition or service contract in respect of which the payment or disbursement is to be made;

(d) that with respect to such requested payment or disbursement there has not been filed with or served upon the City notice of any lien or attachment upon, or claim affecting the right to receive, payment of any of the amounts requisitioned and payable to any of the persons, firms, or corporations named in such requisition which has not been released or will not be released simultaneously with such payment;

(e) that such requisition for payment contains no item representing payment on account of any retained percentages of Construction cost which the City is at the date of such requisition entitled to retain;

(f) that in connection with such requisition for payment, the City has received such proofs as are properly required by the City to the effect that each obligation set forth in said requisition for payment has been (i) properly incurred, and (ii) is then due and unpaid; and (iii) that insofar as such obligation was incurred for work, services materials, equipment or supplies, such work or services was actually performed, or such materials, equipment or supplies were actually installed in furtherance of the Construction of the System, or were delivered at the site or sites of the System for such purposes.

In the event Engineers have not been retained in connection with the costs to be paid from the Construction and Acquisition Account, then an Authorized Officer shall execute the voucher containing the information prescribed by (a) through (f) above.

(11) All such written checks or bills of exchange (requisitions) signed by an Authorized Officer and conforming to subsection (1) above received by the depository as herein set forth may be relied upon by and shall be retained in the possession of the depository, subject at all times to the inspection of the City and its officials.

(12) At such times as all moneys due to be disbursed from any Construction and Acquisition Account have been so disbursed and paid, and the depository has received (a) a Certificate executed by an Authorized Officer stating that completion of the designated portion of the System authorized by the specified Series of Bonds has occurred, which Certificate shall be accompanied by (b) an opinion of legal counsel for the City stating that there are no uncalled mechanics', laborers', contractors' or materialmen's liens on file in any public office where the same should be filed in order to be valid liens against any part of any System facilities constructed by the City, and that in the opinion of said legal counsel the time within which such liens can be filed has expired, the balance in such Construction and Acquisition Account shall thereupon be transferred by the depository to the Bond Fund, or upon the filing of a Certificate by such Authorized Officer to the effect that either (a) a further Series of Bonds are due to be issued within a reasonable time or (b) the City anticipates that within six months of such date the City will incur Construction costs for which it would be inefficient or impractical to issue an additional Series of Bonds, then such funds may be held in said Account or the City, by a certificate executed by such Authorized Officer, may direct the depository to pay and transfer such remaining balance to any other Construction and Acquisition Account created in connection with the System.

504. Revenue Fund.

(1) The City shall cause all moneys received as Pledged Receipts, together with income from the Debt Service Reserve pursuant to Section 506(5) hereof, to be deposited promptly into the Revenue Fund.

(2) To the extent moneys are received by the City representing any legislative appropriation or grant, federal or state, for purposes of deposit to the Revenue Fund, the Bond Fund or the Debt Service Reserve, or for the defrayal of Operation and Maintenance Costs, such funds shall be promptly transmitted by the City to the appropriate depository for deposit to the Fund or Account so specified.

(3) The City shall cause all moneys received as such income and revenues, and as such Pledged Receipts as set forth in the statement of account, to be transferred from the Revenue Fund and deposited to the following Accounts and Funds on no less than a monthly basis (except for item SIXTH) in the amounts hereinafter stated and in the prescribed sequence:

FIRST: Into the Interest Account within the Bond Fund an amount equal to (i) the interest on each Series of Outstanding Bonds and Parity Obligations accrued and unpaid in respect of the next Interest Payment Date for Bonds and Parity Obligations Outstanding, or to reimburse a credit provider for its direct payment of such interest under an agreement with such credit provider, (ii) divided by the number of months preceding the next Interest Payment Date for the related Series of

Bonds and the interest payment date for the Parity Obligations (or, if payable monthly, the amount due in such month).

SECOND: Into the Principal Account within the Bond Fund an amount equal to (i) the Principal Installments accrued and unpaid in respect of the next Principal Installment Date for Bonds and Parity Obligations Outstanding, or to reimburse a credit provider for its direct payment of such principal under an agreement with such credit provider, (ii) divided by the number of months preceding the next Principal Installment Date (or, if payable monthly, the amount due in such month) for Bonds and Parity Obligations Outstanding.

THIRD: Into the Debt Service Reserve such amount as may be required to comply with the requirements of Section 506(2) and Section 506(7) or to pay amounts due under a Debt Service Reserve Guaranty Agreement as a result of payments by the Debt Service Reserve Guarantor under a Debt Service Reserve Guaranty (each of the foregoing capitalized terms being defined in Section 506).

FOURTH: Into the Depreciation Fund an amount equal to 1/36th of the Depreciation Reserve Requirement so that the Depreciation Reserve Requirement will be met within thirty-six months of the date of issuance of a series of Bonds hereunder or Parity Obligations. If at any time the amount in the Depreciation Fund is less than the Depreciation Reserve Requirement, there shall be deposited into the Depreciation Fund, on no less than a monthly basis, an amount equal to 1/36th of such deficiency so that the balance in the Depreciation Fund will equal the Depreciation Reserve Requirement in the month that is thirty-six months from the month such deficiency first existed. Thereafter such monthly payments may cease for so long as the required balance in the Depreciation Fund is maintained and such monthly payments shall resume again if at any time said balance is less than the Depreciation Reserve Requirement and shall continue until said balance is established.

FIFTH: Into the Operation and Maintenance Fund, an amount which, together with any funds already on deposit therein, will be sufficient to pay, as they accrue, the proper and necessary costs of operating, maintaining and insuring the System, and to accumulate and maintain, in the Operation and Maintenance Fund, an amount sufficient to pay all costs of operating, maintaining and insuring the System for two (2) full months.

SIXTH: To the payment of the principal of, interest and any premium on Subordinated Debt.

SEVENTH: On a periodic basis, the amounts remaining in the Revenue Fund at the end of the month, or, in the case of annual transfers, the preceding calendar year, after making the payments required by paragraphs FIRST to SIXTH, inclusive, hereof, including any balances to be accrued and maintained, may be transferred to the Surplus Fund.

(4) Moneys in the Revenue Fund shall be invested by the City in Investment Obligations maturing on dates that will permit timely deposits, transfers and payments as provided in this Section, and except for such investments, shall be used only to make such deposits, transfers and payments. All investments made by the City in any Fund or Account created by this General Bond Ordinance shall be made upon written order issued by an Authorized Officer.

505. Bond Fund.

(1) The Bond Fund shall be maintained by the City in the appropriate depository so long as any of the Bonds, Parity Obligations or Subordinated Debt authorized or permitted to be issued by this General Bond Ordinance remain outstanding; and all moneys deposited in the Bond Fund from time to time shall be used, disbursed and applied, and are irrevocably pledged solely for the purpose of paying the principal of, interest on, and Sinking Fund installments in respect of all Bonds, Parity Obligations and Subordinated Debt as may be issued and outstanding from time to time pursuant to the provisions of this General Bond Ordinance. Funds in the Bond Fund may, from time to time, at the option of the City, be used and employed to purchase sufficient term Bonds, term Parity Obligations or term Subordinated Debt, if any be outstanding, to satisfy a Sinking Fund Installment due within the next succeeding twelve (12) months. The City shall direct the depository to, and the depository shall, pay out of the Interest Account to any Paying Agents, or other applicable party performing an equivalent function, for any of the Bonds, Parity Obligations and Subordinated Debt (a) on the day preceding each Interest Payment Date, the amounts required for the payment of interest on the Outstanding Bonds, Parity Obligations and Subordinated Debt due on such date, and (b) on the date preceding the Redemption Date or date of purchase, the amounts required for the payment of accrued interest on Bonds, Parity Obligations or Subordinated Debt redeemed or purchased for retirement unless the payment of such accrued interest shall be otherwise provided for, and in each such case, such amounts shall be applied by such Paying Agents to such payments.

(2) The City may invest the moneys in the Interest Account in Investment Obligations so that the maturity date or date of redemption at the option of the holder shall be on or before the Interest Payment Date next succeeding the date upon which such investment is made.

(3) The City shall direct the depository to, and the depository shall, pay out of moneys credited to the Principal Account to the respective Paying Agents or other applicable party performing such equivalent function on the day preceding each Principal Installment Date for any of the Outstanding Bonds, Parity Obligations or Subordinated Debt, the amounts required for the payment of principal due on such date and such amounts shall be applied by the Paying Agents or other applicable party performing such equivalent function to such payments.

(4) The amount accumulated in the Principal Account for each Sinking Fund Installment may, at the option of the City, be applied (together with amounts accumulated in the Interest Account with respect to interest on the Bonds, Parity Obligations or

Subordinated Debt for which such Sinking Fund Installment was established) by the City prior to the forty-fifth (45th) day preceding the due date of such Sinking Fund Installment, as follows:

(a) to the purchase of Bonds, Parity Obligations or Subordinated Debt of the Series and maturity for which such Sinking Fund Installment was established, at prices (including any brokerage and other charges) not exceeding the Redemption Price payable from Sinking Fund Installments for such Bonds, Parity Obligations or Subordinated Debt when such Bonds, Parity Obligations or Subordinated Debt are redeemable by application of said Sinking Fund Installments, plus unpaid interest accrued to the date of purchase, such purchases to be made in such manner as the City shall determine, or

(b) to the redemption of such Bonds, Parity Obligations or Subordinated Debt if then redeemable by their terms at the Redemption Price referred to in Clause (a) above.

As soon as practicable after the forty-fifth (45th) day preceding the due date of any such Sinking Fund Installment, the City shall proceed to call for redemption, pursuant to Section 603, on such due date, Bonds, Parity Obligations or Subordinated Debt of the Series and maturity for which such Sinking Fund Installment was established in such amount as shall be necessary to complete the retirement of the principal amount specified for such Sinking Fund Installment of the Bonds, Parity Obligations or Subordinated Debt and maturity. The City shall so call such Bonds, Parity Obligations or Subordinated Debt for redemption whether or not it then has moneys in the Principal Account sufficient to pay the applicable Redemption Price thereof, to the Redemption Date. The City shall so call such Bonds, Parity Obligations or Subordinated Debt for redemption whether or not it then has moneys in the Principal Account sufficient to pay the applicable Redemption Price thereof, to the Redemption Date. The City shall direct the depository to, and the depository shall, pay out of such Principal Account to the appropriate Paying Agents or applicable party performing an equivalent function, on the day preceding each such Redemption Date, the amount required for the redemption of the Bonds, Parity Obligations or Subordinated Debt so called for redemption, and such amount shall be applied by such Paying Agents or applicable party performing an equivalent function to such redemption.

(5) The City may invest the moneys in the Principal Account in Investment Obligations so that the maturity date or date of redemption at the option of the holder shall be on or before the Principal Installment Date next succeeding the date when such investment is made.

(6) Amounts remaining in the Interest Account on any Interest Payment Date, or in the Principal Account on any Principal Installment Date may, to the extent not needed to pay interest and Principal Installments, respectively, be transferred to the Revenue Fund.

506. Debt Service Reserve.

(1) There shall be deposited to the credit of the Debt Service Reserve (a) all Pledged Receipts from the Revenue Fund required to be deposited therein by this General Bond Ordinance, (b) all moneys received on account of or in connection with Investment Obligations credited to the Debt Service Reserve as in this Section provided, and (c) all proceeds of Bonds and Parity Obligations required to be deposited in said Debt Service Reserve to satisfy the Aggregate Debt Service Reserve Requirement in the amounts set forth in a Series Ordinance.

(2) The Debt Service Reserve is pledged to and shall be used for the payment of principal of, interest on, and Redemption Price, if any, in respect of any Outstanding Bond and, if applicable, Parity Obligation, as to which there would otherwise be a default in payment, and sums in the Debt Service Reserve shall be transferred to other Funds and Accounts in a timely manner upon due certification as provided in subsection (3) of this Section 506 in order to effectuate the intent of this Section and the purposes of the Debt Service Reserve. In the event that amounts in the Debt Service Reserve are reduced below the Aggregate Debt Service Reserve Requirement as a result of transfers to the Bond Fund, the deficiency in the Debt Service Reserve shall be cured from the first available revenues by making monthly deposits to the Debt Service Reserve in equal amounts so that such deficiency is eliminated upon making twenty-four (24) such deposits. In the event that amounts in the Debt Service Reserve are below the Aggregate Debt Service Reserve Requirement as a result of a determination in connection with the issuance of a Series of USDA Bonds to fund the required deposit to the Debt Service Reserve by making monthly deposits to the Debt Service Reserve, the required balance to be deposited therein shall be satisfied from the first available revenues by making monthly deposits to the Debt Service Reserve in equal amounts, so that the Aggregate Debt Service Reserve Requirement is fully funded upon making the required deposits specified in the Series Ordinance authorizing the USDA Bonds over a period not exceeding sixty (60) months from the July 1 of the Fiscal Year following the date the facilities financed with the USDA Bonds become operational.

(3) The City shall cause the depository from time to time to transfer or pay out moneys in the Debt Service Reserve for the purpose of making payments and transfers to other Funds and Accounts pursuant to subsection (2) hereof upon receipt by said depository of a check or other bill of exchange executed by an Authorized Officer stating with respect to each payment or transfer to be made:

- (a) the Account or Fund to which the payment or transfer is to be made,
- (b) the purpose of the payment or transfer, and
- (c) the amount to be paid.

(4) Sums from time to time in the Debt Service Reserve shall be continuously invested upon direction of the City, in Investment Obligations. The City shall sell at the best price obtainable, or present for redemption, any Investment Obligations purchased by it as an investment whenever it shall be necessary in order to provide moneys to effectuate the purposes of the Debt Service Reserve.

(5) Any interest earned or sums realized as a result of investment of moneys in the Debt Service Reserve in Investment Obligations shall accrue to, and be a part of, said Debt Service Reserve; provided, however, that so long as the Debt Service Reserve contains the Aggregate Debt Service Reserve Requirement, any such interest earned or sums realized shall be transferred, as received, to the Revenue Fund.

(6) In lieu of the deposit of funds in the Debt Service Reserve, the City may obtain a Debt Service Reserve Guaranty. Any Debt Service Reserve Guaranty shall be considered a deposit of funds in the Debt Service Reserve equal to the Debt Service Reserve Coverage provided by the Debt Service Reserve Guaranty Agreement.

As conditions precedent to delivery of a Debt Service Reserve Guaranty, the City shall obtain (i) a Debt Service Reserve Guaranty, (ii) an opinion of counsel addressed to the City stating that the delivery of such Debt Service Reserve Guaranty to the City is authorized under the General Bond Ordinance, and complies with the terms thereof, and (iii) written evidence from a Rating Agency, if the Bonds are rated by such Rating Agency, that the Rating Agency has reviewed the proposed Debt Service Reserve Guaranty and that (x) the issuance of the Debt Service Reserve Guaranty to the City and (y) if a Debt Service Reserve Guaranty is then in effect with respect to the Debt Service Reserve, the substitution of the proposed Debt Service Reserve Guaranty for the Debt Service Reserve Guaranty then in effect, will not, by itself, result in a reduction or withdrawal of its rating on the Bonds. If the Bonds are insured by a bond insurer, the references to Rating Agency in the prior sentence shall be read to mean such bond insurer and the substitution of the proposed Debt Service Reserve Guaranty shall not result in the cancellation of the bond insurance provided by such Bond Insurer.

"Debt Service Reserve Guarantor" means the issuer of a Debt Service Reserve Guaranty.

