

KING COUNTY

1200 King County Courthouse 516 Third Avenue Seattle, WA 98104

Signature Report

March 4, 2003

Ordinance 14582

Proposed No. 2003-0019.2 Sponsors Lambert 1 AN ORDINANCE authorizing the executive to enter into 2 an agreement with the city of Carnation for disposal of 3 sewage. 4 5 6 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY: 7 SECTION 1. The executive or the executive's designee is hereby authorized to 8 enter into an agreement with the city of Carnation, substantially in the form of 9 Attachment A to this ordinance, for treatment and disposal of sewage. 10 In making final siting and design decisions under Section 3 of the agreement, the 11 executive shall consider approaches for minimizing the risks of flood damage to the 12 treatment facilities, discharges of untreated sewage into flood waters and flooding 13 impacts to neighboring properties. Options for minimizing the risk of flood damages 14 could include flood proofing, alternative siting and development of emergency operation 15 procedures during flood events. 16 The executive shall consider the following factors when making a determination

of timing for award of construction contracts under Section 4 of the agreement:

19

20

21

22

23

24

readiness of the city to issue bonds to cover the first phase of construction of the local collection system; number of customers likely to be ready for connection upon completion of sewage treatment facility construction; revised projections for annual debt service and operating costs based on more detailed design of the sewage treatment facilities; and adequacy of projected revenues to support debt service and operation of the treatment facilities.

Ordinance 14582 was introduced on 1/27/2003 and passed by the Metropolitan King County Council on 3/3/2003, by the following vote:

Yes: 13 - Ms. Sullivan, Ms. Edmonds, Mr. von Reichbauer, Ms. Lambert, Mr. Phillips, Mr. Pelz, Mr. McKenna, Mr. Constantine, Mr. Pullen, Mr. Gossett, Ms. Hague, Mr. Irons and Ms. Patterson

No: 0

Excused: 0

KING COUNTY COUNCIL KING COUNTY, WASHINGTON

Inthia Sullivan, Chair

ATTEST:

Anne Noris, Clerk of the Council

APPROVED this 13 day of Much, 2003.

Ron Sims County Executive

Attachments

A. King County/City of Carnation Agreement for Sewage Disposal

Attachment A

File062702

KING COUNTY

CITY OF CARNATION

AGREEMENT FOR SEWAGE DISPOSAL

THIS AGREEMENT, made as of this	day of	2002,
between the CITY OF CARNATION, a municipal of	corporation of the State	of Washington,
hereinafter referred to as the "City", and KING CO	UNTY, a political subdi	vision of the State of
Washington, hereinafter referred to as "the County"	•	

WITNESSETH:

WHEREAS, the public health, welfare and safety of the residents of the City and the residents of the County require the development of adequate systems of sewage collection and disposal, the elimination of water pollution and the preservation of the fresh and salt water resources of the area; and

WHEREAS, growth of population, topographic conditions and preservation of water resources require that certain sewage disposal works be constructed and operated and that the cities and special districts within the Metropolitan Area dispose of their sewage in accordance with a comprehensive plan for the Metropolitan Area; and

WHEREAS, the County is engaged in developing and operating a Metropolitan Sewage Disposal System and the City is engaged in developing a sewage collection system for the City; and

WHEREAS, the City desires to deliver certain sewage collected by the City to the County for disposal as soon as facilities necessary for such delivery are available; and,

WHEREAS, preliminary planning and engineering information indicates that construction of a wastewater treatment plant in the City would be the preferable alternative for the County's treatment and disposal of sewage delivered by the City; and

WHEREAS, the parties are interested in evaluating any possibilities for the reuse of wastewater that may be associated with locating said plant in the City; and

WHEREAS, to provide for the disposal by the County of sewage collected by the City it is necessary that an agreement be now entered into establishing certain rights and duties of the parties incident thereto;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, it is hereby agreed as follows:

Section 1. <u>Definition of Terms</u>: The following words and phrases used in this agreement shall have the meanings hereinafter set fourth in this section.

