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March 18, 2015

Ms. Luly Massaro, Clerk
Division of Public Utilities and Carriers
89 Jefferson Boulevard
Warwick, RI 02888

***Re: Pawtucket Water Supply Board, General Rate Filing
Docket No. 4550***

Dear Ms. Massaro:

Enclosed please find an original and nine (9) copies of the following document:

1. Pawtucket Water Supply Board's Response to the Division of Public Utilities and Carriers Data Request (Set 1).

Please note that an electronic copy of this document has been sent to the service list.

Thank you for your attention to this matter.

Sincerely,



Joseph A. Keough Jr.

JAK/kf
Enclosure

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-1: Please provide an electronic copy of Mr. Woodcock's exhibits and cost of service study in Excel format with all formulas intact.

Response: A copy of the exhibits and cost of service study in Excel format with all formulas attached was provided to the Service List.

Prepared by: Chris Woodcock

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-2: Please explain the source of the meter and service equivalence factors shown on CW Schedule 2.0. If not based on recent costs, please provide current average meter and service line costs by size.

Response: The meter equivalents used for Pawtucket Water were developed based on costs developed by PWSB in Docket 3378. The basis for the equivalents was provided in response to Division Data Request 1-12 in the prior docket. (See footnote on Settlement Schedule 2.0 in Docket 3378.) These meter equivalents have been used in each PWSB rate docket since 2001.

The current meter and service line costs are as follows:

METER COSTS – The average meter service charge of \$100 is provided in Schedule F – Miscellaneous Charges of the proposed Tariff Schedules (see TAB C). This charge consists of the average labor rate of a service crew, equipment costs based upon current FEMA rates and office labor for recordkeeping of the transaction. Material costs in accordance with the current vendor contract are based upon the meter size as follows:

Meter Size	Cost
5/8"	\$ 87.28
3/4"	\$ 129.48
1"	\$ 186.90
1-½"	\$ 380.00
2"	\$ 533.00

Material costs are not charged on new installations, but are charged in accordance with various charges described in Schedule F of the Tariff Schedules.

SERVICE LINE COSTS - The PWSB Engineering department prepared the average service line costs by size for new service installations for the rate year. These costs are provided in Schedule F – Miscellaneous Charges of the proposed Tariff Schedules (see TAB C). These service line costs were calculated using the labor rates for the rate year, current material costs from existing supplier contracts, equipment

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

costs based upon current FEMA rates and 15 % overhead for administration, account setup, inspection, material handling and supervision.

Prepared by: Christopher Woodcock and Robert Benson

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-3. Please separately identify the current number of private fire service customers billed monthly, quarterly, and annually.

Response: All private fire service customers are billed monthly. See the response to data request # 11 for the current number of billed fire service connections.

Prepared by: Robert Benson

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-4. Reference CW Schedule 3.0, page 2. Please provide a copy of the DBO O&M contract.

Response: See attachment RB – DR#4 for a copy of the DBO O&M contract.

Prepared by: Robert Benson

**PAWTUCKET REGIONAL WATER TREATMENT FACILITY
CAPITAL IMPROVEMENTS, OPERATIONS,
MAINTENANCE AND MANAGEMENT AGREEMENT
BY AND AMONG
THE CITY OF PAWTUCKET, RHODE ISLAND AND THE PAWTUCKET
WATER SUPPLY BOARD
AND
EARTH TECH, INC.
DATED AS OF SEPTEMBER 10, 2003**

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**PAWTUCKET REGIONAL WATER TREATMENT FACILITY
CAPITAL IMPROVEMENTS, OPERATIONS,
MAINTENANCE AND MANAGEMENT AGREEMENT**

This PAWTUCKET REGIONAL WATER TREATMENT FACILITY CAPITAL IMPROVEMENTS, OPERATIONS, MAINTENANCE AND MANAGEMENT AGREEMENT, dated as of September 10, 2003, is entered into by and among THE CITY OF PAWTUCKET, RHODE ISLAND (the "City") and THE PAWTUCKET WATER SUPPLY BOARD (the "PWSB") and EARTH TECH, INC., a corporation organized and existing under the laws of California (the "Company").

W I T N E S S E T H:

WHEREAS, the City owns, and the PWSB operates, the City of Pawtucket Water Treatment Facility;

WHEREAS, the PWSB issued a request for proposals in February, 2001 for capital improvements to the Facility and for the long-term operation, maintenance and management of the Facility;

WHEREAS, in response to the RFP, the Company submitted a proposal for capital improvements to the Facility and for the long-term operation, maintenance and management of the Facility;

WHEREAS, the PWSB has selected the Company, pursuant to the RFP as amended by the Proposal, to operate the existing facilities and to perform the capital improvements and to operate, maintain and manage the Facility, in accordance with the terms and subject to the conditions of this Agreement;

WHEREAS, the Company desires to perform the capital improvements and to operate, maintain and manage the Facility, in accordance with the terms and subject to the conditions of this Agreement;

WHEREAS, the Guarantor shall execute the Guaranty in the form of Exhibit B hereto, guaranteeing the Company's performance of its obligations under this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, representations, warranties and agreements contained herein, and intending to be legally bound hereby, the parties agree as follows:

ARTICLE I SCHEDULES

Section 1.1 Schedules and Exhibits.

The following Schedules and Exhibits are attached hereto and made a part of this Agreement. In the event of a conflict or inconsistency between or among the Schedules and this

Agreement, the provisions of this Agreement control over the Schedules unless otherwise agreed to in writing by the parties or unless otherwise specifically provided in this Agreement.

Schedule 1 PERFORMANCE STANDARDS

Schedule 2 OPERATION AND MAINTENANCE STANDARDS

Schedule 3 FACILITY PLANS

Schedule 4 INSURANCE

Schedule 5 ESCALATION INDICES

Schedule 6 PERMITS AND CONSENT AGREEMENTS

Schedule 7 PWSB CONTRACTS

Schedule 8 MAXIMUM UTILITIES UTILIZATION

Schedule 9 EQUIPMENT AND CHEMICALS INVENTORY

Schedule 10 PASS THROUGH COSTS

Schedule 11 SERVICE FEE

Schedule 12 CAPITAL IMPROVEMENTS

Schedule 13 ACCEPTANCE TEST

Schedule 14 FIXED CONSTRUCTION PRICE ALLOCATION

Schedule 15 FINANCING LAWS AND REGULATIONS

Schedule 16 TERMINATION PAYMENTS

Schedule 17 EXAMPLE ADJUSTMENT METHODOLOGY FOR ANNUAL SERVICE
FEE USING THE CONSUMER PRICE INDEX (CPI)

Schedule 18 MEMORANDA OF AGREEMENT

EXHIBIT A DESCRIPTION OF CITY OF PAWTUCKET WATER TREATMENT
SYSTEM

EXHIBIT B GUARANTY

EXHIBIT C COMPANY PROPSAL

EXHIBIT D FORM OF CONSTRUCTION PERFORMANCE BOND

EXHIBIT E FORM OF OPERATING BOND

ARTICLE II CERTAIN DEFINITIONS

Section 2.1 Definitions.

As used herein, the following terms shall have the following meanings:

“Acceptance” means demonstration by the Company in accordance with Article VI and Schedule 13 hereof that the Acceptance Test has been conducted and the Acceptance Standards have been achieved.

“Acceptance Date” means the date on which the Acceptance Test to demonstrate the ability of the Facility to achieve Acceptance Standards is approved by the PWSB, with the criteria for approval of the Acceptance Test as set forth in Schedule 13 hereto.

“Acceptance Standards” means the standards for Acceptance set forth in Schedule 13 hereto.

“Acceptance Test(s)” or “Acceptance Testing” means the tests, plans and procedures set forth in Schedule 13 hereto.

“Affiliate(s)” means any person, corporation or other entity directly or indirectly controlling or controlled by another person, corporation or other entity or under direct or indirect common control with such person, corporation or other entity.

“Agreement” means the Pawtucket Regional Water Treatment Facility Capital Improvements, Operations, Maintenance and Management Agreement, dated as of the date first set forth above, by and among the City of Pawtucket, the PWSB and the Company.

“Analytical Services” has the meaning specified in Schedule 2.2.4 hereto.

“Annual Facility Inspection” has the meaning specified in Schedule 2.4.3 hereto.

“Annual Report” has the meaning specified in Schedule 2.4.2.

“Applicable Law” means any law, rule, regulation, requirement, action, determination, guideline, or order of, or any legal entitlement issued by any governmental body having jurisdiction, applicable from time to time to the siting, design, acquisition, construction, equipping, financing, ownership, possession, start-up, testing, operation, maintenance or repair of the Facility, the delivery, treatment, or storage of water, the transfer, handling, transportation or disposal of residue or any other transaction or matter contemplated hereby including, without limitation, any of the foregoing which pertain to water.

“Auditor” has the meaning specified in Section 10.3 hereof.

"Auditor's Report" has the meaning specified in Section 10.3 hereof.

"Authorized Representative" has the meaning specified in Section 5.3 hereof.

"Base Rate" means the interest rate announced from time to time as its "prime rate" by Fleet National Bank.

"Billing Month" means each calendar month in a Contract Year.

"Bonds" mean the Construction Performance Bond and the Operations Bond.

"Buildings Services" has the meaning specified in Schedule 2.2.7 hereto.

"Capital Improvement(s)" has the meaning specified in Subsection 5.4.2 hereof.

"CE-PCP" shall have the meaning specified in Schedule 5 hereto.

"Certificates" means insurance certificates as specified in Schedule 4 hereto.

"Change in Law" means (a) the enactment, adoption, promulgation, modification or repeal after the Contract Date of any federal, State, or local law, ordinance, code, rule, regulation or other similar legislation or the modification or change in interpretation after the Contract Date, of any federal, State, or local law, ordinance, code, rule, regulation, official permit, license or approval by any regulatory or judicial entity having jurisdiction with respect to the operation or maintenance of the Facility, or (b) the imposition, after the Contract Date, of any material conditions on the issuance, modification or renewal of any official permit, license or approval necessary for the operation and maintenance of the Facility, which, in either case, modifies the Company's obligations of Facility performance or decreases or increases the cost of the Company's operation or maintenance of the Facility and which are less or more burdensome than the most stringent requirements:

- (i) in effect on the Contract Date;
- (ii) agreed to by the PWSB in any applications for official permits, licenses or approvals for the Facility, other than any requirements set forth in said applications to comply with future laws, ordinances, codes, rules, regulations or similar legislation, or
- (iii) in the Performance Standards and guaranties set forth in Schedule 1 hereto and operation and maintenance standards set forth in Schedule 2 hereto; or
- (iv) of "Prudent Industry Practices" meaning those methods, techniques, standards and practices which, at the time they are employed and in light of the circumstances known or believed to exist at the time, are generally accepted as reasonably prudent in the water treatment industry or other industry in which services similar to the Services are provided as practiced in the United States with respect to a plant of similar type as the Facility.

For purposes of part (a) of this definition, no enactment, adoption, promulgation or modification of laws, ordinances, codes, rules, regulations or similar requirement or enforcement

policy with respect to any such requirement shall be considered a Change in Law if, as of the Contract Date, such law, ordinance, code, rule, regulation or other similar requirement would have affected directly the continued management, operation and maintenance of the Facility by the PWSB after the Commencement Date in the absence of this Agreement and such law, ordinance, code, rule, regulation or other similar requirement was either (i) officially proposed by the responsible agency and published in final form in the Federal Register or equivalent federal, State or local publication and thereafter becomes effective without further action or (ii) enacted into law or promulgated by the appropriate federal, State or local body before the Contract Date, and the comment period with respect to which expired on or before the Contract Date and any required hearing concluded on or before the Contract Date in accordance with applicable administrative procedures and which thereafter becomes effective without further action. In no event shall a change in any federal, State or local tax law relating to corporate income tax be considered a Change in Law.

“Change Order” means a written order issued by the PWSB to the Company after execution of this Agreement, authorizing or requiring: (1) Extra Construction Work, or deleted or omitted Construction Work, pursuant to Section 5.15 hereof; (2) an increase or reduction in the Fixed Construction Price; or (3) any other change in this Agreement prior to the Acceptance Date, including any change in the Design Requirements.

“Chemical(s)” has the meaning specified in Schedule 2, Section 2.2.5 hereto.

“Commencement Date” means the later of: the date the PWSB gives the Company notice pursuant to Subsection 3.2 hereof; or thirty (30) days from the Contract Date or such later date as is mutually agreed upon in writing by the parties hereto, which date shall in no event exceed the date that is one hundred eighty days from the Contract Date.

“Company” means Earth Tech, Inc., a corporation organized and existing under the laws of California, and its permitted successors and assigns, with which the PWSB has entered into this Agreement.

“Company Construction Superintendent” has the meaning specified in Subsection 5.19.3 hereof.

“Company Fault” means any breach (including the untruth or breach of any Company representation or warranty set forth herein), failure, nonperformance or noncompliance by the Company under this Agreement (whether or not attributable to any officer, member, agent, employee, contractor, subcontractor of any tier, or an independent contractor of the Company or any Affiliate of the Company) which is not directly attributable to any Uncontrollable Circumstance or PWSB Fault, and which materially and adversely affects the PWSB’s rights or ability to perform under this Agreement.

“Company Indemnitees” has the meaning specified in Subsection 7.4.2 hereof.

“Compliance Plan” has the meaning specified in Section 3.10 hereof.

"Construction Date" means the first date on which all of the Construction Date Conditions shall be satisfied or waived, as agreed to in writing by the parties, pursuant to Section 4.6 hereof.

"Construction Date Conditions" has the meaning specified in Subsection 4.5.1 hereof.

"Construction Performance Bond" means the bond which guarantees the Company's timely performance of its construction and other specified obligations for the benefit of the PWSB.

"Construction Period" means the period from and including the Construction Date to the Acceptance Date.

"Construction Price" has the meaning specified in Subsection 5.17.1 hereof.

"Construction Work" means everything required to be furnished and done for and relating to the Facility or the Site pursuant to this Agreement during the Construction Period, including all design work and including the design and construction of the Capital Improvements. A reference to Construction Work shall mean any part and all of the Construction Work unless the context otherwise requires, and shall include all Extra Construction Work authorized by Change Order pursuant to Section 5.15 hereof.

"Contract Date" or "Agreement Date" means the date of this Agreement as executed by the parties.

"Contract Term" or "Term" has the meaning specified in Subsection 10.1.1 hereof.

"Contract Year" means the consecutive twelve (12) month period commencing on January 1 in any year and ending on December 31 of that year; provided, however, that the first Contract Year shall begin on the Commencement Date and shall end on the following December 31, and the last Contract Year shall commence on January 1 prior to the date this Agreement expires or is terminated, whichever is appropriate, and shall end on the last day of the Contract Term or the effective date of any termination, whichever is appropriate.

"Contracts" has the meaning specified in Schedule 7 hereto.

"Cost Substantiation" means, with respect to any cost reasonably incurred or to be incurred by the Company which is directly or indirectly chargeable in whole or in part to the PWSB hereunder, delivery to the PWSB of a certificate signed by an officer of the Company, setting forth the amount of such cost and the provisions of this Agreement under which such cost is properly chargeable to the PWSB, stating that such cost is a fair market price for the service or materials supplied or to be supplied and that such services and materials are reasonably required pursuant to this Agreement, and accompanied by copies of such documentation as shall be necessary to reasonably demonstrate that the cost as to which Cost Substantiation is required under this Agreement has been or will be incurred. Such documentation shall include reasonably detailed information concerning (1) all Subcontracts; (2) the amount and character of materials furnished or to be furnished, the persons from whom purchased or to be purchased, the amounts payable therefor and related delivery and transportation costs and any sales or personal property

Taxes, if any; (3) a statement of the equipment used or to be used and any rental payable therefor; (4) Company worker hours, duties, wages, salaries, benefits, assessments, taxes and premiums; and (5) Company expenses, including administrative expenses, bonds, insurance, overhead, and other expenses; and (6) Company profit (4.0% on Construction Work and 4.0% on Operation Services).

"CPI" means the Consumer Price Index published by the United States Department of Labor -Bureau of Labor Statistics for all urban consumers for the Northeast Urban Size B/C communities with populations less than 1,500,000.

"Deliverable Material" has the meaning specified in Section 5.16 hereof.

"Discretionary Termination Amount" has the meaning specified in Subsection 8.4.2 hereof.

"Design Requirements" means the Design Requirements for the Capital Improvements set forth in Schedule 12 hereto, as the same may be changed or modified in accordance with this Agreement.

"Development Period" has the meaning specified in Section 4.1 hereof.

"Disposal Agreement" has the meaning specified in Section 3.5 hereof.

"Disposal Facility" has the meaning specified in Section 3.5 hereof.

"Disputed Work" has the meaning specified in Subsection 5.15.7 hereof.

"Distribution System" means any water collection, conveyance, or transmission piping, conduits, or underground electrical wiring not within the confines of the Facility or any pump station.

"DMR(s)" means the monthly Discharge Monitoring Report(s).

"Encumbrance(s)" means any lien, lease, mortgage, security interest, charge, judgment, judicial award, attachment or encumbrance of any kind with respect to the Site, other than Permitted Encumbrances."

"Enterprise Fund" means the PWSB's fund through which all PWSB revenues are collected and expenses are paid, as authorized by the Rhode Island Public Utilities Commission.

"EPA" means the United States Environmental Protection Agency or any successor.

"Equipment" means all vehicles, machinery, structures, components, parts and materials located at the Facility which are utilized in the operation, maintenance, and management of the Facility.

"Equipment and Chemical Responsibilities" has the meaning specified in Schedule 2.2.5 hereto.

“Extension Period” means the period mutually agreed to by the PWSB and the Company, extending the deadline for Acceptance to occur and commencing on the second anniversary of the Commencement Date or, in the event of one or more delays caused by Uncontrollable Circumstances, PWSB-requested Change Orders or PWSB Fault occurring during such period, the date which is the next business day following the date calculated by adding to the second anniversary of the Commencement Date the aggregate number of days of such delay.

“Extra Construction Work” means any Construction Work ordered by the PWSB in addition to the Construction Work originally required hereunder.

“Extra Payment” has the meaning specified in Subsection 5.15.2 hereof.

“Facility” means the existing PWSB Water Treatment Facility, and the new facilities to be constructed pursuant to this Agreement, including but not limited to, all treatment processes, disposal facilities, laboratory, water storage, pump stations, discharge facilities, and fixtures, equipment, tools and other property stored on or constituting the water plant, pump stations, aeration systems, well fields, intake structure, and associated site properties.

“Facility Modification” means any improvement, alteration, addition or other modification to the Facility following Substantial Completion which is requested or approved by the PWSB. Facility Modifications do not include maintenance, repair or replacement activities required to be undertaken by the Company pursuant to this Agreement.

“Facility Operations Report” has the meaning specified in Schedule 3.4 hereto.

“Fees and Costs” means reasonable fees and expenses of employees, attorneys, architects, engineers, expert witnesses, contractors, consultants and other persons, and costs of transcripts, printing of briefs and records on appeal, copying and other reimbursed expenses, and expenses reasonably incurred in connection with any Legal Proceeding.

“Final Completion” means completion of the Construction Work in compliance with the Design Requirements and the requirements of Section 6.11 hereof.

“Final Punch List” has the meaning specified in Subsection 6.2.2 hereof.

“Fiscal Year” means the fiscal year of the PWSB, currently July 1 through June 30.

“Fixed Construction Price” means \$41,989,639, as itemized by the Company in Schedule 14 hereto.

“Fixed Construction Price Adjustments” has the meaning so specified in Subsection 5.17.4 hereof.

“Fixed Construction Price Index” has the meaning specified in Schedule 5 hereto.

“Future Finished Water Requirements” means future limits as set forth in Tables 1.2 and 1.3 of Schedule 1 hereto.

"Future Operation Period" means the time period beginning with the Acceptance Date and ending on the last day of the Contract Term.

"FY" means Fiscal Year.

"Governmental Body" means any federal, State, City or regional legislative, executive, judicial or other governmental board, agency, authority, commission, administration, court or other body, or any official thereof having jurisdiction.

"Guaranty" means the agreement executed between the PWSB and the Project Guarantor at Exhibit B.

"Hazardous Substance" has the meaning given such term in CERCLA, applicable State law and the regulations promulgated thereunder.

"Hazardous Waste" means any hazardous, toxic or dangerous waste, substance or material, or contaminant, pollutant or chemical, oil or petroleum product or byproduct, known or unknown, defined or identified as such in (or for the purposes of) any existing or future local, State or federal law, statute, code, ordinance, rule, regulation, guideline, decree or order relating to human health or the environment or environmental conditions, including but not limited to the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901 et seq.; the Toxic Substances Control Act ("TSCA"), 15 U.S.C. § 2601 et seq.; the Federal Water Pollution Control Act, 49 U.S.C. § 1801 et seq.; the Safe Drinking Water Act, 42 U.S.C. § 300 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9601 et seq.; the Clean Air Act, 42 U.S.C. § 7401 et seq.; the Hazardous Materials Transportation Act, 49 U.S.C. App. § 1802 et seq.; the Occupational Safety and Health Act, 29 U.S.C. § 651 et seq.; including all similar State of Rhode Island laws and municipal ordinances; including all rules, regulations and guidelines promulgated under such statutes and including all amendments and supplements to such statutes and rules, regulations and guidelines, and any order or decree relating to or imposing liability or standards or conduct concerning, or prohibiting, limiting or regulating exposure to, any waste, material, substance, contaminant, pollutant or chemical.

"Independent Panel" has the meaning specified in Subsection 8.8.2 hereof.

"Insurance" has the meaning specified in Schedule 4 hereto.

"Insurance Requirement(s)" means any rule, regulation, code, or requirement issued by any fire insurance rating bureau or any body having similar functions or by any insurance company which has issued a policy of Insurance under this Agreement, as in effect during the Contract Term, compliance with which is a condition to the effectiveness of such policy.

"Interim Finished Water Requirements" means the existing Facility Finished Water Requirements set forth in Table S1-1 of Schedule 1 hereof.

"Interim Operation Period" means the time period, beginning with the Commencement Date, during which the Facility shall operate under the Interim Finished Water Requirements and ending with the Acceptance Date.

"Inventory Report" shall have the meaning specified in Schedule 9 hereto.

"Legal Entitlement" means any and all Permits, licenses, approvals, authorizations, consents and entitlements of whatever kind and however described which are required under Applicable Law to be obtained or maintained by any person with respect to the construction of the Capital Improvements or the operation, maintenance and management of the Facility or the performance of any other obligation of the Company under this Agreement, including, without limitation, the Consent Agreements and Permits detailed in Schedule 6 hereto.

"Legal Proceeding" means every action, suit, litigation, arbitration, administrative proceeding, and any other legal or equitable proceeding having a bearing upon this Agreement.

"Letter of Credit" has the meaning specified in Section 11.2.4 hereof.

"Lien" means any and every lien against the Facility or the Site or against any moneys due or to become due from the PWSB to the Company under this Agreement, for or on account of the Construction Work or the Services, including without limitation mechanics', materialmen's, laborers', and lenders' liens.

"Loss-and-Expense" means any and all loss, liability, forfeiture, obligation, damage, delay, penalty, judgment, deposit, cost, claim, demand, charge, tax, or expense, except as explicitly excluded or limited under any provision of this Agreement.

"Maintenance Management System" has the meaning specified in Schedule 2.2.2 hereto.

"Manuals" shall mean the Operations Manual and related operations and maintenance manuals, including future operations manuals issued with new Equipment.

"Material Decline in Guarantor's Credit Standing" has the meaning specified in Subsection 11.2.3 hereof.

"Monthly Meeting" has the meaning specified in Schedule 2.4.5 hereto.

"Monthly Reports" have the meaning specified in Schedule 2, Section 2.4.1 hereto.

"Notice to Proceed" has the meaning specified in Subsection 5.4.1 hereof.

"Operation and Maintenance Fee" means the component of the Service Fee consisting of the costs of performing the Services exclusive of the Capital Improvements.

"Operations and Maintenance Plan" or "O&M Plan" has the meaning specified in Schedule 3.4 hereto.

"Operation Period" means the period of time commencing with and including the Commencement Date, through and including the last day of the Contract Term, including the Interim Operation Period and the Future Operation Period.

"Operation Period Letter of Credit" has the meaning specified in Subsection 11.3.3 hereof.

"Operation and Maintenance Manual" has the meaning specified in Section 3.3 hereof.

"Operations Bond" has the meaning specified in Section 11.3.2 hereof.

"Operations Records" has the meaning specified in Schedule 2.4.4 hereto.

"Pass Through Cost(s)" means that component of the monthly invoices from the Company to the PWSB consisting of those costs of the Company listed on Schedule 10 hereto, but not included in the Service Fee.

"Performance Guaranties" means the Construction Performance Bond, the Operations Bond, the Guaranty, the Operation Period Letter of Credit, the Letter of Credit, the Unconditional Guaranty, and the Insurance set forth in Schedule 4 or any combination thereof.

"Performance Requirements" means the Performance Standards set forth in Schedule 1 hereto as well as any other performance requirements relating to the Facility set forth in this Agreement that are the responsibility of the Company.

"Performance Standards" has the meaning specified in Schedule 1 hereof.

"Permits" has the meaning specified in Schedule 6 hereto.

"Permitted Encumbrances" means, as of any particular time, any one or more of the following:

(1) encumbrances for utility charges, taxes rates and assessments not yet delinquent or, if delinquent, the validity of which is being contested diligently and in good faith by the Company and against which the Company has established appropriate reserves in accordance with generally accepted accounting principles;

(2) any encumbrance arising out of any judgment rendered which is being contested diligently and in good faith by the Company, the execution of which has been stayed or against which a bond or bonds in the aggregate principal amount equal to such judgments shall have been posted with a financially sound insurer and which does not have a material and adverse effect on the ability of the Company to construct or operate the Facility;

(3) any encumbrance arising in the ordinary course of business imposed by law dealing with materialmen's, mechanics', workmen's, repairmen's, warehousemen's, landlords', vendors' or carriers' encumbrances created by law, or deposits or pledges which are not yet due or, if due, the validity of which is being contested diligently and in good faith by the Company and against which the Company has established appropriate reserves;

(4) servitudes, licenses, easements, encumbrances, restrictions, rights-of-way and rights in the nature of easements or similar charges which will not in the aggregate materially and adversely impair the construction and operation of the Facility by the Company; and

(5) zoning and building bylaws and ordinances, municipal bylaws and regulations, and restrictive covenants which do not materially interfere with the construction and operation of the Facility by the Company.

"Plans" has the meaning specified in Schedule 3 hereto.

"Pre-Construction Period" means the period from and including the Contract Date to the Construction Date.

"Project Guarantor" or "Guarantor" means the entity financially guarantying the performance of the Company to fulfill the obligations of this Agreement by issuing the Guaranty.

"Proposal" means the Company's Proposal submitted in response to the RFP and the responses submitted by the Company including (a) responses to the PWSB's (i) Requests for Clarifications; and (ii) Interview Questions and (b) all clarifying documents and correspondence from the Company to the PWSB. The Proposal is attached hereto as Exhibit C and made a part hereof. The Proposal is intended to be used for background and interpretation purposes in the event of any ambiguity in this Agreement; provided, however, that in the event of a conflict between the Proposal and the terms and conditions of this Agreement (including all Schedules and Exhibits thereto other than the Proposal), this Agreement shall be controlling.

"Proposal A" means the proposal in response to the RFP addressing meeting existing Finished Water regulatory requirements with existing facilities.

"Proposal A Service Fee" means the Service Fee under Proposal A.