"Debt Service Reserve Guaranty" means a letter of credit, surety bond or similar arrangement representing the irrevocable obligation of the Debt Service Reserve Guarantor to pay to the City upon request made by the City up to an amount stated therein for application as provided in this Section 506.

"Debt Service Reserve Guaranty Agreement" means the reimbursement agreement, loan agreement or similar agreement between the City and a Debt Service Reserve Guarantor with respect to repayment of amounts advanced under the Debt Service Reserve Guaranty.

"Debt Service Reserve Guaranty Coverage" means the amount available at any particular time to be paid to the City under the terms of the Debt Service Reserve Guaranty.

"Debt Service Reserve Guaranty Limit" means the maximum aggregate amount available to be paid to the City under the terms of a Debt Service Reserve Guaranty.

"Rating Agency" means either Moody's Investors Service, Inc. Standard & Poor's Ratings Services, a division of The McGraw Hill Companies, Inc. or Fitch Ratings,

corporations organized under the laws of the States of Delaware, New York and New York, respectively, and their successors and assigns.

(7) Unless the Debt Service Reserve is funded as provided in clause (6) above, the value of Investment Obligations, as determined in accordance with Section 509, shall be calculated at least annually, and any deficiency recognized by such valuation shall be cured from the first available Revenues.

507. Operation and Maintenance Fund.

(1) The Operation and Maintenance Fund shall be used to pay the reasonable expenses of operating, maintaining and repairing the System and for paying Operation and Maintenance Costs. There shall be paid into the Operation and Maintenance Fund the amounts required to be so paid by the provisions of Section 504, and there may be paid into the Operation and Maintenance Fund any moneys received by the City from any other source, unless required to be otherwise applied as provided by this General Bond Ordinance.

(2) Subject to the provisions and requirements of subsection (3) of Section 504, moneys in the Operation and Maintenance Fund shall be withdrawn and paid out from time to time by the City for the purpose of paying reasonable or necessary Operation and Maintenance Costs and when so withdrawn and paid out shall be free and clear of any lien, pledge or assignment in trust created by this General Bond Ordinance, provided, however, the City may at any time withdraw moneys from the Operation and Maintenance Fund and deposit such moneys into any other Funds or Accounts created by this General Bond Ordinance, other than the Depreciation Fund.

(3) Amounts in the Operation and Maintenance Fund may, in the discretion of the City, be invested in Investment Obligations maturing in such amounts and at such times as may be necessary to provide funds when needed to pay Operation and Maintenance Costs. The City may, and to the extent required for payments from the Operation and Maintenance Fund shall, sell at the best price obtainable, or duly present for redemption, any such Investment Obligations at any time, and the proceeds of such sale and of all payments at maturity and upon redemption of such Investment Obligations shall be held in the Operation and Maintenance Fund and unless otherwise transferred or expended pursuant to the provisions of this Section shall be applied to reduce the next succeeding Monthly Requirement.

508. Depreciation Fund.

(1) The Depreciation Fund shall be available and shall be utilized to make repairs and replacements to the System and to pay the costs of constructing additions, extensions, betterments and improvements to the System which will either increase income and revenues or provide a higher degree of service. There shall be deposited or transferred to the Depreciation Fund any moneys required to be deposited or transferred thereto by the provisions of Section 504 hereof.

(2) In addition, there shall be transferred to and deposited in the Depreciation Fund any other moneys:

(a) received by the City from any other source and duly determined and ordered by the City to be deposited therein, unless required to be otherwise applied as provided by this General Bond Ordinance,

(b) for which the City has exercised a discretion to so deposit or transfer as permitted by this General Bond Ordinance, and

(c) ordered to be so deposited from the proceeds of any Series of Bonds, pursuant to a duly adopted Series Ordinance, or from the proceeds of any Parity Obligations in accordance with the terms of such Parity Obligations.

(3) In addition, amounts in the Depreciation Fund may be expended and applied upon written direction of an Authorized Officer from time to time only:

(a) for making up any deficiency existing at any time in the minimum amounts required to be on hand in the Bond Fund and the Debt Service Reserve as provided by this General Bond Ordinance,

(b) for the redemption of Bonds, in whole or in part, as provided in Article VI of this Ordinance, or for the redemption of Parity Obligations, as provided by the terms of such Parity Obligations,

(c) for the payment of Principal Installments of and interest on Bonds and Parity Obligations when due, without limitation,

(d) for transfer and deposit to the Revenue Fund, or

(e) for investment in Investment Obligations which shall be a part of the Depreciation Fund.

(4) Any Investment Obligation credited to the Depreciation Fund may be sold at any time by the City, upon written direction by an Authorized Officer in order to provide moneys for any of the purposes described in subsection (3) hereof.

(5) To the extent that other moneys will not be available for the payment of Principal Installments of and interest on Bonds, Parity Obligations or Subordinated Debt when due, any Investment Obligation credited to the Depreciation Fund shall be sold upon written direction by an Authorized Officer and the proceeds of such sales shall be deposited in the Bond Fund.

(6) The depository shall from time to time pay out or permit the withdrawal of moneys from the Depreciation Fund for the purpose of making payments pursuant to subsection (3) hereof upon receipt by said depository of a check or bill of exchange executed by an Authorized Officer stating the following with respect to each payment to be made:

- (a) the Fund from which the payment is to be made,
 - (b) the name of the person or party to whom the payment is to be made,
- and
- (c) the amount to be paid.

509. Surplus Fund.

(1) The Surplus Fund shall be maintained by the City in the appropriate depository so long as any of the Bonds authorized or permitted to be issued by this General Bond Ordinance remain Outstanding; and all moneys deposited in the Surplus Fund may be used as follows: (a) to the extent necessary from time to time monies in the Surplus Fund shall be transferred to the Debt Service Fund to permit payment of all obligations payable from such Fund without drawing on the Debt Service Reserve; (b) monies in the Surplus Fund shall be used for payment of principal of and interest on any Outstanding Bonds, parity Obligations and Notes issued by the City to pay for costs of improving or extending the System or may be transferred to the appropriate Fund or Account created herein or in any Series Ordinance adopted pursuant to this General Bond Ordinance to permit such payment; and (c) monies in the Surplus Fund otherwise may be used for any other lawful purpose of the City.

(2) Sums from time to time in the Surplus Fund shall be continuously invested upon direction of the City, in Investment Obligations. The City shall sell at the best price obtainable, or present for, redemption, any Investment Obligations purchased by it as an investment whenever it shall be necessary in order to provide moneys to effectuate the purposes of the Surplus Fund.

(3) Any interest earned or sums realized as a result of investment of monies in the Surplus Fund in Investment Obligations shall accrue to, and be a part of, said Surplus Fund.

510. Investment of Funds; Valuation. Except as otherwise provided for in this General Bond Ordinance:

(a) Investment Obligations purchased as an investment of moneys in any Fund or Account held by the City or the depository under the provisions of this General Bond Ordinance shall be deemed at all times to be a part of such Fund or Account and the income or interest earned, gains realized or losses suffered by a Fund or Account due to the investment thereof shall be retained in, credited or charged thereto as the case may be, subject, in the case of the Debt Service Reserve, to the provisions of Section 506(5) hereof; provided that escrow agreements may provide otherwise.

(b) In computing the amount in all Funds, including the Accounts thereof, Investment Obligations purchased as an investment of moneys therein, shall be valued at the lesser of cost or fair market value. Valuation as of any date of computation shall include the amount of interest or gain realized to such date.

(c) The City shall sell at the best price obtainable, or present for redemption or exchange, any Investment Obligation purchased by it as an investment pursuant to this

General Bond Ordinance whenever it shall be necessary in order to provide moneys to meet any payment or transfer from the Fund or Account for which such investment was made. The depository shall advise the City in writing, on or before the twentieth day of each calendar month, of the details of all Investment Obligations held for the credit of each Fund or Account in its custody under the provisions of this General Bond Ordinance as of the end of the preceding month. The depository shall review and advise the City annually on the nature and value of investments in each Fund or Account. In the event that Investment Obligations in the Debt Service Reserve fall below the level required by this General Bond Ordinance, the depository shall notify the City and the City shall cure such deficiency as provided in Section 506(2) hereof.

[End of Article V]

**ARTICLE VI
REDEMPTION OF BONDS**

601. Privilege of Redemption and Redemption Price. Bonds subject to redemption prior to maturity pursuant to a Series Ordinance shall be redeemable, upon notice as provided in this Article, at such times, at such Redemption Prices and upon such terms as may be specified in the Series Ordinance authorizing such Series.

602. Redemption at the Election or Direction of the City. In the case of any redemption of Bonds otherwise than as provided in Section 603, the City shall give written notice to the depository of the Bond Fund and the applicable Paying Agents of its election so to redeem, of the Redemption Date, of the Series, of the principal amounts of the Bonds of each maturity of such Series to be redeemed (which Redemption Date, Series, maturities and principal amounts thereof to be redeemed shall be determined by the City in its sole discretion, subject to any limitations with respect thereto contained in this Ordinance and any Series Ordinance) and of any moneys to be applied to the payment of the Redemption Price. Such notice shall be given at least 45 days prior to the Redemption Date or such shorter period as shall be acceptable to the depository of the Bond Fund and the applicable Paying Agents. In the event notice of redemption shall have been given as in Section 605 provided, the depository of the Bond Fund shall, prior to the Redemption Date, pay to the appropriate Paying Agent or Paying Agents an amount in cash which, in addition to other moneys, if any available therefore held by such Paying Agent or Paying Agents, will be sufficient to redeem on the Redemption Date at the Redemption Price thereof, all of the Bonds to be redeemed.

603. Selection of Bonds to Be Redeemed By Lot. In the event of redemption of less than all the Outstanding Bonds of like Series and maturity, the City, or Registrar as directed by the City, shall assign to each such Outstanding Bond a distinctive number for each \$5,000 of the principal amount of such Bond and shall select by lot, using such method of selection as it shall deem proper in its discretion, as many numbers as, at \$5,000 for each number shall equal the principal amount of such Bonds to be redeemed. The Bonds to be redeemed shall be the Bonds to which were assigned numbers so selected; provided, however, that only so much of the principal amount of each such Bond of a denomination of more than \$5,000 shall be redeemed as shall equal \$5,000 for each number assigned to it and so selected. For the purpose of this Section, Bonds which have theretofore been selected by lot for redemption shall not be deemed Outstanding.

604. Notice of Redemption. The City or Paying Agent as directed by the City, shall give notice in the name of the City of the redemption of Bonds determined to be redeemed, which notice shall specify the Series and maturities of the Bonds to be redeemed, the Redemption Date and the place or places where amounts due upon such redemption will be payable and, if less than all of the Bonds of any like Series and maturity are to be redeemed, the letters and numbers or other distinguishing marks of such Bonds so to be redeemed and, in the case of Bonds to be redeemed in part only, such notice shall also specify the respective portions of the principal amount thereof to be redeemed. Such notice shall further state that on such Date there shall become due and payable upon each Bond to be redeemed the Redemption Price thereof, or the Redemption Price of the specified portions of the principal thereof in the case of Bonds to be redeemed in part only, together with interest accrued to the Redemption Date, and that from and after such Redemption Date interest thereon shall cease to accrue and be payable.

The City shall mail a copy of such notice, postage prepaid, registered mail, not less than thirty (30) days before the Redemption Date to the Holders of any Bonds or portions of Bonds which are to be redeemed, at their addresses appearing upon the registry books.

605. Payment of Redeemed Bonds. Notice having been given in the manner provided in Section 604, the Bonds or portions thereof so called for redemption shall become due and payable on the Redemption Date so designated at the Redemption Price, plus interest accrued and unpaid to the Redemption Date, and, upon presentation and surrender thereof at the office specified in such notice, together with an assignment duly executed by the Holder or his duly authorized attorney, such Bonds, or portions thereof, shall be paid at the Redemption Price plus interest accrued and unpaid to the Redemption Date. If there shall be drawn for redemption less than all of a Bond, the City shall execute and the Paying Agent shall deliver, upon the surrender of such Bond, without charge to the owner thereof, for the unredeemed balance of the principal amount of the Bond so surrendered, Bonds of like Series and maturity in any of the authorized denominations. If, on the Redemption Date, moneys for the redemption of all the Bonds or portions thereof of any like Series and maturity to be redeemed, together with interest to the Redemption Date, shall be held by the applicable Paying Agent so as to be available therefore on said date and if notice of redemption shall have been given as aforesaid, then, from and after the Redemption Date interest on the Bonds or portions thereof of such Series and maturities so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the Redemption Date, such Bonds or portions thereof shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

[End of Article VI]

**ARTICLE VII
PARTICULAR COVENANTS OF THE CITY**

701. Effect of Covenants. The City hereby particularly covenants and agrees with the Holders of the Bonds, Parity Obligations and Notes, and makes provisions which shall be a part of the contract with such Holders, to the effect and with the purposes set forth in the following Sections of this Article.

702. Payment of Bonds, Parity Obligations and Notes. The City shall duly and punctually pay or cause to be paid from the moneys and assets herein pledged, the principal of or Redemption Price, if any, of every Bond, Parity Obligation and Note and the interest thereon, at the date and places and in the manner mentioned in the Bonds, Parity Obligations and Notes, according to the true intent and meaning thereof, and shall duly and punctually pay or cause to be paid all Sinking Fund Installments, if any, becoming payable with respect to any Series of Bonds, Parity Obligations and Notes, but solely from the moneys pledged pursuant to this Ordinance.

703. Offices For Servicing Bonds. The City shall at all times maintain or cause to be maintained an office or agency where notices, presentations and demands upon the City in respect of the Bonds and Notes or of this Ordinance may be served. The City hereby designates the Registrars' principal offices as the offices for the registration, transfer or exchange of Bonds and Notes. The City hereby appoints the Paying Agents and Registrars as its respective agents to maintain such offices or agencies for the payment of Bonds and Notes, as may be stipulated in any Series Ordinance.

704. Further Assurance. At any time and all times the City shall, so far as it may be authorized by law, pass, make, do, execute, acknowledge and deliver, all and every such further resolutions, acts, deeds, conveyances, assignments, transfers and assurances as may be necessary or desirable for the better assuring, conveying, granting, assigning and confirming all and singular the rights, assets and revenues herein pledged or assigned, or intended so to be, or which the City may hereafter become bound to pledge or assign.

705. Powers as to Bonds and Pledge. The City is duly authorized pursuant to law to authorize and issue the Bonds and Notes and to adopt the Ordinance and to pledge the income, revenues and assets pledged by the Ordinance in the manner and to the extent provided in the Ordinance. The income, revenues and assets so pledged are and will be free and clear of any pledge, lien, charge or encumbrance thereon or with respect thereto prior to, or of equal rank with, the pledge created by the Ordinance, and all official action on the part of the City to that end has been duly and validly taken. The Bonds and Notes and the provisions of the Ordinance are and will be the valid and legally enforceable special obligations of the City in accordance with their terms and the terms of the Ordinance. The City shall at all times, to the extent permitted by law, defend, preserve and protect the pledge of the income, revenues and assets pledged under the Ordinance and all the rights of the Bondholders under the Ordinance against all claims and demands of all persons whomsoever.

706. Tax Covenant. In the event the City issues Bonds or Notes which are intended to be excludable from gross income for federal income tax purposes, the City shall at all times do

and perform all acts and things permitted by law and necessary or desirable in order to assure such exclusion. Further covenants of the City regarding federal tax requirements shall, if applicable, be set forth in the applicable Series Ordinance.