- (a) The words "Comprehensive Plan" shall mean the Comprehensive Sewage

 Disposal Plan adopted in Resolution No. 23 of the Municipality of Metropolitan Seattle and all

 amendments thereof or hereafter adopted.
- (b) The words "Metropolitan Sewerage System" shall mean all of the facilities to be constructed, acquired or used by the County as a part of the Comprehensive Plan. The Metropolitan Sewerage System shall generally include sewage disposal facilities with capacity to receive sewage from natural drainage areas of approximately one thousand acres or more. The Metropolitan Sewerage System shall thus include trunk or interceptor sewers extending to a point within each tributary and natural drainage area where not more than one thousand acres remain to be served beyond the upper terminus of such trunk and interceptor sewer.

- (c) The words "Local Sewerage Facilities" shall mean all facilities owned or operated by a Participant for the local collection of sewage to be delivered to the Metropolitan Sewerage System and all side sewers and connection fittings connected directly to such System which serve customers of such Participant.
- (d) The words "Metropolitan Area" shall mean the area contained within the boundaries of King County as now or hereafter constituted.
- (e) the word "Participant" shall mean each city, town, county, sewer district, municipal corporation, person, firm or private corporation which shall dispose of any portion of its sanitary sewage into the Metropolitan Sewerage System and shall have entered into an agreement with the County providing for such disposal.
- (f) The word "Residential Customer" shall mean a single family residence billed by a Participant for sewerage charges.

Section 2. Delivery and Acceptance of Sewage. The City shall deliver to the County all of the sewage and industrial waste collected by the City and the County shall accept the sewage and waste delivered for treatment and disposal as hereinafter provided subject to such reasonable rules and regulations as may be adopted from time to time by the King County Council. The County shall not directly accept sewage or wastes from any person, firm or corporation which is located within the boundaries of or is delivering its sewage into the Local Sewerage Facilities of the City without the written consent of the City. The City shall not deliver sewage to any other agency for disposal without the written consent of the County.

Section 3. Construction of County Facilities. The County shall construct, acquire or otherwise secure the right to use all facilities required for the disposal of sewage delivered to the County pursuant to this Agreement and shall perform all services required for the maintenance,

operation, repair, replacement or improvement of the Metropolitan Sewerage System, including any additions or betterments thereto. The County shall in its sole discretion determine the nature, location and time of construction of facilities of the Metropolitan Sewerage System. The County shall, however, make every reasonable effort to construct and place in operation facilities necessary to treat sewage delivered by the City within five years from the date of this agreement and shall make every reasonable effort to achieve the following milestones:

- 1) Completion of final facility plan by March, 2004.
- 2) Completion of 90% design by December, 2004.
- 3) Execution of construction contract by October, 2005.

If opportunities arise during the course of this project that allow the county to compress the schedule described in this section the county will compress it accordingly. The city and the county will meet periodically to review the progress that each party is making towards construction of the facilities described in this Section 3 and Section 4. Through these meetings the county will also keep the city updated as to costs and financing of the county's project.

In the event the county elects to construct the sewage treatment facilities contemplated by this section outside the Carnation city limits or elects to convey Carnation sewage to a treatment facility outside the city, it will provide a written explanation to the city for such election.

The parties acknowledge that construction of these facilities may proceed only upon compliance with applicable environmental and permit requirements.

The city may terminate this agreement at any time prior to execution of a contract for construction of sewage treatment facilities upon sixty days notice and reimbursement of all costs incurred by the county to plan, design and prepare for construction of sewage treatment facilities to serve the city. The city shall not, however, be obligated to reimburse the county for

any costs it incurs prior to the date of this agreement. In the event the city terminates the agreement and reimburses the county as provided in this paragraph, the county shall release to the city all relevant planning, engineering and bid documents (including those in electronic form) prepared from the date of this agreement to the date of termination including any environmental documents, surveys, drawings, permit applications and permits; it being the intent of the parties that the city shall then receive the work products for which it will have paid.

Section 4. Connection of Local Sewerage Facilities to the Metropolitan Sewerage System. Local Sewerage Facilities of the City which may be required for the delivery of sewage and wastes to the County shall be connected to facilities of the Metropolitan Sewerage System at such time as any of the facilities of such Metropolitan Sewerage System shall be available to receive sewage collected by such local facilities. Such connection shall be accomplished at the expense of the City and in accordance with the rules and regulations of the County at such point or points as shall be determined by the County in consultation with the city. The City shall make every reasonable effort to construct local sewage facilities and connect them to the metropolitan sewerage system in the manner and at the time described in this section. The city shall not, however, be required to construct any local sewage facilities outside of the city. If the county elects to treat Carnation sewage outside of the city, it shall provide a point or points of connection for local sewage facilities within the city and shall construct, own and operate whatever sewage conveyance facilities are necessary to deliver Carnation sewage from said point or points to the treatment facility. The costs of constructing said conveyance facilities would then, for purposes of this agreement, be included in the capital cost of constructing wastewater treatment facilities to serve the city.