"Proposal B" means the proposal in response to the RFP addressing meeting 2004 requirements with newly constructed facilities.

"Proposal B Service Fee" means the Service Fee under Proposal B.

"Pump Station(s)" has the meaning specified in Schedule 2.2.3.

"Purchasing Agent" means the Purchasing Director of the City of Pawtucket Purchasing Board, as established pursuant to City of Pawtucket Charter § 3-700 and R.I. Gen. Laws § 45-55-3.

"PWSB Employee(s)" has the meaning specified in Section 3.9 hereof.

"PWSB Engineer" means either (1) an engineer employed by the PWSB, or (2) a consulting engineer or firm of consulting engineers, having experience with respect to the design, construction, testing, operation and maintenance of water treatment facilities, in either case designated for purposes relating to this Agreement, as the PWSB Engineer from time to time in writing by the PWSB.

"PWSB Fault" means any breach (including the untruth or breach of any PWSB representation or warranty set forth herein), failure, nonperformance or noncompliance by the PWSB under this Agreement (whether or not attributable to any officer, member, agent,

employee, contractor, subcontractor of any tier, the PWSB Engineer, or an independent contractor of the PWSB) which is not directly attributable to any Uncontrollable Circumstance or Company Fault, and which materially and adversely affects the Company's rights or ability to perform under this Agreement.

"PWSB Indemnitees" has the meaning specified in Subsection 7.4.1 hereof.

"Rating Service" means Moody's Investors Service or Standard & Poor's Rating Services, or any of their respective successors.

"Record Documents" has the meaning specified in Subsection 6.5.6 hereof.

"Renewal and Replacement Plan" has the meaning specified in Schedule 3.4 hereto.

"Repair and Replacement Fund" has the meaning specified in Section 3.7 hereof.

"Residuals" or "Facility Residuals" means any liquid, semisolid or solid material resulting from the water treatment process at the Facility.

"RFP" means the Request for Proposals for Capital Improvements, Operations, Maintenance, and Management of City of Pawtucket Water Treatment Facility, dated February 15, 2001 and all addenda thereto and all Requests for Clarifications and Interview Questions submitted by the PWSB.

"RICWFA" means the Rhode Island Clean Water Finance Agency or its successor.

"RIDEM" means the Rhode Island Department of Environmental Management or its successor.

"RIPUC" means the Rhode Island Public Utilities Commission.

"RIWRB" means the Rhode Island Water Resources Board.

"Rolling Stock" means vehicular Equipment included in the Facility.

"Safety and Security Plan" has the meaning specified in Schedule 3.5 hereto.

"SCADA System" means the supervisory control and data acquisition system at the Facility.

"Schedule(s)" mean(s) the schedule(s) attached to this Agreement, which together with this Agreement and the Exhibits attached thereto constitute the entire Agreement with respect to the Capital Improvements, operations, maintenance, and management of the Facility.

"Selected Proposer" means the Company.

"Service Fee" means the annual amount payable to the Company by the PWSB for the Services, exclusive of Capital Improvements, provided under this Agreement as set forth in Schedule 11 hereto and including the Proposal A Service Fee and the Proposal B Service Fee.

“Service Territory” means the City of Pawtucket, City of Central Falls, Town of Cumberland, and all other territory in which customers are served by the Facility during the Contract Term.

“Services” means the Capital Improvements to, and operations, maintenance, and management of the Facility to be provided by the Company in accordance with the terms and provisions of this Agreement.

“Site” means the Facility together with the real property located at Pawtucket, Rhode Island, on which the Facility shall be situated.

“Staffing Plan” has the meaning specified in Schedule 3.3 hereto.

“State” means the State of Rhode Island and all its relevant administrative, contracting and regulatory agencies and offices.

“Subcontract” means an agreement between the Company and a Subcontractor, or between two Subcontractors, as applicable.

“Subcontractor” means every person (other than employees of the Company) employed or engaged by the Company or any person directly or indirectly in privity with the Company (including every subcontractor of whatever tier) whether for the furnishing of labor, materials, equipment, supplies, services, or otherwise.

“Substantial Completion” has the meaning specified in Section 6.2 hereof.

“System” means the City of Pawtucket water treatment system as described in Exhibit A hereto, and including any and all modifications to the System during the Contract Term, but not including the operation and maintenance of the watershed lands and reservoir system and the water distribution system, and appurtenances (excluding pump stations and those transmission facilities designed or rehabilitated by the Company), capital planning, policy development, long range and Service Area planning, the setting of customer rates and charges, meter reading, billing and collection.

“System Revenues” means all revenues derived by the PWSB in connection with the operation of the System and accounted for under the PWSB’s Enterprise Fund.

“Termination for Convenience” has the meaning specified in Subsection 8.4.1 hereof.

“Transaction Costs” has the meaning specified in Subsection 3.11.1 hereof.

“Transaction Cost Payment” has the meaning specified in Subsection 3.11.1 hereof.

“Transition Plan” has the meaning specified in Schedule 3.6 hereto.

“Transmission Line” means any major water conveyance pipeline located outside the treatment plant and/or pump stations for the transportation (i.e. transmission) of water to or from

the water treatment plant. In the later case, the transmission lines are part of the water distribution system of the PWSB.

“Unconditional Guaranty” has the meaning specified in Section 11.2.4 hereof.

“Uncontrollable Circumstances” means any act, event or condition to the extent that it impacts the cost of performance of or materially and adversely affects the ability of either party to perform any obligation under this Agreement (except for payment of obligations), if such act, event or condition, in light of the circumstances known or reasonably believed to exist at the time, is beyond the reasonable control and is not a result of the willful or negligent act, error or omission or failure to exercise reasonable diligence on the part of the party relying thereon; provided, however, that the contesting in good faith or the failure in good faith to contest such action or inaction shall not be construed as a willful or negligent act, error or omission or a lack of reasonable diligence of either party.

Subject to the foregoing, such acts, events or conditions may include, but are not limited to, the following:

(a) Inclusions.

(1) an act of God (but not including reasonably anticipated weather conditions for the geographic area of the Facility as of the date hereof), landslide, earthquake, fire, explosion, flood, sabotage or similar occurrence, acts of a public enemy (i.e., terrorist), extortion, war blockade or insurrection, riot or civil disturbance;

(2) a Change in Law;

(3) the failure of any appropriate governmental agency or private utility to provide and maintain utilities;

(4) the preemption, confiscation, diversion, destruction, or other interference in possession or performance of material or services by, on behalf of, or with authority of a governmental body in connection with a declared or asserted public emergency or any condemnation or other taking by eminent domain or similar action of any portion of the Facility.

(b) Exclusions.

(1) general economic conditions, interest or inflation rate fluctuations, commodity prices or changes in prices, or currency or exchange rate fluctuations;

(2) changes in the financial condition of the PWSB, the City, the Company, the Project Guarantor, or any of their affiliates or subcontractors;

(3) union work rules which increase the Company’s operating cost for the Facility;

(4) any impact of prevailing wage laws on the Company’s cost;

(5) the consequence of Company error, including any errors of Company Affiliates or Subcontractors;

(6) failure of any Subcontractor or supplier to furnish labor, services, materials or equipment on the dates agreed to;

(7) strikes, work stoppages or labor disputes of the Company's employees, agents or Subcontractors;

(8) equipment failure (unless caused by an Uncontrollable Circumstance); or

(9) litigation against the Company.

"Utilities" means any and all utility services and installations whatsoever (including gas, heating, fuel oil, water, sewer, electricity, telephone, and telecommunication), and all piping, wiring, conduit, and other fixtures of every kind whatsoever related thereto or used in connection therewith.

"Vehicle(s)" means all cars, trucks, vans or other modes of transportation used in connection with the operation of the Facility for transporting people or things or used for other necessary functions in the operation or maintenance of the Facility.

"Vehicle Maintenance Responsibilities" has the meaning described in Schedule 2.2.6 hereto.

ARTICLE III OPERATION, MAINTENANCE AND MANAGEMENT OF THE FACILITY

Section 3.1 Conditions Precedent to the Commencement Date.

Section 3.1.1 Company Obligations.

(i) Simultaneously with the execution of this Agreement, the Company shall cause to be provided to the PWSB the Construction Performance Bond specified at Section 11.3.1 hereof.

(ii) The Commencement Date shall be subject to the satisfaction by the Company, to the PWSB's sole satisfaction, of all of the following conditions precedent:

(a) The Guarantor shall have executed and delivered the Guaranty to the PWSB.

(b) The Company shall have delivered to the PWSB (i) a certificate of an authorized officer of the Company, dated as of the Commencement Date, to the effect that each of the representations of the Company set forth in Section 9.2 of this Agreement is true and correct in all material respects as if made on such date, and an (ii) opinion of counsel to the Company, in customary form and reasonably acceptable to the PWSB, regarding matters of law set forth in Sections 9.2.1 through 9.2.5 hereof.

(c) The PWSB shall have received documentation that all Insurance required to be obtained by the Company pursuant to this Agreement has been obtained.

(d) The Company shall have delivered to the PWSB the Operations Bond duly executed by its issuer in the amount equal to the current year's annualized Service Fee plus estimated pass-through costs.

(e) The Company shall have recruited, retained and employed all management and other personnel necessary for its performance of the Services hereunder, which personnel shall be duly licensed as and to the extent required by Applicable Law, and shall have delivered to the PWSB a roster of all such personnel together with copies of the licenses of all personnel required to be licensed.

(f) The Company shall have obtained and shall have submitted to the PWSB copies of all Legal Entitlements required to be obtained by the Company by Applicable Law as a condition of performing the Services hereunder, with the exception of those Legal Entitlements required for the Capital Improvements.

(g) The Company shall have provided to the PWSB resumes of key staff including, but not limited to the Company plant manager; construction site construction manager; and construction design project manager.

Section 3.1.2 PWSB Obligations.

The Commencement Date shall be subject to the satisfaction by the PWSB of each of the following conditions precedent:

(a) The PWSB shall have delivered to the Company a certificate of an authorized representative of the PWSB, dated as of the Commencement Date, to the effect that each of the representations of the PWSB set forth in Section 9.1 of this Agreement is true and correct in all material respects as if made on such date.

(b) The PWSB shall have delivered to the Company an opinion of counsel to the PWSB, in customary form and reasonably acceptable to the Company, regarding matters of law set forth in Sections 9.1.1 through 9.1.5 hereof.

(c) The PWSB shall have delivered to the Company a notice that the City has received approvals for the necessary public and private financing for the Capital Improvements.

Section 3.2 Satisfaction of Conditions Precedent.

The Company and PWSB shall satisfy or waive the conditions precedent identified in Section 3.1.1 and Section 3.1.2 on or before the date that is thirty (30) days from the Contract Date or such later date as is mutually agreed upon in writing by the parties hereto (which date shall in no event exceed the date that is one hundred eighty days from the Contract Date); each party shall give the other prompt notice when any condition precedent has been satisfied. Upon satisfaction of all such conditions precedent, the PWSB shall give written notice to the Company,

and the Commencement Date shall occur on the later of (i) such date or (ii) the date that is thirty (30) days from the Contract Date, so long as, as of such date:

(1) No action, suit, proceeding or official investigation shall have been overtly threatened or publicly announced or commenced by any person or federal, State or local governmental authority or agency other than the PWSB in any federal, State or local court, that seeks to enjoin, assess civil or criminal penalties against, assess civil damages against or obtain any judgment, order or consent decree with respect to the PWSB or the Company as a result of the PWSB's or the Company's negotiation, execution, delivery or performance of this Agreement, other than any such action, suit, proceeding or investigation which would not, if adversely determined, materially adversely affect this Agreement or the performance by the parties of their respective obligations hereunder; or

(2) No changes shall have occurred after the Contract Date and on or before the Commencement Date in any applicable federal, State or local rule, regulation or ordinance thereunder, or in the interpretation thereof by any applicable regulatory authority, that would make (i) the execution or delivery of this Agreement by the PWSB or the Company or (ii) compliance by the PWSB or the Company with the terms and conditions of this Agreement, a violation of such law, rule, regulation or ordinance.

If all such conditions precedent set forth in Sections 3.1.1 and 3.1.2 hereof are not so satisfied or waived on or before the date that is thirty (30) days from the Contract Date or such later date mutually agreed to in writing by the parties hereto, or if any circumstances described in clauses (1) or (2) above, if any, exist and continue as of thirty (30) days from the Contract Date or such later date mutually agreed to in writing by the parties hereto, then the PWSB, by notice in writing to the Company, may terminate this Agreement or may extend the date upon which the Commencement Date shall occur. If the PWSB shall give written termination notice to the Company for failure of the Company to fulfill the Company obligations set forth in Section 3.1.1 or clauses (1) or (2) above, the PWSB shall have recourse to the Construction Performance Bond to recoup the PWSB's (1) costs in connection with reprocurement, and (2) the amount that is the result of (i) the change in Fixed Construction Price Index (capped at 3% per annum) from the time delay from the date of the PWSB's termination notice until time of award of a contract to a substitute vendor, which period shall not exceed nine (9) months for purposes of this calculation, (ii) multiplied by the Company's Fixed Construction Price.

If the PWSB shall not have fulfilled the PWSB obligations set forth in Section 3.1.2, or if the circumstances described in clauses (1) or (2) above exist and continue as of one hundred eighty (180) days from the Contract Date, then the Company may terminate this Agreement by written notice.

Section 3.3 Overall Company Responsibilities.

Section 3.3.1 [RESERVED]

Section 3.3.2

On and after the Commencement Date and throughout the Contract Term the Company shall:

(1) operate, maintain and manage the Facility in accordance with this Agreement (including, without limitation, the requirements set forth in the Schedules hereto) and Applicable Law, said Company responsibilities including, without limitation, the following:

(a) preparing and delivering to the PWSB an updated Operation and Maintenance Manual for the Facility, including the Capital Improvements (the "Operation and Maintenance Manual");

(b) conducting day-to-day operations and monitoring in accordance with this Agreement, including all Schedules hereto, and in compliance with Applicable Law;

(c) preparing and submitting to appropriate authorities all reports and plans mandated by this Agreement and by Applicable Law;

(d) complying with all emergency and safety requirements set forth in Schedule 3 hereto and required by Applicable Law;

(e) performing all scheduled maintenance to ensure the long-term efficient operation of Facility;

(f) in addition to the Capital Improvements, performing maintenance, repairs and replacements as needed on infrastructure components;

(g) maintaining the inventory and inventory records for the consumable supplies and Equipment needed for the operations and maintenance of the System, including, without limitation, the Equipment and Chemicals Inventory described more particularly in Schedules 2 and 9 hereto;

(h) maintaining the grounds at the Site in a neat and orderly condition;

(i) disposing of Facility residuals;

(j) plowing access roads and parking areas when snow levels reach two (2) or more inches;

(k) integrating, on an on-going basis, the SCADA System with Facility operations, including, without limitation, (a) any staff training with regard to the SCADA System that may be required, and (b) any modifications to the SCADA System that may be required in connection with the Capital Improvements;

(l) hiring and retaining appropriate staff for the Facility while maintaining compliance with Section 3.9 hereof; and

(m) maintaining any and all appropriate records in connection with the activities specified above; and

(2) Except for Equipment, and other facilities and materials included in the Facility as of the Commencement Date, and except for the Capital Improvements and

expenditures under the Repair and Replacement Fund, provide, at its sole cost and expense, all labor, materials, machinery, vehicles, equipment, office equipment (i.e. copiers, computers, etc.), fuel, chemicals, supplies, spare parts, expendables, consumables, testing and laboratory analysis and any other items required for operation, maintenance repair, replacement, renewal and management of the Facility in accordance with this Agreement.

(3) As requested by the PWSB, provide facilities and facility operation of any future Facility upgrades or expansions in accordance with terms and conditions mutually agreed to by the PWSB and the Company.

Section 3.4 [RESERVED].

Section 3.5 Identification of an Authorized Disposal Facility.

The Company also shall be responsible for the identification, subject to the PWSB's approval, of an authorized disposal facility for the disposal of Facility residuals (the "Disposal Facility"), and the negotiation and execution of a contract or other agreement with the Disposal Facility (the "Disposal Agreement"); provided, however, that prior to the Company's entering into the Disposal Agreement, the terms and conditions of said Disposal Agreement shall be approved in writing by the PWSB.

Section 3.6 Responsibilities.

On and after the Commencement Date and during the remainder of the Contract Term, the PWSB shall:

- (1) pay, or cause to be paid, the Service Fee to the Company in accordance with the terms and conditions of this Agreement for the Company's performance of its obligations under this Agreement;
- (2) afford the Company access to the Facility to the extent necessary for the Company to perform its obligations hereunder;
- (3) retain responsibility for the operation and maintenance of the Distribution System, perform meter reading and maintenance, and perform long-term System and Service Area planning and management of watershed dams and reservoirs;
- (4) make available to the Company Equipment warranty information, engineering drawings, calculations, maintenance manuals, operational records, logs, reports, submittals, repair records, audits, and information which may be in the PWSB's possession or that of its agents, relating to the design, condition, operation or maintenance of the Facility.

Section 3.7 Repair and Replacement.

The PWSB has authorized significant repair and replacement projects for the existing water treatment facility for fiscal years 2000 and 2001. During FY 2001 these projects include:

1. Replacement of twelve (12) 24" filter discharge butterfly valves
2. Repair of twelve (12) 12" flow rate control valves
3. Repair of twelve (12) 12" flow rate control valves
4. Replacement of six (6) flocculator monitors and repairs to shaft and paddle reels
5. Roof replacement over filter gallery and rapid mixer areas
6. Installation of twelve (12) filter turbidimeters

These FY 2001 projects have an estimated capital cost of approximately \$300,000.

During FY 2002 and 2003, the PWSB continued to make significant repair and replacement expenditures for the existing water treatment plant. During FY 2002 and 2003, these projects include:

- 1) Replace of two pump impellers for high lift pumps
- 2) Concrete work and replacement / repair to deteriorated internal piping at the treatment plant
- 3) Autoclave replacement
- 4) Replacement of GAC in three filters
- 5) Engineering inspection of all treatment plant components

These FY 2002 and 2003 projects have an estimated capital cost of over \$600,000. To the extent these items were included in the Company's Proposal as part of the Company capital program for the existing facility and/or new facility, the Company capital cost commitment will be reduced accordingly.

The PWSB recognizes that additional repair and replacement capital spending for the existing water treatment plant may be required for fiscal years 2004 - 2005 to maintain functional performance of the facility until such time as the existing facility is replaced with the new water treatment plant.

For Proposal A (existing treatment plant), the Company shall include the following for repair and replacement budgets during the period of Company operation of the existing water treatment plant:

- (a) All repair and replacement expenditures will be funded by the Company for all expenses less than \$10,000 and shall be included in the Service Fee;

(b) Any repair and replacement expenses more than \$10,000 will be funded separately from the Service Fee as outlined below:

1. The Company shall establish a "major repair and replacement fund" of \$100,000 per year to be used for major repair and replacement expenditures as submitted by the Company and authorized by PWSB (the "Repair and Replacement Fund").

2. The Repair and Replacement Fund shall only be accessed with PWSB approval and authorization following documented submittals by the Company to the PWSB. The PWSB recognizes that the PWSB shall be responsible for arranging for the financing of any major repair and replacement expenditures authorized in any one year in excess of the Repair and Replacement Fund.

3. At new plant startup, any unused funding remaining in the Repair and Replacement Fund shall revert to the PWSB and ratepayers for funding "pay as you go" capital projects as determined by the PWSB.

For Proposal B (new treatment plant), the Company shall be responsible for all repair and replacement expenditures within the established budget of the Service Fee. The Company shall provide in sufficient detail, the dollars budgeted for repair and replacement expenditures in the annual Service Fee to allow review and evaluation by the PWSB during Proposal evaluations. As part of the Company's monthly reporting requirements to the PWSB, the PWSB shall receive from the Company a summary of any/all expenditures for repair and replacement. Utilization of these repair and replacement dollars for expenditures over \$10,000 will be reviewed and authorized by the PWSB, whose authorization shall not be unreasonably withheld.

This section of the Agreement shall also be in accordance with the proposed O&M plan under Facility Plans in Section 3.3 above.

The Company shall make all necessary Repair and Replacement expenditures and on a monthly basis shall submit to the PWSB a report of expenses which should be reimbursed out of the Repair and Replacement Fund and, at its option, may request the PWSB to pay such expenses directly from the Repair and Replacement Fund.

All Repair and Replacement expenditures in excess of amounts in the Repair and Replacement Fund shall be borne by the Company.

During the Contract Term, the Company shall recommend and perform activities to be paid from the Repair and Replacement Fund as follows:

(1) The Company shall demonstrate the necessity for performing any major repair and maintenance activities payable from the Repair and Replacement Fund, and shall further demonstrate that all applicable and routine maintenance has been performed.

(2) The Company shall prepare written recommendations for all major repair and maintenance activities to be paid from the Repair and Replacement Fund that the Company

determines may be required to keep the Facility in a state of good operating repair and order, which recommendations shall include the approximate cost of completing such activities.

(3) The PWSB, within sixty (60) days of receipt of such written recommendations, shall either approve or deny the Company's recommendation in writing; provided, however, that if the PWSB fails to notify the Company, in writing, within such sixty (60) day period of its decision, such recommendation shall be deemed approved.

(4) In the event that the PWSB shall approve the Company's recommendation, the Company shall proceed with the recommended work and it shall be paid for from the Repair and Replacement Fund or by the Company if no such Repair and Replacement Funds are available; provided, however, that in the event of an emergency situation involving health and safety concerns, the Company may, upon prior notice to and approval of the PWSB's Chief Engineer/General Manager, immediately undertake work to be paid for from the Repair and Replacement Fund.

Section 3.8 Company Project Manager.

The Company has designated John Marcin as the Company's full-time Project Manager and such Project Manager, and any PWSB-approved successor, shall, within ninety (90) days after the Commencement Date, reside either within the PWSB service area or within thirty (30) miles of the Facility. The PWSB has selected the Company to perform the services contemplated under this Agreement based, in part, on the past successful experience and expertise of the designated Project Manager. Accordingly, the Company shall not, absent good cause, replace such Project Manager during the term of this Agreement, without the prior approval of the PWSB. If such Project Manager or any PWSB-approved successor shall retire, resign as Project Manager or otherwise cease employment with the Company, the Company shall not appoint a successor Project Manager without the prior written approval of the PWSB. If the PWSB, in its sole discretion, determines that the Project Manager is performing in an unsatisfactory manner, or if an unworkable relationship between the Project Manager and the PWSB shall arise, the Company, upon notice by the PWSB of such circumstance, shall promptly replace such Project Manager with a successor acceptable to the PWSB; provided, however, the PWSB represents that it will not give such notice to the Company unless and until the PWSB, in its sole determination, has exercised reasonable good faith efforts to rectify to its satisfaction the adverse circumstance regarding the Project Manager.

Section 3.8A Company Design/Build Manager.

The Company has designated Richard Steiger as the Company's manager of the design/build of the Facility to be provided by the Company during the 24-month schedule provided by the Company as Schedule 3 hereto. The PWSB has selected the Company to perform the services contemplated under this Agreement based, in part, on the past successful experience and expertise of the designated Design/Build Manager. Accordingly, the Company shall not, absent good cause, replace such Design/Build Manager during the term of this Agreement, without the prior written approval of the PWSB. If such Design/Build Manager or any PWSB-approved successor shall retire, resign as Design/Build Manager or otherwise cease employment with the Company, the Company shall not appoint a successor Design/Build

Manager without the prior written approval of the PWSB. If the PWSB, in its sole discretion, determines that the Design/Build Manager is performing in an unsatisfactory manner, or if an unworkable relationship between the Design/Build Manager and the PWSB shall arise, the Company, upon notice by the PWSB of such circumstance, shall promptly replace such Design/Build Manager with a successor acceptable to the PWSB; provided, however, the PWSB represents that it will not give such notice to the Company unless and until the PWSB, in its sole determination, has exercised reasonable good faith efforts to rectify, to its satisfaction, the adverse circumstance regarding the Design/Build Manager.

Section 3.8B Company On-Site Construction Project Manager.

The Company has designated Brian Corbett as the Company's on-site construction project manager of the Facility. The PWSB has selected the Company to perform the services contemplated under this Agreement based, in part, on the past successful experience and expertise of the designated On-Site Construction Project Manager. Accordingly, the Company shall not, absent good cause, replace such On-Site Construction Project Manager during the term of this Agreement, without the prior written approval of the PWSB. If such On-Site Construction Project Manager or any PWSB-approved successor shall retire, resign as On-Site Construction Project Manager or otherwise cease employment with the Company, the Company shall not appoint a successor On-Site Construction Project Manager without the prior written approval of the PWSB. If the PWSB, in its sole discretion, determines that the On-Site Construction Project Manager is performing in an unsatisfactory manner, or if an unworkable relationship between the On-Site Construction Project Manager and the PWSB shall arise, the Company, upon notice by the PWSB of such circumstance, shall promptly replace such On-Site Construction Project Manager with a successor acceptable to the PWSB; provided, however, the PWSB represents that it will not give such notice to the Company unless and until the PWSB, in its sole determination, has exercised reasonable good faith efforts to rectify, to its satisfaction, the adverse circumstance regarding the On-Site Construction Project Manager.

Section 3.9 Personnel

Section 3.9.1 Orientation and Career Planning.

Within the first two (2) weeks of the Commencement Date, the Company shall conduct a Company orientation and career planning workshop or workshops at the Company's sole cost and expense for PWSB Employees. The workshop(s) shall apprise PWSB Employees of applicable legal requirements relative to their employment rights, and shall orient the PWSB Employees to the Company's management, operation and maintenance policies (and its plan for providing such services under this Agreement), its career planning policy, its hiring program and criteria and its compensation and benefits plans.

Section 3.9.2 Continued and Comparable Employment.

The parties hereby incorporate the terms of those certain Memoranda of Agreement by and among (a) Teamsters Local 64, the City, the PWSB and the Company, and (b) R.I. Council 94 (Local 1012), the City, the PWSB and the Company, attached hereto as Schedule 18.

Section 3.10 Noncompliance Assessment for Failure to Meet Water Quality Standards.

The Company is required to satisfy the requirements of Applicable Law with respect to the quality of treated raw water by the Facility as set forth in Schedule 1 hereto except during events of Uncontrollable Circumstances. Except where such failure is due to Uncontrollable Circumstances, failure to satisfy such requirements, or failure to operate the Facility in such a manner as to minimize noise and/or dust emanating from the Facility, shall result in the imposition on the Company of a noncompliance assessment in the manner and in the amounts set forth in this Section 3.10. If the Company fails to meet Interim or Future Finished Water Requirements as and when required hereunder:

- (1) the Company shall immediately take all reasonable and appropriate action to satisfy all Interim or Future Finished Water Requirements as applicable;
- (2) the Company shall provide a plan to the PWSB outlining corrective actions for achieving compliance with Interim or Future Finished Water Requirements as applicable (the "Compliance Plan") within forty-eight (48) hours of written notice of noncompliance given by the PWSB;
- (3) the PWSB will review and provide written comments on the Compliance Plan within forty-eight (48) hours after receipt; and
- (4) the Company shall immediately implement the Compliance Plan, which shall address the PWSB's comments.