707. Accounts and Reports. The City shall at all times keep, or cause to be kept, proper books of record and account in which complete and accurate entries shall be made of all its transactions relating to the System, and all Funds and Accounts established by this Ordinance, which shall at all reasonable times be subject to the inspection of the Holders of an aggregate of not less than five percent (5%) in principal amount of Bonds then Outstanding or their representatives duly authorized in writing.

708. General Compliance With All Duties. The City shall faithfully and punctually perform all duties with reference to said System required by the Constitution and laws of the Commonwealth of Kentucky, Chapter 58 of the Kentucky Revised Statutes, Section 96.190 of the Kentucky Revised Statutes and Sections 96.350 to 96.510, inclusive, of the Kentucky Revised Statutes, and by the terms and provisions of the General Bond Ordinance.

709. Operation and Maintenance; No Free Service. The City shall at all times lawfully maintain and operate said System and all extensions thereto on a revenue-producing basis, and will provide no free water services to any person. From and after the issuance of any Bonds, the City will not initiate and commence service to any person without charging in full for services rendered in accordance with its prescribed and current schedule of rates, rentals and charges. The City shall further maintain the said System in good condition through application of Pledged Receipts accumulated and set aside for operation and maintenance, as provided in the Ordinance; and will make unusual or extraordinary repairs, renewals and replacements, as the same may be required, through application of Pledged Receipts accumulated and set aside for such purposes.

710. System Not To Be Disposed of. The City covenants and agrees that, so long as any Bonds are Outstanding, it will not sell, mortgage, or in any manner dispose of, or surrender control or otherwise dispose of any of the facilities of the System or any part thereof that are material to the operation of the System unless an Authorized Officer files a certificate with the City Clerk that the requirements of Section 711 will be satisfied after such sale, mortgage, or other disposition of, or surrender of control of any such facilities; except that the City may retire obsolete and worn out facilities, and sell same, if appropriate, depositing the sale price to the Depreciation Fund. Furthermore, except as provided for in the Ordinance, it will not create or permit to be created any charge or lien on the Pledged Receipts ranking equal or prior to charge, or lien of the Bonds.

711. Rates and Charges; Coverage; Annual Budget. The City shall at all times establish, enforce and collect rates, rentals, and charges for services rendered and facilities afforded by said City works and facilities constituting the System; and the same shall be reasonable and just, taking into account and consideration the cost and value of the System, the costs of operating the same and maintaining the same in a good state of repair, proper and necessary allowances for depreciation and for additions and extensions, and the amounts necessary for the orderly retirement of all outstanding Bonds, Parity Obligations and Notes and Subordinated Debt and the accruing interest thereon, and the accumulation and maintenance of

reserves as provided in the Ordinance; and such rates and charges shall be adequate to meet all such requirements as provided in the Ordinance, and shall, if necessary, be adjusted from time to time in order to comply therewith (subject to such regulatory approvals as may be required by law); and annual revenue from such rates, rentals and charges shall be further adequate to provide, after accumulation and maintenance of all reserves required by the Ordinance, and after payment of Operation and Maintenance Costs as provided in the Annual Budget of the System (a) 1.20 times coverage of annual principal, interest, and Sinking Fund requirements on all Bonds and Parity Obligations and (b) 1.00 times coverage of annual principal, interest, and Sinking Fund requirements on all Bonds, Parity Obligations and Subordinated Debt, and shall, if necessary, be adjusted from time to time in order to comply herewith.

On or before the first day of each Fiscal Year, so long as any Bonds and Parity Obligations authorized or permitted to be issued by the General Bond Ordinance are Outstanding, the City will adopt an Annual Budget of Current Expenses and projected Revenues for the ensuing fiscal year, and will promptly file a copy of each such Budget, and of any amendments thereto, in the Office of the City Clerk of the City, and will furnish copies thereof to any holder of any Bond or Parity Obligation upon request. The term "Current Expenses" as herein used, includes all reasonable and necessary costs of operating, repairing, maintaining and insuring the System, allowances for depreciation on all plant facilities, but shall exclude expenditures for extensions, improvements and extraordinary repairs and maintenance, and payments into the Bond Fund, and the Debt Service Reserve. The City covenants that the Current Expenses incurred in any year will not exceed the reasonable and necessary amounts therefore, and that it will not expend any amount or incur any obligations for operation, maintenance and repairs in excess of the total amount provided for Current Expenses in the Annual Budget, except upon resolution duly adopted by the City Commission determining that such expenses are necessary in order to operate and maintain the System. At the same time, and in like manner, the City agrees that it will prepare an estimate of gross income and revenue to be derived from operation of the System for such calendar year, and to the extent that said gross income and revenues are insufficient to meet all requirements as provided in this General Bond Ordinance, the City covenants and agrees that it will immediately (subject to regulatory approvals as required by law) revise its rates, rentals and charges for services rendered by the City's works and facilities, so that the same will be adequate to meet all of such requirements.

712. No Decrease in Rates, Rentals and Charges. The City shall not at any time make any reduction in any prevailing schedule of rates, rentals and charges for use of the services and facilities of the City without first obtaining the written determination of a Consulting Engineer of National Recognition in the field of water and sewer system engineering to the effect that the proposed reduction will not adversely affect the ability of the City to meet all the requirements and covenants set forth in this General Bond Ordinance.

713. Segregation of Funds. The City shall at all times account for the income and revenues of the System and distinguish same from all other revenues, moneys and funds of the City, if any, and will promptly and regularly make application and distribution thereof into the special funds identified in and created by the Ordinance, in the manner and with due regard for the priorities herein attributed thereto.

714. Annual Audit Required. The City shall, within one hundred eighty (180) days after the end of each Fiscal Year, cause an audit of the books of record and account pertinent to the System to be commenced, and a report on such audit to be issued by an independent certified public accountant, reflecting in reasonable detail the financial condition and results of operations of the System, including the status of the required insurance and fidelity bonding, as provided by this General Bond Ordinance, the current rates, rentals and charges of the City and coverage ratios as set forth in Section 711 hereof, with comments of the certified public accountant concerning compliance with all provisions and requirements of this General Bond Ordinance, such audit to be in accordance with generally accepted governmental accounting principles, and will promptly cause a copy of the audit report of said certified public accountant to be submitted to the City Commission for review, and when received and approved by the City Commission, to be filed in the Office of the City Clerk of the City, where it will be available for public inspection, and will promptly mail a copy thereof to the original purchaser or purchasers of any Series of Bonds issued pursuant to this General Bond Ordinance and to any rating agency then rating any Bonds. If requested to do so, the City will furnish to any Bondholder a condensed form of the balance sheet, and a condensed form of the operating report, in reasonable detail. All expenses incurred in causing such audits to be made, and copies distributed, shall constitute proper expenses of operating and maintaining the System, and may be paid from Revenues allocated for such purposes, as herein provided.

715. Fidelity Bonding of Personnel. The City shall cause each officer or other person (other than depository banks) having custody of any moneys administered under the provisions of the Ordinance to be bonded at all times in an amount at least equal to \$50,000; each such bond to have surety given by a surety corporation qualified to do business in Kentucky and approved by the City Commission, and the premiums for such surety shall constitute a proper expense of operating the System.

716. Insurance of Facilities. The City covenants and agrees that so long as any Bonds and Parity Obligations are Outstanding, it will keep all buildings and all machinery and equipment therein constituting a part of the System and, to the extent possible, all other facilities of the System which are insurable, insured against loss or damage by fire, lightning, windstorm, vandalism and malicious mischief, together with coverage against the perils normally and regularly insured against in standard "extended coverage" protection, under a policy or policies of a responsible insurance company or companies authorized and qualified under the laws of Kentucky to assume such risks. Coverage of such insurance shall be for not less than ninety percent (90%) of the insurable value, or the total principal amount of Bonds and Parity Obligations Outstanding, whichever sum is the lesser, subject to the deduction from such loss or damage (except in the case of a total loss) of not more than such deductibles which are customarily maintained by utility districts which are similar to the City.

717. Liability Coverage Required. The City shall carry public liability, vehicular insurance, and property damage insurance covering such risks and for such amounts as the City Commission determines from time to time to be necessary or advisable by reason of the character and extent of operations of the City. However, at a minimum, the City shall carry such insurance insuring the City against losses occasioned by bodily injury and in respect of property damage in amounts which are customarily maintained by utility districts which are similar to the

City. If obtainable, the City may (but need not) carry loss of use and occupancy insurance, and war risk insurance. The proceeds of any and all such insurance, other than public liability and property damage, are hereby pledged as security for the Bonds and Parity Obligations issued pursuant to or permitted by the General Bond Ordinance until such proceeds are paid out in making good the loss or damage in respect of which such proceeds are received, by repairing or replacing the property damaged or destroyed.

718. System Improvements To Be Expeditiously Completed. When any Bonds and Parity Obligations are issued, the City shall cause the work thereby to be acquired to be constructed and installed as rapidly and expeditiously as good business practice dictates, and will use and employ its best efforts to prevent delay in the prompt fulfillment of any such work.

719. Personnel and Servicing of Program.

(1) The City shall at all times appoint, retain and employ personnel for the purposes of administering and managing the System and shall establish and enforce reasonable rules, regulations, tests and standards governing the employment of such personnel at reasonable compensation, salaries, fees and charges and all persons employed by the City shall be qualified for their respective positions.

(2) The City may pay to any state agency, municipality, political subdivision or governmental instrumentality of the state from the Operation and Maintenance Fund such amounts as are necessary to reimburse such state agency, municipality, political subdivision or governmental instrumentality of the state for the reasonable costs of any services performed for and on behalf of the City, if any.

(3) The City shall in a timely manner file all reports as may, from time to time be required by law, and shall prepare and file such other reports and documents as shall in the future be required by law, including administrative regulations promulgated by any agency of the federal government or the Commonwealth of Kentucky having jurisdiction.

720. Compliance With Conditions Precedent. Upon the date of issuance of any of the Bonds, all conditions, acts and things required by law or by the General Bond Ordinance or a Series Ordinance to exist, to have happened or to have been performed precedent to or in the issuance of such Bonds, shall exist, shall have happened and shall have been performed, or will have happened or been performed, and such Bonds, together with all other indebtedness of the City, including Parity Obligations, shall be within every debt and other limit prescribed by law.

721. General. The City shall do and perform or cause to be done and performed all acts and things required to be done or performed by or on behalf of the City under the provisions of the Act and the General Bond Ordinance in accordance with the terms of such provisions.

722. Waiver of Laws. The City shall not at any time insist upon or plead in any manner whatsoever, or claim or take the benefit or advantage of any stay or extension law now or at any time hereafter in force which may affect the covenants and agreements contained in this Ordinance or in any Series Ordinance or Supplemental Ordinance or in the Bonds, and all benefit or advantage of any such law or laws is hereby expressly waived by the City.

723. Termination of Services to Delinquent Users. The City covenants and agrees that it shall, pursuant to the provisions of the Act and any other applicable provisions of law, to the maximum extent authorized by law enforce and collect the schedule of rates, rentals and charges imposed upon users of the City's works and facilities constituting the System, and will promptly cause service to be discontinued to any premises where such City bill for such facilities and services shall not be paid in full.

724. Extension of Payment of Bonds. The City shall not directly or indirectly extend or assent to the extension of the maturity of any of the Bonds or the time of payment of any of the claims for interest by the purchase or funding of such Bonds or claims for interest, or by any other arrangement and in case the maturity of any of the Bonds or the time for payment of any such claims for interest shall be extended, such Bonds or claims for interest shall not be entitled in case of any default under the General Bond Ordinance to the benefit of the General Bond Ordinance or to any payment out of any assets of the City or the funds (except funds held in trust for the payment of particular Bonds or claims for interest pursuant to the General Bond Ordinance) held by any Fiduciary except subject to the prior payment of the principal of all Bonds issued and Outstanding, the maturity of which has occurred and has not been extended and of such portion of the accrued interest on the Bonds as shall not be represented by such extended claims for interest. Nothing herein shall be deemed to limit the right of the City to issue bonds as provided in this General Bond Ordinance, and such issuance shall not be deemed to constitute an extension of the maturity of any Bond or of the time of payment of any claim for interest.

725. Statutory Mortgage Lien. For the further protection of the holders of the Bonds authorized to be issued by this General Bond Ordinance, a statutory mortgage lien upon all properties constituting the System and extensions thereof and belonging thereto is granted and created by Chapter 58 and Section 96.400 of the Kentucky Revised Statutes, which said mortgage lien is hereby recognized and declared to be valid and binding upon the City and all property constituting the System as provided by law, and shall take effect immediately upon the delivery of any Bonds authorized to be issued under the provisions of this General Bond Ordinance.

726. Effect of Defeasance. From and after the defeasance of any Outstanding Bonds, the General Bond Ordinance shall not govern the issuance of Bonds of the City.

[End of Article VII]

**ARTICLE VIII
SERIES ORDINANCE AND SUPPLEMENTAL ORDINANCES**

801. Modification and Amendment Without Consent. Notwithstanding any other provision of this Article VIII, or Article IX, the City may adopt at any time or from time to time Series Ordinances or Supplemental Ordinances for any one or more of the following purposes, and any such Series Ordinance or Supplemental Ordinance shall become effective in accordance with its terms upon the filing thereof in the City's official records, certified by an Authorized Officer:

(1) To add additional covenants and agreements of the City for the purpose of further securing the payment of the Bonds, provided such additional covenants and agreements are not contrary to or inconsistent with the covenants and agreements of the City contained in this General Bond Ordinance;

(2) To prescribe further limitations and restrictions upon the issuance of Bonds and the incurring of indebtedness by the City which are not contrary to or inconsistent with the limitations and restrictions thereon theretofore in effect;

(3) To surrender any right, power or privilege reserved to or conferred upon the City by the terms of this General Bond Ordinance, provided that the surrender of such right, power or privilege is not contrary to or inconsistent with the covenants and agreements of the City contained in this General Bond Ordinance;

(4) To confirm as further assurance any pledge under and the subjection to any lien, claim or pledge created or to be created by the provisions of this General Bond Ordinance;

(5) To modify any of the provisions of this General Bond Ordinance or any Series Ordinance in any other respects, provided that such modifications shall not be effective until after all Bonds of any Series of Bonds Outstanding as of the date of execution and delivery of such Supplemental Ordinance shall cease to be Outstanding, and all Bonds issued under such Series Ordinances shall contain a specific reference to the modifications contained in such subsequent Series Ordinances;

(6) To cure any ambiguity or defect or inconsistent provision in this General Bond Ordinance or to insert such provisions clarifying matters or questions arising under this General Bond Ordinance or any Series Ordinance as are necessary or desirable in the event any such modifications are not contrary to or inconsistent with this General Bond Ordinance or any Series Ordinance as theretofore in effect;

(7) To conform any requirements hereunder to the requirements of a Securities Depository; or

(8) For any other purpose provided that any such amendment or modification does not materially adversely affect the rights of Bondholders affected hereby.

A Supplemental Ordinance for the purposes described in this Section shall be effective upon the execution thereof by the City.

802. Supplemental Ordinances Effective With Consent Of Bondholders. The provisions of this General Bond Ordinance may also be modified or amended at any time or from time to time by a Supplemental Ordinance, subject to the consent of Bondholders and holders of Parity Obligations, in accordance with and subject to the provisions of Article IX hereof, such Supplemental Ordinance to become effective upon the obtaining of consent of the requisite percentages of Bondholders and the filing in the City's official records of a copy thereof certified by an Authorized Officer.