The county may, at its option, delay its award of a construction contract for the sewage treatment facilities described in Section 3 until such time that the city awards a construction contract for local sewage facilities. The City shall secure and pay for the right to use all Local Sewerage Facilities of another Participant which may be required to delivery the City's sewage to the Metropolitan Sewerage System.

Section 5. Payment for Sewage Disposal. Commencing with the first month in which sewage is collected and delivered by the City to the County, the City shall pay to the County on or before the last day of each month during the term of this Agreement, a sewage disposal charge determined as provided in this Section 5.

1. For the quarterly periods ending March 31, June 30, September 30 and December 31 of each year every Participant shall submit a written report to the County setting forth (a) the number of Residential Customers billed by such Participant for local sewerage charges as of the last day of the quarter, (b) the total number of all customers billed by such Participant as of such day, and (c) the total water consumption during such quarter for all customers billed by such Participant other than Residential Customers. The quarterly water consumption report shall be taken from water meter records and may be adjusted to exclude water which does not enter the sanitary facilities of a customer. Where actual sewage flow from an individual customer is metered, the metered sewage flows shall be reported in lieu of adjusted water consumption. The total quarterly water consumption report in cubic feet shall be divided by 2,250 to determine the number of Residential Customer equivalents represented by each Participant's customers other than single family residences. The County shall maintain permanent records of the quarterly customer reports from each Participant.

The City's first quarterly report shall cover the first quarterly period following the date when sewage is first delivered to the County and shall be submitted within thirty days following the end of the quarter. Succeeding reports shall be made for each quarterly period thereafter and shall be submitted within thirty (30) days following the end of the quarter.

- 2. a) To form a basis for determining the monthly sewage disposal charge to be paid by each Participant during any particular quarterly period, the County shall ascertain the number of Residential Customers and Residential Customer equivalents of each Participant. This determination shall be made by taking the sum of the actual number of Residential Customers reported as of the last day of the next to the last preceding quarter and the average number of Residential Customer Equivalents per quarter reported for the four quarters ending with said next to the last preceding quarter, adjusted for each Participant to eliminate any Residential Customers or Residential Customer equivalents whose sewage is delivered to a governmental agency other than the County or other than a Participant for disposal outside of the Metropolitan Area.
- b) For the initial period until the City shall have submitted six consecutive quarterly reports, the basic reported number of Residential Customers and Residential Customer equivalents of the City shall be determined as provided in this subparagraph (b). On or before the tenth day of each month beginning with the month prior to the month in which sewage from the City is first delivered to the County, the City shall submit a written statement of the number of Residential Customers and Residential Customer equivalents estimated to be billed by the City during the next succeeding month. For the purpose of determining the basic reported number of Residential Customers or Residential Customer equivalents of the City for such next succeeding month, the County may at its discretion adopt either such estimate or the actual

number of Residential Customers and Residential Customer equivalents reported by the City as of the last day of the next to the last preceding reported quarter. After the City shall have furnished six consecutive quarterly reports the basic reported number of Residential Customers and Residential Customer equivalents of the City shall be determined as provided in the immediately preceding subparagraph (a).

- c) If the City shall fail to submit the required monthly and/or quarterly reports when due, the County may make its own estimate of the number of Residential Customers and Residential Customer equivalents of the City and such estimate shall constitute the reported number for the purpose of determining sewage disposal charges.
- d) The basic reported number of residential customers and residential customer equivalents of the City shall be further adjusted by adding thereto 65% of said number of residential customers and residential customer equivalents. The sum thus determined is hereafter called the "adjusted reported number". Beginning with the first quarterly report (or written monthly statement) submitted by the City, and continuing each quarter for thirty-five years, the adjusted reported number of residential customers and residential customer equivalents shall be the number reported by the City for the purpose of determining sewage disposal charges pursuant to paragraph 3 of this section.