The Company will be responsible for performing any and all operational modifications as specified by the Compliance Plan. Failure to either provide a Compliance Plan or to implement the corrective actions set forth in the Compliance Plan shall result in Company liability for a noncompliance assessment in the amount of \$1,000 per day from such time that either (i) the Compliance Plan should have been submitted, or (ii) the date on which corrective actions should have commenced pursuant to the Compliance Plan. Such noncompliance assessment shall increase to the amount of \$5,000 per day for any repeated failure to comply with the same particular standard previously violated within any twelve (12) month period under this Section 3.10. Neither the review of or comment on, nor the failure of the PWSB to comment on, any Compliance Plan proposed by the Company, shall relieve the Company of any of its responsibilities under this Agreement, be deemed to constitute a representation that the PWSB that the corrective actions proposed in any such Compliance Plan will cause the Facility to be in compliance with the Interim or Future Finished Water Requirements, as applicable, or otherwise impose any liability on the PWSB.

All fines or penalties imposed on the PWSB or the Company by any Governmental Body as a result of failure of the Facility to conform to the Interim or Future Finished Water Requirements shall be the sole obligation of and shall be paid by the Company unless such failure is the result of an Act of God.

Section 3.11 Fees and Payments.

Section 3.11.1 Reimbursement for Transaction Costs.

Upon delivery of the invoice described herein by the PWSB, the Company shall pay to the PWSB a one-time payment for the fees and expenses paid or incurred by the PWSB to or for its consultants relative to the planning, preparation and procurement through contract execution with respect to this Agreement in an amount not to exceed Four Hundred Fifty Thousand Dollars (\$450,000). In addition, the Company shall pay the PWSB a one-time payment of up to Three Hundred Seventy-Five Thousand Dollars (\$375,000) to the PWSB for employee transition costs. With respect to these payments, the PWSB shall provide to the Company an invoice for the payment together with reasonable documentation of the costs involved. The invoice for the payments shall not be delivered by the PWSB to the Company prior to the Commencement Date. If the Commencement Date does not occur, the Company shall not be liable for the \$375,000 employee transition payment to the PWSB, but shall be responsible for the \$450,000 transaction cost payment to the PWSB; however, the Company shall not be responsible for the \$450,000 transaction cost payment to the PWSB if the Commencement Date does not occur due to the failure of the PWSB to satisfy its conditions precedent to the Commencement Date as set forth in Section 3.1.2(c).

Section 3.11.2 [RESERVED].

Section 3.11.3 [RESERVED].

Section 3.11.4 Service Fee.

Commencing with the first Billing Month and for each Billing Month thereafter, the PWSB shall pay to the Company a Service Fee for managing, operating and maintaining the Facility pursuant to the terms and conditions of this Agreement. The Service Fee shall be dependent upon the Proposal in effect. Except as otherwise provided in this Agreement, the Service Fee includes all compensation to the Company for managing, operating and maintaining the Facility. The Service Fee shall be paid in increments of 1/12th each during each month of a Contract Year.

Section 3.11.5 Service Fee Adjustment.

The Service Fee shall be consistent with the private activity limitations described in Section 141 of the Internal Revenue Code and regulations and official interpretations issued thereunder, including, without limitation, Revenue Procedure 97-13. The PWSB shall have the right to equitably adjust the Service Fee payment formula over the course of the Contract Term as follows:

(1) As necessary, to comply with the private activity limitations described in Section 141 of the Internal Revenue Code and regulations and official interpretations issued thereunder, including, without limitation, Revenue Procedure 97-13. Any such adjustments shall be such that the fixed and variable components of the Service Fee are within the specified percentages allowed by the private activity limitations described in Section 141 of the Internal Revenue Code and regulations issued thereunder. Adjustments shall not entitle the Company to

additional compensation. Should such adjustments not be possible so that continued compliance with the private activity limitations described in Section 141 of the Internal Revenue Code and regulations issued thereunder is not possible, the PWSB reserves the right to terminate this Agreement upon thirty (30) days notice to the Company. Any such termination shall be deemed to be a Termination for Convenience pursuant to and governed by Section 8.4.1 hereof;

(2) If the 12-month moving average for finished water quantity falls outside of the established range of "13.3 MGD +/- 10%" for the monthly average of finished water production and/or the 12-month moving averages for raw water quality parameters fall outside of the range of +/- 10% of the values specified in Schedule 2 (tables S2-1 and S2-2), then the Company and the PWSB shall negotiate in good faith to adjust upward or downward the Service Fee in accordance with the adjustment methodology set forth in Schedule 11 incorporated by reference herein and made a part hereof;

(3) The Service Fee payment formula shall be adjusted as provided in Section 4.5.3 hereof;

(4) The Service Fee payment formula shall be adjusted by (i) mutual agreement of the parties as to the amount and/or methodology and (ii) determination by the PWSB that any such adjustment will not contravene the Applicable Law (including, without limitation, any law relating to procurement) or the private activity limitations described in Section 141 of the Internal Revenue Code and regulations and official interpretations issued thereunder, including, without limitation, Revenue Procedure 97-13; and

(5) The Service Fee payment formula shall be adjusted annually on the anniversary date of the Commencement Date, the Service Fee will be adjusted to reflect changes in the CPI as outlined in Schedule 11 hereto, which adjustment shall utilize the percentage change in CPI for the prior 12 month period using all monthly indices published for that 12 month period as outlined in Schedule 17.

(6) On an annual basis, the PWSB shall monitor compliance with the private activity limitations described in Section 141 of the Internal Revenue Code and regulations and official interpretations issued thereunder, including, without limitation, Revenue Procedure 97-13. In the event the PWSB determines that any payment or fee would result in a violation of the private activity limitations, the PWSB shall immediately notify the Company. The PWSB and the Company shall then mutually agree to make any and all adjustments necessary to comply with Applicable Law.

Section 3.11.6 Cost Savings.

The Company shall actively pursue improvements in the effectiveness and efficiency of the operation, maintenance and management of the Facility that may reduce the Service Fee or Pass Through Costs. Any Company proposals for such improvements, including the costs, benefits and anticipated net savings, shall be provided to the PWSB in writing. If the PWSB approves any such proposals, and if implementation of any such proposal results in net savings to the PWSB as determined by the PWSB, the PWSB shall pay the Company an amount equal to

forty percent (40%) of the aggregate net savings to the PWSB resulting from the implementation of any such proposal. Such share of net savings shall be, at the discretion of the PWSB, either (i) a one time payment to the Company, or (ii) an annual payment, depending on the nature of the modification and the resulting net savings. Any such payment shall be consistent with the private activity limitations described in Section 141 of the Internal Revenue Code and regulations and official interpretations issued thereunder, including, without limitation, Revenue Procedure 97-13.

Section 3.12 Additional Compliance Obligations.

Should the Company fail to timely perform the other aspects of the workscope contained in this Agreement, including reporting and administrative requirements, and should such failure continue following written notification to cure and a five business day period to cure, the Company shall be liable to the PWSB for a noncompliance assessment in the amount of \$1,000 per day until such time as the noted deficiency is corrected. In the event of repeated failure to timely perform such aspects of this Agreement within any twelve (12) month period, such fine shall be increased to \$5,000 per day until such time as the noted deficiency is corrected.

ARTICLE IV CAPITAL IMPROVEMENTS -DEVELOPMENT PHASE

Section 4.1 Development Phase -Generally.

The period beginning on the Commencement Date and ending on the Construction Date shall be referenced herein as the "Development Period." During the Development Period, the obligations of the parties with regard to the Capital Improvements shall be as provided for in this Article and the obligations of the parties to proceed with their respective obligations during the Construction Period shall not commence until all Construction Date Conditions have been satisfied.

Section 4.2 Site Suitability Confirmation.

Section 4.2.1 Site Familiarity.

The Company acknowledges that the Company's agents and representatives have visited, inspected and are familiar with the Site, its surface physical condition relevant to the obligations of the Company pursuant to this Agreement, including surface conditions, normal and usual soil conditions, roads, utilities, topographical conditions and air and water quality conditions; that the Company is familiar with all local and other conditions which may be material to the Company's performance of its obligations under this Agreement (including, but not limited to transportation; seasons and climate; access, availability, disposal, handling and storage of materials and Equipment; and availability and quality of labor and Utilities), and has received and reviewed all information regarding the Site provided to it as part of the RFP process or obtained in the course of performing its obligations hereunder.

Section 4.2.2 Assumption of Structural Suitability Risk.

Based on the Site investigations and other inquiries made by the Company prior to the Contract Date and consistent with the Company's Development Period obligations set forth in Section 4.3.1 hereof, which the Company acknowledges to be sufficient for this purpose, the Company assumes the risk of all subsurface geotechnical conditions at the Site as they may affect the structural suitability of the Site or the Company's excavation or construction costs or schedules, and agrees that any such subsurface geotechnical condition revealed during excavation for or construction of the Capital Improvements which has such an effect shall not be an Uncontrollable Circumstance.

Section 4.3 Company Responsibilities During the Development Period.

Section 4.3.1 Obligation to Proceed.

Promptly following the Contract Date, the Company shall proceed, at its own cost and expense, to exercise good faith and due diligence in order to promptly satisfy all of the following Company responsibilities:

(a) Site Conditions. Prior to the Construction Date, a fully integrated geotechnical investigation shall be performed by qualified professionals, including but not limited to an exploratory boring and soil sampling program, in-situ testing of soils, and geophysical investigations, consistent with Prudent Industry Practices, and as necessary for construction of the required Capital Improvements. Such geotechnical investigation shall include, without limitation: synthesizing available data; retaining all required permits; conducting field and laboratory investigations; characterizing and confirming site stratigraphy and soil properties, including environmental conditions and/or hazardous substances, if applicable; evaluating engineering alternatives, including proposed load-bearing fill support or subsoil improvement techniques, if applicable; identifying bearing levels; selecting the appropriate foundation system(s); formulating design and construction criteria; and performing appropriate constructability and field tests. Such geotechnical program shall be integrated with design and construction quality assurance to ensure a continuity of purpose and philosophy that effectively reduces the risks associated with unanticipated subsurface conditions and design and construction deficiencies.

Within thirty (30) days following the completion of the Site investigation, the Company shall furnish the PWSB with a certified written report describing and certifying the geotechnical tests conducted, the results of each test, and the level of satisfaction of the tests relating thereto and all other requirements specified herein (the "Written Test Report"). The Written Test Report shall include copies of the original data sheets, log sheets, and all calculations used to determine the suitability of the Site for the Capital Improvements, and laboratory reports conducted in conjunction with the Site investigation.

The Written Test Report also shall detail the geotechnical conditions, if any, that were not previously identified by the Company and reasonably could not have been identified by the Company and, therefore, were not included in the Proposal. If applicable, the Written Test Report also will detail, for acceptance by the PWSB, the impact on the design of the Capital

Improvements and on the Fixed Construction Price of accommodating the newly identified geotechnical condition(s) in a manner consistent with generally accepted design standards and sound, professional engineering and construction methodologies. If the Company demonstrates to the PWSB's satisfaction that the revisions to the Capital Improvements are necessary to accommodate the newly identified geotechnical condition(s), the PWSB will make appropriate adjustments to the Fixed Construction Price and schedule. Under no circumstances shall the Company be eligible for an adjustment to the Fixed Construction Price or schedule based on geotechnical conditions at the Site not identified in the Written Test Report except for Hazardous Waste that migrates from off of the Site onto the Site subsequent to the date of the Written Test Report.

The Company shall certify, through the Written Test Report, either (a) that the Site constitutes an acceptable and suitable Site for the Capital Improvements and the operation, maintenance and management of the Facility in accordance with the terms of this Agreement, and that the Capital Improvements can be constructed within the Fixed Construction Price, or (b) that modifications to the Fixed Construction Price are necessary because of newly identified geotechnical conditions.

The PWSB shall determine within fifteen (15) days of its receipt of the Written Test Report whether it concurs with such certification. If the PWSB states in writing that it concurs with the Company's certification, then the geotechnical investigation shall be deemed complete. If the PWSB determines that it does not concur with such certification, the PWSB shall immediately send written notice to the Company of the basis for its disagreement. In the event of any such non-concurrence by the PWSB, either party may elect to refer the dispute to the Independent Panel for resolution.

(b) Permit Applications and Fee Payments. The Company shall prepare and submit, on behalf of the PWSB as applicant, applications, including any and all required studies and supporting documentation, for any and all required Permits and approvals. The Company shall pay all Permit fees, permitting agency costs and charges due in connection therewith, and shall take all action necessary on behalf of the PWSB as applicant in connection with all associated permitting and land use proceedings before all appropriate Governmental Bodies if and to the extent required in order to obtain, designate and provide for the use of the Site for the purposes of this Agreement, and obtain all permits necessary to commence construction of the Facility not later than the date that is eighteen (18) months from the Contract Date.

(c) Legal Entitlements. The Company shall submit, on behalf of the PWSB as applicant, applications and take all other steps which are necessary to obtain all Legal Entitlements required to be issued under Applicable Law before the Construction Date, in form and substance satisfactory to the PWSB.

(d) Site-Related Plans. The Company shall prepare and submit to the appropriate Governmental Body, as required, any and all plans necessary for issuance of any Permit, including but not limited to, (a) a clearing and grading plan, (b) an erosion and sediment control plan, (c) a drainage plan, (d) a wetland mitigation plan, and (e) a landscaping plan.

(e) Supplemental Environmental Impact Statement. The Company shall prepare for the PWSB all supplements and addenda to any environmental impact statement prepared by the PWSB with respect to the Site which are required under Applicable Law to undertake and complete the Capital Improvements or to obtain any necessary Permits and approvals.

(f) Information to Support Site Easements. In the event that the PWSB is required to grant Utility easements on the Site in connection with the Capital Improvements, the Company shall provide complete descriptions of all Utility connections and routes on the Site necessary for such purposes.

(g) Site Survey. The Company shall prepare or have prepared a property line survey of the Site as of a date subsequent to the Contract Date showing (i) the exact dimensions and locations of the Site, (ii) the exact location of all means of access thereto and all easements relating thereto, (iii) that the proposed location(s) of any Capital Improvements at the Facility are in compliance with all applicable building and set-back lines and do not encroach on or interfere with existing easements (whether on, above or below ground), (iv) no encroachments from the Facility extending to adjacent property or from adjacent property onto the Facility, nor any gaps, gores, projections, protrusions or other survey defects, and (v) that the Facility, after completion of the Capital Improvements, will comply with the zoning classification applicable thereto, if any.

(h) Zoning. If necessary, the Company shall apply to the appropriate Governmental Body for any required change in the zoning classification applicable to the Site, or any portion thereof, caused by the Capital Improvements so that, no later than the Construction Date, a zoning ordinance, or a variance or special exception thereto, shall then be effective which permits the construction of the Capital Improvements and operation of the Facility as contemplated hereby, and the Company shall furnish confirming evidence thereof to the PWSB.

(i) Utilities. The Company shall make all arrangements necessary to secure the availability of all Utilities required to support the Facility including the Capital Improvements in the capacities required hereunder, and shall evidence such availability by letters from the providers of such Utilities.

(j) Technical Materials and Safety Plans. The Company shall provide to the PWSB copies of all plans, technical specifications, blueprints, drawings, reports and other design documents and safety plans prepared by or on behalf of the Company prior to the Construction Date for permitting, regulatory compliance, financing, bonding, credit enhancement and insurance purposes. Documents to support Permit applications shall be submitted to the PWSB for review prior to submittal to permitting agencies.

(k) Construction Plans. Not later than sixty (60) days prior to the Construction Date, the Company shall enter into a construction contract with a contractor (the "Contractor") experienced in constructing industrial projects similar to the Capital Improvements (the "Construction Contract") or shall indicate that the Company shall complete the Construction Work itself. In either case, the Contractor or the Company shall provide for the performance of all construction work related to the Capital Improvements, except that to be performed by the

Company. All drawings, blueprints, plans and specifications prepared shall be consistent with all terms and conditions of this Agreement, and shall be subject to review and comment by the PWSB. The Construction Contract, if any, shall be subject to review and comment by the PWSB. No such review or comment by the PWSB shall amend, alter or affect this Agreement or the Company's obligations hereunder in any manner, nor shall the PWSB incur any liability or expense as a result thereof.

(l) Applicable Law Compliance. The Company shall comply with all other requirements of Applicable Law pertaining to the activities constituting the Construction Date Conditions.

(m) The Guaranty. The Guarantor shall execute and deliver to the PWSB the Guaranty substantially in the form of Exhibit B hereto.

(n) Insurance. The Company shall submit to the PWSB the necessary Certificates and copies of insurance policies and/or such other evidence as the PWSB in its sole discretion shall determine to be satisfactory, for all Insurance specified in Schedule 4 hereto.

(o) Emergency Response Plan. The Company shall have completed and furnished to the PWSB, and the PWSB shall have accepted, the Emergency Response Plan described in Schedule 3.2 hereto.

(p) Financing Assistance. The Company shall cooperate with and assist the PWSB in providing any information, certifications or documents which reasonably may be required in connection with the issuance of City or PWSB revenue obligations or otherwise obtaining the funds necessary to pay the Fixed Construction Price.

(q) Representations. The representations of the Company set forth in Sections 9.2 and 9.3 hereof and of the Guarantor set forth in the Guaranty shall be true and correct in all material respects as of the Construction Date as if made on and as of the Construction Date, and the Company shall deliver to the PWSB a certificate of an authorized officer of each to that effect, together with appropriate certified authorizing resolutions and incumbency certificates.

(r) Documents Evidencing Required Activities. The Company shall have provided to the PWSB copies of all filings and reports conducted, prepared or obtained with respect to or evidencing the Company's activities pursuant to this Section 4.3.

(s) Financial Condition. The Company shall provide audited financial statements of the Guarantor for the most recently completed fiscal year and unaudited quarterly period. The Company shall provide financial information regarding the Company sufficient to satisfy the PWSB with respect to the Company's financial condition. Since the Contract Date, there shall not have occurred any change, financial or otherwise, in the condition of the Company or the Guarantor that would materially and adversely affect the ability of the Company or the Guarantor to perform its respective obligations under this Agreement or the Guaranty.

(t) Notice of Default. The Company shall provide to the PWSB, promptly following the receipt thereof, copies of any notice of default, breach or noncompliance received under or in connection with any Permit or any other matter pertaining to the Development Period.

Section 4.4 City/PWSB Responsibilities During the Development Period.

Promptly following the Contract Date, the PWSB shall proceed at its own cost and expense to exercise good faith and due diligence in order to satisfy all of the following the PWSB responsibilities.

Section 4.4.1 Financing.

The City shall obtain financing, through the public or private sector, for the Capital Improvements. The capital improvements and operations will be performed by the Company to comply with all Federal, State, and local laws and regulations, including requirements for projects financed through RICWFA or RIWRB. The Company will comply with these financing laws and regulations. See Schedule 15.

Section 4.4.2 Legal Entitlements.

The PWSB shall cooperate with the Company in the submittal, on behalf of the PWSB as applicant, of all applications for Legal Entitlements which the Company is obligated to submit pursuant to Section 4.3 hereof.

Section 4.4.3 Zoning.

The PWSB will cooperate with and assist the Company in any application for any change in zoning classification that may be required to undertake the Capital Improvements.

Section 4.5 Construction Date Conditions.

Section 4.5.1 Construction Date Conditions.

The obligations of the Company and the PWSB to proceed with their respective obligations hereunder during the Construction Period shall not commence until all of the following conditions are satisfied or waived in writing by the PWSB and the Company (the "Construction Date Conditions"):

(a) Company Development Period Responsibilities. The Company shall have fulfilled all of its responsibilities with respect to the Development Period under Section 4.3 hereof.

(b) Development Period Responsibilities. The PWSB shall have fulfilled all of its responsibilities with respect to the Development Period under Section 4.4 hereof.

(c) Legal Entitlements. All Permits and other Legal Entitlements required to commence construction of the Capital Improvements shall have been issued or obtained and shall be in full force and effect.

(d) Acceptability and Effectiveness of Documents. All of the documents, instruments and agreements identified in this Section 4 shall be in form and substance reasonably satisfactory to both parties, and shall be valid, in full force and effect and enforceable against each party thereto as of the Construction Date. No such documents, instruments or agreements shall be subject to the satisfaction of any outstanding condition precedent except those expressly to be satisfied after the Construction Date, no party to any such document, instrument or agreement shall have repudiated or be in default or imminent default thereunder, and each party shall have received such certificates or other evidence reasonably satisfactory to it of such facts as such party shall have reasonably requested. The PWSB and the Company shall each proceed at their own cost and expense, in good faith and with due diligence, to take such actions as may reasonably be under their respective control in order to satisfy the condition set forth in this Subsection 4.5.1(d).

(e) Legal Proceedings. There shall be no Legal Proceeding which (1) challenges, or might challenge, directly or indirectly, the authorization, execution, delivery, validity or enforceability of this Agreement or the Guaranty, or (2) seeks to enjoin or restrict the use of the Site for the purposes contemplated by this Agreement or seeks damages, fines, remediation or any other remedy in connection with the environmental condition or any other factor pertaining to the Site.

(f) No Change In Law. No Change In Law shall have occurred after the Contract Date that would make the authorization, execution, delivery, validity, enforceability or performance of this Agreement or the Guaranty a violation of Applicable Law.

Section 4.5.2 Required Development Milestone Completion Dates.

Without limiting the Company's obligations under Section 4.3 hereof, and notwithstanding the occurrence of any Uncontrollable Circumstance, the Company shall meet, complete and satisfy in full the following milestones by the dates indicated:

<u>Milestone</u>	<u>Guaranteed Completion Date</u>
1. Submit to the PWSB the final schedule and reconfirmation of the envisioned components of the Capital Improvements	(1) 90 days after the Contract Date
2. Submit to the PWSB all applications for Legal Entitlements	(2) 90 days after the Contract Date

Section 4.5.3 Conditions to Legal Entitlements.

The Company shall apply on behalf of the PWSB for any Legal Entitlement required to assure that the terms and conditions are not inconsistent with the Company's obligations hereunder, and shall notify the PWSB of any terms and conditions proposed by the issuing or approving Governmental Body that are more stringent or burdensome than the standards set forth in Schedule 1 hereto. Within ten (10) days of the receipt of information as to proposed terms, conditions or requirements to be contained in any draft or final Legal Entitlement, the Company shall provide the PWSB with written notice of its determination and reasoning as to whether and why the terms and conditions of any such draft or final Legal Entitlement are more burdensome or stringent than those set forth in Schedule 1 hereto. In the event the Company claims that such Legal Entitlement contains conditions or requirements which are more burdensome or stringent than those set forth in Schedule 1, and therefore constitutes a Change In Law, the Company shall provide the PWSB with notice and information required pursuant to Subsection 5.14.3 hereof and the parties shall negotiate any equitable adjustment to the Service Fee as appropriate.

Section 4.5.4 Denial of a Legal Entitlement.

In the event that at any time during the Development Period any application (or appeal from the denial of an application) for a Legal Entitlement required to be obtained by the Company hereunder for the Capital Improvements is denied, the PWSB may elect either (1) to direct the Company to appeal the denial at the sole cost and expense of the PWSB, or (2) terminate this Agreement, with the same effect as if the Company had terminated this Agreement upon a failure of the parties to satisfy the Construction Date Conditions contained in Section 4.5 hereof by the time required under Subsection 4.6.2 hereof. The PWSB shall make any such election within sixty (60) days of the date it receives final formal notice of the denial action. If the PWSB elects to direct the Company to appeal the initial denial, denial at a higher appellate level of the same Legal Entitlement shall give rise to an additional termination option as set forth in subparagraph (2) hereof.

Section 4.6 Closing the Development Period.

Section 4.6.1 Satisfaction of Conditions.

The parties will give each other prompt notice when each Construction Date Condition has been achieved. Upon the satisfaction or waiver in writing by both the PWSB and the Company of all of such Construction Date Conditions, the parties shall hold a formal closing acknowledging such satisfaction and certifying that the Construction Date has occurred. Written documents or instruments constituting or evidencing satisfaction of the Construction Date Conditions shall be furnished to each party prior to or on the Construction Date.

Section 4.6.2 Failure to Satisfy Construction Date Conditions.

If, by the date that is one day after the eighteen month anniversary of the Contract Date, all of the Construction Date Conditions for which the Company is responsible are not either satisfied by the Company or waived by the PWSB, then the Company shall pay to the PWSB, in addition to other costs and expenses required to be paid pursuant to this Agreement, a daily delay non-compliance assessment in the amount of \$5,000 for each day that such Construction Date

Conditions remain unsatisfied after said date until any termination of this Agreement for an Event of Default, up to a total of sixty (60) days of delay non-compliance assessments. In the event that the Construction Date Conditions are not either satisfied or waived as required hereunder due to the sole fault of the PWSB, then schedule relief will be granted by the PWSB consistent with documented evidence of such fault and delay provided by the Company to the PWSB's satisfaction.

The parties agree that, since the PWSB's actual damages if all of the Construction Date Conditions for which the Company is responsible are not either satisfied by the Company or waived by the PWSB prior to that date which is one day after the eighteen month anniversary of the Contract Date would be difficult or impossible to ascertain, the non-compliance assessment provided for in this Section, in addition to the other costs and expenses required to be paid pursuant to this Agreement, are intended to place the PWSB in the same economic position in which it would have been had such Construction Date Conditions been satisfied on or prior to the eighteen month anniversary of the Contract Date.

Section 4.7 PWSB Termination and Suspension Options.

Section 4.7.1 PWSB Convenience Termination Option.

As set forth more fully in Section 8.4.1 hereof, the PWSB shall have the right to terminate this Agreement at its sole discretion, for its convenience and without cause, at any time after the execution of this Agreement upon 90 days' prior written notice to the Company. If the PWSB so exercises its right to terminate this Agreement under this paragraph, the PWSB shall pay the Company a termination fee equal to an amount as set forth on Schedule 16. The fees indicated on Schedule 16 shall include costs for demobilization and related costs, and unamortized portions of Capital Improvement costs. The maximum amount for termination (as proposed by the Company on Schedule 16) is set forth in Section 8.4 hereof.

Section 4.7.2 PWSB Suspension Option During the Development Period.

The PWSB shall have the right at any time prior to the Construction Date, exercisable in its sole discretion, for any reason by written notice to the Company and without terminating this Agreement, to suspend the obligations of the Company and the PWSB to seek the fulfillment of the Construction Date Conditions. Upon any such suspension, the PWSB shall reimburse the Company, subject to the maximum reimbursement limitation set forth in Section 4.7.1 hereof, for its substantiated actual direct costs and demobilization and mobilization costs, all of which shall be documented to the PWSB's satisfaction, incurred and expenses paid or incurred to third parties from the Contract Date to the date on which this Agreement is suspended by the PWSB, less any amounts already paid to the Company; provided, however, that all such costs and expenses must have been (a) directly related to the Company's performance of its Development Period obligations hereunder, and (b) necessary to be performed prior to the Construction Date. The Company shall not be further obligated during the suspension to seek to fulfill the Construction Date Conditions.

The PWSB may, in its sole discretion at any time thereafter, upon written notice to the Company, reinstate the obligations of the Company to fulfill the Construction Date Conditions,

and thereupon an amount equal to all substantiated actual direct expenses previously reimbursed to the Company, not including demobilization and mobilization costs, shall be deducted from the Fixed Construction Price and the obligations of the Company as to the Construction Date Conditions shall resume. In such event, schedule relief may be granted by the PWSB to the Company based upon documented evidence to the PWSB's satisfaction of the necessity of such relief due to the PWSB's exercising its suspension option hereunder. If the PWSB does not reinstate the obligation of the Company to seek to fulfill the Construction Date Conditions within twelve (12) months following the suspension, the Company may, at any time thereafter, terminate this Agreement upon written notice to the PWSB.

Section 4.7.3 Cost of Records and Reporting.