803. General Provisions Relating to Series Ordinances and Supplemental Ordinances. This General Bond Ordinance shall not be modified or amended in any respect except in accordance with and subject to the provisions of this Article VIII and Article IX. Nothing contained in this Article VIII or Article IX shall affect or limit the rights or obligations of the City to adopt, make, do, execute or deliver any resolution, act or other instrument pursuant to the provisions of Section 704 or the right or obligation of the City to execute and deliver to any Fiduciary any instrument elsewhere in this General Bond Ordinance provided or permitted to be delivered to any such Fiduciary.

A copy of every Series Ordinance and Supplemental Ordinance adopted by the City when filed with the City's official records shall be accompanied by a Counsel's Opinion stating that such Series Ordinance or Supplemental Ordinance has been duly and lawfully adopted in accordance with the provisions of this Ordinance, is authorized or permitted by this General Bond Ordinance and is valid and binding upon the City and enforceable in accordance with its terms.

No Series Ordinance or Supplemental Ordinance changing, amending or modifying any of the rights or obligations of any Fiduciary may be adopted by the City without the written consent of the Fiduciary affected thereby.

[End of Article VIII]

**ARTICLE IX
GENERAL BOND ORDINANCE - FURTHER PROVISIONS**

901. Modification or Amendment. Any modification or amendment of this General Bond Ordinance and of the rights and obligation of the City, the Holders of the Bonds and the holders of Parity Obligations hereunder, in any particular, may be made by a Supplemental Ordinance, with the written consent given as hereinafter provided in Section 902, (1) of the Holders of at least a majority in principal amount of the Bonds and Parity Obligations Outstanding at the time such consent is given, (2) in cases where less than all of the several Series of Bonds then Outstanding or Parity Obligations are affected by the modification or amendment, of the Holders of at least a majority in principal amount of the Bonds of each Series or Parity Obligations so affected and Outstanding at the time such consent is given, or (3) in case the modification or amendment changes the amount or date of any Sinking Fund Installment of the Holders of at least a majority in principal amount of the Bonds or Parity Obligations of the particular Series, maturity and interest rate entitled to such Sinking Fund Installment Outstanding at the time such consent is given; provided, however, that if such modification or amendment will, by its terms, not take effect so long as any Bonds or Parity Obligations of any specified like Series and maturity remain Outstanding, the consent of the Holders of such Bonds or Parity Obligations shall not be required and such Bonds and Parity Obligations shall not be deemed to be Outstanding for the purpose of any calculation of Outstanding Bonds and Parity Obligations under this Section; and provided, further, no such modification or amendment shall permit a change in the terms of redemption or maturity of the principal of any Outstanding Bond or of any installment of interest thereon or a reduction in the principal amount or the Redemption Price thereof or in the rate of interest thereon without the consent of the Holder of such Bond, or shall change or modify any of the rights or obligations of any Fiduciary without its written assent thereto, or shall reduce the percentages or otherwise affect the classes of Bonds or Parity Obligations the consent of the Holders of which is required to effect any such modification or amendment. For the purposes of this Section, a Series of Bonds or Parity Obligations shall be deemed to be affected by a modification or amendment of this General Bond Ordinance if the same adversely affects or diminishes the rights of the Holders of Bonds of such Series of Bonds or Parity Obligations. The City may in its discretion determine whether or not, in accordance with the foregoing provisions, Bonds of any particular Series or maturity or any Parity Obligations would be adversely affected by any modification or amendment of this General Bond Ordinance and any such determination shall be binding and conclusive on the City and all Holders of Bonds and any Parity Obligations. The City may receive an opinion of Counsel, including Counsel's Opinion, as conclusive evidence as to whether Bonds of any particular Series or maturity or any Parity Obligations would be so affected by any such modification or amendment of this General Bond Ordinance.

902. Consent of Bondholders. The City may at any time adopt a Supplemental Ordinance making a modification or amendment permitted by the provisions of Section 901 to take effect when and as provided in this Section. A copy of such Supplemental Ordinance (or brief summary thereof or reference thereto) together with a request to Bondholders and holder of any Parity Obligations for their consent thereto, shall promptly after adoption be mailed by the City to Bondholders and the holders of Parity Obligations (but failure to mail such copy and request shall not affect the validity of the Supplemental Ordinance when consented to as in this Section provided). Such Supplemental Ordinance shall not be effective unless and until (1) there

shall have been filed with the City (a) the written consents of the Holders of the percentages of Outstanding Bonds and Parity Obligations specified in Section 901 and (b) a Counsel's Opinion stating that such Supplemental Ordinance has been duly and lawfully adopted by the City in accordance with the provisions of this Ordinance, is authorized or permitted by this Ordinance, and is valid and binding upon the City and enforceable in accordance with its terms. Each such consent shall be effective only if accompanied by proof of the holding at the date of such consent, of the Bonds and Parity obligations with respect to which such consent is given, which proof shall be such as is permitted by Section 1202. Any such consent shall be binding upon the Holder of the Bonds and Parity Obligations giving such consent and, anything in Section 1202 to the contrary notwithstanding, upon any subsequent Holder of such Bonds and Parity Obligations and of any Bonds and Parity Obligations issued in exchange thereof (whether or not such subsequent Holder thereof has notice thereof), unless such consent is revoked in writing by the holder of such Bonds or Parity Obligations giving such consent or a subsequent Holder thereof by filing with the City, such revocation and, if such Bonds and Parity Obligations are transferable by delivery, proof that such Bonds and Parity Obligations are held by the signer of such revocation in the manner permitted by Section 1202. The fact that a consent has not been revoked may likewise be proved by a certificate of the City to the effect that no revocation thereof is on file with the City. At any time after the Holders of the required percentages of Bonds and Parity Obligations shall have filed their consents to the Supplemental Ordinance, the City shall make and file (a) in the official records of the City, accompanied by a Counsel's Opinion, as to the quality thereof, and (b) with each Fiduciary a written statement that the Holders of such required percentages of Bonds and Parity Obligations have filed such consents. Such written statement shall be conclusive that such consents have been filed. At any time thereafter, notice, stating in substance that the Supplemental Ordinance (which may be referred to as a Supplemental Ordinance adopted by the City on a stated date) has been consented to by the holders of the required percentages of Bonds and Parity Obligations and will be effective as provided in this Section, shall be given to the holders of Bonds and Parity Obligations by the City by mailing such notice to holders of Bonds and Parity Obligations (but failure to mail such notice shall not prevent such Supplemental Ordinance from becoming effective and binding as in this Section provided) not more than ninety (90) days after the holders of the required percentages of Bonds and Parity Obligations shall have filed their consents to the Supplemental Ordinance and the written statements of the Fiduciary hereinabove provided for are filed. Such Supplemental Ordinance making such amendment or modification shall be deemed conclusively binding upon the City, each Fiduciary and the holders of all Bonds and Parity Obligations, at the expiration of thirty (30) days after the filing with each Fiduciary of the proof of the first publication of such last mentioned notice, except in the event of a final decree of a court of competent jurisdiction setting aside such Supplemental Ordinance in a legal action or equitable proceeding for such purpose commenced within such thirty (30) day period; provided, however, that the City during such thirty (30) day period and any such further period during which any such action or proceeding may be pending shall be entitled in its reasonable discretion to take such action, or to refrain from taking such action, with respect to such Supplemental Ordinance as they may deem expedient.

903. Mailing. Any provision in this Article for the mailing of a notice or other document to holders shall be fully complied with if it is mailed postage prepaid to each Holder of

Bonds then Outstanding at his address appearing upon the registry books of the Registrar or as may be provided in or with respect to Parity Obligations.

904. Modifications By Unanimous Action. Notwithstanding anything contained in Article VIII or in the foregoing provisions of this Article IX, the rights and obligations of the City and of the Holders of the Bonds and Parity Obligations and the terms and provisions of the Bonds or of this Ordinance may be modified or amended in any respect upon the adoption of a Supplemental Ordinance by the City and the consent of the Holders of all of the Bonds and Parity Obligations then Outstanding, such consent to be given as provided in Section 902 except that no notice to Bondholders by mailing shall be required; provided, however, that no such modification or amendment shall change or modify any of the rights or obligations of any Fiduciary without its written assent thereto in addition to the consent of the City and of the Bondholders.

905. Exclusion of Bonds and Parity Obligations. Bonds and Parity Obligations owned or held by or for the account of the City shall not be deemed Outstanding for the purpose of consent or other action or any calculation of Outstanding Bonds and Parity Obligations provided for in this General Bond Ordinance, and the City shall not be entitled with respect to such Bonds and Parity Obligations to give any consent or take any other action provided for in this General Bond Ordinance.

906. Notation On Bonds. Bonds authenticated and delivered after the effective date of any action taken as in Article VIII or this Article IX provided may bear a notation by endorsement or otherwise in form approved by the City as to such action, and in that case upon demand of the Holder of any Bond Outstanding at such effective date and upon presentation of his Bond for such purpose at the principal office of any Paying Agent, suitable notation shall be made on such Bond by such Paying Agent as to any such action. If the City shall so determine, new Bonds so modified as in the opinion of the City to conform to such action shall be prepared and delivered, and upon demand of the Holder of any Bond then Outstanding shall be exchanged, without cost to such Bondholder, for Bonds of the same Series and maturity then Outstanding, upon surrender of such Bonds.

907. Contracts or Indentures. The City, in so far as authorized by law, may and if requested by any Fiduciary shall, enter into a contract or an indenture with any Fiduciary giving effect to any modification or amendment of the Bonds or of the Ordinance as hereinabove in this Article IX provided.

[End of Article IX]

**ARTICLE X
DEFAULTS AND REMEDIES**

1001. Events of Defaults. Each of the following events is hereby declared as "Event of Default," that is to say if:

(1) the City shall default in the payment of the principal of or Redemption Price, if any, on any Bond or Parity Obligations when and as the same shall become due, whether at maturity or upon call for redemption or otherwise;

(2) payment of any installment of interest on any of the Bonds or Parity Obligations shall not be made when and as the same shall become due; or

(3) the City shall fail or refuse to comply with the provisions of the Act, or shall default in the performance or observance of any other of the covenants, agreements or conditions on its part contained in this Ordinance, any Series Ordinance, any Supplemental Ordinance or the Bonds, and such failure, refusal or default shall continue for a period of forty-five (45) days after written notice thereof by the Holders of not less than five percent (5%) in principal amount of the Outstanding Bonds.

1002. Remedies.

(1) Upon the happening and continuance of any Event of Default, the Holders of not less than twenty-five percent (25%) in principal amount of the Outstanding Bonds, may proceed, in their own name, subject to the provisions of this Section 1002, to protect and enforce the rights of the Bondholders by such of the following remedies, as such Bondholders, being advised by counsel, shall deem most effectual to protect and enforce such rights:

(a) by mandamus or other suit, action or proceeding at law or in equity, to enforce all rights of the Bondholders, including (subject to regulatory requirements) the right to require the City to adopt, enforce, collect and receive utility rates, rentals and charges adequate to carry out the covenants and agreements of the City in respect of production of minimum Revenues and to require the City to carry out any and all other covenants or agreements with Bondholders and to perform its duties under the Act;

(b) by bringing suit upon the Bonds;

(c) by action or suit in equity, require the City to account as if it were the trustee of an express trust for the Holders of the Bonds;

(d) by action or suit in equity, enjoin any acts or things which may be unlawful or in violation of the rights of the Holders of the Bonds;

(e) by action or suit in equity, seek the appointment of a receiver who shall take charge of and administer the affairs of the City;

(f) by declaring all Bonds due and payable, and if all defaults shall be made good (excepting that in respect of acceleration of maturities), then, with the written consent of the Holders of not less than twenty-five percent (25%) in principal amount of the Outstanding Bonds, by annulling such declaration and its consequences; or

(g) in the event that all Bonds are declared due and payable and a receiver is appointed, by selling Investment Obligations and all other assets of the City (to the extent not theretofore set aside for redemption of Bonds for which call has been made), and by the taking over by the receiver of the System, and operating same as an adequate revenue-generating operation to the fullest legal extent in the name of the City for the use and benefit of the Holders of Bonds;

(2) In the enforcement of any rights and remedies under this General Bond Ordinance, the Bondholders shall be entitled to sue for, enforce payment on and receive any and all amounts then or during any default becoming, and at any time remaining, due from the City for principal, Redemption Price, interest or otherwise, under any provision of this General Bond Ordinance or a Series Ordinance or of the Bonds, and unpaid, with interest on overdue payments at the rate or rates of interest specified in such Bonds, together with any and all costs and expenses of collection and of all proceedings hereunder and under such Bonds, without prejudice to any other right or remedy of the Bondholders, and to recover and enforce a judgment or decree against the City for any portion of such amounts remaining unpaid, with interest, costs and expenses, and to collect from any moneys available for such purposes, in any manner provided by law, the moneys adjudged or decreed to be payable.

1003. Priority of Payments After Default. In the event that upon the happening and continuance of any Event of Default, the funds held by the Paying Agents shall be insufficient for the payment of principal or Redemption Price, if any, and interest then due on the Bonds and Parity Obligations, such funds (other than funds held for the payment or redemption of particular Bonds or Parity Obligations which have theretofore become due at maturity or by call for redemption) and any other moneys received or collected by the City acting pursuant to the Act and this Article X, after making provision for the payment of any expenses necessary in the opinion of the City to protect the interests of the Holders of the Bonds and Parity Obligations, and for the payment of the charges and expenses and liabilities incurred and advances made by any Registrar and any Paying Agents in the performance of their respective duties under this General Ordinance, shall be applied, as follows:

(1) Unless the principal of all of the Bonds and Parity Obligations shall have become or have been declared due and payable:

FIRST: To the payment to the persons entitled thereto of all installments of interest then due in the order of the maturity of such installments, and, if the amount available shall not be sufficient to pay in full any installment, then to the payment thereof ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference; and

SECOND: To the payment to the persons entitled thereto of the unpaid principal or Redemption Price of any Bonds and Parity Obligations which shall have become due, whether at maturity or by a call for redemption, in the order of their due dates and, if the amounts available shall not be sufficient to pay in full all the Bonds and Parity Obligations due on any date, then to the payment thereof ratably, according to the amounts of principal or Redemption Price, if any, due on such date, to the persons entitled thereto, without any discrimination or preference.

(2) If the principal of all of the Bonds and Parity Obligations shall have become or have been declared due and payable, and such declaration shall not have been annulled, then, to the payment of the principal and interest then due and unpaid upon the Bonds and Parity Obligations without preference or priority of principal over interest, or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other Bond or Parity Obligation, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto without any discrimination or preference except as to any difference in the respective rates of interest specified in the Bonds or Parity Obligations.

Whenever moneys are to be applied by the City pursuant to the provisions of this Section, such moneys shall be applied at such times, and from time to time, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for application in the future. The deposit of such moneys with the Paying Agents, or otherwise setting aside such moneys in trust for the proper purposes, shall constitute proper application, and the representative holders or receiver shall incur no liability whatsoever, to any Bondholder or to any other person for any delay in applying any such moneys, so long as the representative Bondholders or receivers act with reasonable diligence, having due regard for the circumstances, and ultimately apply the same in accordance with such provisions of this Ordinance as may be applicable at the time of application. Wherever the representative Bondholders or the receiver shall exercise such discretion in applying such moneys, it shall fix the date (which shall be an Interest Payment Date unless the representative Bondholders or the receiver shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal to be paid on such date shall cease to accrue. The representative Bondholders or the receiver shall give such notice as it may deem appropriate for the fixing of any such date. The representative Bondholders or the receiver shall not be required to make payment to the Holder of any Bond unless such Bond shall be presented to the appropriate Paying Agent for appropriate endorsement or for cancellation if fully paid.