Not less than one year or more than eighteen months after facilities are constructed by the County for the purpose of providing wastewater treatment service to the City, the County will conduct a review of the additive adjustment described in this subparagraph (d) in the following manner: The capital cost of planning, designing and constructing the wastewater treatment facilities that serve the City shall be calculated and presented to the City along with the original assumptions that formed the basis of this surcharge. Subsequent to said presentation, King

County shall lower the above percentage if said percentage results in disproportionate allocation of metropolitan sewerage system capital costs to the City. In that event, the percentage will be lowered to the level necessary to avoid disproportionate allocation of costs to the city and the lowered percentage would then be employed for the duration of the thirty-five year period. For purposes of facilitating the additive adjustment review provided for in this paragraph, the original assumptions that form the basis of the additive adjustment are attached to this agreement as Appendix A.

The county will attempt to secure grants and low interest loans for the financing of the wastewater treatment facilities mentioned above so that the cost of financing those facilities will be minimized.

- 3. The monthly sewage disposal charge payable to the County shall be determined as follows:
- a) Prior to July 1st of each year the County shall determine its total monetary requirements for the disposal of sewage during the next succeeding calendar year. Such requirements shall include the cost of administration, operation, maintenance, repair and replacement of the Metropolitan Sewerage System, establishment and maintenance of necessary working capital and reserves, the requirements of any resolution providing for the issuance of revenue bonds of the County to finance the acquisition, construction or use of sewerage facilities, plus not to exceed 1% of the foregoing requirements for general administrative overhead costs.
- b) To determine the monthly rate per Residential Customer or Residential Customer equivalent to be used during said next succeeding calendar year, the total monetary requirements for the disposal of sewage as determined in subparagraph 3(a) of this section shall be divided by twelve and the resulting quotient shall be divided by the total number of Residential Customers

and Residential Customer equivalents of all Participants for the October-December quarter proceeding said July 1st.

- c) The monthly sewage disposal charge paid by each Participant to the County shall be obtained by multiplying the monthly rate by the number of Residential Customers and Residential Customer equivalents of the Participant. An additional charge may be made for sewage or wastes of unusual quality or composition requiring special treatment by the County may require pretreatment of such sewage or wastes. An additional charge may be made for quantities of storm or ground waters entering those Local Sewerage Facilities which are constructed after January 1, 1961 in excess of the minimum standard established by the general rules and regulations of the County.
- d) An additional charge may be made to recover unforseen costs to operate and maintain the Metropolitan Sewerage System or meet debt requirements if the county executive declares and the county council by a majority vote finds that the system cannot be adequately maintained, and debt requirements or debt policies met, without such additional charge. The additional charge shall then be effective the first day of the second month following the emergency declaration described in this subparagraph 3.d) and shall be billed and collected in the same manner as the monthly rate referenced in subparagraph 3.c). The additional charge may be incorporated into the next rate setting cycle but will otherwise terminate within twelve months of the date approved. The additional charge described in this subparagraph 3.d) shall not be made until and unless it also conforms to the sewage disposal agreements with all remaining participants.
- 4. The parties acknowledge that the County may impose a charge or charges directly on the future customers of a Participant for purposes of paying for capacity in Metropolitan Sewage

Facilities and that such charges shall not constitute a breach of this agreement or any part thereof. The proceeds of said charge or charges, if imposed, shall be used only for capital expenditures or defeasance of outstanding revenue bonds prior to maturity.

In the event such a charge or charges are imposed, the City shall, at the County's request, provide such information regarding new Residential Customers and Residential Customer equivalents as may be reasonable and appropriate for purposes of implementing such a charge or charges.