During the Development Period, the Company shall prepare and maintain proper, accurate and complete records of the cost and description of the permitting and other Development Period costs of the Company since the Contract Date which are directly related to the Company's obligations under this Agreement, the cost of which would be the responsibility of the PWSB if the PWSB were to elect to suspend or terminate this Agreement pursuant to Subsection 4.7.1 or 4.7.2 hereof. All financial records of the Company and its Subcontractors shall be maintained in accordance with generally accepted accounting principles and auditing standards. The Company shall submit all books and records or a reasonably detailed summary thereof acceptable to the PWSB, together with a summary statement of monthly and aggregate reimbursable expenses incurred, to the PWSB on a monthly basis after the Contract Date until either the PWSB exercises its right to suspend or terminate this Agreement or until the Construction Date occurs, whichever is earlier. If the Company fails to provide such monthly reports to the PWSB within sixty (60) days from the last business day of any such month, the Company waives its right to claim and receive any reimbursable expenses incurred for that month. Specific requests by the Company for the payment of reimbursable expenses shall include documentation substantiating such expense. In addition, on the Contract Date and on the first day of each month thereafter, the Company shall provide to the PWSB an itemized list of all work related to the Capital Improvements expected to be undertaken in the following month and the expected costs thereof. The PWSB shall have the right to question the Company's decision to undertake such activities and to provide notice to the Company that such costs will not be reimbursed.

Section 4.7.4 Delivery of Development Period Work Product to the PWSB.

Concurrent with payment by the PWSB to the Company of any amount due on termination or suspension of this Agreement by the PWSB under this Section 4.7, the Company shall deliver to the PWSB all its Development Period work product for the Capital Improvements during the period commencing on the Contract Date and ending on the date of payment. Such work product immediately shall become the property of the PWSB and shall include, without limitation, all plans, specifications, designs, drawings, renderings, blueprints, manuals, equipment layouts, and Legal Entitlements and related applications, submittals and other information prepared for the purpose of planning, designing, constructing and operating the Capital Improvements and securing Legal Entitlements.

Section 4.8 Termination for Cause During the Development Period.

The PWSB shall have the right during the Development Period to terminate this Agreement for cause and to pursue all remedies available pursuant to Article VIII hereof, without cost or liability to the PWSB, based upon (1) any failure of the Company to satisfy the Development Period responsibilities specified in Section 4.3 hereof by the required date or failure by the Company to meet the Construction Date conditions under Section 4.5 hereof by the date that is the eighteen month anniversary of the Contract Date or (2) the occurrence of an Event of Default during the Development Period by the Company. The Company shall have the right during the Development Period to terminate this Agreement for cause and pursue all remedies available pursuant to Article VIII hereof, based upon the occurrence of an Event of Default during the Development Period by the PWSB.

Section 4.9 PWSB Election to Initiate Construction Work.

Notwithstanding anything in this Agreement to the contrary and without changing any of the obligations of the PWSB or the Company other than those expressly changed under this Section 4.9, the PWSB may provide written notice to the Company during the Development Period directing the Company to initiate certain portions of the Capital Improvements prior to the Construction Date. If the PWSB provides such written notice to the Company to so direct the commencement of certain portions of the Capital Improvements, then the costs and expenses payable under Section 4.7.1 shall include such portions of the Capital Improvements which are authorized to be initiated prior to the Construction Date. In order to be eligible for any adjustment to the Fixed Construction Price, the Company shall be obligated to document to the PWSB's satisfaction any change in Capital Improvement cost resulting from this early commencement of certain Capital Improvements prior to commencing such Capital Improvements. Otherwise, there shall be no change in the Fixed Construction Price as a result of an election by the PWSB under this Section 4.9.

ARTICLE V DESIGN AND CONSTRUCTION OF THE CAPITAL IMPROVEMENTS

Section 5.1 Construction Period - Generally.

The period beginning on the Construction Date and ending on the Acceptance Date shall be referred to as the Construction Period. The Company shall complete all Capital Improvements during the Construction Period; provided, however, that the Company shall not begin construction at the Site until after issuance by the PWSB of the Notice to Proceed. During this period, the Company shall be entitled to payments for construction of the Capital Improvements as provided in this Article.

Section 5.2 Facility Ownership.

The Facility shall be owned by the City or its assignee for financing purposes at all times. The Company shall perform the Capital Improvements and other Services provided for herein as an independent contractor and shall not have any ownership or other property interest in the Facility or the Site.

Section 5.3 Authorized Representative.

The PWSB and the Company shall each designate in writing by the Construction Date a person to transmit instructions, receive information and otherwise coordinate service matters arising pursuant to this Agreement during the Construction Period (each, an "Authorized Representative"). Either party may designate a successor or substitute Authorized Representative at any time by written notice to the other party.

Section 5.4 Design and Construction Generally.

Section 5.4.1 Commencement of Design and Construction.

Following the Construction Date, the PWSB shall have the right to issue a written Notice to the Company to begin the Construction Work (the "Notice to Proceed"). The Notice to Proceed shall be issued within thirty (30) days of the Construction Date unless the PWSB provides a reason to the Company that the Notice to Proceed cannot be issued within such period. Immediately following the issuance of the Notice to Proceed, except as otherwise provided in Section 5.4 hereof, the Company shall commence and proceed to undertake, perform and complete the Capital Improvements at its sole cost and expense in accordance with all provisions of this Agreement. The time for the Company's construction of the Capital Improvements work shall be computed from the date of issuance of the Notice to Proceed. The Company's failure to achieve Acceptance on or before the second anniversary of the Commencement Date shall result in the assessment of the delay non-compliance assessment under Section 6.9 hereof.

Section 5.4.2 Elements of the Capital Improvements Construction.

Company shall be responsible for identifying the need for and overseeing the design and construction of all necessary water system capital improvements to meet the Future Finished Water Requirements, including large scale repairs of capital infrastructure and the replacement of capital components, as well as all capital improvement requirements or Facility modifications necessary to achieve compliance with all Applicable Law, including but not limited to the Capital Improvements set forth in Schedule 12 hereto (the "Capital Improvements"). In constructing the Capital Improvements generally, the Company shall, in accordance with all of the terms and conditions of this Agreement, (1) prepare and excavate the Site, (2) demolish and remove any existing facilities or systems as necessary, (3) reroute or replace any underground Utilities, pipes or systems, (4) dispose of any demolition or construction debris on the Site and any soil excavated therefrom, (5) supply and install all labor, materials and equipment necessary to design and construct the Capital Improvements, (6) monitor the Capital Improvements construction work, (7) maintain continuous compliance with all Legal Entitlements and Applicable Law, (8) allow free and unlimited access to the Facility by the PWSB and/or its representatives, (9) trouble shoot and shake down the Capital Improvements and operations, (10) conduct the Acceptance Tests required, and (11) operate, maintain and manage the Capital Improvements and the existing Facility as an integrated system following completion and endorsement of the Acceptance Tests, all so that the Facility is suitable and adequate for meeting the Future Finished Water Requirements as provided herein. In the event that, pursuant to this Section 5.4.2, the Company substantially changes the use of the existing PWSB administrative

building (the "Administrative Building"), then the Company shall be required to build a replacement administrative building (including adequate parking) of comparable architectural style and quality of the existing Administrative Building, and in conformance with the standards and specifications set forth in Schedule 2.4.7 hereto, in such time and manner as to keep to a minimum the displacement and inconvenience of the PWSB and the City. The PWSB functions housed within the existing Administrative Building include all administrative functions and facilities for the Transmission & Distribution function. The Company shall provide a separate, detailed summary of the costs to be incurred in building such replacement administrative building and Transmission & Distribution facility.

Section 5.4.3 Liens and Subcontracts.

The Company shall promptly discharge or bond any liens or encumbrances arising out of the Company's construction of the Capital Improvements or operation of the Facility, and shall provide evidence to the PWSB of such bond or discharge within ten (10) business days of the placement of such lien or encumbrance. Contracts and Subcontracts entered into by the Company for the construction of the Capital Improvements shall neither supersede nor abrogate any of the terms or provisions of this Agreement.

Section 5.4.4 Payment of Costs.

The Company shall pay directly all costs and expenses of the design and construction of the Capital Improvements of any kind or nature whatsoever, without payment or reimbursement from the PWSB except through payment of the Fixed Construction Price, including any Fixed Construction Price Adjustments, based on achievement of milestones listed in the drawdown schedule set forth in Schedule 14 hereto. Such costs and expenses, without limiting the generality of the foregoing, shall include all costs of permitting, regulatory compliance and Legal Proceedings brought against the Company; obtaining and maintaining all forms of Company credit enhancement required hereunder during the Development Period and Construction Period; payments due under the Construction Contract, if any, contracts with Subcontractors or otherwise for all labor and materials and equipment; legal, financial, engineering, architectural and other professional services of the Company; general supervision by the Company of all design and construction; the cost of all design and construction performed by or on behalf of the Company; Company preparation of schedules, budgets and reports; keeping all construction accounts and cost records; and all other costs required to achieve Acceptance. In accordance with Applicable Law, the Company shall pay all wages and benefits to its employees when due and require its Subcontractors to pay all wages and benefits of its employees when due.

Section 5.5 Company Design.

Section 5.5.1 Sole Responsibility.

The Company shall have the sole and exclusive responsibility for the design of the Capital Improvements hereunder and the preparation of all plans, technical specifications, drawings, blueprints or other design documents necessary or appropriate to construct the Capital Improvements. The Company warrants that the Facility, upon the occurrence of the Acceptance Date, will be capable of achieving the performance requirements specified in Schedules 1 and 2

hereof. Further, all components, materials, equipment and workmanship incorporated in the Work shall be of first class quality and in accordance with prudent industry practices and all relevant industry standards. The PWSB shall have the right to review such design documents, but shall have no right of approval with respect thereto except in order to confirm the compliance and consistency of the design documents with the requirements set forth in Schedules 1 and 12 hereto. Any architects and engineers engaged by the Company related to the construction of the Capital Improvements shall be licensed in the State, if required by law, experienced and qualified to perform such services and shall be selected in the manner provided in Section 5.19 hereof.

Section 5.5.2 PWSB Interest in Design Requirements.

The Company acknowledges the PWSB's material interest in each provision of the Design Requirements and, notwithstanding the Acceptance Standards and Performance Guaranties of the Company and associated non-performance remedies of the PWSB, agrees that no change to the Design Requirements shall be made except upon the terms and conditions set forth in this Section and pursuant to a PWSB Change Order given under Section 5.15 hereof.

Section 5.5.3 Company Requested Changes.

The Company shall have the right to request changes to the Design Requirements. At its sole cost and expense, it must give written notice to the PWSB containing detailed information concerning the design changes and the expected effects thereof on the Company's Performance Guaranties. The notice shall contain sufficient information to enable the PWSB to determine that such changes (1) do not adversely affect the ability of the Facility to be operated so as to meet the Performance Guaranties set forth in this Agreement, (2) do not impair the quality, integrity, durability or reliability of the Facility as set forth in the Design Requirements, (3) do not impair and are necessary for the Company to fulfill all of its obligations under this Agreement, and (4) are feasible.

Section 5.5.4 PWSB Approval of Changes.

The PWSB shall have the right to review all changes requested by the Company under this Section, and if the PWSB agrees in writing that the requested change meets the design change criteria set forth in Subsection 5.5.3, then the PWSB shall permit the change to the Design Requirements, and the Company shall be responsible for all additional costs, including additional costs to the PWSB, resulting from such changes to the Design Requirements. Cost savings resulting from such change to the Design Requirements shall be to the benefit of the Company. If the PWSB and the Company cannot agree that a requested change meets the design change criteria set forth in Section 5.5.3, then the dispute shall be submitted to the Independent Panel in accordance with Section 8.8.2 hereof. No such change shall result in an increase in the Fixed Construction Price or an extension of the Acceptance Date unless otherwise agreed by the PWSB in its sole discretion.

Section 5.6 Construction Practice.

Unless the Design Requirements or this Agreement expressly provide otherwise, the Company shall perform the Construction Work in a good and workmanlike manner and in accordance with generally accepted construction practice and shall have exclusive responsibility

for all construction means, methods, techniques, sequences, and procedures necessary or desirable for the correct, prompt, and orderly prosecution and completion of the Capital Improvements as required by this Agreement. The responsibility to provide the construction means, methods, techniques, sequences and procedures referred to above shall include, but not be limited to, the obligation of the Company to provide the following construction requirements: temporary power and light, temporary offices and construction trailers, required design certifications, required approvals, weather protection, site clean-up and housekeeping construction trade management, temporary parking, safety and first aid facilities, correction of or compensation for defective work or equipment, Subcontractors' insurance, storage areas, workshops and warehouses, temporary fire protection, site security, temporary utilities, potable water, phone, sanitary, gas, Subcontractor and vendor qualification, receipt and unloading of delivered materials and equipment, erection rigging, temporary supports, and construction coordination. Laydown and staging areas for construction material shall be located on the Site, or at other locations approved by and arranged and paid for by the Company.

Section 5.7 Insurance.

The Company or, with the consent of the PWSB, the Company's approved construction manager, shall, at its own cost and expense, obtain and maintain the Insurance in accordance with Schedule 4 hereto. If the Company fails to pay any premium for the Insurance, or if any insurer cancels any Insurance and the Company fails to obtain replacement coverage so that the Facility and the Site remains insured on a continuous basis, then, at the PWSB's election (but without any obligation to do so), the PWSB may pay such premium or procure similar insurance coverage from such company or companies as the PWSB, in its sole discretion, chooses, and upon such payment by the PWSB the amount thereof shall be immediately reimbursable to the PWSB by the Company or deducted by the PWSB from any payment(s) due the Company. The Company shall not perform any construction work on the Capital Improvements, or allow any of the Company's or any Subcontractor's employees on the Site, during any period when any policy of Insurance is not in effect. The Company shall take all steps necessary to assure the Facility remains continuously insured in accordance with the requirements of this Agreement during the Contract Term, and that no gaps in coverage occur. Should any such gap in coverage occur, the Company shall bear, indemnify and defend the PWSB against any and all expense arising out of the failure of the Company to provide such continuous Insurance coverage. Deductible amounts shall be the responsibility of the Company. The City and PWSB and their employees, officers and consultants shall be additional insureds on Insurance policies in accordance with Schedule 4 hereto. No material change shall be made to the Insurance coverage in effect as of the Commencement Date without the prior written consent of the PWSB.

Section 5.8 Compliance with Law and Equipment Operating Requirements.

In designing, constructing, starting-up and testing the Capital Improvements, the Company shall comply with Applicable Law, shall operate all Equipment and systems comprising the Facility in accordance with good engineering practice and applicable equipment manufacturer's specifications and recommendations, and shall observe the same safety standards as are set forth in Schedule 2 and Schedule 3 hereof with respect to the operation of the Facility.

Section 5.9 Legal Entitlements Necessary for Continued Construction.

Company, at its own cost and expense and on behalf of the PWSB as applicant, shall make all further filings, applications and reports necessary to obtain and maintain all Legal Entitlements required to be made, obtained or maintained under Applicable Law in connection with the continuance of work with respect to the design, construction, start-up and testing of the Capital Improvements. The PWSB shall cooperate with the Company in connection with the foregoing undertaking, and shall provide the Company with such relevant data or documents as are within its control which are reasonably required for such purpose.

Section 5.10 Engagement of the PWSB Clerk of the Works and PWSB Engineer.

Section 5.10.1 Duties.

The Company shall fully cooperate with any PWSB Clerk of the Works and PWSB Engineer designated by the PWSB to assist it in connection with the administration of this Agreement. In the performance of such services, the Company agrees that the in conjunction with the PSWB Clerk of the Works and PWSB Engineer may, without limiting other possible services to the PWSB: review and monitor construction progress, payments and procedures; confirm the completion of specified portions of the Construction Work and review the release of PWSB funds in payment of the Construction Price; review proposed changes to the Design Requirements pursuant to Section 5.5.4 hereof; review Facility plans, drawings and specifications for compliance with the Design Requirements; monitor the Acceptance Tests undertaken by the Company pursuant to Article VI hereof and Schedule 13 hereto; review the validity of the Company's written notice that an Uncontrollable Circumstance has occurred; review and advise the PWSB with respect to material changes to the Facility during the Contract Term; and provide certificates and perform such other duties as may be specifically conferred on the in conjunction with the PSWB Clerk of the Works and PWSB Engineer hereunder. The Company agrees to cooperate with all reasonable requests made by the PWSB Engineer and the PWSB Clerk of the Works in connection with the performance of such duties for the PWSB.

Section 5.10.2 Fees.

Any fees of the PWSB Engineer prior to the Acceptance Date shall initially be paid by the PWSB, but shall be reimbursed by the Company to the PWSB together with allocable costs of the PWSB personnel to the extent any such fees and costs are attributable to the failure of the Company to cause Acceptance to occur on or before the Acceptance Date. The Company also shall reimburse the PWSB for the reasonable fees and expenses of the PWSB Engineer and costs of the PWSB personnel for services in connection with repetition of any Acceptance Tests unless such additional or repeated Acceptance Tests are required as a result of the PWSB Fault or Uncontrollable Circumstances. Any fees of the PWSB Engineer and the PWSB personnel after the Acceptance Date shall be paid by the PWSB without reimbursement by the Company except as otherwise specifically provided by this Agreement.

Section 5.11 Monthly Progress Report.

The Company shall submit to the PWSB a monthly progress report detailing work accomplished and an updated schedule. The monthly progress report shall include a summary of

work activities during the reporting month, a listing of upcoming work activities, a listing of submittals delivered during the reporting month, a listing of submittals scheduled for delivery the following month, a listing of any permit violations, and an updated schedule which reflects critical path activities. The updated schedule shall set forth major activities and reflect any change in the Company's estimated construction progress schedule from the schedule submitted the prior month. The Company agrees that the Company's submission of the monthly progress report is for the PWSB's information only, and the PWSB's acceptance of the monthly progress report shall not bind the PWSB in any manner. Thus, the PWSB's acceptance of the monthly progress report shall not imply that the PWSB: (1) approves the Company's proposed staffing or scheduling of the Construction Work; (2) agrees or guaranties to the Company or any other person that the Company has the capacity or ability to complete the Construction Work in accordance with the progress schedule, or that the Construction Work can or will be completed in accordance with the monthly progress schedule; or (3) consents to any changes in scheduling, or agrees to any extension of time, unless the PWSB agrees specifically in writing to the applicable change.

Section 5.12 Construction Monitoring, Observations, Testing and Uncovering of Work.

Section 5.12.1 Observation and Design Review Program.

During the progress of the Construction Work through Acceptance, the Company shall at all times during normal working hours afford the PWSB and the PWSB Engineer every reasonable opportunity for observing all Construction Work at the Site. During any such observation, all representatives of the PWSB and the PWSB Engineer shall comply with all safety and other rules and regulations applicable to presence in or upon the Site or the Facility, including those adopted by the Company, and shall in no material way interfere with the Company's performance of any Construction Work. The Company shall provide the PWSB with a mylar and five (5) copies of the construction design drawings, blueprints, detailed plans and technical Design Requirements and of all other Deliverable Materials, including manufacturing and shop drawings.

Section 5.12.2 Company Tests.

The Company shall conduct all tests of the Construction Work (including shop tests) or inspections required by good engineering practice, by the Design Requirements, by Applicable Law or for Insurance purposes. The Company shall give the PWSB and the PWSB Engineer reasonable advance notice of tests or inspections prior to the conduct thereof; provided, however, that in no event shall the inability, failure or refusal to attend or be present of the PWSB or the PWSB Engineer at or during any such test or inspection delay the conduct of such test or inspection or the performance of the Construction Work. If required by Applicable Law or for Insurance purposes, the Company shall engage a registered engineer or architect at its sole cost and expense to conduct or witness any such test or inspection. All analyses of test samples shall be conducted by persons appearing on lists of laboratories authorized to perform such tests by the State or federal agency having jurisdiction or, in the absence of such an authorized list in any particular case, shall be subject to the approval of the PWSB, which consent shall not be unreasonably withheld. Acceptance Testing shall be conducted in accordance with Schedule 13 hereto.

Section 5.12.3 PWSB Tests, Observations and Inspections.

The PWSB, its employees, agents, representatives and contractors (which may be selected in the PWSB's sole discretion), and all Governmental Bodies having lawful jurisdiction, may at any reasonable time and with reasonable notice conduct such on-Site observations and inspections, and such civil, structural, mechanical, electrical, chemical, or other tests as the PWSB deems necessary or desirable to ascertain whether the Construction Work complies with this Agreement. The PWSB shall pay for any test, observation or inspection requested by the PWSB and any Governmental Bodies, and the costs of such test, observation or inspection shall be borne by the PWSB unless such test, observation or inspection reveals a material failure of the Construction Work to comply with this Agreement or Applicable Law, in which event the Company shall bear all reasonable costs and expenses of such test, observation or inspection. In the event that any requested test, observation or inspection causes a material delay in the construction schedule, the Acceptance Date shall be extended to reflect the actual period of time needed for completion as directly caused by the requested testing, but only if such testing, observation or inspection does not reveal any material failure or noncompliance as set forth herein.

Section 5.12.4 Certificates and Reports.

The Company shall secure and deliver to the PWSB promptly, at the Company's sole cost and expense, all required certificates of inspection, test reports, work logs, certified payroll or approvals with respect to the Construction Work as and when required by the Design Requirements, Applicable Law or the Insurance Requirements. The Company shall provide to the PWSB, immediately after the receipt thereof, copies of any notice of default, breach or noncompliance received by the Company under or in connection with, any Legal Entitlement, Subcontract, Construction Performance Bond, the Guaranty or agreement pertaining to the Construction Period.

Section 5.12.5 Notice of Covering Construction Work.

The Company shall give the PWSB reasonable notice of its upcoming schedule with respect to the covering and completion of any Construction Work. The PWSB shall give the Company reasonable notice of any intended inspection or testing of such Construction Work in progress prior to its covering or completion, which notice shall be sufficient to afford the PWSB a reasonable opportunity to conduct a full inspection of such Construction Work. At the PWSB's written request, the Company shall take apart or uncover for inspection or testing any previously-covered or completed Construction Work; provided, however, that the PWSB's right to make such requests shall be limited to circumstances where there is a reasonable basis for concern by the PWSB that the disputed Construction Work conforms with the requirements of this Agreement. The cost of uncovering, taking apart or replacing such Construction Work along with the costs related to any delay in performing Construction Work caused by such actions, shall be borne as follows: (1) by the Company, if such Construction Work has been covered prior to any observation or test required by the Design Requirements, Applicable Law or the Insurance Requirements or if such Construction Work has been covered prior to any observation or test as to which the PWSB has provided reasonable advance notice hereunder; and (2) in all other cases, as follows: (a) by the Company, if such observation or test reveals that the

Construction Work does not comply with this Agreement, or (b) by the PWSB, if such observation or test reveals that the Construction Work complies with this Agreement.

In the event such Construction Work does comply with this Agreement, the delay caused by such observation or test shall be treated as having been caused by an Uncontrollable Circumstance and any costs incurred with respect to such observation or test shall be borne by the PWSB (through and only through a Fixed Construction Price Adjustment). Either the PWSB or the Company may request confirmation of the test results by the Independent Panel, pursuant to Section 8.8.3 of this Agreement.

Section 5.12.6 Meetings and Design and Construction Review.

During the Construction Period, the Company and the PWSB shall conduct meetings on a monthly basis at a minimum. At such meetings, discussions shall be held concerning all aspects of the construction of the Capital Improvements including, but not limited to, construction schedule, progress payments, Extra Construction Work, shop drawings, catalogued and dated progress photographs, and any soil boring data and shop test results. Monthly project construction progress reports containing all relevant information shall be prepared by the Company and provided to the PWSB at least five (5) business days prior to each monthly meeting, together with a list of agenda items for the meeting. The Company shall also attend any on-call meeting which may be required by the PWSB from time to time in connection with the Construction Work, provided that the Company has at least twenty-four (24) hours notice of such meeting. The Company shall provide to the PWSB, for its planning, budgeting and financing purposes, monthly estimates of the commencement date for start-up operations, the date upon which the Acceptance Tests shall commence, and the Acceptance Date.

Section 5.13 Correction of Work.

Section 5.13.1 Correction of Non-Conforming Construction Work.

Throughout the Contract Term, including the period of any renewal pursuant to Section 10.2 hereof, the Company at its sole cost and expense, shall complete, repair, replace, restore, rebuild and correct promptly any Construction Work which does not conform with the Design Requirements and all other requirements of this Agreement. However, the warranty liability of the surety under the Construction Performance Bond required under Article 11 of this Agreement shall terminate 12 months after the Acceptance Date.

Section 5.13.2 Election to Accept Non-Conforming Construction Work.

The PWSB may elect, subject to the Pawtucket Purchasing Board's (the "Purchasing Board") approval, by Change Order, at the Company's request, to accept Construction Work that does not conform to the Design Requirements and charge the Company (by a reduction in the Fixed Construction Price) for the amount agreed upon by the parties by which the value of the Company's services or Construction Work has been reduced.

Section 5.13.3 Relation to Other Obligations.

The obligations specified in this Section establish only the Company's specific obligation to correct the Construction Work and shall not be construed to establish any limitation with respect to any other obligations or liabilities of the Company under this Agreement. This Section is intended to supplement (and not to limit) the Company's obligations under the Acceptance Test procedures and standards, the Future Finished Water Requirements and any other provisions of this Agreement or Applicable Law.

Section 5.14 Damage to the Construction Work

Section 5.14.1 Damage Prevention.

From the Construction Date until Acceptance (or whenever earlier or later performing Construction Work on the Site), the Company shall use care and diligence, and shall take all appropriate precautions, to guard the Construction Work and the Site and the property of other persons (including any materials, equipment, or other items furnished by the PWSB) from damage prior to the Acceptance Date. For such purpose, the Company shall provide fencing, protective features (such as tarpaulins, boards, boxing, frames, canvas guards, and fireproofing), and other safeguards to the extent the Company reasonably determines such are necessary and proper in the performance of the Construction Work.

Section 5.14.2 Restoration.

In case of damage or destruction to the Construction Work or the Site resulting from any cause, and regardless of the extent thereof or the estimated cost of repair, replacement or restoration, and whether or not any insurance proceeds are sufficient or available for the purpose, the Company shall immediately undertake and complete the repair, replacement and restoration of the damage or destruction to Construction Work to the character and condition thereof existing immediately prior to the damage or destruction in accordance with the construction procedures set forth herein, as applicable, all at the Company's sole cost and expense, except in the event that such damage or destruction is caused by PWSB Fault.

Section 5.14.3 Notice and Reports.

The Company shall notify the PWSB immediately of any damage or destruction to the Construction Work or the Site or any accident or permit violation on the Site, including but not limited to, Hazardous Substance spills or releases, damage to sensitive areas, permit conditions violations, fires and injuries. Additionally, the Company shall notify the insurers under any risk insurance and all applicable Insurance of any damage or destruction to the Construction Work or the Site, or any accidents on the Site, as promptly as possible after the Company learns of any such damage, destruction or accidents. As soon as practicable after learning of any such occurrence, the Company shall submit a full and complete written report to the PWSB. The Company shall also submit to the PWSB within twenty-four (24) hours copies of all reports relating to the subject matter of this subparagraph which are filed with, or given to the Company by, any insurance company, adjuster, or Governmental Body.

Section 5.15 Change Orders and Extra Construction Work

Section 5.15.1 Right to Issue Change Orders.

The PWSB, subject to the provisions of Subsection 5.15.6 and subject to the Purchasing Board's approval, may issue Change Orders pertaining to any and all aspects of the Construction Work at any time and for any reason whatsoever, whether and however such Change Orders revise this Agreement, add Extra Construction Work or omit Construction Work or affect the Acceptance Date.