1004. Termination of Proceedings. In case any proceedings taken on account of any Event of Default shall have been discontinued or abandoned for any reason, then in every such case the City and the Bondholders shall be restored to their former positions and rights hereunder, respectively, and all rights, remedies, powers and duties of the Bondholders shall continue as though no such proceeding had been taken.

1005. Bondholders' Direction of Proceedings. Anything in this General Bond Ordinance to the contrary notwithstanding, the Holders of the majority in principal amount of the Bonds and Parity Obligations then Outstanding shall have the right by an instrument or concurrent instruments in writing executed and delivered to the City, to direct the method of

conducting all remedial proceedings to be taken hereunder, provided that such direction shall not be otherwise than in accordance with law or the provisions of this Ordinance.

1006. Remedies Not Exclusive. No remedy herein conferred upon or reserved to the Holders of the Bonds is intended to be exclusive of any other remedy or remedies, and each and every such remedy shall be cumulative and shall be in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or by statute.

1007. No Waiver of Default. No delay or omission of the Holder of the Bonds to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this General Bond Ordinance to the Holders of the Bonds, respectively, may be exercised from time to time and as often as may be deemed expedient.

1008. Notice of Event of Default. The City shall cause the appropriate Registrar to give to the Bondholders notice of each Event of Default hereunder known to the City within sixty (60) days after knowledge of the occurrence thereof, unless such Event of Default shall have been remedied or cured before the giving of such notice. Each such notice of Event of Default shall be given by mailing written notice thereof: (1) to all Holders of Bonds, as the name and addresses of such Holders appear upon the books for registration and transfer of Bonds as kept by the Registrar and (2) to such other persons as is required by law.

[End of Article X]

**ARTICLE XI
CONCERNING THE FIDUCIARIES**

1101. Appointment and Acceptance of Duties of Paying Agents and Registrars. The City may appoint one or more Paying Agents and one or more Registrars (who may be a Paying Agent) for the Bonds of any Series in the Series Ordinance authorizing such Bonds or may appoint such Paying Agent or Paying Agents and such Registrar or Registrars by resolution of the City adopted prior to the authentication and delivery of such Bonds, and may at any time or from time to time appoint one or more other Paying Agents or one or more other Registrars in the manner and subject to the conditions set forth in Section 1107 for the appointment of a Successor Paying Agent or Registrar.

Each Paying Agent or Registrar shall signify its acceptance of the duties and obligations imposed upon it by this General Bond Ordinance by written instrument of acceptance executed and delivered to the City.

The principal offices of the Paying Agents are hereby designated as the respective agencies of the City for the payment of the interest on and principal or Redemption Price of the Bonds.

The City shall enter into an agreement for paying agent and for registrar for each issue of Series Bonds.

1102. Responsibility of Fiduciaries. The recitals of fact herein and in the Bonds contained shall be taken as the statements of the City and no Fiduciary assumes any responsibility for the correctness of the same. No Fiduciary makes any representations as to the validity or sufficiency of this General Bond Ordinance or of any Bonds issued thereunder or in respect of the security afforded by this General Bond Ordinance, and no Fiduciary shall incur any responsibility in respect thereof. Each Registrar shall, however, be responsible for its representation contained in its certificate on the Bonds. No Fiduciary shall be under any responsibility or duty with respect to the issuance of the Bonds for value or the application of the proceeds thereof or the application of any moneys paid to the City. No Fiduciary shall be under any responsibility or duty with respect to the application of any moneys paid to any other Fiduciary. No Fiduciary shall be under any obligation or duty to perform any act which would involve it in expense or liability or to institute or defend any suit in respect hereof, or to advance any of its own moneys, unless properly indemnified. No Fiduciary shall be liable in connection with the performance of its duties hereunder except for its own negligence or default. No Fiduciary shall be under any responsibility or duty with respect to the application of any moneys paid to any one of the other Fiduciaries.

1103. Evidence on Which Fiduciaries May Act. Each Fiduciary shall be protected in acting upon any notice, resolution, request, consent, order, certificate, report, opinion, bond, or other paper or document believed by it to be genuine, and to have been signed or presented by the proper party or parties. Each Fiduciary may consult with counsel, who may or may not be of counsel to the City, and the opinion of such counsel shall be full and complete authorization and protection in respect of any action taken or suffered by it hereunder in good faith and in accordance therewith. Whenever any Fiduciary shall deem it necessary or desirable that a matter

be proved or established prior to taking or suffering any action hereunder, including payment of moneys out of any Fund or Account, such matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a certificate signed by an Authorized Officer, and such certificate shall be full warrant for any action taken or suffered in good faith under the provisions of this General Bond Ordinance upon the faith thereof, but in its discretion the Fiduciary may in lieu thereof accept other evidence of such fact or matter or may require such further or additional evidences as to it may seem reasonable. Except as otherwise expressly provided herein, any request, order, notice or other direction required or permitted to be furnished pursuant to any provision hereof by the City to any Fiduciary shall be sufficiently executed if executed by an Authorized Officer of the City, as applicable.

1104. Compensation. The City shall pay to each Paying Agent, Registrar and other Fiduciary from time to time reasonable compensation for all services rendered under this General Bond Ordinance, and also all reasonable expenses, charges, counsel fees and other disbursements, including those of its attorneys, agents and employees, incurred in and about the performance of their powers and duties under this General Bond Ordinance. The City further agrees to indemnify each Paying Agent, Registrar and other Fiduciary harmless against any liabilities which it may incur in the exercise and performance of its powers and duties hereunder, and which are not due to its negligence or default.

1105. Permitted Acts and Functions. Each Paying Agent, Registrar and any other Fiduciary may become the owner of any Bonds, with the same rights it would have if it were not such Paying Agent, Registrar or other Fiduciary. Each Paying Agent, Registrar and any other Fiduciary may act as Depository for, and permit any of its officers or directors to act as a member of, or in any other capacity with respect to, any committee formed to protect the rights of Bondholders or to effect or aid in any reorganization growing out of the enforcement of the Bonds or this General Bond Ordinance, whether or not any such committee shall represent the Holders of a majority in principal amount of the Bonds then Outstanding.

1106. Consolidation. Any company into which any Fiduciary may be merged or converted or with which it may be consolidated or any company resulting from any merger, conversion or consolidation to which it shall be a party or any company to which any Fiduciary may sell or transfer all of substantially all of its corporate trust business, provided such company shall be a trust company or bank which is qualified to be a successor to such Fiduciary under Section 1110 or Section 1113 and shall be authorized by law to perform all the duties imposed upon it by this General Bond Ordinance, shall be the successor to such Fiduciary without the execution or filing of any paper or the performance of any further act, anything herein to the contrary notwithstanding.

1107. Resignation or Removal of the Paying Agents, Registrars and Other Fiduciaries and Appointment of Successors. Any Paying Agent, Registrar or other Fiduciary may at any time resign and be discharged of the duties and obligations created by this General Bond Ordinance by giving at least sixty (60) days' written notice to the City. Any Paying Agent, Registrar or other Fiduciary may be removed at any time by an instrument filed with such Paying Agent, Registrar or other Fiduciary and signed by an Authorized Officer of the City. Any

successor Paying Agent, Registrar or other Fiduciary shall be appointed by the City and (subject to the requirements of Section 703) shall be a trust company or bank having the powers of a trust company, having a capital and surplus aggregating at least Twenty-Five Million Dollars (\$25,000,000), and willing and able to accept the office of Paying Agent or Registrar on reasonable and customary terms and authorized by law to perform all the duties imposed upon it by this General Bond Ordinance.

In the event of the resignation or removal of any Paying Agent, Registrar or other Fiduciary, such Paying Agent, Registrar or other Fiduciary shall pay over, assign and deliver any moneys held by it to its successor, if there be no successor then appointed, to the City until such successor be appointed.

[End of Article XI]

**ARTICLE XII
MISCELLANEOUS**

1201. Defeasance.

(1) Except as may be provided with respect to Parity Obligations, If the City shall pay or cause to be paid, or there shall otherwise be paid, to the Holders of the Bonds and Parity Obligations, all of the principal and interest and Redemption Price, if any, to become due thereon, at the times and in the manner stipulated therein and in this General Bond Ordinance, then and in that event the General Bond Ordinance shall cease, determine, and become null and void, and the covenants, agreements and other obligations of the City hereunder shall be satisfied and discharged, and in such event, the City shall execute and deliver all such instruments as may be desirable to evidence such discharge and satisfaction and the Fiduciaries shall pay over or deliver to the City all moneys or securities held by them pursuant to the General Bond Ordinance which are not required for the payment or redemption of Bonds, not theretofore surrendered for such payment or redemption.

(2) Bonds and Parity Obligations or interest installments for the payment or redemption of which moneys shall have been set aside and which shall be held in trust by Fiduciaries (through deposit by the City of funds for such payment or redemption or otherwise) shall, at the maturity or Redemption Date thereof, be deemed to have been paid within the meaning and with the effect expressed in subsection (1) of this Section. Except as may be otherwise provided with respect to Parity Obligations, all Outstanding Bonds and Parity Obligations shall, prior to the maturity or Redemption Date thereof, be deemed to have been paid within the meaning and with the effect expressed in subsection (1) of this Section if (a) in case any of said Bonds and Parity Obligations are to be redeemed on any date prior to their maturity, the City shall have given notice of redemption on said date of the Redemption of Parity Obligations in accordance with their terms and notice of the Redemption of such Bonds as provided in Article VI or shall have provided for the giving of such notice at the appropriate time, and (b) there shall have been deposited with the Paying Agents either moneys in an amount which shall be sufficient, or Defeasance Obligations, the principal of and the interest on which when due will provide moneys which, together with the moneys, if any, deposited with the Paying Agents at the same time, shall be sufficient to pay when due the principal or Redemption Price, if any, and interest due and to become due on said Bonds and Parity Obligations on and prior to the Redemption Date or maturity date thereof, as the case may be. Neither Defeasance Obligations nor moneys deposited with the Paying Agents pursuant to this Section nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purposes other than, and shall be held in trust for, the payment of the principal or Redemption Price, if any, and interest on said Bonds and Parity Obligations; provided that any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Paying Agent if not then needed for such purposes, shall, to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal or Redemption Price, if any, and interest to become due on said Bonds and Parity Obligations on and prior to such Redemption Date or maturity date thereof, as the case may be, and shall

be paid over to the City, following full discharge and payment of such Bonds and Parity Obligations free and clear of any trust, lien or pledge.

(3) If, through the deposit of moneys by the City or otherwise, the Fiduciaries shall hold, pursuant to this General Bond Ordinance and the provisions of authorizing documents relating to any Parity Obligations, moneys sufficient to pay the principal and interest to maturity on all Outstanding Bonds and Parity Obligations, or in the case of Bonds and Parity Obligations in respect of which the City shall have taken all action necessary to redeem prior to maturity, sufficient to pay the Redemption Price and Interest to such Redemption Date, then at the request of the City all moneys held by and Paying Agent shall be paid over to the City, and together with other moneys held by it hereunder, shall be held by the City for the payment or redemption of Outstanding Bonds and Parity Obligations.

(4) Anything in this General Bond Ordinance to the contrary notwithstanding, any moneys held by a Fiduciary in trust for the payment and discharge of any of the Bonds or Parity Obligations which remain unclaimed for six (6) years after the date when all of the Bonds or Parity Obligations shall have become due and payable, either at their stated maturity dates or by call for earlier redemption, if such moneys were held by the Fiduciary at such date, or for six (6) years after the date of deposit of such moneys if deposited with the Fiduciary after the said date when all of the Bonds and Parity Obligations became due and payable, shall, at the written request of the City, be repaid by the Fiduciary to the City, as its absolute property and free from trust, and the Fiduciary shall thereupon be released and discharged; provided, however, that before being required to make any such payment to the City, the Fiduciary shall, at the expense of the City, cause to be published at least twice, at an interval of not less than seven (7) days between publications, in the Authorized Newspapers notice that said moneys remain unclaimed and that, after a date named in said notice, which date shall be not less than ten (10) nor more than twenty (20) days after the date of the first publication of such notice, the balance of such moneys then unclaimed will be returned to the City.

1202. Evidence of Signatures of Bondholders and Ownership of Bonds. Any request, consent or other instrument which this General Bond Ordinance may require or permit to be signed and executed by the Bondholders may be in one or more instruments of similar tenor, and shall be signed or executed by such Bondholders in person or by their authorized attorneys: Proof of (1) the execution of any such instruments, or of an instrument appointing any such attorney, or (2) the holding by any person of the Bonds, shall be sufficient for any purpose of the General Bond Ordinance (except as otherwise expressly provided) if made in the following manner, but the City may nevertheless in its discretion require further or other proof in cases where it deems the same desirable.

The fact and date of the execution by any Bondholder or his attorney of such instrument may be proved by the certificate, which need not be acknowledged or verified, of an officer of a bank or trust company satisfactory to the City or of any notary public or other officer authorized to take acknowledgements of deeds to be recorded in the state in which he purports to act, that the person signing such request or other instrument acknowledged to him the execution thereof, or by an affidavit of a witness of such execution, duly sworn to before such notary public or other officer. The authority of the person or persons executing any such instrument on behalf of

a corporate Bondholder may be established without further proof if such instrument is signed by a person purporting to be the president or a vice president of such corporation with a corporate seal affixed and attested by a person purporting to be its secretary or an assistant secretary.

Any request, consent or vote of the owner of any Bond or Parity Obligation shall bind all future owners of such Bond and Parity Obligation in respect of anything done or suffered to be done by the City or any Fiduciary in accordance therewith.

1203. Preservation and Inspection of Documents. All documents received by any Fiduciary under the provisions of this General Bond Ordinance or any supplemental General Bond Ordinance or Series Ordinance shall be retained in its possession and shall be subject at all reasonable times to the inspection of the City, any other Fiduciary and any Bondholder and their agents and their representatives, any of whom may make copies thereof.

1204. Parties in Interest. Nothing in this General Bond Ordinance or in any Series Ordinance adopted pursuant to the provisions hereof, expressed or implied, is intended to or shall be construed to confer upon or to give to any person or party other than the City, Paying Agents, Registrars and the Holders of the Bonds and Parity Obligations any rights, remedies or claims under or by reason of this General Bond Ordinance or any Series Ordinance or any covenants, conditions or stipulations thereof; and all covenants, stipulations, promises and agreements in this General Bond Ordinance and any Series Ordinance contained by or on behalf of the City shall be for the sole and exclusive benefit of the City, Paying Agents, Registrars and the holders from time to time of the Bonds and Parity Obligations.

1205. No Recourse Under General Bond Ordinance or on Bonds. All covenants, stipulations, promises, agreements and obligations of the City contained in this General Bond Ordinance shall be deemed to be the covenants, stipulations, promises, agreements and obligations of the City and not of any member, officer, director or employee of the City in his individual capacity, and no recourse shall be had for the payment of the principal or Redemption Price of or interest on the Bonds or for any claim based thereon or on this General Bond Ordinance against any member, officer, director or employee of the City or any natural person executing the Bonds.