- 5. A statement of the amount of the monthly sewage disposal charge shall be submitted by the County to each Participant on or before the first day of each month and payment of such charge shall be due on the last day of such month. If any charge or portion thereof due to the County shall remain unpaid for fifteen days following its due date, the Participant shall be charged with and pay to the County interest on the amount unpaid from its due date until paid at the rate of 6% per annum, and the County may, upon failure to pay such amount, enforce payment by any remedy available at law or equity.
- 6. The City irrevocably obligates and binds itself to pay its sewage disposal charge out of the gross revenues of the sewage system of the City. The City further binds itself to establish, maintain and collect charges for sewer service which will at all times be sufficient to pay all costs of maintenance and operation of the sewer system of the City, including the sewage disposal charge payable to the County hereunder and sufficient to pay the principal of and interest on any revenue bonds of the City which shall constitute a charge upon such gross revenues. It is recognized by the County and the City that the sewage disposal charge paid by the City to the County shall constitute an expense of maintenance and operation of the sewer system of the City. The City shall provide in the issuance of future sewer revenue bonds of the

City that expenses of maintenance and operation of the sewer system of the City shall be paid before payment of principal and interest of such bonds. The City shall have the right to fix its schedule of rates and charges for sewer service provided that same shall produce revenue sufficient to meet the covenants contained in this Agreement.

Section 6. Responsibility of City. The City shall be responsible for the delivery to the Metropolitan Sewerage System of sewage collected by the City, for the construction, maintenance and operation of Local Sewerage Facilities, and for the payment of all costs incident to the collection of such sewage and its delivery to the Metropolitan Sewerage System. All sewerage facilities of the City carrying sewage delivered to the County shall be constructed and maintained in accordance with the rules and regulations of the County and shall be constructed, maintained and operated by the City at no expense or risk to the County.

Section 7. Records. Permanent books and records shall be kept by the County and the City of the respective rates established, the volumes of sewage delivered and discharged into the Metropolitan Sewerage System whenever such volumes are measured and the number of Residential Customers and Residential Customer equivalents reported. In addition the County shall keep complete books of account showing all costs incurred in connection with the Metropolitan Sewerage System and the City shall keep complete records showing the amount billed to each of its customers for sewer service and the basis used for such billing including sewage flow and water consumption for each customer where applicable. The records required by this paragraph shall be available for examination by either party at any reasonable time.

Section 8. Development of Metropolitan Sewerage System. It is contemplated that the Metropolitan Sewerage System will be developed in stages and the nature of facilities to be constructed, acquired or used and the time of such construction, acquisition or use shall be

determined by the County, it being contemplated that the County shall ultimately provide sewage disposal service for the entire Metropolitan Area.

Section 10. Insurance and Liability for Damages. The City shall secure and maintain with responsible insurers all such insurance as is customarily maintained with respect to sewage systems of like character against loss of or damage to the sewerage facilities of the City and against public and other liability to the extent that such insurance can be secured and maintained at reasonable cost. Any liability incurred by the County as a result of the operation of the Metropolitan Sewerage System shall be the sole liability of the County and any liability incurred by the City as a result of the operation of the Local Sewerage Facilities of the City shall be the sole liability of the City.

Section 12. Assignment. The City shall not have the right to assign this Agreement or any of its rights and obligations hereunder either by operation of law or by voluntary agreement without the written consent of the County and neither party may terminate its obligations hereunder by dissolution or otherwise without first securing the written consent of the other party and this Agreement shall be binding upon and inure to the benefit of the respective successors and assigns of the parties hereto. In the event that the City should be dissolved or should no longer be authorized to operate sewer facilities, the Local Sewerage Facilities owned and operated by the City shall be assigned and transferred to the County subject to any outstanding debts of the City which had been incurred for the specific purpose of construction or acquiring such facilities and subject to the acceptance by the County of the obligation to continue to provide sewer service to the residents served by such local facilities upon payment by such residents of sewage disposal charges determined as herein provided and the reasonable costs of local sewer service.

Section 13. Effective Date and Term of Agreement. This Agreement shall be in full force and effect and binding upon the parties hereto upon the execution of the Agreement and shall continue in full force and effect until July 1, 2056.

Section 14. Notice. Whenever in this Agreement notice is required to be given, the same shall be given by registered Mail addressed to the respective parties at the following addresses:

King County 201 S. Jackson St. Seattle, Washington 98104

City of Carnation Post Office Box Carnation, Washington 98

Unless a different address shall be hereafter designated in writing by either of the parties.

The date of giving such notice shall be deemed to be the date of mailing thereof. Billings for and payments of sewage disposal costs may be made by regular mail.

Section 15. Execution of Documents. This Agreement shall be executed in three counterparts, any of which shall be regarded for all purposes as one original. Each party agrees that it will execute any and all deeds, leases, instruments, documents and resolutions or ordinances necessary to give effect to the terms of this Agreement.