Section 5.15.2 Obligation to Complete Extra Construction Work.

The Company shall, except to the extent excused under Subsection 5.15.6, undertake and complete promptly all Extra Construction Work authorized under this Section. The Company shall not perform any Extra Construction Work without a Change Order authorized by the PWSB and the Purchasing Board. The Company shall be entitled to additional compensation for Extra Construction Work determined in accordance with this Section ("Extra Payment").

Section 5.15.3 Effect of Company Fault.

The Company shall not be entitled to any Extra Payment for any Extra Construction Work, if required by reason of any Company Fault. The Fixed Construction Price shall be reduced for omitted Construction Work resulting from any Company Fault by the greater of: (1) the reduction in value of the Facility due to the omitted Construction Work, or (2) the reduction in the Company's cost of the omitted Construction Work.

Section 5.15.4 Cost Reductions.

The Fixed Construction Price shall be reduced if and to the extent that any Change Order, whether for omitted Construction Work or otherwise, results in any reduction in the Company's cost of the Construction Work.

Section 5.15.5 Proposal for Extra Work.

The Company shall submit a written quotation on a lump-sum basis for Extra Construction Work covered by any proposed Change Order. The Company shall include with each quotation Cost Substantiation therefor and, with respect to any Extra Construction Work necessitated by Uncontrollable Circumstances, the Company shall be limited to two and one-half percent (2.5%) profit with respect thereto. Any such quotation shall be deemed the Company's offer to the PWSB, binding for one hundred twenty (120) days to perform the Extra Construction Work at the price quoted. In addition, each quotation shall include the effect, if any, of the Extra Construction Work on the progress schedule, the Performance Guaranties, the Acceptance Date, the Fixed Construction Price, the Service Fee and any of the other obligations of the Company under this Agreement.

Section 5.15.6 Conditions to the Obligation to Proceed.

The parties shall promptly proceed to negotiate in good faith to reach agreement on the price to be paid the Company for the Extra Construction Work and on the effect of the Extra Construction Work on any other obligations of the Company under this Agreement. The Company acknowledges that it shall not be entitled to seek nor shall it receive a price for the Extra Construction Work which is in excess of the fair market price of such Extra Construction Work, whether such work is to be performed solely by the Company or by a Subcontractor under the Company's supervision. The Company shall not be obligated to proceed with the Extra Construction Work except following agreement as to the price to be paid therefor and as to any adjustments to the Performance Guaranties and its other obligations hereunder which are necessitated by the Change Order requiring the Extra Construction Work. Payments for Extra Construction Work shall be paid only as a Fixed Construction Price Adjustment, in accordance with Section 5.17.6. Except to the extent that the PWSB and the Company shall agree, no such work shall modify the Acceptance Date, or impair the ability of the Company to meet the Performance Guaranties, comply with any other term or condition of this Agreement, affect any right of the Company or impose any additional liability or obligation on the Company under this Agreement; but the Company shall have no right of objection with respect to such work if the PWSB affords the Company price, schedule and any other relief hereunder agreed to by the parties to be necessary to avoid any such impairment.

Section 5.15.7 Disputed Work.

If the Company is of the opinion that any Construction Work which it elects to perform in the absence of any agreement hereunder is Extra Construction Work and not original Construction Work ("Disputed Work"), the Company shall give the PWSB a written notice of dispute before commencing the Disputed Work.

Section 5.15.8 Notice; Waiver.

The Company shall give at least thirty (30) days advance notice to the PWSB in writing of the scheduling of all Extra Construction Work and all Disputed Work. The Company's failure to give such written notice of Disputed Work under this Section shall constitute a waiver of Extra Payment, any extension of time, and all other Loss-and-Expense whatsoever relating to the particular Disputed Work.

Section 5.16 Deliverable Material.

Section 5.16.1 Delivery and Use.

The Design Requirements and all other documents forming any part of this Agreement shall be and remain the property of the PWSB and may be utilized for all appropriate public purposes in reference to the Facility, provided that the PWSB use of any such documents shall be at its own risk. As the Construction Work progresses (or upon the termination of the Company's right to perform the Construction Work), the Company shall deliver to the PWSB all equipment, process, and materials required for the Construction Work ("Deliverable Material"), as described and set forth in Schedule 12 hereto together with the Operations and Maintenance Manual described at Section 3.3 hereof. If any Deliverable Material utilized in the Construction Work is

patented or copyrighted by other persons (or is or may be subject to other protection from use or disclosure), the PWSB shall, upon and following the Construction Date, have a royalty-free perpetual license to use the same, but solely for purposes of the ownership, construction, and operation of the Facility. However, if the Company does not have the right to grant such a license, the Company shall obtain for the PWSB such rights of use as the PWSB may request, without separate or additional compensation, whether such Deliverable Material is patented or copyrighted or becomes subject to other protection from use before, during or after performance of the Construction Work. The PWSB shall have the right from and after the Agreement Date to use (or permit use) of all such Deliverable Material, process or equipment, all oral information whatsoever received by the PWSB in connection with the Construction Work, and all ideas or methods represented by such Deliverable Material, process or equipment, without additional compensation.

Section 5.16.2 Injunction on Use.

If the Company or the PWSB is enjoined from using any Deliverable Material (or any affected Construction Work) from and after the Construction Date for reasons other than Uncontrollable Circumstances or PWSB Fault, the PWSB may, at the PWSB's option, require the Company (1) to provide, at the Company's expense, equivalent substitutes for the Deliverable Material (and any affected Construction Work), (2) to take such steps necessary to eliminate the injunction or to otherwise obtain the right to use the Deliverable Materials; or (3) to take such steps as to make the Deliverable Materials non-infringing on any patent, copyright, trade secret or other intellectual property right.

Section 5.17 Payment of the Construction Price.

Section 5.17.1 Construction Price Generally.

The Company shall be entitled to receive the Construction Price for the Construction Work on a progress basis in accordance with the terms of this Section. The Construction Price shall be the sum of the Fixed Construction Price and the Fixed Construction Price Adjustments, as adjusted by Change Orders.

Section 5.17.2 Fixed Construction Price.

The Fixed Construction Price is an amount equal to \$41,989,639 and shall be escalated pursuant to Schedule 5. The Fixed Construction Price Index for the month in which the Notice to Proceed is issued shall be prorated such that the Fixed Construction Price escalates only through the date the Notice to Proceed is issued and not through such entire month. The Fixed Construction Price shall not be adjusted after the date the Notice to Proceed is issued.

Section 5.17.3 Reduction in Fixed Construction Price Escalation.

In the event the Company fails to use good faith efforts to perform its Development Period responsibilities set forth in Section 4.3 hereof and such failure causes a delay in the occurrence of the Construction Date, the Fixed Construction Price will not be escalated to the Construction Date, but will be escalated to the date prior to the Construction Date reasonably estimated by the PWSB to be the date on which the Construction Date would have occurred had

the Company used good faith efforts to perform its Development Period responsibilities set forth in Section 4.3 hereof.

Section 5.17.4 Fixed Construction Price Adjustments.

The following items shall constitute the Fixed Construction Price Adjustments: (1) an adjustment for Change Orders given pursuant to Section 5.15 hereof; (2) an adjustment for the cost due to Uncontrollable Circumstances as required under Section 7.3.5 hereof; (3) an adjustment for any increases in the following specific taxes: (a) increases in taxes imposed by the City at any time during the Term of this Agreement and (b) cost increases due to a Change in Law; and (4) an adjustment pursuant to Section 4.5.3 hereof.

Section 5.17.5 Limitation on Payments for Construction Costs.

The Company agrees that the Construction Price shall be the Company's entire compensation and reimbursement for the performance of the Construction Work, including obtaining all Utilities that the Company will require to perform the Construction Work. In no event shall the Company be entitled to any payment for Construction Costs in excess of the Construction Price (including the adjustments provided for pursuant to Subsections 5.17.2, 5.17.3 and 5.17.4), notwithstanding any cost overruns, except for additional amounts payable to the Company on account of Uncontrollable Circumstances or Change Orders (except in the event of any PWSB Fault, as and to the extent provided in Article VIII hereof). The Company shall pay for or finance any such excess Construction Costs which are the Company's responsibility in any manner it chooses without reimbursement from or other claim upon the PWSB.

Section 5.17.6 Construction Disbursement Procedure.

Upon the issuance of the Notice to Proceed by the PWSB, the Company shall be entitled to submit a requisition for the initial payment of the Fixed Construction Price set forth in the milestone payments provided for in Schedule 14 hereto. Following the initial payment, the Company shall be entitled to submit requisitions on a monthly basis and receive from the RICWFA, as requested by the PWSB, the remainder of the milestone payments, which (1) shall be made only upon completion of the milestone required to be completed as the basis for such payment as set forth in Schedule 14 hereto, including additional intermediate milestones to be developed as allowed by Schedule 14; (2) shall be subject to the maximum payment limitations for each major milestone specified in Schedule 14 hereto; and (3) shall be subject to the conditions of payment regarding disbursement disputes set forth in Section 5.18 hereof. Any Fixed Construction Price Adjustments shall be payable monthly when and as the cost or expense constituting the Fixed Construction Price Adjustment is paid or incurred. Each requisition shall be accompanied by a certificate of an authorized officer of the Company certifying (1) the portion of the Fixed Construction Price which is payable to the Company, (2) the amount of Fixed Construction Price Adjustments which are payable to the Company, together with Cost Substantiation for such amounts, (3) that the Company is neither in default under this Agreement nor in breach of any material provision of this Agreement such that the breach would, with the giving of notice or passage of time, constitute an Event of Default, and (4) that all items applicable to the milestone entitling the Company to request payment under the milestone payment schedule in Schedule 14 hereto have been completed in accordance therewith and with

the Design Requirements. In addition, the Company shall submit all completed payment forms. The PWSB shall review the Company's certified requisitions to the PWSB for each Fixed Construction Price payment and for Fixed Construction Price Adjustment payments, and within ten (10) business days of receipt of the Company's written submission shall verify or dispute in writing (or by telecommunication promptly confirmed in writing) the Company's certification that the Company has achieved the level of progress indicated and is entitled to payment. The Company shall be entitled to payment within forty (40) days of the expiration of such ten (10) business day period if (1) the PWSB determines that the work has progressed to the milestone indicated in the Company's certified requisition or that the costs constituting Fixed Construction Price Adjustments have been paid or incurred and the PWSB provides written notice thereof to the Company, or (2) the PWSB fails to verify or dispute the certified requisition within ten (10) business days of receipt. Disputes regarding payments of the Fixed Construction Price and Fixed Construction Price Adjustments shall be resolved in accordance with Section 5.18 hereof.

Section 5.17.7 Information Supporting Requisition.

The Company shall submit to the PWSB, with each requisition the following:

- (a) a verified statement setting forth the information required under any Applicable Law pertaining to prevailing wages;
- (b) a reasonably detailed description of all Construction Work actually completed to date;
- (c) revisions to the progress schedule (or a revised progress schedule) which shall reflect changes in the Company's construction schedule since the date of the last requisition;
- (d) revisions to the critical path schedule which shall reflect changes in the critical path schedule since the date of the last requisition;
- (e) notice of any Liens which have been filed together with evidence that the Company has bonded against any such Liens;
- (f) any other documents or information relating to the Construction Work or this Agreement requested by the PWSB or the PWSB Engineer as may be required by Applicable Law, this Agreement or generally accepted accounting practices and principles; and
- (g) any construction progress photographs as may be requested by the PWSB.

Section 5.17.8 Permissible Withholdings.

The PWSB may disapprove and withhold and retain all or any portion of any payment requested in a requisition in any amount equal to the sum of:

- (a) any amounts which are permitted under this Section to be withheld from any payment requested in any requisition;

- (b) any amounts which are due the PWSB under this Article;
- (c) any delay non-compliance assessments which are payable under Article VI hereof;
- (d) any indemnification amounts which are due and owing to the PWSB under Section 7.4 hereof;
- (e) any other deductions which are required by Applicable Law;
- (f) any payments with respect to which documents to be delivered in connection therewith are not correct and complete;
- (g) an amount equal to the cost to the PWSB of performing any work in the event of a failure by the Company or any Subcontractor to timely perform its obligations hereunder;
- (h) any payments with respect to which the Construction Work covered by such requisition (or any previous requisition) does not comply with this Agreement;
- (i) any payments with respect to which any person has filed a Lien resulting from the acts or omissions of the Company in performing the Construction Work, where such Lien remains unreleased or unbonded;
- (j) any payments by the PWSB due to the failure of the Company to make payment properly to Subcontractors or for labor, materials and equipment; and
- (k) all requisitioned payments, if an Event of Default of the Company has occurred under Section 8.2 hereof.

Section 5.17.9 Set-Off.

The Company hereby grants to the PWSB a lien upon, security interest in and right of set-off against, as security for all liabilities and obligations of the Company to the PWSB arising under or relating to this Agreement or any other documents related thereto, all deposits, credits, collateral, proceeds and property of the Company, now or hereafter in the possession, custody, safekeeping or control of the PWSB or any entity under the control of the PWSB (including any and all payments due the Company from PWSB). THE COMPANY HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVES ANY AND ALL RIGHTS TO REQUIRE THE PWSB TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES ANY SUCH LIABILITY OR OBLIGATION, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH PROPERTY OF THE COMPANY RELATED TO, OR EMPLOYED IN THE PERFORMANCE OF THIS AGREEMENT.

Section 5.17.10 Required Company Certification.

Any notice, certification, report or requisition delivered by the Company to the PWSB in connection with the Construction Work or payment therefor under this Agreement shall be accompanied by a certificate of the Company affirming the accuracy thereof to the best knowledge of the Company.

Section 5.18 Disbursement Dispute Procedures.

Section 5.18.1 Dispute Notice.

If the PWSB disputes in writing pursuant to Section 5.17.6 that the Construction Work required for any payment has progressed to the milestone indicated or disputes any requisition for Fixed Construction Price Adjustments, such dispute notice from the PWSB shall include the PWSB's reasons for such dispute, in detail reasonably available to the PWSB. After receiving such dispute notice, the Company may make the necessary corrections and resubmit a certified requisition to the PWSB, or the PWSB may agree on a revised amount, requisition or estimate, as applicable, in which case the Company shall be entitled to payment.

Section 5.18.2 Dispute Resolution.

If the Company is unable to reach agreement with the PWSB as to the progress of work, the Company may exercise its right to Dispute Resolution pursuant to Section 8.8 hereof. The Company shall not be entitled to payment of the amount so requisitioned and disputed except upon resolution of the dispute in accordance with this Section; provided, however, that the Company shall be entitled to all requisitioned amounts which are not in dispute. Nothing contained in this Section shall be deemed to alter the rights of the parties, if any, under Article VIII hereof. The Company shall continue the Construction Work while the dispute is being resolved.

Section 5.19 Personnel

Section 5.19.1 Personnel Performance.

The Company shall enforce discipline and good order at all times among the Company's employees and all Subcontractors. All persons engaged by the Company for Construction Work shall have requisite skills for the tasks assigned. The Company shall employ or engage and compensate engineers and other consultants to perform all engineering and other services specified in this Agreement and as required for the layouts, locations, and levels of the Construction Work. Each such engineer and consultant shall have current professional registration or certification to practice in the State (if required by law).

Section 5.19.2 Prevailing Wages.

The Company shall take all action necessary directly and through its Subcontractors to assure that all laborers performing services in connection with the Construction Work are paid prevailing wages under Applicable Law whether or not such legal prevailing wage requirements are held to be applicable to the Construction Work. Certified payrolls and other relevant

information shall be furnished to the PWSB in order to permit the PWSB to monitor compliance by the Company with this Section.

Section 5.19.3 Company Construction Superintendent.

The Company shall designate an employee of the Company, any Affiliate of the Company, or the Company's construction manager (the "Company Construction Superintendent"), who shall be present on the Site with any necessary assistants on a full time basis when the Company or any Subcontractor is performing Construction Work on the Site. The Company Construction Superintendent shall, among other things:

- (a) be familiar with the Construction Work and all requirements of this Agreement;
- (b) coordinate the Construction Work and give the Construction Work regular and careful attention and supervision;
- (c) maintain a daily status log of the Construction Work; and
- (d) attend monthly construction progress meetings with the PWSB.

The Company may change the person assigned as Company Construction Superintendent, subject to the provisions of Subsection 5.19.4.

Section 5.19.4 PWSB Rights With Respect to Key Personnel.

The Company acknowledges that the identity of the key management and supervisory personnel proposed by the Company and its Subcontractors was a material factor in the selection of the Company to perform this Agreement. Such personnel and their affiliations are set forth in Schedule 3 hereto. The Company shall utilize such personnel to direct services unless such personnel are unavailable for good cause shown, however "good cause" for this purpose shall not include performing services on other projects. In the event of any such unavailability for good cause, the Company shall utilize replacement key management and supervisory personnel of equivalent experience and reputation. Any such personnel change shall be proposed to the PWSB for its approval within a reasonable advance time period.

Section 5.19.5 Labor Disputes.

The Company shall have exclusive responsibility for all disputes or jurisdictional issues among unions or trade organizations representing employees of the Company or its Subcontractors. The PWSB shall have no responsibility whatsoever for any such disputes or issues.

Section 5.20 Construction Books and Records.

In order to insure that the PWSB can review and approve changes in the Construction Price, the Company shall prepare and maintain proper, accurate and complete books and records regarding the Construction Work and all other transactions related to the permitting, design,

construction, start-up and testing of the Facility, including all books of account, bills, vouchers, invoices, personnel rate sheets, cost estimates and bid computations and analyses, Subcontracts, purchase orders, time books, daily job diaries and reports, correspondence, and any other documents showing all acts and transactions in connection with or relating to or arising by reason of the Construction Work, this Agreement, any Subcontract or any operations or transactions in which the PWSB has or may have a financial or other material interest hereunder. The Company shall produce such construction books and records (except financial ledgers and statements) for examination and copying in connection with the costs of Change Orders, Extra Construction Work, Uncontrollable Circumstance costs, or other costs in addition to the Fixed Construction Price on the basis of which the PWSB may be responsible for increases in the Service Fee payable hereunder with respect to work performed prior to the Acceptance Date. The Company shall keep and maintain all such construction books and receipts for at least six (6) years after the Acceptance Date, or such longer period during which any Legal Proceeding with respect to the Facility commenced within six (6) years of the Acceptance Date may be pending.

ARTICLE VI - ACCEPTANCE OF THE FACILITY

Section 6.1 Acceptance -Generally.

At such time during the Construction Period that the Company accomplished Substantial Completion of the Facility, the Company shall then conduct the Acceptance Test as provided for in this Article. Once the Acceptance Test has been successfully passed and Final Completion shall have occurred, the Construction Period and Interim Operation Period shall end and the Future Operation Period shall begin, provided, however, that in no event shall the Future Operation Period begin after the second anniversary of the Commencement Date without the written approval of the PWSB.

Section 6.2 Substantial Completion.

Section 6.2.1 Requirements for Substantial Completion.

The Company shall not commence operations in preparation for conducting the Acceptance Tests until Substantial Completion has occurred. Substantial Completion shall occur only when all of the following conditions have been satisfied:

- (1) a preliminary or temporary certificate of occupancy has been issued for the Facility, if required by Applicable Law;
- (2) the Company is authorized, on a temporary or permanent basis, to operate the Facility under Applicable Law, and such authorization has not been withdrawn, revoked, superseded, suspended, or materially impaired or amended;
- (3) all Utilities specified or required under this Agreement are connected and functioning properly;
- (4) the Company and the PWSB have agreed in writing upon the Final Punch List (or, if they are unable to agree, the PWSB shall have prepared and issued the Final Punch

List to the Company within fifteen (15) business days of the Company having submitted its Final Punch List to the PWSB);

(5) the PWSB has approved in writing, such approval not to be unreasonably withheld, the certification by the Company that all Construction Work, excepting the items on the Final Punch List, is complete and in all respects is in compliance with this Agreement;

(6) the Company has delivered to the PWSB written certification from equipment manufacturers that all major items of machinery and equipment have been properly installed and tested in accordance with the manufacturers' recommendations and requirements;

(7) the Company has delivered to the PWSB a Claims Statement setting forth in detail all claims of every kind whatsoever of the Company connected with, or arising out of, this Agreement or the Construction Work and arising out of or based on events prior to the date when the Company gives such statement to the PWSB;

(8) the Company has delivered to the PWSB the initial Operating Protocol and the Operations and Maintenance Manual required to be delivered by Section 3.3 hereof;

(9) the Company has submitted to the PWSB and the PWSB has reviewed and approved the plan for Acceptance Testing as required by Schedule 13 hereto;

(10) if applicable, the RIDEM has approved the plan for Acceptance Testing and has authorized the Acceptance Tests to be conducted;

(11) the Company has submitted to the PWSB and the PWSB has reviewed and approved the Transition Plan; and

(12) the Company has submitted written certification that all of the foregoing conditions have been satisfied and the PWSB has approved the Company's certification, which approval shall be effective as of the date of the Company's certification.

Alternatively, Substantial Completion shall occur on such earlier date (than would otherwise be required by this Subsection) as certified by the PWSB, which shall have the discretion to waive any of the foregoing conditions.

Section 6.2.2 Final Punch List.

The Company shall submit a proposed Final Punch List to the PWSB and the PWSB Engineer when the Company believes that the Construction Work has been substantially completed in compliance with this Agreement. The "Final Punch List" shall be a statement of repairs, corrections and adjustments to the Construction Work, and incomplete aspects of the Construction Work, which in the Company's opinion:

(a) the Company can complete before the Company's agreed date for Final Completion and with minimal interference to the occupancy, use and lawful operation of the Facility; and

(b) would represent, to perform or complete, a total cost of not more than one and one-half percent (1.5%) of the Fixed Construction Price (unless the PWSB determines that a higher percentage is acceptable).

The Final Punch List shall be approved by the PWSB, and completion of the Final Punch List work shall be verified by a final walk-through of the Facility conducted by the PWSB and the PWSB Engineer with the Company and the Company Engineer.

Section 6.3 Notice of Start-Up Operations

Section 6.3.1 Submittal of Acceptance Test Plan.

The Company shall prepare and submit an Acceptance Test plan, which shall conform to the requirements of Schedule 13 hereto in all respects.

Section 6.3.2 Notice of Substantial Completion.

The Company shall give the Authorized Representative of the PWSB at least thirty (30) days prior written notice of the expected date of Substantial Completion and of commencement of start-up operations at the Facility in preparation for conducting the Acceptance Tests.

Section 6.3.3 Notice of Commencement of Acceptance Test.

The Company shall also provide the PWSB with at least thirty (30) days prior written notice of the expected initiation of the Acceptance Tests in accordance with the requirements of Schedule 13 hereto. At least ten (10) days prior to the actual commencement of Acceptance Testing, the Company shall certify in writing that it is ready to begin Acceptance Testing in accordance with the Acceptance Test Plan and Schedule 13 hereto.

Section 6.4 Transitional Operations.

At least one hundred eighty (180) days before the Acceptance Date, the Company shall prepare and submit to the PWSB for its approval a detailed Transition Plan. If the Company and PWSB are unable to agree upon an acceptable Transition Plan within thirty (30) days of such submission, their inability to agree shall be treated as an engineering dispute subject to construction period alternative dispute resolution as set forth in Section 8.8. The Transition Plan shall ensure that operations and Acceptance Testing of the Facility are conducted in a manner which has no adverse affect on the ability of the PWSB to process water to meet the Future Finished Water Requirements at all times without interruption and in accordance with Applicable Law.

Section 6.5 Acceptance Date Conditions.

The following conditions shall constitute the "Acceptance Date Conditions," each of which may be satisfied in all material respects by the Company at its cost, expense and risk in order for the Acceptance Date to occur, and each of which must be and remain satisfied as of the Acceptance Date.

Section 6.5.1 Construction Date Conditions.

Each of the Construction Date Conditions shall be and remain satisfied as of the Acceptance Date.

Section 6.5.2 Achievement of Acceptance Standards.

The Company shall have completed the Acceptance Tests and such tests shall have demonstrated that the Facility has met the Acceptance Standards.

Section 6.5.3 Substantial Completion.

The Company shall demonstrate that Substantial Completion has occurred.

Section 6.5.4 Utility Usage.

The Company shall demonstrate in meeting the Acceptance Standards that Utility usage has been within the limits of the Guaranteed Maximum Utility Utilization.

Section 6.5.5 Operating Legal Entitlements.

Legal Entitlements required under Applicable Law which are necessary for the continued routine operation of the Facility shall have been duly obtained by the Company and shall be in full force and effect. Copies of all such Legal Entitlements, to the extent not in the PWSB's possession, certified by the Company shall have been delivered to the PWSB.

Section 6.5.6 Record Documents.

The Company shall maintain current as-built or record drawings and documents, including but not limited to shop drawings and manufacturer's guaranties ("Record Documents") at the Facility for inspection by the PWSB. The Company also shall have delivered to the PWSB a final and complete reproducible set of Record Documents, together with six copies thereof, in a size and form required by the PWSB and as required by the Design Requirements and shall certify that the Capital Improvements were constructed in accordance with the Design Requirements, including any Change Orders. Such Record Documents shall include one mylar copy. The Company shall also provide an electronic file of the Record Documents in such format as the PWSB may specify.

Section 6.5.7 Equipment Warranties and Manuals.

The Company shall be in possession of, and shall have delivered to the PWSB, copies of the warranties of machinery, Equipment, fixtures and Rolling Stock constituting a part of the Facility, together with copies of all related operating manuals supplied by the equipment supplier.

Section 6.5.8 Contract Compliance Calendar.

The Company shall have delivered to the PWSB a calendar schedule of all required activities to be performed by both parties under this Agreement during the Future Operation Period.

Section 6.5.9 No Default.

There shall be no Event of Default by the Company under this Agreement or by the Guarantor under the Guaranty Agreement, or event which with the giving of notice or the passage of time would constitute an Event of Default by the Company hereunder or an Event of Default by the Guarantor under the Guaranty Agreement.

Section 6.6 Written Test Report.

Within twenty (20) days following conclusion of the Acceptance Test, the Company shall furnish the PWSB and the PWSB Engineer with an Acceptance Test report consistent with the requirements of Schedule 13.

Section 6.7 Concurrence or Disagreement with Test Results

Section 6.7.1 Acceptance Date Concurrence.

If the Company certifies in its Acceptance Test report delivered pursuant to Section 6.6 hereof that the full Acceptance Standards have been achieved, the PWSB shall determine within thirty (30) days of its receipt of such report, whether it concurs in such certification. If the PWSB states in writing that it concurs with the Company's certification, the Facility shall be deemed to have achieved Acceptance and the Acceptance Date shall be deemed to have been established on a permanent basis on the date of such written concurrence by the PWSB.

Section 6.7.2 Acceptance Date Disagreement.

If the PWSB determines at any time during such thirty (30) day review period that it does not concur with the Company's certification that the full Acceptance Standards have been achieved, the PWSB shall immediately send written notice to the Company of the basis for its disagreement.

In the event of any such non-concurrence by the PWSB, or in the event the PWSB fails to act within such thirty (30) day review period, the dispute shall be referred to the Independent Panel for resolution. Acceptance shall not be deemed to have been achieved unless the Acceptance Test is conducted in a unified and continuous manner as provided in the Acceptance Test Plan and Schedule 13 hereto, and demonstrates that all of the Acceptance Standards have been met. In the event the Company, in conducting such Acceptance Test, does not successfully meet each Acceptance Standard, the PWSB shall have the right, in its sole discretion, to permit the Company to re-test the Facility for compliance only with the Acceptance Standards not previously achieved through an earlier Acceptance Test. Nothing in this Section shall prevent the Company from repeating any Acceptance Test in order to establish the achievement of Acceptance.