1206. Severability. If any one or more of the covenants, stipulations, promises, agreements or obligations provided in this General Bond Ordinance on the part of the City or any Paying Agent or any Registrar to be performed should be determined by a court of competent jurisdiction to be contrary to law, then such covenant or covenants, stipulation or stipulations, promise or promises, agreement or agreements, obligation or obligations shall be deemed and construed to be severable from the remaining covenants, stipulations, promises, agreements and obligations herein contained and shall in no way affect the validity of the other provisions of this General Bond Ordinance.

1207. Headings. Any headings preceding the texts of the several Articles and Sections hereof, and any table of contents or marginal notes appended to copies hereof, shall be solely for convenience of reference and shall not constitute a part of this General Bond Ordinance, nor shall they affect its meaning, construction or effect.

1208. Conflicts. All General Bond Ordinances and resolutions or parts of General Bond Ordinances and resolutions, or other proceedings of the City in conflict herewith be and the same are repealed insofar as such conflict exists.

1209. Effective Date. This General Bond Ordinance shall take effect upon its adoption and publication of a summary hereof, as provided by law.

[End of Article XII]

Introduced and given first reading on September 9, 2013. Given second reading and adopted on September 23, 2013.

CITY OF DANVILLE, KENTUCKY

By: Bernie Hunstod
Mayor

Attest:

D. A.
City Clerk

CERTIFICATION

I, the undersigned, the duly appointed and qualified City Clerk of the City of Danville, Kentucky, do hereby certify that the foregoing Ordinance is a true, accurate and complete copy of a certain Ordinance duly adopted by the City Council of said City at a duly and properly convened meeting of said City Council held on September 23, 2013, on the same occasion signed in open session by the Mayor attested by me as City Clerk, and declared to be in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this 3rd day of December, 2013.



City Clerk, City of Danville, Kentucky

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Proposed Adjustment of the Wholesale)
Water Service Rates of) Case No. 2014 00392
the City of Danville)

**CITY OF DANVILLE'S RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

Response to Request No. 10

Appendix C

Allocation of Operation and Maintenance Expense

	Fy 99-00	Commodity	Demand		Customer Cost		
			Max Day	Max Hour	Meter Services	Billing Finance	Fire Protection
Raw Water, Treatment and Storage							
Personnel Cost	\$ 342,442.00		\$ 342,442.00				
Electric	\$ 131,123.00	\$ 93,097.00	\$ 38,026.00				
Chemicals	\$ 110,706.00	\$ 110,706.00					
Laboratories	\$ 23,221.00		\$ 23,221.00				
Insurance	\$ 23,998.00		\$ 23,998.00				
Supplies	\$ 27,306.00		\$ 27,306.00				
Other	\$ 59,418.00		\$ 59,418.00				
Transmission and Distribution							
Mains							
Personnel	\$ 128,366.00		\$ 89,856.00	\$ 38,510.00			
Other	\$ 56,622.00		\$ 39,635.00	\$ 16,987.00			
Meters							
Personnel	\$ 113,152.00				\$ 113,152.00		
Other	\$ 19,698.00				\$ 19,698.00		
Hydrants	\$ 1,144.00						\$ 1,144.00
Administration and Finance							
20.85% Executive Legislative	\$ 105,468.00	\$ 17,852.00	\$ 56,401.00	\$ 4,861.00	\$ 11,637.00	\$ 14,617.00	\$ 100.00
35.24% Accounting	\$ 166,878.00					\$ 166,878.00	
5% Franchise Fee	\$ 102,889.00					\$ 102,889.00	
Total Operation and Maintenance	\$ 1,412,431.00	\$ 221,655.00	\$ 700,303.00	\$ 60,358.00	\$ 144,487.00	\$ 284,384.00	\$ 1,244.00

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Proposed Adjustment of the Wholesale)	
Water Service Rates of)	Case No. 2014-00392
the City of Danville)	

**CITY OF DANVILLE'S RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

Response to Request No. 11

11c. Capital Investment

FY 08/09	Expenses in Year	Comments including if there was funding
Stanford Connector project	78,854.31	This project finished in the fy total project 541,896.41
Airport Rd Waterline Ext	86,704.80	
Water Distribution Vehicle	15,714.00	
Water Distribution Vehicle	19,315.00	
Meter Equipment	186,011.19	
Water Treatment plant - planning	<u>152,160.89</u>	
	538,760.19	
FY 09/10		
Airport Rd Waterline Ext	138,531.58	This project finished in the fy total project 225,236.38
Water Dist refurbish pump	163,264.90	
Meter equipment	53,823.66	
Perryville Line improvements	15,556.50	
Water Treatment plant - planning	<u>44,859.58</u>	
	416,036.22	
FY 10/11		
Water Treatment plant (Design)	12,033.50	
Water Distribution Vehicle	18,870.00	
Generator - Water	179,748.00	
Meter Equipment	1,150.00	
Stanford Connection	2,000.00	
Water Treatment plant - planning	<u>5,814.23</u>	
	219,615.73	

Fy 11/12

Water Treatment plant (Design)	704,270.04	
Water Line replacement	31,250.00	Reimbursed from the state
Water Dist 70ft 90mph ssvn tower	7,550.00	
Water Line Improvements	9,453.75	
Water Electric info system	829.67	
SCADA upgrade	<u>40,495.35</u>	
	793,848.81	

FY 12/13

Lebanon Road water line	38,253.03	Finished
Water Treatment plant	378,066.01	
Water Line replacement	400,089.24	Part reimbursed by State (have not received total)
Water Line Improvements	9,055.00	
Water Electric info system	<u>931.47</u>	
	826,394.75	

FY 13/14

Storage Tank Painting	140.40	
Water Treatment Plant	1,866,548.72	1,132,483.84 paid with KIA and RD Funds
Water Line replacement	52,811.53	Part reimbursed by State (have not received total)
Water Distribution pump station(popplewell)	34,986.56	
Water Distribution Vehicle	20,120.00	
Meter equipment	<u>70,566.67</u>	
	2,045,173.88	

11.d

Actual Capital For FY 6/30/14

Storage Tank Painting	140.40	Bids
Water Treatment Plant	1,866,548.72	Engineering/construction
Water Line replacement	52,811.53	
Water Distribution pump station(popplewell)	34,986.56	Popplewell
Water Distribution Vehicle	20,120.00	
Meter equipment	<u>70,566.67</u>	
	2,045,173.88	

Budget Capital for 6/30/15

Painting 6th street tank	265,000.00
SCADA Upgrades	10,000.00
Meter Equipment	50,000.00
Distribution Improvements	50,000.00
Distribution Vehicles	50,000.00
Water Treatment Plant	<u>15,000,000.00</u>
	15,425,000.00

Anticipated Budgeted Capital for 6/30/16

Meigs Lane Tank	200,000.00
Perryville Stand Pipe	194,040.00
SCADA Upgrades	10,000.00
Meter Equipment	50,000.00
Distribution Improvements	50,000.00
Air Compressor	15,000.00
Distribution Vehicles	55,000.00
Water Treatment Plant	<u>11,363,556.27</u>
	11,937,596.27

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Proposed Adjustment of the Wholesale)
Water Service Rates of) Case No. 2014-00392
the City of Danville)

**CITY OF DANVILLE'S RESPONSES TO THE
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

Response to Request No. 13

City of Caryville
 Functionalization and Allocation of Rate Base (based on Total Year 2013 with PFR Forms Adjustments)

account description	total expenses	commodity (COMM)	capacity (CAP)	actual customer (AC)	weighted customer		public fire (PFP)	revenue related (RR)	direct assign (DA)	basis of classification
					customer accounting (WCA)	meters and services (WCMS)				
intangible										
organization & franchises	0	0	0	0	0	0	0	0	0	as factor ST&D
total intangible plant	0	0	0	0	0	0	0	0	0	balance
source of supply										
land & land rights	13,580	8,827	4,753	0	0	0	0	0	0	65 COMM/35 CAP
structures & improvements	1,663,736	1,081,428	582,308	0	0	0	0	0	0	65 COMM/35 CAP
collect/impound reservoirs	0	0	0	0	0	0	0	0	0	65 COMM/35 CAP
other source plant	0	0	0	0	0	0	0	0	0	65 COMM/35 CAP
total source of supply	1,677,316	1,090,255	587,061	0	0	0	0	0	0	balance
water treatment										
land & land rights	40,000	26,000	14,000	0	0	0	0	0	0	65 COMM/35 CAP
structures & improvements	28,874,002	18,768,101	10,105,901	0	0	0	0	0	0	65 COMM/35 CAP
treatment equipment	8,377,113	5,445,123	2,931,990	0	0	0	0	0	0	65 COMM/35 CAP
other treatment	0	0	0	0	0	0	0	0	0	65 COMM/35 CAP
total water treatment	37,291,115	24,239,225	13,051,890	0	0	0	0	0	0	balance
transmission & distribution										
land & land rights	40,708	0	31,784	4,092	0	469	4,363	0	0	as other trans & distr
structures - transmission	2,346,000	0	1,707,523	0	0	0	0	0	638,477	100 CAP less DA
distribution reservoirs	2,446,564	0	567,466	0	0	0	100,141	0	1,778,957	85 CAP/15 PFP less DA
distribution mains	1,851,534	0	683,578	380,865	0	0	302,714	0	484,377	dist main analysis
services	5,820	0	0	0	0	5,820	0	0	0	100 WCMS
meters	37,850	0	0	0	0	37,850	0	0	0	100 WCMS
hydrants	3,270	0	0	0	0	0	3,270	0	0	100 PFP
other distribution plant	603,778	0	471,420	60,687	0	6,958	64,712	0	0	as other trans & distr
total transmission & distribution	7,335,524	0	3,461,771	445,644	0	51,098	475,200	0	2,901,812	balance
total supply, treat & T&D plant	46,303,955	25,329,480	17,100,722	445,644	0	51,098	475,200	0	2,901,812	balance
% total supply, treat & T&D	100%	58%	39%	1%	0%	0%	1%	0%	0%	factor "ST&D"
general plant										

City of Danville
 Fund Balances and Allocation of Rate Base (based on Test Year 2013 with Pro Forma Adjustments)

account description	total expenses	commodity (COMM)	capacity (CAP)	actual customer (AC)	weighted customer		public fire (PFP)	revenue related (RR)	direct assign (DA)	basis of classification
					customer accounting (WCA)	meters and services (WCMS)				
structures	4,194	2,448	1,652	43	0	5	46	0	0	as factor ST&D
office equipment	34,063	19,879	13,421	350	0	40	373	0	0	as factor ST&D
vehicles	285,046	166,353	112,310	2,927	0	336	3,121	0	0	as factor ST&D
tools & shop equipment	0	0	0	0	0	0	0	0	0	as factor ST&D
lab equipment	10,045	5,862	3,958	103	0	12	110	0	0	as factor ST&D
communication equipment	548,418	320,057	216,080	5,631	0	648	6,005	0	0	as factor ST&D
misc equipment	180,839	105,538	71,252	1,857	0	213	1,980	0	0	as factor ST&D
total general plant	1,062,605	620,136	418,673	10,911	0	1,251	11,634	0	0	balance
total plant in service	47,368,560	25,949,616	17,519,395	456,554	0	52,349	486,834	0	2,901,812	balance
% of total plant in service	100%	58%	39%	1%	0%	0%	1%	0%	0%	factor "plant in service"
less accumulated depreciation										
intangible plant	0	0	0	0	0	0	0	0	0	as intangible plant
source of supply plant	(378,289)	(245,880)	(132,401)	0	0	0	0	0	0	as source of supply plant
water treatment plant	(8,244,773)	(5,359,102)	(2,883,671)	0	0	0	0	0	0	as water treatmt plant
trans & distribution plant	(3,003,670)	0	(1,634,642)	(210,432)	0	(24,123)	(224,389)	0	(910,279)	as trans & distr plant
general plant	(677,475)	(395,374)	(286,929)	(5,916)	0	(738)	(7,418)	0	0	as general plant
total accumulated depreciation	(12,304,407)	(5,000,365)	(4,919,643)	(217,388)	0	(24,921)	(231,806)	0	(910,279)	balance
less contributions in aid										
distribution mains	0	0	0	0	0	0	0	0	0	as distr mains
meters & services	0	0	0	0	0	0	0	0	0	as meters & services
total contributions in aid	0	0	0	0	0	0	0	0	0	balance
less grants in aid										
treatment plant	(2,175,000)	(1,413,750)	(761,250)	0	0	0	0	0	0	as water treatmt plant
transmission	(700,000)	0	(700,000)	0	0	0	0	0	0	as trans mains
distribution & storage	0	0	0	0	0	0	0	0	0	as distr mains
total grants in aid	(2,875,000)	(1,413,750)	(1,461,250)	0	0	0	0	0	0	balance
plus working capital										
materials & supplies	43,550	25,416	17,159	447	0	51	477	0	0	as plant in service

City of Las Vegas
 Functionalization and Allocation of Rate Base (based on Test Year 2013 with PFD Form Adjustments)

account description	total expenses	commodity (COMM)	capacity (CAP)	actual customer (AC)	weighted customer		public fire (PFP)	revenue related (RR)	direct assign (DA)	basis of classification
					customer accounting (WCA)	meters and services (WCMS)				
prepayments	0	0	0	0	0	0	0	0	0	as plant in service
1/8 O&M	414,194	224,911	114,096	21,618	34,689	3,869	15,011	0	0	as O&M expense
total working capital	457,744	250,327	131,255	22,066	34,689	3,920	15,487	0	0	balance
total rate base	32,644,897	18,785,828	11,269,757	261,231	34,689	31,343	270,515	0	1,991,533	balance
% total rate base	100.0%	61.3%	36.8%	0.9%	0.1%	0.1%	0.9%	0.0%	0.0%	factor RATE BASE

City of Upland
 Functionalization and Allocation of Expenses (based on Test Year 2013 with PIP Form Adjustment)

acct no	account description	total expenses	commodity (COMM)	capacity (CAP)	actual customer (AC)	weighted customer			revenue related (RR)	direct assign (DA)	basis of classification
						customer accounting (WCA)	meters and services (WCMS)	public fire (PFP)			
source of supply											
	operating labor & expense	0	0	0	0	0	0	0	0	0	as "source of supply"
	operating supply & expense	0	0	0	0	0	0	0	0	0	as "source of supply"
	pump power cost	177,003	177,003	0	0	0	0	0	0	0	100% COMM
	maintenance source plant	190,514	123,834	66,680	0	0	0	0	0	0	as "source of supply"
	total source of supply exp	367,517	300,837	66,680	0	0	0	0	0	0	balance
treatment expense											
	operation labor	518,840	337,246	181,594	0	0	0	0	0	0	as "treatment plant"
	chemicals	669,857	669,857	0	0	0	0	0	0	0	100% COMM
	operating supply & expense	72,773	47,302	25,471	0	0	0	0	0	0	as "treatment plant"
	power cost	270,344	270,344	0	0	0	0	0	0	0	100% COMM
	maintenance trmt plant	6,277	4,080	2,197	0	0	0	0	0	0	as "treatment plant"
	total treatment expense	1,538,091	1,328,830	209,262	0	0	0	0	0	0	balance
transmission expense											
	operation labor	688,549	0	411,428	65,534	0	0	52,087	0	159,500	as "transmission lines"
	pump power cost	6,212	0	4,831	769	0	0	612	0	0	as "transmission lines"
	operating supply & expense	12,368	0	9,618	1,532	0	0	1,218	0	0	as "transmission lines"
	maint of trans mains	10,190	0	7,925	1,262	0	0	1,003	0	0	as "transmission lines"
	total transmission expense	717,319	0	433,802	69,098	0	0	54,919	0	159,500	balance
distribution expense											
	operation labor	0	0	0	0	0	0	0	0	0	as "total T&D"
	operating supply & expense	77,015	0	60,132	7,741	0	888	8,254	0	0	as "total T&D"
	maint of reservoirs	19,406	0	16,495	0	0	0	2,911	0	0	as "reservoirs"
	maint of distribution mains	76,868	0	38,434	21,414	0	0	17,020	0	0	as "distribution mains"
	maint of services	0	0	0	0	0	0	0	0	0	100% WCMS
	maint of meters	27,321	0	0	0	0	27,321	0	0	0	100% WCMS
	maint of hydrants	26,206	0	0	0	0	0	26,206	0	0	100% PFP
	other maintenance	19,528	11,397	7,694	201	0	23	214	0	0	as factor ST&D
	total distribution expense	246,344	11,397	122,755	29,355	0	28,232	54,605	0	0	balance