Section 16. Waiver. No waiver by either party of any term or condition of this

Agreement shall be deemed or construed as a waiver of any other term or condition, nor shall a

waiver of any breach be deemed to constitute a waiver of any subsequent breach whether of the
same or a different provision of this Agreement.

Section 17. Remedies. In addition to the remedies provide by law, this Agreement shall be specifically enforceable by either party.

Section 18. Entirety. This agreement merges and supersedes all prior negotiations, representations and agreements between the parties hereto relating to the subject matter hereof and constitutes the entire contract between the parties.

Section 19: Future Amendments. The city agrees to amend and hereby concurs in any amendment to this agreement which incorporates any changes in the terms for sewage disposal and payment therefor as may be proposed by the County and agreed to by those Participants that shall represent, in total, not less than 90% of the Residential Customers and Residential Customer Equivalents then served by the Metropolitan Sewerage System.

Section 20. Dispute Resolution. In the event disputes or claims arise over the interpretation, administration or effect of this agreement, either party may refer the matter to a committee composed of King County's Director of the Department of Natural Resources, the Manager of King County's Wastewater Treatment Division, or their respective designees, a member of the Carnation City Council and the City Manager of Carnation. At the request of either party a mediator or other neutral third party agreed upon by the parties to this agreement shall be added to the committee. Any costs incurred by the use of a third party shall be borne equally by the parties. The consideration of the dispute or claim by this committee, in an effort to reach a solution which reflects the best public interest, shall be a prerequisite to any legal action by either party.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

KING COUNTY	CITY OF CARNATION
Ву	By
Pam Bissonnette, Director Department of Natural Resources	

ATTEST:

ATTEST:

Appendix A: Carnation Surcharge Methodology and Assumptions Page 1 of 3

The sections below outline the assumptions and methodology used to calculate the surcharge to be added to the normal monthly sewer charge for Carnation customers. This surcharge is implemented by Section 5.2.d) as an additive adjustment of 65 percent of Carnation's residential customers and residential customer equivalents.

I. General Assumptions

- 1. Treatment Plant costs. Total project cost (excluding financing costs) for construction of the treatment plant is estimated at \$10,600,000 in 2001 dollars. The project is assumed to begin in 2002 and be placed in operation in 2006.
- 2. Capacity charge payments from Carnation customers are credited against treatment plant project costs.
- 3. Monthly sewage disposal charge described in Section 5 is a regional-system revenue and will cover the operations and maintenance costs of the treatment plant.
- 4. Surcharge on the monthly charge is designed to compensate King County for the development and financing costs of the treatment plant that are not covered by capacity charge revenues from Carnation customers.
- 5. Rate, surcharge and capacity charge payments from Carnation customers will not commence until the treatment plant is placed in service. This is currently planned for 2006.
- 6. All Carnation residences and businesses (customers) pay the capacity charge and monthly charges beginning in 2006.

II. General Financial Assumptions

Table 1.0 presents the basic financial assumptions used in the calculation of the monthly surcharge.

Table 1.0 Carnation Financing Assumptions				
Source	Rate	Term	Limit	
King County Sewer Revenue Bonds	5.5%	35 years	N/A	
Public Works Trust Fund Loan 2004	0.5%	20 years	\$10 million per biennium	
Discount Rate	5.5%	N/A	N/A	
Inflation Rate	3.0%	N/A	N/A	
Bond Issuance Costs	2.0%			

III. Public Works Trust Fund Assumptions

The Public Works Trust Fund provides low-interest loans. This surcharge calculation assumes one PWTF loan of \$9.7 million in 2004. Other project costs and the 15 percent local matching are financed through the issuance of King County WTD sewer revenue bonds.

- 1. PWTF loan has a 20 year term.
- 2. PWTF loan has a 0.5 percent interest rate.
- 3. 15 percent local match required.
- 4. First two years of treatment plant project activity are bond funded.
- 5. PWTF loan disbursed in 2004.

Appendix A: Carnation Surcharge Methodology and Assumptions Page 2 of 3

The following presents the components of financing the Carnation Treatment Plant with sewer revenue bonds and a PWTF loan. Table 2.0 presents the total principal financed, the sum of all debt service payments and the present value of all debt service payments.