Section 6.8 Extension Period.

If Acceptance shall not have occurred on or before the that date which is one day prior to the second anniversary of the Commencement Date for any reason other than Uncontrollable Circumstances or PWSB Fault, the Company shall be entitled to conduct or repeat the Acceptance Test at its sole cost and expense as often as it desires in order to secure Acceptance of the Facility during the Extension Period, if applicable.

Section 6.9 Delay Non-Compliance Assessment.

If the Acceptance Date occurs subsequent to that date which is one day prior to the second anniversary of the Commencement Date, then the Company shall pay to the PWSB, in addition to other costs and expenses required to be paid pursuant to this Agreement, a daily delay non-compliance assessment in the amount of \$5,000 for each day that the Acceptance Date falls after that date which is one day prior to the second anniversary of the Commencement Date until any termination of this Agreement for an Event of Default, up to a total of ninety (90) days of delay non-compliance assessments; provided, however, that such non-compliance assessment shall not accrue with respect to the period during which the PWSB reviews a certification of Acceptance achievement from the Company submitted in good faith, but shall commence immediately after notice of nonconcurrence is provided by the PWSB. The parties agree, that, since the PWSB's actual damages if the Acceptance Date occurs subsequent to that date which is one day prior to the second anniversary of the Commencement Date would be difficult or impossible to ascertain, the non-compliance assessment provided for in this Section, in addition to other costs and expenses required to be paid pursuant to this Agreement, are intended to place the PWSB in the same economic position it would have been in had the Acceptance Date occurred on that date which is one day prior to the second anniversary of the Commencement Date.

Section 6.10 Failure to Meet Acceptance Standard.

If, as of the last day of the Extension Period (if applicable), the Acceptance Test has not been conducted or has failed to demonstrate that the Facility operates at a standard equal to or greater than the full Acceptance Standard, an Event of Default by the Company will be deemed to have occurred under Section 8.2 hereof notwithstanding any absence of notice, further cure opportunity or other procedural rights accorded the Company thereunder, and the PWSB shall thereupon have the right to terminate this Agreement upon written notice to the Company. Upon any such termination, the PWSB shall have all of the rights provided in Article VIII hereof upon a termination of the Company for cause.

Section 6.11 Final Completion.

Section 6.11.1 Requirements.

"Final Completion" shall occur when all of the following conditions have been satisfied:

- (a) Certificate of Occupancy Issued. If necessary, a certificate of occupancy has been issued for the Facility;

(b) Acceptance Achieved. The Acceptance Test has been conducted, the Acceptance Standards have been achieved and Acceptance has occurred;

(c) Construction Work Completed. All Construction Work (including all items on the Final Punch List) is complete and in all respects is in compliance with this Agreement;

(d) Deliverable Material and Record Documents Furnished. The Company has furnished to the PWSB all Deliverable Material and Record Documents required to be delivered prior to Acceptance.

Section 6.11.2 Final Voucher and Claims Statement.

The Company shall also prepare and submit to the PWSB as soon as practicable following the Acceptance Test, for purposes of demonstrating Final Completion and obtaining Final Completion payment of the Construction Price, (1) a voucher for payment of the Construction Price, accompanied by a certificate of an authorized officer of the Company certifying (a) the amount of the Fixed Construction Price which is payable, (b) the amount of Fixed Construction Price Adjustments which are to be added or subtracted from the Fixed Construction Price (together with Cost Substantiation if not previously submitted), (c) that all Construction Work has been completed in accordance herewith and with the Design Requirements, and (d) that Acceptance of the Facility has occurred, and (2) a Claims Statement setting forth in detail all claims of every kind whatsoever against the PWSB in connection with or arising out of this Agreement or the Construction Work the Company may have. The PWSB shall review the certified voucher to the PWSB for the Construction Price and the Claims Statement and shall verify or dispute them in writing within thirty (30) days of receipt. When the PWSB determines them to be correct, the Company shall be entitled to payment of the remainder of the Construction Price as of the date of the PWSB's determination. In the event of disputes regarding the certification, the parties shall attempt in good faith to resolve the dispute and, if they are unable to do so, the Company may exercise its right to submit the dispute to resolution pursuant to Section 8.8 hereof.

Section 6.12 No Acceptance, Waiver or Release.

Unless other provisions of this Agreement specifically provide to the contrary, none of the following shall be construed as the PWSB's acceptance of any Construction Work which is defective, incomplete, or otherwise not in compliance with this Agreement, as the PWSB's release of the Company from any obligation under this Agreement, as the PWSB's extension of the Company's time for performance, as an estoppel against the PWSB, or as the PWSB's acceptance of any claim by the Company:

(1) the PWSB's payment to the Company or any other person of all or any portion of the Fixed Construction Price;

(2) the PWSB's approval or acceptance of any drawings, submissions, punch lists, other documents, certifications (other than certificates relating to completion or Acceptance of the Capital Improvements), or Construction Work of the Company or any Subcontractor;

- (3) the PWSB's review of (or failure to prohibit) any construction applications, means, methods, techniques, sequences, or procedures for the Construction Work;
- (4) the PWSB's entry at any time on the Site (including any area in which the Construction Work is being performed);
- (5) any inspection, testing, or approval of any Construction Work (whether finished or in progress) by the PWSB or any other person; or
- (6) the failure of the PWSB or any PWSB consultant to respond in writing to any notice or other communication of the Company.

ARTICLE VII - LIABILITY, INSURANCE, UNCONTROLLABLE CIRCUMSTANCES AND INDEMNIFICATION

Section 7.1 Liability.

The Company shall be liable for injuries and death to any and all persons and for damage to the Facility and the property of others which result from the acts, errors or omissions by the Company occurring in connection with, or arising out of, the design, construction, start-up, testing, operation and maintenance of the Facility.

Section 7.2 Insurance.

Section 7.2.1 General Requirements.

At all times during the Contract Term, the Company shall maintain or cause to be maintained insurance as required by Schedule 4 hereto and this Agreement against such risks and for such amounts as are indicated on Schedule 4 hereto paying, as the same became due and payable, all premiums with respect thereto.

Section 7.2.2 Insurers, Deductibles and PWSB Rights.

All Insurance shall be procured and maintained from financially sound and generally recognized responsible insurance companies selected by the Company with the consent of the PWSB, which consent shall not be unreasonably withheld, and authorized to write such insurance in the State. Such insurance may be written with deductible amounts comparable to those on similar policies carried by other companies engaged in businesses similar in size, character and respects to those in which the Company is engaged. The Company shall be responsible for any deductible amounts. All policies evidencing such insurance shall provide for (1) payment of the losses to the City and PWSB, and to the Company as their respective interests may appear, and (2) at least thirty (30) days prior written notice of the cancellation thereof to the Company and the PWSB. All policies of insurance required by this Section shall be primary insurance without any right of contribution from other insurance carried by the PWSB.

Section 7.2.3 Certificates, Policies and Notice.

The Company shall deliver to the PWSB, as soon as practicable after the execution of this Agreement and within sixty (60) days prior to each Contract Year thereafter, a certificate setting forth in reasonable detail the particulars as to all insurance policies which the Company is required to maintain pursuant to this Section, listing the risks that are covered thereby, the name of the insurers issuing such insurance, certifying that the same are in full force and effect and giving the amounts and expiration dates of such insurance. The Company shall also supply, upon the written request of the PWSB, the PWSB with certified copies of said policies promptly following issuance by the insurers. Such policies shall contain an endorsement to the effect that the insuring company shall notify the PWSB at least thirty (30) days prior to the effective date of the cancellation or material change in the provisions of such policy or policies. Whenever a Subcontractor is utilized, the Company shall either procure and maintain or require the Subcontractor to procure and maintain during either the Construction Period or the Operation Period comprehensive general liability, worker's compensation and motor vehicle liability insurance coverage subject to the requirements of Schedule 4, covering damage caused by actions of the Subcontractor or its employees.

Section 7.3. Uncontrollable Circumstances.

Section 7.3.1 Relief from Obligations.

Except as expressly provided under the terms of this Agreement, neither party to this Agreement shall be liable to the other for any loss, damage, delay or failure to perform any obligation to the extent it results from an Uncontrollable Circumstance. The occurrence of an Uncontrollable Circumstance shall not excuse or delay the performance of a party's obligation to pay monies previously accrued and owing under this Agreement.

Section 7.3.2 Notice and Mitigation.

The party experiencing an Uncontrollable Circumstance shall notify the other party by telephone or facsimile, on or promptly after the date the party experiencing such Uncontrollable Circumstance first knew of the commencement thereof, followed within fifteen (15) days by a written description of (1) the Uncontrollable Circumstance and the cause thereof (to the extent known), (2) the date the Uncontrollable Circumstance began, its estimated duration, the estimated time during which the performance of such party's obligations hereunder shall be delayed, and the impact, if any, on the Acceptance Date, (3) the amount, if any, by which the Construction Price or the Service Fee is proposed to be adjusted as a result of such Uncontrollable Circumstance, (4) its estimated impact on the other obligations of such party under this Agreement, and (5) any areas where costs might be reduced and the approximate amount of such cost reductions. Each party shall provide prompt written notice of the cessation of such Uncontrollable Circumstance. Whenever such act, event or condition shall occur, the party claiming to be adversely affected thereby shall, as promptly as reasonably possible, use its best efforts to eliminate the cause therefor, reduce costs and resume performance under this Agreement. While the delay continues, the affected party shall give notice to the other party, before the first day of each succeeding month, updating the information previously submitted. The Company shall furnish promptly (if and to the extent available to the Company) any

additional documents or other information relating to the Uncontrollable Circumstance reasonably requested by the PWSB.

Section 7.3.3 Conditions and Schedule Relief.

If and to the extent that Uncontrollable Circumstances interfere with, delay or increase the cost of the Company's performing the Construction Work or the Operation Services in accordance herewith, and the Company has given timely notice as required by this Section, the Company shall not be entitled to an increase in the Construction Price or the Service Fee except as set forth in Sections 7.3.4 and 7.3.5 hereof, but may be entitled to an extension of the schedule for performance equal to the time lost as a result thereof. In the event that the Company believes it is entitled to any relief on account of any Uncontrollable Circumstance, it shall furnish the PWSB written notice of the specific relief requested and detailing the event giving rise to the claim within thirty (30) days after the giving of notice delivered pursuant to Subsection 7.3.2. Within thirty (30) days after receipt of such a timely submission from the Company, the PWSB shall issue a written determination as to the extent, if any, it concurs with the Company claim for schedule relief, and the reasons therefor.

Section 7.3.4 Facility Modifications.

Before proposing any adjustment to the Service Fee in its notice of requested relief under this Section, the Company shall determine whether any increased costs of operation and maintenance of the Facility resulting from an Uncontrollable Circumstance can reasonably and prudently be reduced by the undertaking of a Facility Modification. In the event that the Company makes such a determination, the Company shall provide the PWSB with a notice thereof. The PWSB shall thereupon determine, in its sole discretion, whether such a Facility Modification shall be undertaken and shall so advise the Company. In no event shall the Company undertake such Facility Modification except at the express written direction of the PWSB.

Section 7.3.5 Share of Costs of Uncontrollable Circumstances.

The Company shall share the net costs after insurance proceeds are realized resulting from the occurrence of an insured Uncontrollable Circumstance to the extent of the first twenty-five percent (25%) of the costs necessitated by Uncontrollable Circumstances up to an aggregate of \$100,000 per Fiscal year. The cost of insurance deductibles to be borne by the Company hereunder shall not be a cost which is included in the Company's share of Uncontrollable Circumstances within such limits. Such risk sharing by the Company shall be reflected in a decrease in the amount by which the Construction Price or the Service Fee, as the case may be, shall otherwise have been increased on account of such occurrence.

Section 7.3.6 No Reimbursement for Costs Due to Delays Caused by Uncontrollable Circumstances.

If an Uncontrollable Circumstance causes the Company a delay in performance of any of its obligations under this Agreement, the sole remedy available to the Company shall be a reasonable extension of time pursuant to Section 7.3.3 hereof. The Company shall not be

entitled to any reimbursement of costs due to any such delay caused by Uncontrollable Circumstances.

Section 7.3.7 Acceptance of Relief Constitutes Release.

The Company's acceptance of any Construction Price, Service Fee or Schedule relief under this Section shall be construed as a release of the PWSB by the Company (and all persons claiming by, through, or under the Company) for any and all Loss-and-Expense resulting from, or otherwise attributable to, the event giving rise to the relief claimed.

Section 7.4 Indemnification.

Section 7.4.1 Indemnification by the Company.

The Company agrees that it shall protect, indemnify, defend and hold harmless the PWSB, and its officers, employees, agents and persons under the PWSB's control or supervision (the "PWSB Indemnitees"), from and against (and pay the full amount of) all claims for Loss-and-Expense and shall defend the PWSB Indemnitees in any suit, including appeals, for personal injury to, or death of, any person, or loss or damage to property to the extent arising out of (1) the negligence, wrongful conduct or other fault of the Company or any of its officers, members, employees, agents, representatives, contractors or Subcontractors in connection with its obligations or rights under this Agreement, (2) the operation of the Facility by or under the direction of the Company, or (3) the performance or non-performance of the Company's obligations or rights under this Agreement. The Company shall not, however, be required to reimburse or indemnify any PWSB Indemnitee for any Loss-and-Expense to the extent due to (a) Finished Water Quality that meets the standards set forth in this Agreement and conforms to Applicable Law, (b) the negligence or other wrongful conduct of any PWSB Indemnitee or due to any Uncontrollable Circumstance or (c) any act or omission of any PWSB Indemnitee responsible for or contributing to the Loss-and-Expense, and the PWSB Indemnitee whose negligence or other wrongful conduct, act or omission is adjudged to have caused such Loss-and-Expense shall be responsible therefor in the proportion that its negligence or wrongful conduct caused or contributed to the Loss-and-Expense. A PWSB Indemnitee shall promptly notify the Company of the assertion of any claim against it for which it is entitled to be indemnified hereunder, shall give the Company the opportunity to defend such claim, and shall not settle the claim without the approval of the Company. These indemnification provisions are for the protection of the PWSB Indemnitee only and shall not establish, of themselves, any liability to third parties. Except as set forth herein, this indemnification obligation shall be unconditional and shall include, but shall not be limited to, all claims against the PWSB by an employee or former employee of the Company, the Guarantor or any Subcontractor and the Company expressly waives all immunity and limitation on liability under any Industrial Insurance Act, other worker's compensation act, disability benefit act, or other employee benefit act of any jurisdiction which would otherwise be applicable in the case of such a claim. Notwithstanding anything contained in this Section 7.4.1 hereof to the contrary, the liability of the Company pursuant to this Section 7.4.1 hereof or under this Agreement shall not exceed One Hundred Million Dollars (\$100,000,000.00) (the "Liability Cap") cumulatively for the Contract Term; provided, however, that the foregoing limitation shall be reduced by any amounts paid to the PWSB by or on behalf of the Company or its insurers with respect to claims of the PWSB under

this Section 7.4.1 hereof or under this Agreement, and provided, further, however, that in no event shall any fines or penalties incurred by the Company count toward the Liability Cap. The provisions of this Section shall survive termination of this Agreement.

Section 7.4.2 Indemnification by the PWSB.

The PWSB agrees that, to the extent permitted by Applicable Law, it shall protect, indemnify and hold harmless the Company and its Affiliates and their respective officers, directors, shareholders, agents and employees (the "Company Indemnitees") from and against all claims for Loss and Expense, and shall defend the Company Indemnitees in any lawsuit, including appeals, for personal injury to, or death of, any person, or loss or damage to property arising out of (1) the negligence, wrongful conduct or other fault of the PWSB or any of its officers, employees, agents, representatives, contractors or subcontractors in connection with its obligations or rights under this Agreement, or (2) the performance or nonperformance of the PWSB's obligations under this Agreement. The PWSB shall not, however, be required to reimburse or indemnify any Company Indemnitee for any Loss-and-Expense to the extent due to (a) the negligence or other wrongful conduct of any Company Indemnitee or (b) to the extent due to any Uncontrollable Circumstance or any act or omission of any Company Indemnitee responsible for or contributing to the Loss-and-Expense, and the Company Indemnitee whose negligence or other wrongful conduct, act or omission is adjudged to have caused such Loss-and-Expense shall be responsible therefor in the proportion that its negligence or wrongful conduct caused or contributed to the Loss-and-Expense. A Company Indemnitee shall promptly notify the PWSB of the assertion of any claim against it for which it is entitled to be indemnified hereunder, shall give the PWSB the opportunity to defend such claim, and shall not settle any such claim without the approval of the PWSB. These indemnification provisions are for the protection of the Company Indemnitee only and shall not establish, of themselves, any liability to third parties.

ARTICLE VIII - EVENTS OF DEFAULT, REMEDIES AND TERMINATION

Section 8.1 Remedies for Breach.

Section 8.1.1 General.

The parties agree, except as otherwise specifically provided for in this Agreement, that (1) neither party shall have the right to terminate this Agreement, and (2) in the event that either party breaches any material obligation under this Agreement, or in the event any representation made by either party hereunder is untrue in any material respect, the other party shall have the right to terminate this Agreement under the terms provided herein, and recover damages or to secure the performance of such obligations as provided herein. The parties agree that the provisions herein constitute an adequate remedy for any breach of such obligation or any material untruth in any such representation.

Section 8.1.2 No Payment or Damages for PWSB Delay.

If the Company shall claim to have sustained any damages or costs by reason of delays, extraordinary or otherwise, or hindrances which it claims to be due to any action, omission or direction of the PWSB, to the extent such delay is due to Uncontrollable Circumstances, the

Company shall be entitled only to an extension of time and shall not have or assert any other claim, cause or action against the PWSB based on such delay or hindrance.

Section 8.2 Events of Default by the Company.

Section 8.2.1.

Due to the opportunity already given to cure or the seriousness of the Event of Default, each of the following shall constitute an Event of Default by the Company upon which the PWSB may terminate this Agreement without any requirement to provide notice or further opportunity to cure:

- (1) Failure to Apply for Certain Legal Entitlements. The failure of the Company to submit applications or required submittals, to be complete by the dates and in the manner for the milestones required by Subsection 4.5.2 hereof.
- (2) Failure to Achieve Acceptance. The failure of the Company to achieve Acceptance prior to the second anniversary of the Commencement Date, as such date may be extended for the Extension Period.
- (3) Failure to comply with the Performance Standards set forth in Schedule 1 hereto.
- (4) Abandonment. The failure to operate or the abandonment of the Facility for a period of one (1) or more days in any Contract Year.
- (5) Failure to Pay or Credit. The failure of the Company to pay or credit amounts not in dispute (including performance liquidated damages and/or non-compliance assessments) owed to the City or PWSB (excluding matters in dispute pursuant to Section 8.8 hereof) under this Agreement as and when such payments become due and owing.
- (6) Failure to Provide, Extend or Replace Security. The failure of the Company to provide, extend or replace any Bond or Letter of Credit or other security acceptable in the sole discretion of PWSB when and if required by Section 11.3 hereof.
- (7) Bankruptcy. The voluntary or involuntary filing by or against the Company of a petition seeking relief under the Federal Bankruptcy Code or any Federal or State statute intended to provide relief for entities that are insolvent or unable to meet their obligations as they come due.
- (8) Failure to Perform Any Other Material Obligation. The failure of the Company to perform any material obligation hereunder, where said failure is caused by any job action, including, but not limited to, a labor strike or slow down, a work stoppage, a walkout, or a secondary boycott, by employees of the Company performing services pursuant to this Agreement.

Section 8.2.2. Events of Default Requiring Notice and Cure Opportunity for Termination.

It shall be an Event of Default by the Company upon which the PWSB may terminate this Agreement if the Company fails or refuses to perform any material obligation under this Agreement (unless such failure or refusal is excused by an Uncontrollable Circumstance or PWSB Fault), including but not limited to the following specific Events of Default:

(1) Failure to comply with Applicable Law for ten (10) cumulative days in any Contract Year;

(2) Defaults of Company or Guarantor. The failure of the Company or the Guarantor to satisfy their respective covenants and agreements, the material untruth of any representation or warranty of the Company contained in this Agreement or of the Guarantor contained in the Guaranty Agreement, or the failure of the Company or the Guarantor to comply with the terms and conditions of Section 11.2 hereof;

(3) Bankruptcy. The voluntary or involuntary filing by or against the Guarantor of a petition seeking relief under the Federal Bankruptcy Code or any Federal or State statute intended to provide relief for entities that are insolvent or unable to meet their obligations as they come due;

except that no such failure or refusal to perform (other than those set forth in Section 8.2.1) shall constitute an Event of Default giving the PWSB the right to terminate this Agreement for cause under this Subsection unless:

(a) the PWSB has given prior written notice to the Company stating that a specified failure or refusal to perform exists which constitutes a material breach of this Agreement by the Company which gives the PWSB a right to terminate this Agreement for cause under this Section, unless such default is corrected within a reasonable time; and

(b) the Company has neither (i) challenged in an appropriate forum the PWSB's conclusion that such failure or refusal to perform has occurred or constitutes a material breach of this Agreement nor (ii) corrected or diligently taken steps to correct such default within a reasonable period of time, but not more than sixty (60) days, from receipt of the notice given pursuant to the preceding paragraph (but if the Company shall have diligently taken steps to correct such default within a reasonable period of time, the same shall not constitute an Event of Default for as long as the Company is diligently continuing to take such steps to correct such default).

Section 8.2.3. Termination Damages and Other Legal Rights Upon Company Default.

The right of termination provided under this Section upon an Event of Default by the Company is not exclusive. Upon the occurrence of an Event of Default by the Company, the PWSB or the City may exercise, without prejudice to any other right held by the PWSB or the City, any rights provided by law to the PWSB or the City to bring appropriate legal action to recover actual damages for failure in the performance by the Company of its obligations pursuant

to this Agreement for the remaining Contract Term. In calculating actual damages, the Company's obligation to pay delay non-compliance assessment amounts accruing during the Extension Period in accordance with Section 6.9 hereof shall in no way limit the right of the PWSB or the City to receive damages for any delay beyond the Extension Period. No such termination or other exercise of legal rights shall affect the right of the PWSB or the City to exercise its rights under any Bonds.

Section 8.2.4. Enforcement Costs.

The Company agrees to pay to the PWSB all Fees and Costs incurred by or on behalf of the PWSB in enforcing payment or performance of the Company's obligations hereunder in any instance in which the PWSB is successful in such enforcement action by the PWSB.

Section 8.3 Events of Default by the PWSB.

Section 8.3.1 Events of Default Not Requiring Notice of Cure Opportunity for Termination.

The following shall constitute an Event of Default by the PWSB upon which the Company may terminate this Agreement without any requirement of notice or cure opportunity:

(a) Bankruptcy. The filing by the PWSB of a petition seeking relief under the Federal Bankruptcy Code or any Federal or State statute intended to provide relief for political subdivisions which are insolvent or unable to meet their obligations as they mature.

Section 8.3.2 Events of Default Requiring Notice and Cure Opportunity for Termination.

The following shall be an Event of Default by the PWSB upon which the Company may terminate this Agreement upon the conditions stated in (1) and (2) below:

(a) The PWSB fails or refuses to perform any material obligation under this Agreement (unless such failure or refusal is excused by an Uncontrollable Circumstance or Company Fault),

(b) The failure of the PWSB to pay undisputed amounts owed to the Company under this Agreement.

(1) the Company has given prior written notice to the PWSB stating that a specified failure or refusal to perform exists which shall, unless corrected, constitute a material breach of this Agreement on the part of the PWSB and which shall, in its opinion, give the Company a right to terminate this Agreement for cause under this Section unless such default is corrected within a reasonable period of time; and

(2) the PWSB has neither challenged in an appropriate forum the Company's conclusion that such failure or refusal to perform has occurred or constitutes a material breach of this Agreement nor corrected or diligently taken steps to correct such default within a reasonable period of time but not more than sixty (60) days from the date of the notice given pursuant to the

preceding paragraph (but if the PWSB shall have diligently taken steps to correct such default within a reasonable period of time, but in no event greater than sixty (60) days, the same shall not constitute an Event of Default for as long as the PWSB is continuing diligently to take such steps to correct such default).

Section 8.3.3 Termination Liquidated Damages During the Initial Term.

If this Agreement is terminated by the Company for cause as a result of an Event of Default by the PWSB during the Initial Term (as defined in Section 10.1.1 hereof), the PWSB shall be obligated to pay the Company, as liquidated damages upon any such termination, the sum specified in Section 8.4 hereof which would be payable if this Agreement were terminated during the Initial Term, according to the year of termination, at the election of the PWSB for convenience and without cause. The parties agree that since the Company's actual damages upon termination of the PWSB for cause under this Section during the Initial Term would be difficult or impossible to ascertain, that the termination liquidated damages provided for in this Section are intended to place the Company in the same economic position it would have been in had the Event of Default permitting termination for cause during the Initial Term not occurred, and that such termination liquidated damages shall constitute the only damages payable by the PWSB upon any such termination for cause, regardless of legal theory.

Section 8.4 PWSB Discretionary Termination.

Section 8.4.1 Discretionary Termination Right.

The PWSB shall have the right to terminate this Agreement in its sole discretion, for its convenience and without cause at any time upon ninety (90) days' written notice to the Company (a "Termination for Convenience"). A Termination for Convenience will be considered to have occurred if the PWSB terminates this Agreement for either of the following reasons: (1) funds for the Capital Improvements or for the operations, maintenance and management of the Facility are not appropriated or otherwise made available; and (2) an Uncontrollable Circumstance, regardless of the cause, shall have occurred relative to a material obligation of the Company hereunder, and said material obligation of the Company is not performed for a period of thirty (30) days following the initial occurrence of said Uncontrollable Circumstance; provided, however, that in the event of a Termination for Convenience for the reasons specified in (1) and (2) above, the PWSB may terminate this Agreement upon fifteen (15) days' written notice. The amount paid as liquidated damages for termination shall be \$2,092,708, plus the compensation allowed under Section 8.4.2, if such termination occurs within the first five (5) years of the term. Beginning in the sixth (6th) year of the term, the maximum amount for termination shall a sum that equals \$1,775,730, which amount shall decline by 1/20th each year during the remaining term of this Agreement plus the compensation allowed under Section 8.4.2, plus \$316,978 for demobilization-related costs, which demobilization-related costs amount shall not be subject to reduction.

Section 8.4.2 Discretionary Termination Amount.

If the PWSB exercises its right to terminate this Agreement pursuant to this Section within the first five (5) years of the Contract Term, and the Company, upon the request of the

PWSB, demonstrates that the Company is ready, willing and able to perform its obligations under this Agreement, the PWSB shall reimburse the Company for its substantiated actual direct costs incurred and any expenses paid or incurred to third parties from the Contract Date to the date on which this Agreement is terminated by the PWSB, less any amounts already paid to the Company; provided, however, that all such costs and expenses must have been (a) directly related to the Company's performance of its Development Period obligations hereunder, and (b) necessary to be performed prior to the Construction Date, provided, however, that the total payment due to the Company under items (a) and (b) shall not exceed a maximum amount of \$250,000.

Section 8.4.3 Payment of Amounts Owning Through the Termination Date.

Upon any termination pursuant to this Section, the Company shall also be paid all amounts due for services hereunder to be paid as part of the Construction Price, including the cost of canceling subcontracts and material orders, and the Service Fee due but not yet paid as of the date of termination.