City of Danville
 Functionalization and Allocation of Expenses (based on Test Year 2013 with Pro Forma Adjustments)

acct no	account description	total expenses	commodity (COMM)	capacity (CAP)	weighted customer					direct assign (DA)	basis of classification
					actual customer (AC)	customer accounting (WCA)	meters and services (WCMS)	public fire (PFP)	revenue related (RR)		
customer accounting											
	meter reading	31,670	0	0	0	31,670	0	0	0	0	100% WCA
	accounting & collection	246,044	0	0	24,604	221,440	0	0	0	0	90% WCA; 10% AC
	uncollectable accounts	34,681	0	0	34,681	0	0	0	0	0	100% AC
	total customer accounts	312,395	0	0	59,285	253,110	0	0	0	0	balance
	total operation & maintenance and customer accounts expense	3,181,666	1,641,063	832,499	157,739	253,110	28,232	109,524	0	159,500	balance
	maintenance and customer	100.0%	54.3%	27.5%	5.2%	8.4%	0.9%	3.6%	0.0%	0.0%	factor "O&M"
admin & general expenses											
	admin and general salaries	57,787	31,379	15,918	3,016	4,840	540	2,094	0	0	as factor O&M
	office supplies expense	60,777	33,002	16,742	3,172	5,090	568	2,203	0	0	as factor O&M
	outside services	74,373	40,385	20,487	3,882	6,229	695	2,695	0	0	as factor O&M
	property insurance	83,591	51,229	30,732	712	95	85	738	0	0	as factor rate base
	employee benefits	0	0	0	0	0	0	0	0	0	as factor O&M
	misc general expense	24,916	13,530	6,863	1,300	2,087	233	903	0	0	as factor O&M
	total admin & general expense	301,444	163,687	83,037	15,734	25,246	2,816	10,924	0	0	balance
	total all operating expense	3,483,110	1,804,750	915,536	173,472	278,356	31,048	120,449	0	159,500	balance
taxes											
	state and local taxes	62,382	0	0	0	0	0	0	62,382	0	100% RR
	Social Security	53,288	28,936	14,679	2,781	4,463	498	1,931	0	0	as factor O&M
	Kentucky River Authority	41,417	41,417	0	0	0	0	0	0	0	100% COMM (cla)
	total taxes and fees	157,087	70,353	14,679	2,781	4,463	498	1,931	62,382	0	balance
debt service											
	principal expense	678,154	378,270	255,382	6,655	0	763	7,097	0	29,987	as total plant in service
	interest expense	722,666	415,219	280,327	7,305	0	838	7,790	0	11,187	as total plant in service

City of Danville
 Functional Utility and Allocation of Expenses (based on Test Year 2013 with Pro Forma Adjustments)

acct no	account description	total expenses	commodity (COMM)	capacity (CAP)	actual customer (AC)	weighted customer			revenue related (RR)	direct assign (DA)	basis of classification
						customer accounting (WCA)	meters and services (WCMS)	public fire (PFP)			
	total debt service	1,400,820	793,489	535,709	13,951	0	1,601	14,886	0	41,174	balance
		0	0	0	0	0	0	0	0	0	as distribution
	total revenue requirement	6,082,393	3,269,565	1,853,701	198,494	282,819	34,082	146,061	62,382	235,290	balance

City of Danville
 Functionalization and Allocation of Expenses (based on Total Year 2013 with Pro Forma Adjustments)

acct no	account description	total expenses	commodity (COMM)	capacity (CAP)	actual customer (AC)	weighted customer			revenue related (RR)	direct assign (DA)	basis of classification
						customer accounting (WCA)	meters and services (WCMS)	public fire (PFP)			
	less miscellaneous revenues										
	other operating	(62,000)	(27,880)						(54,120)		66% RR/34% COMM
	non-operating	(328,557)	(201,355)	(120,794)	(7,890)	(372)	(336)	(2,900)	0	0	as rate base
	miscellaneous	(2,750)			(2,750)						
	jobbing - net										
	total miscellaneous revenues	(413,307)	(329,235)	(120,794)	(5,550)	(372)	(336)	(2,900)	(54,120)	0	balance
	total net revenue requirements	5,669,086	3,040,330	1,732,906	192,944	282,447	33,746	143,161	8,262	235,290	balance

City of Junctionville
 Cost of Service/Rate Study
 Distribution Factors
 Water - COMM-1

Commodity Distribution Factor				
Customer Class	Metered Water Sales (CCF)	Plus % Losses	Total CCF at the Source	% of Total
Owner Residential/Commercial	894,344	15.6%	1,033,861	44.500%
Non-Owner Residential/Commercial	291,694	15.6%	337,198	14.514%
Owner Industrial	65,049	15.6%	75,197	3.237%
Non-Owner Industrial	44,731	15.6%	51,709	2.226%
Perryville	70,066	15.6%	80,996	3.486%
Junction City	76,543	15.6%	88,484	3.809%
Wholesale-Parksville	148,103	10.0%	162,913	7.012%
Wholesale-Hustonville	159,370	10.0%	175,307	7.546%
Wholesale-GCWA	111,801	10.0%	122,981	5.293%
Wholesale-LVWA	176,952	10.0%	194,647	8.378%
Total	2,038,652		2,323,293	100%
DISTRIBUTION FACTOR			(COMM-1)	

City of Danville
 Cost of Service/Rate Study
 Distribution Factors
 Water - CAP-1

Capacity Distribution Factor					
Customer Class	Total CCF at the Source	Ave Day Use in MGD	Peaking Factor	Peak Day Use (MGD)	% of Total
Owner Residential/Commercial	1,033,861	2.12	2.50	5.297	50.403%
Non-Owner Residential/Commercial	337,198	0.69	2.50	1.728	16.439%
Owner Industrial	75,197	0.15	2.00	0.308	2.933%
Non-Owner Industrial	51,709	0.11	2.00	0.212	2.017%
Perryville	80,996	0.17	2.25	0.373	3.554%
Junction City	88,484	0.18	2.25	0.408	3.882%
Wholesale-Parksville	162,913	0.33	2.00	0.668	6.354%
Wholesale-Hustonville	175,307	0.36	1.50	0.539	5.128%
Wholesale-GCWA	122,981	0.25	1.50	0.378	3.597%
Wholesale-LVWA	194,647	0.40	1.50	0.598	5.694%
Total	2,323,293			10.509	100%
DISTRIBUTION FACTOR				(CAP-1)	

City of Danville
 Cost of Service/Rate Study
 Distribution Factors
 Water - CUST-X

Customer Distribution Factors								
Customer Class	Ave Number of Customers	% of Total	Customer Accounting Weighting Factor	Customers Weighted for Customer Accounting	% of Total	Meters and Services Weighting Factor	Weighted Customer	% of Total
Owner Residential/Commercial	5,835	55.324%	1.0	5,835	33.967%	\$200	\$1,167,000	48.603%
Non-Owner Residential/Commercial	1,845	17.493%	1.5	2,768	16.110%	\$250	\$461,250	19.210%
Owner Industrial	16	0.152%	2.0	32	0.186%	\$1,200	\$19,200	0.800%
Non-Owner Industrial	2	0.019%	2.5	5	0.029%	\$1,200	\$2,400	0.100%
Perryville	1,390	13.179%	3.0	4,170	24.275%	\$250	\$347,500	14.473%
Junction City	1,455	13.795%	3.0	4,365	25.410%	\$250	\$363,750	15.149%
Wholesale-Parksville	1	0.009%	1.0	1	0.006%	\$8,000	\$8,000	0.333%
Wholesale-Hustonville	1	0.009%	1.0	1	0.006%	\$16,000	\$16,000	0.666%
Wholesale-GCWA	1	0.009%	1.0	1	0.006%	\$8,000	\$8,000	0.333%
Wholesale-LVWA	1	0.009%	1.0	1	0.006%	\$8,000	\$8,000	0.333%
Total	10,547	100%		17,179	100%		2,401,100	100%
DISTRIBUTION FACTOR		(CUST-1)		(CUST-2)			(CUST-3)	

City of Danville
 Cost of Service/Rate Study
 Distribution Factors
 Water - PFP-1

Public Fire Distribution Factor					
Customer Class	Number of Units	Public Fire Protection Requirements (GPM)	Duration (mins)	Total Fire Protection Requirement (MG)	% of Total
Owner Residential/Commercial	5,835	1000	60	350.100	52.663%
Non-Owner Residential/Commercial	1,845	1000	60	110.700	16.652%
Owner Industrial	16	5000	240	19.200	2.888%
Non-Owner Industrial	2	5000	240	2.400	0.361%
Perryville	1,390	1000	60	83.400	12.545%
Junction City	1,455	1000	60	87.300	13.132%
Wholesale-Parksville	1,584	250	12	4.752	0.715%
Wholesale-Hustonville	1,850	250	15	6.938	1.044%
Wholesale-GCWA	5,397	1000	0	0.000	0.000%
Wholesale-LVWA	2,302	1000	0	0.000	0.000%
Total	21,676			664.790	100%
DISTRIBUTION FACTOR				(PFP-1)	

City of Danville
 Cost of Service/Rate Study
 Distribution Factors
 Water - REV-1

Revenue Related Distribution Factor		
Customer Class	Revenues at Present Rates	% of Total
Owner Residential/Commercial	\$1,650,649	36.668%
Non-Owner Residential/Commercial	\$742,834	16.502%
Owner Industrial	\$236,983	5.264%
Non-Owner Industrial	\$259,043	5.755%
Perryville	\$397,350	8.827%
Junction City	\$486,250	10.802%
Wholesale-Parksville	\$175,634	3.902%
Wholesale-Hustonville	\$198,372	4.407%
Wholesale-GCWA	\$137,958	3.065%
Wholesale-LVWA	\$216,480	4.809%
Total	\$4,501,553	100%
REVENUE RELATED DISTRIBUTION FACTOR		(REV-1)

City of Danville
 Cost of Service/Rate Study
 Allocation Factors
 Water - distr main analysis

Distribution Main Analysis			
Pipe Size (in)	Linear Feet	Installed Cost (\$/LF)	Replacement Cost (\$)
2	46,144	8.00	\$ 369,152
3	34,678	12.00	\$ 416,136
4	100,053	16.00	\$ 1,600,848
6	484,551	25.00	\$ 12,113,775
8	54,271	35.00	\$ 1,899,485
10	8,991	45.00	\$ 404,595
12	131,754	60.00	\$ 7,905,240
Totals	860,442		\$ 24,709,231

Customer % = 860,442 X \$8.00 = \$ 6,883,536
 divided by \$ 24,709,231 gives 28%
 Customer Component

Add cost of 2 inch through 6 inch pipe \$ 14,499,911
 Equivalent for 8 inch through 12 inch

Add	54,271	8,991	131,754
		multiplied by \$	25
Add \$	(6,883,536)	\$ 14,499,911	\$ 4,875,400
		gives \$	12,491,775
		divided by \$	24,709,231
			50%

Capacity Component

100% minus 28% 50%
 22%
 Fire Protection Component

City of Danville
Distribution of Rate Base (based on Test Year 2013 with Pro Forma Adjustments)

Distribution of Costs												
Cost Component	Total	Residential/Commercial		Industrial		Perryville	Junction City	Non-Owner Wholesale				Basis of Distribution
		Owner	Non-Owner	Owner	Non-Owner			Parksville	Hustonville	GCWA	LVWA	
commodity (COMM)	18,773,135	8,354,012	2,724,696	607,619	417,832	654,483	714,983	1,316,403	1,416,549	993,735	1,572,823	COMM-1
capacity (CAP)	11,274,603	5,682,690	1,853,433	330,659	227,379	400,682	437,721	716,370	578,152	405,584	641,933	CAP-1
actual customer (AC)	263,498	145,777	46,094	400	50	34,727	36,351	25	25	25	25	CUST-1
customer accounting (WCA)	38,342	13,024	6,177	71	11	9,307	9,743	3	3	2	2	CUST-2
meters and services (WCMS)	31,708	15,411	6,091	254	32	4,589	4,804	106	211	106	106	CUST-3
public fire (PFP)	272,079	143,286	45,306	7,858	982	34,133	35,729	1,945	2,839	0	0	PFP-1
revenue related (RR)	0	0	0	0	0	0	0	0	0	0	0	RR-1
direct assign (DA)	1,991,533	0	0	150,728	150,728	704,979	586,693	191,016	207,389	0	0	direct assignment
Total (Plant In Service) Rate Base	32,644,897	14,354,199	4,681,797	1,097,589	797,014	1,842,900	1,826,023	2,225,868	2,205,169	1,399,452	2,214,888	

City of Danville
Distribution of Expenses (based on Test Year 2013 with Pro-Rata Adjustments)

Distribution of Costs												
Cost Component	Total	Residential/Commercial		Industrial		Perryville	Junction City	Non-Owner Wholesale				Basis of Distribution
		Owner	Non-Owner	Owner	Non-Owner			Parksville	Hustonville	GCWA	LVWA	
commodity (COMM)	3,040,330	1,352,941	441,267	98,405	67,668	105,994	115,792	213,193	229,412	160,937	254,720	COMM-1
capacity (CAP)	1,732,906	873,429	284,873	50,822	34,948	61,585	67,278	110,106	88,862	62,338	98,665	CAP-1
actual customer (AC)	192,944	106,744	33,752	293	37	25,428	26,617	18	18	18	18	CUST-1
customer accounting (WCA)	282,447	95,938	45,503	526	82	68,563	71,769	16	16	16	16	CUST-2
meters and services (WCMS)	33,746	16,402	6,483	270	34	4,884	5,112	112	225	112	112	CUST-3
public fire (PFP)	143,161	75,393	23,839	4,135	517	17,960	18,800	1,023	1,494	0	0	PFP-1
revenue related (RR)	8,262	3,030	1,363	435	475	729	892	322	364	253	397	RR-1
direct assign (DA)	235,290	0	0	3,015	3,015	118,365	94,589	7,818	8,488	0	0	direct assignment
Total Expenses	5,669,086	2,523,877	837,080	157,901	106,777	403,508	400,849	332,609	328,879	223,675	353,930	balance

City of Camden

Annotation of Direct Assignments for Rate Base (based on Test Year 2015 with Piggy Back Adjustments)