2002: \$ 779,545 is bond financed resulting in 35 annual payments of \$50, 561. 2003: \$1,261,750 is bond financed resulting in 35 annual payments of \$81,982.

2004: \$9,793,003 is borrowed from PWTF resulting in 20 annual payments of \$515,763.

Table 2.0 Treatment Plant with 2004 PWTF Loan		
Total Financed*	\$11,834,298	
Sum of all Debt Service Payments	\$14,957,409	
Present Value of all Debt Service	\$7,501,254	

^{*} total amount financed is based on project expense, including inflation and bond issuance cost, in the year those costs occur. Total cost financed therefore exceeds the total project cost of \$10.6 million denominated in 2001 dollars.

IV. Surcharge Assumptions and Calculations

- 1. Surcharge rate is calculated as the ratio of:
 - the net present value (NPV) of principal and interest costs incurred by King County 2002-2040 minus the NPV of the capacity charge revenues.
 - to the NPV of sewer rate revenues paid by Carnation customers 2002-2040.
- 2. Surcharge components are:
 - NPV, 2002-2040, principal and interest payments \$7,501,254
 - NPV, 2002-2040, capacity charge revenue \$3,253,499
 - NPV, 2002-2040, rate revenue \$6,583,849

0.65 = (\$7,501,254 - \$3,253,499) / \$6,583,849

The monthly rate and capacity charge forecasts are presented in Table 4.0 on Page 3.

REMAINDER OF THIS PAGE LEFT INTENTIONALLY BLANK.

Appendix A: Carnation Surcharge Methodology and Assumptions Page 3 of 3

	Monthly		Monthly	Total
Year	Sewer Rate	Surcharge/1/	Capacity Charge /2/	Capacity Charge /3
2000	\$19.50	\$0.00	\$10.50	\$1,890
2001	\$19.75	\$0.00	\$10.50	\$1,890
2002	\$23.40	\$0.00	\$17.20	\$3,096
2003	\$23.40	\$0.00	\$17.60	\$3,168
2004	\$23.40	\$0.00	\$18.13	\$3,263
2005	\$25.32	\$0.00	\$18.67	\$3,361
2006 /4/	\$26.68	\$17.34	\$19.23	\$3,462
2007	\$28.14	\$18.29	\$19.81	\$3,566
2008	\$29.41	\$19.11	\$20.40	\$3,673
2009	\$30.81	\$20.02	\$21.02	\$3,783
2010	\$32.23	\$20.95	\$21.65	\$3,896
2011	\$32.64	\$21.22	\$22.30	\$4,013
2012	\$32.80	\$21.32	\$22.96	\$4,134
2013	\$33.11	\$21.52	\$23.65	\$4,258
2014	\$33.52	\$21.79	\$24.36	\$4,385
2015	\$33.37	\$21.69	\$25.09	\$4,517
2016	\$31.23	\$20.30	\$25.85	\$4,652
2017	\$31.60	\$20.54	\$26.62	\$4,792
2018	\$31.88	\$20.72	\$27.42	\$4,936
2019	\$32.08	\$20.86	\$28.24	\$5,084
2020	\$32.30	\$21.00	\$29.09	\$5,236
2021	\$32.60	\$21.19	\$29.96	\$5,393
2022	\$32.89	\$21.38	\$30.86	\$5,555
2023	\$33.25	\$21.61	\$31.79	\$5,722
2024	\$33.74	\$21.93	\$32.74	\$5,893
2025	\$34.26	\$22.27	\$33.72	\$6,070
2026	\$34.83	\$22.64	\$34.74	\$6,252
2027	\$35.36	\$22.98	\$35.78	\$6,440
2028	\$35.90	\$23.34	\$36.85	\$6,633
2029	\$36.51	\$23.73	\$37.96	\$6,832
2030	\$37.13	\$24.13	\$39.09	\$7,037
2031	\$37.76	\$24.54	\$40.27	\$7,248
2032	\$38.40	\$24.96	\$41.48	\$7,466
2033	\$39.05	\$25.38	\$42.72	\$7,690
2034	\$39.72	\$25.82	\$44.00	\$7,920
2035	\$40.39	\$26.25	\$45.32	\$8,158
The capacity ch This is the amo	unt due if paid in full at t	h a 15-year term. Custor he time of connection.	ners may pay the entire capace	