Section 8.4.4 Adequacy of Termination Payment.

The Company agrees that the applicable termination payments provided in this Section constitute full and adequate compensation to the Company and all Subcontractors for all profits, costs, expenses, losses, liabilities, damages, taxes, and charges of any kind whatsoever (whether foreseen or unforeseen) attributable to such termination of the Company's right to perform this Agreement.

Section 8.4.5 Completion or Continuance by the PWSB.

After the date of any termination under this Section, the PWSB may at any time (but without any obligation to do so) take any and all actions necessary or desirable to continue and complete the Construction Work or continue the Operations Services so terminated, including, without limitation, entering into contracts with other contractors.

Section 8.5 Certain Obligations of the Company Upon Termination or Expiration.

Section 8.5.1 Company Obligations Upon Termination.

Upon a termination of the Company's right to perform this Agreement under Sections 8.2, 8.3 or 8.4 hereof or upon the expiration of this Agreement under Section 10.1 hereof, the Company shall, as applicable: (1) stop the Construction Work and/or the Operation Services, as applicable, on the date and to the extent specified by the PWSB; (2) promptly take all action as necessary to protect and preserve all materials, equipment, tools, facilities and other City property; (3) promptly remove from the Site all construction equipment, implements, machinery, tools, temporary facilities of any kind and other property owned or leased by the Company, and repair any damage caused by such removal; (4) clean the Site and Facility, and leave the same in a neat and orderly condition; (5) promptly remove all employees of the Company and any Subcontractors and vacate the Site; (6) promptly deliver to the PWSB copies of any and all Subcontracts, together with a statement of: (a) the items ordered and not yet delivered pursuant to each agreement; (b) the expected delivery date of all such items; (c) the total cost of each

agreement and the terms of payment; and (d) the estimated cost of canceling each agreement; (7) deliver to the PWSB promptly a list of: (a) all special order items previously delivered or fabricated by the Company or any Subcontractor but not yet incorporated in the Construction Work or the Operation Services; and (b) all other supplies, materials, machinery, equipment, and other property previously delivered or fabricated by the Company or any Subcontractor but not yet incorporated in the Construction Work or the Operation Services; (8) advise the PWSB promptly of any special circumstances which might limit or prohibit cancellation of any Subcontract; (9) unless the PWSB directs otherwise, terminate all Subcontracts and make no additional agreements with Subcontractors; (10) as directed by the PWSB, transfer to the PWSB or the City by appropriate instruments or title, and deliver to the Site (or such other place as the PWSB may specify), all special order items pursuant to this Agreement; (11) promptly transfer to the PWSB all warranties given by any manufacturer or Subcontractor with respect to particular components of the Construction Work or the Operation Services; (12) notify the PWSB promptly in writing of any Legal Proceedings against the Company by any Subcontractor relating to the termination of the Construction Work or the Operation Service (or any Subcontracts); (13) give written notice of termination, effective as of date of termination of this Agreement, promptly under each policy of Insurance (with a copy of each such notice to the PWSB), but permit the PWSB to continue such policies thereafter at its own expense, if possible; and (14) take such other actions, and execute such other documents as may be necessary to effectuate and confirm the foregoing matters, or as may be otherwise necessary or desirable to minimize the PWSB's costs, and take no action which shall increase any amount payable to the PWSB under this Agreement.

Section 8.5.2. Additional Obligations.

Upon termination of the Company's right to perform this Agreement under Sections 8.2, 8.3 or 8.4 hereof or upon the expiration of this Agreement under Section 10.1 hereof, the Company at its cost and expense shall provide, and shall use its best reasonable efforts to cause its Subcontractors to provide, operational, systems, technological and design advice and support to the PWSB or any replacement operator designated by the PWSB. Such advice and support shall be for a period of twelve (12) months and shall include providing any existing plans, drawings, renderings, blueprints, operating manuals, maintenance and operating records (each as the same may exist as of the date of termination), or other information useful or necessary for the PWSB or any replacement operation designated by the PWSB or any such replacement operator to complete and carry out the Construction Work and to perform the Operation Services. If terminated during the Operation Period, the Company shall exercise its best efforts to maintain the performance of the Facility during the transfer to the PWSB.

Section 8.5.3. Company Payment of Certain Costs.

If termination is pursuant to Section 8.2.1 or 8.2.2 hereof, the Company shall be obligated to pay the costs and expenses of undertaking its post-termination responsibilities under this Section. If the Company fails to comply with any obligations under this Section, the PWSB may perform such obligations and the Company shall pay on demand all reasonable costs thereof subject to receipt of invoices or other substantiation.

Section 8.5.4. PWSB Payment of Certain Costs.

If termination occurs under any article except 8.2.1 or 8.2.2 hereof, the PWSB shall pay to the Company within sixty (60) days of the date of the Company's invoice supported by Cost Substantiation all reasonable costs and expenses incurred by the Company in satisfying the requirements of this Section, subject to the limitation set forth in Section 8.5.

Section 8.6 No Waivers.

No action of the PWSB or Company pursuant to this Agreement (including, but not limited to, any investigation or payment), and no failure to act, shall constitute a waiver by either party of the other party's compliance with any term or provision of this Agreement. No course of dealing or delay by the PWSB or Company in exercising any right, power or remedy under this Agreement shall operate as a waiver thereof or otherwise prejudice such party's rights, powers and remedies. No single or partial exercise of (or failure to exercise) any right, power or remedy of the PWSB or Company under this Agreement shall preclude any other or further exercise thereof or the exercise of any other right, power or remedy.

Section 8.7 No Consequential or Punitive Damages.

Provided the raw quality and quantity provided by the PWSB to the treatment facility is within the specifications established herein and except as excused by Uncontrollable Circumstances, the Company will protect the Board, the PWSB and the City from any consequential or punitive damage claim or liability asserted by a third party resulting from the Company's failure to provide from the treatment Facility finished water of equivalent quantity and of such quality that meets all regulatory standards.

The Company will further provide coverage for consequential or punitive damages up to a \$250,000 per occurrence limit to protect the PWSB and the City from other third party liabilities which arise from the Company's actions or failure to act. For purposes hereof, the term "occurrence" is defined as each individual claim, counterclaim, crossclaim, indemnity claim, demand, cause of action, claim of obligation, liability or damage of any kind, name, nature or description made against the PWSB or the City. For purposes hereof, the term "occurrence" shall not be defined as or with respect to an individual instance of the Company's actions or failure to act which does not take into account the number of individual claims, counterclaims, crossclaims, indemnity claims, demands, cause of actions, claims of obligation, liabilities or damages of any kind, name, nature or description made against the PWSB or the City.

As between the PWSB, the City and the Company, the parties shall not be liable to each other for special, indirect, consequential or punitive damages except as such are brought by a third party and are subject to indemnification by virtue of Sections 7.4.1 or 7.4.2 of this Agreement.

Section 8.8 Dispute Resolution.

To the extent the parties cannot, after good faith attempts, resolve any controversy or dispute that may have arisen hereunder, either party, to the extent its interests are adversely

impacted, may refer the matter to mediation. If despite the good faith efforts of the parties to resolve the dispute, the mediation does not conclude with a resolution of the dispute, the parties shall follow the procedure set forth in Section 8.8.4 hereof.

The parties shall continue to perform services and make payments not in dispute under this Agreement, without interruption or slowdown, pending resolution of any dispute(s), unless the matter at issue precludes such continued activity until resolved. This section shall survive termination of this Agreement.

Section 8.8.1 Negotiation.

The PWSB and the Company agree, prior to invoking any other method of dispute resolution as provided in this Agreement, first to engage in good faith negotiations regarding any dispute. Either party may invoke good faith negotiations by written notice to the other, and, upon receipt of such written notice, said negotiations shall commence forthwith. If the dispute has not been resolved by mutual agreement within seven (7) calendar days of the commencement of negotiations, either party may refer the dispute to non-binding mediation as provided below.

Section 8.8.2 Independent Panel Establishment.

The parties agree to establish, within one hundred twenty (120) days after executing this Agreement, an Independent Panel of Engineers (the "Independent Panel") to conduct non-binding mediation of any disputes referred for mediation which the parties have been unable to resolve through good faith negotiation. The Independent Panel shall consist of three (3) members chosen by agreement of the PWSB and the Company. The Independent Panel shall consist of engineers or other persons with expertise and experience in the design, construction and operation of private, public or municipal water treatment plants, or other similar type facilities, similar in size and complexity to the Facility.

Section 8.8.3 Independent Panel Mediation.

In the event that any dispute cannot be resolved through negotiation, either party may invoke the services of the Independent Panel to conduct non-binding mediation of the dispute by (a) giving written notice to the other of its intent to invoke non-binding mediation before the Independent Panel, which notice shall include a brief but detailed description of the dispute, including the relief requested, and (b) providing a copy of such notice to the Independent Panel. Within seven (7) days of its receipt of the written notice, the Independent Panel shall designate one member to serve as a mediator in the dispute, and so notify the parties. The member so designated shall fix a time and place for the non-binding mediation, which date shall not be later than fourteen (14) days from the date of the receipt of such notice, and shall give the parties at least five (5) business days written notice of the initial mediation session. The mediator shall meet with the parties until either (a) the dispute is resolved or (b) the mediator decides that further meetings will not likely result in a resolution by agreement. All costs and expenses incurred by the Independent Panel in the performance of its duties and responsibilities shall be shared equally between the PWSB and the Company. If the dispute has not been resolved by non-binding mediation within forty-five (45) days of the written notice convening such non-binding mediation, either party may refer the dispute to binding arbitration as provided below.

Section 8.8.4 Binding Arbitration.

All disputes arising out of or relating to this Agreement, which have not been resolved by negotiation or mediation as provided above, shall be decided by binding arbitration conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then currently in effect. The demand for arbitration shall be filed in writing with the other party to this Agreement and with the American Arbitration Association. A demand for arbitration shall be made within a reasonable time after the dispute has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings would be barred by the applicable statute of limitations. The party filing a notice of demand for arbitration must assert in the demand all disputes then known to that party on which arbitration is permitted to be demanded. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

ARTICLE IX - REPRESENTATIONS AND WARRANTIES

Section 9.1. Representations of the PWSB.

The PWSB represents and warrants to the Company as follows:

Section 9.1.1 Existence and Powers.

The PWSB is a department of the City of Pawtucket, Rhode Island, duly authorized by the City to enter into and to perform its obligations under this Agreement.

Section 9.1.2 Due Authorization and Binding Obligation.

This Agreement has been duly authorized, executed and delivered by all necessary action of the PWSB and constitutes a legal, valid and binding obligation of the City through the PWSB, enforceable against the City through the PWSB in accordance with its terms, except as the same may be limited by bankruptcy, insolvency or other similar laws affecting creditors' rights from time to time in effect.

Section 9.1.3 No Conflict.

Neither the execution nor delivery by the PWSB of this Agreement, nor the performance by the PWSB of its obligations in connection with the transactions contemplated hereby or the fulfillment by the PWSB of the terms or conditions hereof (1) conflicts with, violates or results in the breach of any constitution, law or governmental regulation applicable to the PWSB, or (2) conflicts with, violates or results in the breach of any term or condition of any order, judgment or decree, or any contract, agreement or instrument, to which the PWSB is a party or by which the PWSB or any of its properties or assets are bound, or constitutes a default under any of the foregoing.

Section 9.1.4 No Approvals Required.

Except for City Council for authorization of financing and the RIPUC/Rhode Island Division of Public Utilities ("RIDPU") for approval of financing arrangements and water rates to pay for the PWSB operational and capital costs, no approval, authorization, order or consent of, or declaration, registration or filing with, any Governmental Body or referendum of voters is required for the valid execution and delivery by the PWSB of this Agreement or the performance by the PWSB of its payment or other obligations hereunder except as the same have been disclosed to the Company and have been duly obtained or made.

Section 9.1.5 No Litigation.

There is no action, lawsuit or proceeding, at law or in equity, before or by any court or Governmental Body, or proceeding for referendum or other voter initiative, pending or, to the best of the PWSB's knowledge, threatened against the PWSB, which is likely to result in an unfavorable decision, ruling or finding which would materially and adversely affect the execution and delivery of this Agreement or the validity, legality or enforceability of this Agreement, or any other agreement or instrument entered into by the PWSB in connection with the transactions contemplated hereby, or which would materially and adversely affect the ability of the PWSB to perform its obligations hereunder or under any such other agreement or instrument.

Section 9.1.6 No Implied Representations or Warranties.

Except as expressly set forth in this Agreement, the PWSB shall not be deemed to have made and has not made (1) any representations or warranties, either express or implied, irrespective of any reviews or other action by the PWSB, or its representatives, with respect to the Site, (2) any representations or warranties as to compliance with, design, operation, fitness for use, condition or capacity, actual or design, of the Facility or any component thereof, or (3) any representations or warranties as to the suitability of the Facility for the purpose specified in this Agreement or for any other purpose specified in this Agreement or otherwise.

Section 9.2 Representations and Warranties of the Company.

The Company represents and warrants to the PWSB and the City as follows:

Section 9.2.1 Existence and Powers.

The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of California and has the authority to do business in this State, with the full legal right, power and authority to enter into and perform its obligations under this Agreement.

Section 9.2.2 Due Authorization and Binding Obligation.

This Agreement has been duly authorized, executed and delivered by all necessary corporate action of the Company and constitutes a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except to the extent

that its enforceability may be limited by bankruptcy, insolvency or other similar laws affecting creditors' rights from time to time in effect.

Section 9.2.3 No Conflict.

Neither the execution nor delivery by the Company of this Agreement nor the performance by the Company of its obligations in connection with the transactions contemplated hereby or the fulfillment by the Company of the terms or conditions hereof (1) conflicts with, violates or results in a breach of any constitution, law or governmental regulation applicable to the Company or (2) conflicts with, violates or results in a breach of any order, judgment or decree, or any contract, agreement or instrument to which the Company is a party or by which the Company or any of its properties or assets are bound, or constitutes a default under any of the foregoing.

Section 9.2.4 No Approvals Required.

No approval, authorization, order or consent, or declaration, registration or filing with any governmental authority is required for the valid execution and delivery of this Agreement by the company or the performance of its payment or other obligations hereunder except as the same have been disclosed to the PWSB and have been duly obtained or made.

Section 9.2.5 No Litigation.

There is no action, lawsuit or proceeding, a law or in equity, before or by any court or Governmental Body pending or, to the best of the Company's knowledge, threatened against the Company, which is likely to result in an unfavorable decision, ruling or finding which would materially and adversely affect the execution and delivery of this Agreement or the validity, legality or enforceability of this Agreement, or any other agreement or instrument entered into by the Company in connection with the transactions contemplated hereby, or which would materially and adversely affect the ability of the Company to perform its obligations hereunder or under any such other agreement or instrument.

Section 9.2.6 Practicability of Performance.

The Company assumes and shall have exclusive responsibility for the design and the technology to be employed in the Capital Improvements and maintenance and operation of the Facility, and for their efficacy. The Company (1) assumes the risk of the practicability and possibility of performance of the Facility in accordance with its obligations required hereunder, (2) assumes the risk of treating water through the operation of the Facility which meets all of the requirements hereof even though such performance and supply may involve technological or market breakthroughs or overcoming facts, events or circumstances which may be different from those assumed by the Company in entering into this Agreement, and (3) agrees that sufficient consideration for the assumption of such risks and duties is included in the Fixed Construction Price and the Service Fee. The Company's warranties in this paragraph shall apply notwithstanding the occurrence of any Uncontrollable Circumstance other than those specifically enumerated in item (a)(1) and (a)(4) of the definition thereof.

Section 9.2.7 Adequacy of Price and Schedule.

The Company has reviewed carefully the Capital Improvements described in Schedule 12 hereto and all other documents forming part of this Agreement, as existing on the Agreement Date. Subject to the terms of this Agreement, the Company agrees that it can perform the Capital Improvements for the Fixed Construction Price, can achieve Acceptance on or before the second anniversary of the Commencement Date, and can perform the operations maintenance and management of the Facility for the Service Fee set forth in Schedule 11 hereto.

Section 9.2.8 Information Supplied by the Company.

The information in this Agreement supplied by the Company is correct and complete in all material respects.

Section 9.3 Representations and Warranties Against Patent Infringement.

Section 9.3.1 Patents and Licenses.

The Company warrants that it owns, or is authorized to use under patent rights, licenses, franchises, trademarks, copyrights, or otherwise, the technology necessary for the performance by the Company of this Agreement and the transactions contemplated hereby, without any known material conflict with the rights of others.

In recognition of the current lack of EPA standards for usage of ultraviolet radiation equipment in the treatment of drinking water (the "UV Disinfectant Equipment"), the PWSB will delay installation of the UV Disinfectant Equipment until such time as the PWSB determines that the installation and usage of such UV Disinfectant Equipment is appropriate. However, the parties agree that the Facility shall be designed and constructed in such manner as to permit, with the minimum time, cost and disruption to the Facility as possible, the future insertion of the UV Disinfectant Equipment into the Facility, which implementation shall take place as soon as reasonably practicable following written notice from the PWSB to the Company of the PWSB's election to have the UV Disinfectant Equipment installed. The Company agrees to obtain and install the UV Disinfectant Equipment in consideration of the total payment from the PWSB to the Company not to exceed the amount of \$165,000, adjusted to reflect changes in the CPI. The Company warrants that, upon the implementation of the UV Disinfectant Equipment into the Facility and the water treatment process, the UV Disinfectant Equipment shall be operated for disinfection purposes other than for the prevention of cryptosporidium oocysts and similar organisms. In the event that a royalty or other payment shall be due as a result of the use of the UV Disinfectant Equipment in a manner not specifically authorized in writing by the PWSB, the Company shall indemnify and hold the PWSB and the City harmless from and against (and pay the full amount of) all claims in connection therewith. In accordance with Section 7.4.2 hereof, the PWSB shall indemnify and hold the Company harmless from and against (and pay the full amount of) all claims in connection with the use of the UV Disinfectant Equipment as directed by the PWSB in writing.

Section 9.3.2 Warrant Against Infringement.

The Company warrants that it shall pay all applicable royalties and license fees and shall at its own cost and expense defend, indemnify, save and hold harmless, and pay any and all awards of damages assessed against the PWSB from and against any and all damages, costs, claims, expenses, and liabilities including, without limitation, all fees and costs, on account of infringements of patents, copyrighted or uncopyrighted works, secret processes, trade secrets, patented or unpatented inventions, articles or appliances, or claims thereof pertaining to the Facility, or any part or operation thereof, combinations thereof, processes therein or the use of any tools or implements used by the Company, or its Subcontractors; provided, however, that the PWSB (1) promptly upon receipt forwards to the Company any communication charging infringement; (2) promptly forwards to the Company all process, pleadings, and other papers served in any action charging infringement; and (3) gives the Company the opportunity to defend any such action which defense shall be at the Company's sole cost and expense.

Section 9.3.3 Preliminary Injunction.

If in any suit or proceeding, a temporary restraining order or preliminary injunction is requested, the Company shall immediately retain counsel and shall use its best efforts, by giving a satisfactory bond or otherwise, to avoid the issuance of or alternatively to secure the release of the order or injunction.

Section 9.3.4 Permanent Injunction.

If in any suit or proceeding the Facility, or any part or combination thereof or process therein, is held to constitute an infringement and its use is permanently enjoined, the Company shall at once use its best efforts to secure for the PWSB and the Company a license, at the Company's expense, including payment of any fee or royalty related thereto, authorizing the continued use of the Facility, part thereof, or combination therein.

Section 9.3.5 Replacement.

If the Company is unable to secure such license within a reasonable time as determined by the PWSB, the Company shall, at its own expense, and without impairing any Performance Requirements for the construction or operation of the Facility, cause the infringing portion of the Facility to be replaced with noninfringing components or parts or modify the same so that they become noninfringing.

Section 9.4 Survival of Representations and Warranties.

Notwithstanding any other provision of this Agreement, the representations, warranties and covenants in this Article IX are intended to and shall survive termination of this Agreement.

ARTICLE X - TERM

Section 10.1 Term of Agreement.

Section 10.1.1 Effective Date and Termination Rights.

This Agreement shall become effective on the Agreement Date, and shall continue in effect for twenty (20) years following the Commencement Date (the "Initial Term") unless (1) if renewed at the option of the PWSB as provided in Section 10.2 hereof, this Agreement shall remain effective until the last day of any applicable renewal term (the "Renewal Term"; the Initial Term and any Renewal Term being referred to herein collectively as the "Term" or the "Contract Term"), or (2) if earlier terminated pursuant to the termination provisions of Article IV or Article VIII hereof, in which event the Term shall be deemed to have ended as of the date of such termination.

Section 10.1.2 Survival of Certain Provisions.

All representations and warranties of the parties contained in Article IX and such other provisions of this Agreement that expressly so provide, are intended to and shall survive the termination of this Agreement, and no such termination of this Agreement shall limit or otherwise affect the respective rights and obligations of the parties hereto accrued prior to the date of such termination.

Section 10.2 Renewal.

The PWSB and the City shall have the option to renew this Agreement for two additional periods, each of five (5) years. If the PWSB and the City determine that they wish to renew this Agreement pursuant to this Section, the PWSB shall give the Company written notice of the PWSB's irrevocable election to renew this Agreement on or before one hundred eighty (180) days preceding the last day of the Initial Term hereof or the then effective Renewal Term hereof. If the PWSB so elects to renew this Agreement, such renewal shall be on the same terms and conditions as are applicable during the Initial Term hereof. However, the Company may terminate this Agreement at the expiration of the Initial Term only if, following request by the Company, the PWSB does not permit a reconsideration and adjustment, if warranted, of the amount of the Service Fee, based upon documented evidence, over a minimum of the previous five (5) years of the Initial Term, presented by the Company in support of such request for reconsideration.

Section 10.3 Review at Expiration of Agreement.

Prior to the final Contract Year, the Company and the PWSB shall mutually select an independent, technically qualified firm (the "Auditor") to perform an audit of the Facility to determine the condition of the Facility. The cost of the services provided by the Auditor shall be divided equally between the Company and the PWSB.

The Auditor will conduct a detailed and comprehensive survey and inspection of the Facility, including but not limited to, all Equipment, buildings, structures, pavements, grounds, utility lines, spare parts inventories, operation and maintenance records, to identify the physical

and operational conditions and general status of repair of the Facility. The Auditor will prepare a detailed report documenting the findings of the survey and inspection during the first six (6) months of the final Contract Year (the "Auditor's Report"). The Auditor's Report will include, but not be limited to, the following: an assessment of the current condition of each item or component, its estimated remaining service life, and whether its current condition is consistent with the maintenance and general upkeep requirements of this Agreement and expected normal wear and tear. An estimated cost, including a reasonable contingency allowance which will vary depending on the nature of the work required, for repair, renewal or replacement, as appropriate, will be included in the Auditor's Report for each item or component that is judged to be deficient by the Auditor.

The Auditor will provide a draft of the Auditor's Report to the PWSB and the Company for their respective review and comments. In the case of any disagreement between the PWSB and the Company as to the appraised condition of items or portions of the Facility, or the estimated cost for repair, renewal or replacement, the Auditor's determination will be final and binding upon both parties.

ARTICLE XI - MISCELLANEOUS

Section 11.1 Limited Recourse to PWSB or City.

Section 11.1.1 No Recourse to General Fund.

No recourse shall be had to the general fund or general credit of the PWSB or the City for the payment of any amount due the Company hereunder, whether on account of the Construction Price, the Service Fee, any Indemnity payment, or for any Loss-and-Expense or payment or claim of any nature arising from the performance or non-performance of the PWSB's obligations hereunder. The sole recourse of the Company for all such amounts shall be to the funds held in the PWSB's Enterprise Fund. All amounts held in the Enterprise Fund shall be held for the uses permitted thereby, and no such amounts shall constitute property of the Company.

Section 11.1.2 Enforcement of Collections.

The PWSB will use reasonable efforts to enforce its right to receive the System Revenues and will use reasonable efforts to enforce and collect the fees, rates and charges as contemplated in this Section. The PWSB shall, so long as this Agreement is in full force and effect, take all lawful action necessary or required, as determined in its sole discretion, to continue to entitle the PWSB to receive the System Revenues in an amount sufficient to satisfy its payment obligations hereunder.

Section 11.2 Company Business Activities and Guarantor Credit Standing.

Section 11.2.1 Company Business.

The Company is presently a firm engaged in, among other areas of business, engineering, design, construction, and environmental services.

Section 11.2.2 Guaranty Agreement.

During the Contract Term, the Company shall cause to be provided and maintained the Guaranty Agreement, substantially in the form attached hereto as Exhibit B.

Section 11.2.3 Material Decline in Guarantor's Credit Standing.

For purposes of this Section, a "Material Decline in Guarantor's Credit Standing" shall be deemed to have occurred if (1) in the event that the Guarantor has long-term senior debt outstanding which has a credit rating by either Rating Service; such rating by both Rating Services is established at or is reduced below investment grade level, or (2) in the event that the Guarantor does not have long-term senior debt outstanding or such debt is not rated by either Rating Service, the credit standing of the Guarantor declines to a level which is insufficient to support an investment grade credit rating by either Rating Service on long-term senior debt of the Guarantor, whether or not any such debt is outstanding. The Company immediately shall notify the PWSB of any Material Decline in the Guarantor's Credit Standing.

Section 11.2.4 Credit Enhancement.

If, at any time, a Material Decline in Guarantor's Credit Standing occurs, the Company shall cause to be provided credit enhancement of its obligations hereunder within thirty (30) days after such occurrence. Such credit enhancement shall be in the form either of (1) an unconditional guaranty of all of the Company's obligations hereunder provided by a corporation or financial institution whose long-term senior debt is or would be rated investment grade by either Rating Service (the "Unconditional Guaranty"), or (2) a letter of credit securing the Company's obligations hereunder in the face amount of Five Million Dollars (\$5,000,000), provided by a financial institution whose long-term senior debt is or would be rated investment grade by either Rating Service (the "Letter of Credit"). Such Letter of Credit shall be maintained until the Guarantor's credit standing has been restored. In accordance with New York Insurance Regulations, this requirement for credit enhancement shall not be an obligation secured under either the Construction Performance Bond or the Operations Bond. Failure of the Company to provide such credit enhancement shall not be a cause for a claim under either the Construction Performance Bond or the Operations Bond. However, should the Company fail to provide such credit enhancement, the Company shall pay to the PWSB a daily delay non-compliance assessment in the amount of \$500 each day, commencing on the date that is sixty (60) days from the date of occurrence of such Material Decline in Guarantor's Credit Standing until the date that such credit enhancement is provided, or the date upon which Guarantor's credit standing has been restored, whichever is earlier, up to a maximum period of two hundred (200) days (for a maximum total non-compliance assessment in the amount of \$100,000).

Section 11.2.5 [RESERVED]

Section 11.2.6 Annual Financial Reports.

The Company shall furnish the PWSB, within ninety (90) days after the end of each Contract Year, consolidated balance sheets and income statements for the Guarantor (which shall include the respective statements of the Company) attached to the Guarantor's audited year-end financial statements reported upon by the independent public accountant. To the extent not

publicly available on the internet at www.tyco.com, the Company shall also furnish the PWSB with copies of the quarterly and annual reports and other filings of the Guarantor filed with the Securities and Exchange Commission.

Section 11.3. Financial Security for the Performance of the Company's Obligations.

Section 11.3.1 Construction Performance Bond.