Annotation of Direct Assignments for Rate Base												
Direct Assignment	Total	Residential/Commercial		Industrial		Perryville	Junction City	Non-Owner Wholesale				Basis of Distribution
		Owner	Non-Owner	Owner	Non-Owner			Parkville	Hustonville	GCWA	LVWA	
transmission lines	638,477			77,050	77,050	264,367	220,010					
water tower	1,778,957			152,972	152,972	352,489	293,347	396,592	430,586			
distribution lines	484,377					264,367	220,010					
accumulated depreciation	(910,279)			(79,294)	(79,294)	(176,244)	(146,674)	(205,576)	(223,197)			
				9%	9%	19%	16%	23%	25%			
Total of Direct Assign for Rate Base	1,991,532	0	0	150,728	150,728	704,979	586,693	191,016	207,389	0	0	error

City of Danville
 Annotation of Direct Assignments Expenses (based on Total Year 2013 with Pro Rata Adjustments)

Annotation of Direct Assignments for Expenses												
Direct Assignment	Total	Residential/Commercial		Industrial		Perryville	Junction City	Non-Owner Wholesale				Basis of Distribution
		Owner	Non-Owner	Owner	Non-Owner			Parkville	Hustonville	GCWA	LVWA	
existing debt service - principal	29,987					7,140	22,847					
existing debt service - interest	11,187					5,023	6,164					
maintenance of reservoirs	0					0	0					
employee salary & benefits DA to P	99,500					99,500						
employee salary & benefits DA to JC	60,000						60,000					
Total of Direct Assign Expenses	235,290	0	0	3,015	3,015	118,365	94,589	7,818	8,488	0	0	

City of Clark
 Summary based on FY 2015 revised 10/1/2015 - Super Resolution - Proposed Budget

Line No.	Description	Total	Residential/Commercial		Industrial		Perryville	Junction City	Parkville	Non-Owner Wholesale			Notes
			Owner	Non-Owner	Owner	Non-Owner				Hustonville	GCWA	LVWA	
1	revenues at present rates	4,501,553	1,650,649	742,834	236,983	259,043	397,350	486,250	175,634	198,372	137,958	216,480	last rate incr other than COLA was FY12
2	allocated revenue requirement	5,659,086	2,523,877	837,080	157,901	106,777	403,508	400,849	332,609	328,879	223,675	353,930	
3	net income	(1,157,533)	(873,228)	(94,246)	79,082	152,266	(6,158)	85,400	(156,975)	(130,507)	(85,717)	(137,450)	
4	rate base	32,644,897	14,354,199	4,681,797	1,097,589	797,014	1,842,899	1,826,023	2,225,867	2,205,169	1,399,452	2,214,888	
5	present return on rate base	-3.6%	-6.1%	-2.0%	7.2%	19.1%	-0.3%	4.7%	-7.1%	-5.9%	-6.1%	-6.2%	
6	proposed rate of return	1.5%	1.0%	2.0%	1.0%	2.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	see below for explanation of varying rates
7	proposed return component	502,365	143,542	93,636	10,976	19,925	36,858	36,520	44,517	44,103	27,989	44,298	
8	proposed rate revenues	6,171,451	2,667,419	930,716	168,877	126,702	440,366	437,370	377,127	372,982	251,664	398,228	
9	balance (deficiency) of funds	(1,669,899)	(1,016,770)	(187,882)	68,106	132,341	(43,016)	48,880	(201,493)	(174,610)	(113,706)	(181,748)	
10	Δ over present rates	-37.1%	-62%	-25%	29%	51%	-11%	10%	-115%	-88%	-82%	-84%	
11	surplus		0	0	68,106	132,341	0	48,880	0	0	0	0	
12	redistribute by CAP-1		125,667	40,987	7,312	5,028	8,861	9,680	15,842	12,785	8,969	14,196	
13	surplus		0	0	7,312	5,028	0	9,680	0	0	0	0	
14	redistribute by CAP-1		11,099	3,620	646	444	783	855	1,399	1,129	792	1,254	
15	surplus		0	0	646	444	0	855	0	0	0	0	
16	redistribute by CAP-1		980	320	57	39	69	76	124	100	70	111	
17	total redistribution adjusted balance		137,746	44,927	-68,049	-132,302	9,712	-48,804	17,365	14,014	9,831	15,560	
18	(deficiency) of funds	(1,669,899)	(879,024)	(142,955)	57	39	(33,304)	76	(184,128)	(160,596)	(103,875)	(166,188)	
19	Δ over present rates	-37.1%	-53.3%	-19.2%	0.0%	0.0%	-8.4%	0.0%	-104.8%	-81.0%	-75.3%	-76.8%	

City of Danville
Average Unit Costs based on FY 2011 with the Various Adjustments (Units Cost)

Cost Component	Total	Residential/Commercial		Industrial		Perryville	Junction City	Parksville	Non-Owner Wholesale			Source
		Owner	Non-Owner	Owner	Non-Owner				Hustonville	GCWA	LVWA	
Allocated Commodity Costs	3,040,330	1,352,941	441,267	98,405	67,668	105,994	115,792	213,193	229,412	160,937	254,720	
Commodity Costs - \$/CCF	\$1.49	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.44	\$1.44	\$1.44	\$1.44	
Allocated Capacity Costs	1,732,906	873,429	284,873	50,822	34,948	61,585	67,278	110,106	88,862	62,338	98,665	
Capacity Costs - \$/CCF	\$0.85	\$0.98	\$0.98	\$0.78	\$0.78	\$0.88	\$0.88	\$0.74	\$0.56	\$0.56	\$0.56	
Allocated Pub Fire Pro Costs	143,161	75,393	23,839	4,135	517	17,960	18,800	1,023	1,494	-	-	
Pub Fire Pro Costs - \$/CCF	\$0.07	\$0.08	\$0.08	\$0.06	\$0.01	\$0.26	\$0.25	\$0.01	\$0.01	\$0.00	\$0.00	
Allocated Rev & DA Costs	243,552	3,030	1,363	3,450	3,491	119,094	95,481	8,140	8,852	253	397	
Rev & DA Costs - \$/CCF	\$0.12	\$0.00	\$0.00	\$0.05	\$0.08	\$1.70	\$1.25	\$0.05	\$0.06	\$0.00	\$0.00	
Allocated Return Component	502,365	143,542	93,636	10,976	19,925	36,858	36,520	44,517	44,103	27,989	44,298	
Return Component Costs - \$/CCF	\$0.25	\$0.16	\$0.32	\$0.17	\$0.45	\$0.53	\$0.48	\$0.30	\$0.28	\$0.25	\$0.25	
Allocated Customer Costs	509,137	219,084	85,737	1,089	153	98,875	103,499	147	260	147	147	
Customer Costs - \$/Cust/Mn	\$4.02	\$3.13	\$3.87	\$5.67	\$6.36	\$5.93	\$5.93	\$12.26	\$21.63	\$12.26	\$12.26	
Total Cost - \$/CCF	\$2.78	\$2.74	\$2.90	\$2.58	\$2.83	\$4.87	\$4.36	\$2.55	\$2.34	\$2.25	\$2.25	
Basic Data:												
Annual Water Flow CCF	2,038,652	894,344	291,694	65,049	44,731	70,066	76,543	148,103	159,370	111,801	176,952	
Number of Customers	10547	5835	1845	16	2	1390	1455	1	1	1	1	

City of Darville
Average Unit Costs based on FY 2013 with Pro Forma Adjustments (galons)

Cost Component	Total	Residential/Commercial		Industrial		Perryville	Junction City	Parksville	Non-Owner Wholesale			Source
		Owner	Non-Owner	Owner	Non-Owner				Hustonville	GCWA	LVWA	
Allocated Commodity Costs	3,040,330	1,352,941	441,267	98,405	67,668	105,994	115,792	213,193	229,412	160,937	254,720	
Commodity Costs - \$/1000 gal	\$1.99	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$1.92	\$1.92	\$1.92	\$1.92	
Allocated Capacity Costs	1,732,906	873,429	284,873	50,822	34,948	61,585	67,278	110,106	88,862	62,338	98,665	
Capacity Costs - \$/1000 gal	\$1.14	\$1.31	\$1.31	\$1.04	\$1.04	\$1.18	\$1.18	\$0.99	\$0.75	\$0.75	\$0.75	
Allocated Pub Fire Pro Costs	143,161	75,393	23,839	4,135	517	17,960	18,800	1,023	1,494	-	-	
Pub Fire Pro Costs - \$/1000 gal	\$0.09	\$0.11	\$0.11	\$0.08	\$0.02	\$0.34	\$0.33	\$0.01	\$0.01	\$0.00	\$0.00	
Allocated Rev & DA Costs	243,552	3,030	1,363	3,450	3,491	119,094	95,481	8,140	8,852	253	397	
Rev & DA Costs - \$/1000 gal	\$0.16	\$0.00	\$0.01	\$0.07	\$0.10	\$2.27	\$1.87	\$0.07	\$0.07	\$0.00	\$0.00	
Allocated Return Component	502,365	143,542	93,636	10,976	19,925	36,858	36,520	44,517	44,103	27,989	44,298	
Return Comp Costs - \$/1000 gal	\$0.33	\$0.21	\$0.43	\$0.23	\$0.60	\$0.70	\$0.64	\$0.40	\$0.37	\$0.33	\$0.33	
Allocated Customer Costs	509,137	219,084	85,737	1,089	153	98,875	103,499	147	260	147	147	
Customer Costs - \$/Cust/Mn	\$4.02	\$3.13	\$3.87	\$5.67	\$6.36	\$5.93	\$5.93	\$12.26	\$21.63	\$12.26	\$12.26	
Total Cost - \$/1000 gal	\$3.71	\$3.66	\$3.87	\$3.45	\$3.78	\$6.52	\$5.83	\$3.40	\$3.13	\$3.01	\$3.01	
Basic Data:												
Annual Water Flow 1000 gal	1,524,912	668,969	218,187	48,657	33,459	52,409	57,254	110,781	119,209	83,627	132,360	
Number of Customers	10547	5835	1845	16	2	1390	1455	1	1	1	1	

City of Danville
Average Unit Costs based on TY 2013 revised Pro Forma Adjustments (Kgallons) with Adjustment
Depreciation substituted

Cost Component	Total	Residential/Commercial		Industrial		Perryville	Junction City	Parksville	Non-Owner Wholesale			Source
		Owner	Non-Owner	Owner	Non-Owner				Houstonville	GCWA	LVWA	
Allocated Commodity Costs	3,040,330	1,352,941	441,267	98,405	67,668	105,994	115,792	213,193	229,412	160,937	254,720	
Commodity Costs - \$/1000 gal	\$1.99	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$2.02	\$1.92	\$1.92	\$1.92	\$1.92	
Allocated Capacity Costs	1,732,906	735,683	239,946	118,871	167,250	51,872	116,082	92,742	74,848	52,507	83,105	
Capacity Costs - \$/1000 gal	\$1.14	\$1.10	\$1.10	\$2.44	\$5.00	\$0.99	\$2.03	\$0.84	\$0.63	\$0.63	\$0.63	
Allocated Pub Fire Pro Costs	143,161	75,393	23,839	4,135	517	17,960	18,800	1,023	1,494	-	-	
Pub Fire Pro Costs - \$/1000 gal	\$0.09	\$0.11	\$0.11	\$0.08	\$0.02	\$0.34	\$0.33	\$0.01	\$0.01	\$0.00	\$0.00	
Allocated Rev & DA Costs	243,552	3,030	1,363	3,450	3,491	119,094	95,481	8,140	8,852	253	397	
Rev & DA Costs - \$/1000 gal	\$0.16	\$0.00	\$0.01	\$0.07	\$0.10	\$2.27	\$1.67	\$0.07	\$0.07	\$0.00	\$0.00	
Allocated Return Component	502,365	143,542	93,636	10,976	19,925	36,858	36,520	44,517	44,103	27,989	44,298	
Return Comp Costs - \$/1000 gal	\$0.33	\$0.21	\$0.43	\$0.23	\$0.60	\$0.70	\$0.64	\$0.40	\$0.37	\$0.33	\$0.33	
Allocated Customer Costs	509,137	219,084	85,737	1,089	153	98,875	103,499	147	260	147	147	
Customer Costs - \$/Cust/Mn	\$4.02	\$3.13	\$3.87	\$5.67	\$6.36	\$5.93	\$5.93	\$12.26	\$21.63	\$12.26	\$12.26	
Total Cost - \$/1000 gal	\$3.71	\$3.45	\$3.67	\$4.85	\$7.74	\$6.33	\$6.68	\$3.25	\$3.01	\$2.89	\$2.89	
Basic Data:												
Annual Water Flow 1000 gal	1,524,912	668,969	218,187	48,657	33,459	52,409	57,254	110,781	119,209	83,627	132,360	
Number of Customers	10547	5835	1845	16	2	1390	1455	1	1	1	1	

City of Danville
Average Unit Costs based on TY 2013 with Pro Forma Adjustments (100 cubic ft) with Adjustment

Cost Component	Total	Residential/Commercial		Industrial		Perryville	Junction City	Parksville	Non-Owner Wholesale			Source
		Owner	Non-Owner	Owner	Non-Owner				Hustonville	GCWA	LVWA	
Allocated Commodity Costs	3,040,330	1,352,941	441,267	98,405	67,668	105,994	115,792	213,193	229,412	160,937	254,720	
Commodity Costs - \$/CCF	\$1.49	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.51	\$1.44	\$1.44	\$1.44	\$1.44	
Allocated Capacity Costs	1,732,906	735,683	239,946	118,871	167,250	51,872	116,082	92,742	74,848	52,507	83,105	
Capacity Costs - \$/CCF	\$0.85	\$0.82	\$0.82	\$1.83	\$3.74	\$0.74	\$1.52	\$0.63	\$0.47	\$0.47	\$0.47	
Allocated Pub Fire Pro Costs	143,161	75,393	23,839	4,135	517	17,960	18,800	1,023	1,494	-	-	
Pub Fire Pro Costs - \$/CCF	\$0.07	\$0.08	\$0.08	\$0.06	\$0.01	\$0.26	\$0.25	\$0.01	\$0.01	\$0.00	\$0.00	
Allocated Rev & DA Costs	243,552	3,030	1,363	3,450	3,491	119,094	95,481	8,140	8,852	253	397	
Rev & DA Costs - \$/CCF	\$0.12	\$0.00	\$0.00	\$0.05	\$0.08	\$1.70	\$1.25	\$0.05	\$0.06	\$0.00	\$0.00	
Allocated Return Component	502,365	143,542	93,636	10,976	19,925	36,858	36,520	44,517	44,103	27,989	44,298	
Return Component Costs - \$/CCF	\$0.25	\$0.16	\$0.32	\$0.17	\$0.45	\$0.53	\$0.48	\$0.30	\$0.28	\$0.25	\$0.25	
Allocated Customer Costs	509,137	219,084	85,737	1,089	153	98,875	103,499	147	260	147	147	
Customer Costs - \$/Cust/Mn	\$4.02	\$3.13	\$3.87	\$5.67	\$6.36	\$5.93	\$5.93	\$12.26	\$21.63	\$12.26	\$12.26	
Total Cost - \$/CCF	\$2.78	\$2.58	\$2.74	\$3.63	\$5.79	\$4.74	\$5.00	\$2.428	\$2.251	\$2.162	\$2.162	
Basic Data:												
Annual Water Flow CCF	2,038,652	894,344	291,694	65,049	44,731	70,066	76,543	148,103	159,370	111,801	176,952	
Number of Customers	10547	5835	1845	16	2	1390	1455	1	1	1	1	