Simultaneously with the execution of this Agreement, the Company shall cause to be provided to the PWSB the Construction Performance Bond as security for the performance of all of its Pre-Construction Period and Construction Period obligations hereunder, subject to the limitations stated in Section 5.13.1 and 11.2.4. The Construction Performance Bond shall be issued by a surety acceptable to the PWSB. The Construction Performance Bond shall name the PWSB and the City as Owner/Obligee, as appropriate, and shall be issued substantially in the form specified in Exhibit D.

Section 11.3.2 Operations Bond.

The Company shall provide an Operations Bond issued by a surety reasonably acceptable to the PWSB as security for performance of its obligations hereunder during the Operation Period (the "Operations Bond"). The Operations Bond shall be in the amount of the Annual Service Fee plus pass-through costs at the time it is issued, shall be for a term of one (1) year, shall be continuously renewed, extended or replaced throughout the term of the Operations Period, or for as long as required by the PWSB, and shall be issued substantially in the form specified at Exhibit E. Failure to renew the annual performance bond or provide alternate security acceptable to the PWSB shall be an event of default by the Company and constitute cause for termination under the provisions of this Agreement. However, neither the non-renewal of the Operations Bond by the surety nor the failure of the Company to provide a replacement Operations Bond shall constitute a loss to the PWSB or City recoverable under the Operations Bond or any renewal thereof.

Section 11.3.3 Operation Period Letter of Credit.

Upon the occurrence of one or more of the following conditions:

- (1) Any Event of Default specified in Section 8.2;
- (2) The failure or refusal promptly to cure any Event of Default specified in Subsection 8.2.1; or
- (3) Continued and repeated material events of non-compliance with the Performance Requirements of Schedule 1 hereto;

the Company shall provide a letter of credit in the stated amount of 150% of the then-established annual Service Fee, including pass through costs, and shall be annually adjusted thereafter by the annual CPI adjustment as determined in Section 3.11.5(5). Such letter of credit shall be issued by a bank whose long-term debt is rated "A" or better by either Rating Service (the "Operation Period Letter of Credit"). The Operation Period Letter of Credit shall be for a term of one (1)

year, shall be continuously renewed, extended or replaced so that it remains in effect for the entire Term of this Agreement, or such shorter period of time as determined by the PWSB, in its sole discretion, and shall be issued in form and substance acceptable to the PWSB. The PWSB shall be authorized under the Operation Period Letter of Credit to make one or more sight drawings thereon upon certification to the issuing bank of the Company's failure to pay any amounts due and owing under this Agreement when and as due as the result of an Event of Default by the Company. The Operation Period Letter of Credit shall permit a drawing thereon in the full stated amount thereof in the event that any required renewal, extension or replacement thereof is not made prior to thirty (30) days of its expiration. Such Letter of Credit shall serve as a security for the performance of the Company's obligations hereunder, and the stated amount thereof shall in no way limit the amount of damages to which the PWSB may be entitled for any Company Event of Default.

Section 11.4 Relationship of the Parties.

The Company is an independent contractor of the PWSB and the relationship between the parties shall be limited to the performance of this Agreement in accordance with its terms. Neither party shall have any responsibility with respect to the services to be provided or contractual benefits assumed by the other party. Nothing in this Agreement shall be deemed to constitute either party a partner, agent or legal representative of the other party. Except as otherwise provided herein, no liability or benefits, such as workers' compensation, pension rights or liabilities, or other provisions or liabilities arising out of or related to a contract for hire or employer/employee relationship shall arise or accrue to any party's agent or employee as a result of this Agreement or the performance.

Section 11.5 Property Rights.

The Company shall pay all royalties and license fees relating to the design, construction, start-up, and testing of the Capital Improvements, and to the operation and maintenance of the Facility. The Company shall indemnify and hold harmless the PWSB, and any of the PWSB Indemnities from and against all Loss and Expense, and shall defend the PWSB Indemnities in any suit, including appeals, arising out of or related to infringement of such patent, trademark or copyright relating to, or for the unauthorized use of trade secrets by reason of the design, construction, start-up, and testing of the Capital Improvements, and to the operation and maintenance of the Facility, or at its option, shall acquire the rights of use under infringed patents, or modify or replace infringing equipment with equipment equivalent in quality, performance, useful life and technical characteristics and development so that such equipment does not so infringe. The Company shall not, however, be required to reimburse or indemnify any person for any losses and expenses due to the negligent or willful conduct of such person. The provisions of the Section shall survive termination of this Agreement.

Section 11.6 Interest on Overdue Obligations.

Except as otherwise provided herein, all amounts due hereunder, whether as damages, credits, revenue, charges or reimbursements, that are not paid when due shall bear interest at the rate of interest which is the lower of (1) the maximum rate permitted by the law of the State or (2) 18%, on the amount outstanding from time to time, on the basis of a 365-day year, counting

the actual number of days elapsed, and such interest accrued at any time, to the extent permitted by law, shall be deemed added to the amount due as accrued.

Section 11.7 No Discrimination.

During the performance of this Agreement, the Company agrees that it will comply with all applicable anti-discrimination statutes, ordinances and regulations, and will take affirmative action or have affirmative action programs.

Section 11.8 Subcontractors.

Section 11.8.1 Limited Review and Approval.

The PWSB shall have the right, to the extent provided below in this Section, to approve Subcontractors engaged for Construction Work and Operation Services at the Facility, except: (1) Affiliates of the Company, (2) equipment suppliers, (3) Subcontractors the common stock of which is publicly traded on a national exchange or over-the-counter, (4) Governmental Bodies, and (5) Subcontractor(s) required for emergency response. At least 10 days prior to subcontracting with any Subcontractor, the Company shall furnish the PWSB written notice of its intention to engage such Subcontractors, together with all information requested by or otherwise available to the Company pertaining to the proposed Subcontractor and subcontract pertaining to the demonstrated responsibility of the proposed Subcontractor in the following areas: (a) any conflicts of interest, (b) any record of felony criminal convictions or pending felony criminal investigations, (c) any final judicial or administrative finding or adjudication of illegal employment discrimination, (d) any unpaid State, City or local taxes, and (e) any final judicial or administrative findings or adjudication of non-performance in contracts with the PWSB. In the event the PWSB fails to respond to any such notice of intention within ten (10) days of receipt thereof, the PWSB shall be deemed to have approved the proposed Subcontractor. The approval or withholding thereof by the PWSB of any proposed Subcontractor shall not create any liability of the PWSB to the Company, to third parties or otherwise. In no event shall any Subcontract be awarded to any person debarred, suspended or disqualified from State, or City contracting for any services within the scope of the Construction Work. In the event of an emergency, the PWSB may waive the requirements of this Subsection 11.8.1.

Section 11.8.2 Indemnity for Subcontractor Claims.

No Subcontractor shall have any right against the PWSB for labor, services, materials or equipment furnished for the Construction Work or the Operation Services. The Company acknowledges that its indemnity obligations under Section 7.4 hereof shall extend to all claims for payment or damages by any Subcontractor who furnishes or claims to have furnished any labor, services, materials or equipment in connection with the Construction Work or the Operation Services.

Section 11.9 Actions of the PWSB in its Governmental Capacity.

Section 11.9.1 Rights as Government Not Limited.

Nothing in this Agreement shall be interpreted as limiting the rights and obligations of the PWSB in its governmental or regulatory capacity, or as limiting the right of the Company to bring any action against the PWSB, not based on this Agreement, arising out of any act or omission of the PWSB in its governmental or regulatory capacity.

Section 11.9.2 No City Obligation to Issue Legal Entitlements.

Notwithstanding any other provision of this Agreement, neither the PWSB nor the City shall be obligated in any manner to issue or approve any Legal Entitlement required with respect to the Facility, nor shall the PWSB or the City be deemed to be in breach or default hereunder as a result of any delay or failure in the issuance or approval of any such Legal Entitlement. The PWSB and the City retain all issuance and approval rights the PWSB and the City have under Applicable Law with respect to such Legal Entitlements, and none of such rights shall be deemed to be waived, modified or amended as a consequence of the execution of this Agreement.

Section 11.10 Assignment.

Section 11.10.1 By the Company.

The Company shall not assign, transfer, convey, lease, encumber or otherwise dispose of this Agreement, its right to execute the same, or its right, title or interest in all or any part of this Agreement whatsoever to another entity without the prior written consent of the PWSB, in the PWSB's sole discretion. Any such approval given in one instance shall not relieve the Company of its obligation to obtain the prior written approval of the PWSB to any further assignment. Any such assignment shall require the assignee of the Company to assume the performance of and observe all obligations, representations and warranties of the Company under this Agreement, and no such assignment shall relieve the Guarantor of any of its obligations under the Guaranty, which shall remain in full force and effect during the Contract Term. The approval of any assignment, transfer or conveyance shall not operate to release the Company in any way from any of its obligations under this Agreement unless such approval specifically provides otherwise. The following shall constitute an assignment for purposes hereof: (i) the sale, lease, or other disposal of all or substantially all of the Company's assets to any other person, firm, corporation or association, or (ii) the entry by the Company into any agreement to any such effect. However, in the case of the assignments described in subsection (i) and (ii) above, the PWSB's sole remedy, should it object to such assignment, shall be to terminate this Agreement. Any such termination shall be treated as a Termination for Convenience, except that the total amount to be paid to the Company as liquidated damages for such termination shall be the sum of (x) \$316,978 for demobilization-related costs, which demobilization-related costs amount shall not be subject to change over time, and (y) payment to the Company in the amount of \$450,000, which amount shall decline by 1/10th each year, commencing with the Commencement Date and continuing during the remaining term of this Agreement until such amount is zero dollars; the Company shall not be entitled to the balance of the payments

provided for in Section 8.4.1 or 8.4.2 for a Termination for Convenience or Termination due to an Event of Default by the PWSB or the City.

Section 11.10.2 By the PWSB.

The PWSB may not assign its rights or obligations under this Agreement without the prior written consent of the Company, except that the PWSB may assign its rights and obligations under this Agreement, without the consent of the Company, to another public or quasi-public entity if such entity is legally and financially capable of discharging the duties and obligations of the PWSB hereunder.

Section 11.11 Amendment.

This Agreement may not be amended, except by a written agreement signed by the parties. This Agreement shall not be amended in such a way as to make any tax-exempt financing of this Agreement taxable.

Section 11.12 No Other Agreements.

All negotiations, proposals and agreements prior to the date of this Agreement are merged herein and superseded hereby, there being no agreements or understandings other than those written or specified herein, unless otherwise provided. This Agreement, including all Schedules attached hereto, constitutes the entire Agreement between the PWSB and the Company with respect to the design, construction, start-up, and Acceptance Testing of the Capital Improvements, and the management, operation and maintenance of the Facility. No obligation or covenant of good faith or fair dealing shall be implied or interpreted as conferring upon either party any right, duty, obligation or benefit other than as expressly set forth herein, notwithstanding the fact that certain terms and conditions hereof may give either party discretion in the manner of performance under this Agreement.

Section 11.13 Notices.

All notices, demands, requests and other communications hereunder shall be deemed sufficient and properly given if in writing and delivered in person to the following addresses or sent by first class mail and facsimile, to such addresses:

(a) If to the PWSB:

Pamela Marchand
General Manager and Chief Engineer
Pawtucket Water Supply Board
85 Branch Street
Pawtucket, RI 02860
Phone: 401.729.5001
Facsimile: 401.726.6493

(b) If to the Company: Earth Tech, Inc.
John F. Netto

Executive Vice President/Division President
3740 West 1987 South
Salt Lake City, UT 84104
Telephone: 801.844.4539
Facsimile: 801.973.9733

Either party may, by like notice, designate further or different addresses to which subsequent notices shall be sent. Any notice hereunder signed on behalf of the notifying party by a duly authorized attorney at law shall be valid and effective to the same extent as if signed on behalf of such party by a duly authorized officer or employee. Notices and communications given by mail hereunder shall be deemed to have been given five (5) days after the date of dispatch; all other notices shall be deemed to have been given upon receipt.

Section 11.14 Binding Effect.

This Agreement shall bind and inure to the benefit of and shall be binding upon the PWSB, the City and the Company and any assignee acquiring an interest hereunder consistent with Section 11.10.

Section 11.15 Consent to Jurisdiction.

THE COMPANY IRREVOCABLY (1) AGREES THAT ANY LEGAL PROCEEDING ARISING OUT OF THIS AGREEMENT SHALL BE BROUGHT IN THE STATE OR FEDERAL COURTS IN PROVIDENCE COUNTY, RHODE ISLAND, (2) CONSENTS TO THE JURISDICTION OF SUCH COURTS IN ANY SUCH SUIT, (3) WAIVES ANY OBJECTION WHICH IT MAY HAVE TO THE LAYING OF THE JURISDICTION OF ANY LEGAL PROCEEDING, AND (4) WAIVES ITS RIGHT TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING IN ANY OF SUCH COURTS.

Section 11.16 Further Assurances.

The PWSB and the Company each agree to execute and deliver such further instruments and to perform any acts that may be necessary or reasonably requested in order to give full effect to this Agreement. The PWSB and the Company each agree, in order to carry out this Agreement, to use all reasonable efforts to provide such information, execute such further instruments and documents and take such actions as may be reasonably requested by the other and not inconsistent with the provisions of this Agreement and not involving the assumption of obligations or liabilities different from or in excess of or in addition to those expressly provided for herein.

Section 11.17 Counterparts.

This Agreement may be executed in any number of original counterparts. All such counterparts shall constitute one and the same document.

Section 11.18 Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of Rhode Island.

Section 11.19 Headings.

The Table of Contents and any heading preceding the text of Articles, Sections and Subsections of this Agreement shall be solely for convenience of reference and shall not constitute a part of this Agreement, nor shall they affect its meaning, construction or effect.

Section 11.20 Days.

All references to days herein are references to calendar days, unless otherwise specified in this Agreement.

[The remainder of this page is intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

CITY OF PAWTUCKET

By: 

Name (Print): JAMES E. DOYLE

Its duly authorized MAYOR

PAWTUCKET WATER SUPPLY BOARD

By: Mary E. Tetzner

Name (Print): Mary E. Tetzner

Its duly authorized Chairperson

By: William W. Masack

Name (Print): William W. MASACK

Its duly authorized VICE CHAIR

EARTH TECH, INC.

By: *R. P. Mead*
Name (Print): R. P. Mead
Its duly authorized President

EXHIBIT A

DESCRIPTION OF CITY OF PAWTUCKET WATER TREATMENT SYSTEM

This Exhibit A is intended as a general description of the City of Pawtucket Water Treatment System, and is not a substitution or modification of the description of the System contained in the body of the Agreement. Attached hereto as Figure 1 is a schematic showing the PWSB Infrastructure and Facilities as of November, 2000. The following is a description of the scope of capital improvements and operations, as contemplated in the RFP and the Agreement:

1. Water Treatment Plant and Pump Station.
 - (a) design, build and operate a 25-MGD water treatment plant
 - (b) design, build and operate a 35-MGD pump station
 - (c) manage the existing pump station at 85 Branch Street
 - (d) operate the existing water treatment plant
2. Storage Tank.
 - (a) hydraulic model
 - (b) design, build and maintain a storage tank and associated pump station to be located on the same site as the new treatment plant (85 Branch Street, Pawtucket)
 - (c) inter-connect piping
3. Intake Structure and Aeration System.
4. Design, operate and maintain the Wells, Piping and Electrical Systems for well field system.
5. Pipeline Mill Street to Branch Street.
6. Existing 54" Main Rehabilitation.
7. Watershed Monitoring System.

EXHIBIT B
GUARANTY

GUARANTY

by

TYCO INTERNATIONAL GROUP S.A.

in favor of

CITY OF PAWTUCKET, RHODE ISLAND

AND

PAWTUCKET WATER SUPPLY BOARD

Dated as of ____, 2003

GUARANTY

GUARANTY, dated as of _____, 2003 by Tyco International Group S.A., a corporation organized and existing under the laws of Luxembourg, and having its principal place of business at 17, Bd. Grande-Duchesse Charlotte, L-1331 Luxembourg (the "Guarantor") (the "Guaranty"), in favor of the City of Pawtucket, Rhode Island, a municipal corporation duly incorporated in Rhode Island and the Pawtucket Water Supply Board (collectively, the "Entity").

R E C I T A L S

(A) Pursuant to the Pawtucket Regional Water Treatment Facility Capital Improvements, Operations, Maintenance and Management Agreement (the "Contract") dated as of _____, 2003 between Earth Tech, Inc., a corporation duly incorporated in the State of California (the "Subsidiary") and the Entity, the Subsidiary has agreed to design, build and operate a water treatment facility to provide drinking water to the municipalities of Pawtucket, Cumberland and Central Falls, Rhode Island.

(B) The Entity has required, as a condition precedent to entering into the Contract, that the Guarantor execute and deliver this Guaranty. The Entity would not enter into the Contract with the Subsidiary but for the execution and delivery of this Guaranty by the Guarantor.

(C) Guarantor is the direct or indirect parent of the Subsidiary.

(D) In furtherance of the business purposes of the Guarantor, the Guarantor desires to guaranty all obligations of the Subsidiary pursuant to the Contract.

NOW, THEREFORE, based upon the foregoing, and in order to induce the Entity to enter into the Contract, the Guarantor hereby agrees as follows:

ARTICLE 1

DEFINITIONS

ARTICLE 1 *SECTION 1.1. Definitions.* Capitalized terms not otherwise defined in this Guaranty shall have the meanings ascribed to them in the Contract, as the same may be amended, supplemented or otherwise modified from time to time. As used in this Guaranty, the following terms have the following meanings unless the context otherwise requires:

“Guaranteed Obligations” has the meaning ascribed to such term in Section 2.1.

“Guaranty” means this Guaranty, as it may be amended, supplemented or otherwise modified from time to time in writing signed by the Guarantor and the Entity.

ARTICLE 2

THE GUARANTY

SECTION 2.1. *The Guaranty.* Except as expressly set forth herein (and in particular subject to the limitations set forth in 4.5 below), the Guarantor hereby unconditionally guarantees to Entity the full and punctual performance by the Subsidiary of its obligations under the Contract including but not limited to the payment of damages (excluding indirect and consequential damages or losses), as well as all obligations to perform the Services and all indemnification obligations of the Subsidiary to the Entity for any claims, losses, damages or liabilities arising out of any acts or omissions of the Subsidiary or its agents, contractors and employees in performing the Services in accordance with the Contract, in each case subject to the conditions and limitations expressly set forth in the Contract (“the “Guaranteed Obligations”). The Guarantor and the Entity expressly acknowledge that, subject to Section 2.5 below, default by the Subsidiary or the failure of the Subsidiary to perform any Guaranteed Obligation in the time required in each case under the Contract, is a condition of the exercise of this Guaranty.

SECTION 2.2. *Termination of Guaranty.* This Guaranty shall remain in full force and effect until the earliest date on which (i) all of the Guaranteed Obligations have been completely performed and paid in full, or (ii) a replacement guarantor reasonably acceptable to the Entity shall have assumed all the rights and obligation of the Guarantor under this Guaranty. The Guarantor’s payment of a portion, but not all, of the Guaranteed Obligations shall in no way limit, affect, modify or abridge the Guarantor’s liability, as set forth herein, for any portion of the Guaranteed Obligations that has not been completely performed or indefeasibly paid in full. Notwithstanding anything to the contrary, this Guaranty shall expire upon the earlier to occur of (a.) satisfaction of the Guaranteed Obligations, or (b) the date that is twenty years from the Contract Date, as extended by any renewal thereof..

SECTION 2.3. *Guaranty Unconditional.* Except as expressly set forth herein and subject in particular to section 4.5 below, the Guarantor agrees that the obligations of the Guarantor hereunder shall be unconditional and absolute.

Notwithstanding any provision of this Guaranty to the contrary, the Guarantor shall be entitled to assert as a defense to any claim for payment of the Guaranteed Obligations, that (i) such Guaranteed Obligations are not currently due under the terms of the Contract or (ii) that such Guaranteed Obligations have previously been paid in full.

SECTION 2.4. *Waivers of Notices and Defenses.* The Guarantor hereby waives acceptance hereof, presentment, demand, protest and any notice not provided for herein, as well as any requirement that at any time any action be taken by any corporation or person against the Subsidiary or any other corporation or person.

SECTION 2.5. *Stay.* The Guarantor agrees that, notwithstanding anything to the contrary herein, if the Entity is stayed upon the insolvency, bankruptcy, or reorganization of the Subsidiary from exercising its rights to enforce or exercise any right or remedy with respect to the Guaranteed Obligations, or is prevented from giving any notice or demand for payment or performance or taking any action to realize on any security or collateral or is prevented from collecting any of the Guaranteed Obligations, in any such case, by such proceeding or action, the Guarantor shall pay or render to the Entity upon demand therefor the amount that would otherwise have been due had such rights and remedies been permitted to be exercised by the Entity.

SECTION 2.6. *No Enforcement of Subrogation.* Upon making any payment or performance with respect to any Guaranteed Obligation hereunder, the Guarantor shall be subrogated to the rights of the Entity against the Subsidiary with respect to such payment; *provided* that the Guarantor shall not enforce any payment right by way of subrogation until all Guaranteed Obligations have been paid in full.

SECTION 2.7. *Choice of Remedy.* This Guaranty may be enforced by the Entity without first resorting to any action against the Subsidiary or exhausting any other remedies that the Entity may have; provided, however, the Entity shall give the Subsidiary and Guarantor reasonable notice prior to exercising its rights and remedies hereunder against the Guarantor.

ARTICLE 3

REPRESENTATIONS AND WARRANTIES

The Guarantor hereby represents and warrants to the Entity that the following statements are true and correct:

SECTION 3.1. *Binding Obligation.* This Guaranty has been duly and validly executed and delivered by the Guarantor and constitutes the legal, valid and binding obligation of the Guarantor enforceable against the Guarantor in accordance with its terms, except as the enforceability thereof may be limited by bankruptcy, insolvency or other similar laws affecting the enforcement of creditors' rights generally and by equitable principles relating to the availability of equitable remedies.

SECTION 3.2. *Financial Statements.* Guarantor warrants and represents that to the best of its knowledge the financial statements posted on the internet at www.tycoint.com and provided to the entity in printed copy on July 9, 2003 accurately reflect the financial condition of Guarantor for the dates and periods indicated, and that there has been no material adverse change in the financial condition of Guarantor which would impair Guarantor's ability to meet its obligations under this Guaranty since the date of such statements.

ARTICLE 4

MISCELLANEOUS

SECTION 4.1 *Notices.* All notices, requests and other communications to any party hereunder shall be in writing (including bank wire, facsimile transmission, or similar writing) and shall be given to such party at its address or telecopy number set forth, in the case of the Guarantor, on the signature pages hereof, or in the case of the Entity, in the Contract, or such other address or telecopy number as such party may hereafter specify for the purpose by notice to the other party. Each such notice, request or other communication shall be effective (i) if given by facsimile transmission, when such telecopy is transmitted to the telecopy number specified in this Section and answerback has been received, (ii) if given by any other means (which in the case of mail shall be registered mail or airmail for international mail), when delivered at the address specified in this Section.

SECTION 4.2. *Waivers.* No failure or delay by the Entity in exercising any right, power or privilege hereunder or under the Contract shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies herein provided shall be cumulative and not exclusive of any rights or remedies provided by law.

SECTION 4.3. *Amendments and Waivers.* This Guaranty constitutes the complete agreement of the Entity and the Guarantor with respect to the subject matter hereof and supersedes all prior or contemporaneous negotiations, promises,

covenants, agreements or representations. No amendment, modification, termination or waiver of any provision of this Guaranty, shall in any event be effective without the written consent of the Entity and Guarantor.

SECTION 4.4. *Successors and Assigns.* This Guaranty is a continuing Guaranty and shall be binding upon the Guarantor and its successors and assigns (including any successor by merger or consolidation or any transferee of all or substantially all of the assets of Guarantor) whether or not such obligations are expressly assumed by such successor, assignee or transferee. This Guaranty shall inure to the benefit of the Entity and its successors and assigns permitted under the Contract. Nothing contained in this Guaranty shall be deemed to confer upon anyone other than the parties hereto (and their permitted successors and assigns) any right to insist upon or to enforce the performance or observance of any of the obligations contained herein.

SECTION 4.5. *Limitation on Liability.* Notwithstanding anything to the contrary contained or implied herein, except as otherwise agreed by Guarantor and Entity, the aggregate liability of Guarantor hereunder shall not in any event exceed the lesser of (a) the then remaining liability of the Subsidiary under the Contract, or (b) the amount of Fifty Million Dollars (\$50,000,000), which amount shall in no event be reduced by (i) the amount recovered by Entity under any bond or insurance pursuant to the Contract, or (ii) any amounts previously paid under the Contract to Entity and/or its successors and assigns by the Subsidiary and/or its successors and assigns, except that in no event shall the aggregate amount paid out to Entity by the Guarantor, the Subsidiary, insurance maintained by the Subsidiary, the Operations Bond, and the Construction Performance Bond maintained pursuant to the Contract exceed One Hundred Million (\$100,000,000). All dollar amounts stated herein shall mean United States Dollars.

SECTION 4.6. *APPLICABLE LAW.* THIS GUARANTY SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAW OF THE STATE OF RHODE ISLAND.

SECTION 4.7. *JURISDICTION.*

ANY ACTION OR PROCEEDING AGAINST THE GUARANTOR RELATING IN ANY WAY TO THIS GUARANTY MAY BE BROUGHT AND ENFORCED IN THE COURTS OF THE STATE OF RHODE ISLAND OR OF THE UNITED STATES FOR THE DISTRICT OF RHODE ISLAND, AND THE GUARANTOR IRREVOCABLY CONSENTS TO THE JURISDICTION OF EACH SUCH COURT IN RESPECT OF ANY SUCH ACTION OR PROCEEDING. THE GUARANTOR IRREVOCABLY APPOINTS THE CT CORPORATION SYSTEM 10 Weybosset St. Providence, RI 02903, AS ITS AGENT TO RECEIVE SERVICE OF PROCESS OR OTHER LEGAL

SUMMONS FOR PURPOSES OF ANY SUCH ACTION OR PROCEEDING. THE GUARANTOR FURTHER IRREVOCABLY CONSENTS TO THE SERVICE OF PROCESS IN ANY SUCH ACTION OR PROCEEDING BY THE MAILING OF COPIES THEREOF BY REGISTERED OR CERTIFIED MAIL, POSTAGE PREPAID, RETURN RECEIPT REQUESTED, TO THE GUARANTOR AT ITS ADDRESS AS PROVIDED FOR NOTICES HEREUNDER. THE FOREGOING SHALL NOT LIMIT THE RIGHT OF THE ENTITY TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY LAW OR TO BRING ANY ACTION OR PROCEEDING, OR TO OBTAIN EXECUTION OF ANY JUDGMENT, IN ANY OTHER JURISDICTION.

THE GUARANTOR HEREBY IRREVOCABLY WAIVES ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING UNDER THIS GUARANTY IN ANY COURT LOCATED IN THE STATE OF RHODE ISLAND, AND HEREBY FURTHER IRREVOCABLY WAIVES ANY CLAIM THAT ANY COURT LOCATED IN THE STATE OF RHODE ISLAND IS NOT A CONVENIENT FORUM FOR ANY SUCH ACTION OR PROCEEDING.

SECTION 4.8. *Severability.* If any provision in or obligation under this Guaranty shall be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, shall not in any way be affected or impaired thereby.

SECTION 4.9. *Interpretation.* Section headings in this Guaranty are included herein for convenience of reference only and shall not constitute a part of this Guaranty for any other purpose or be given any substantive effect.

SECTION 4.10 *Further Assurances.* At any time or from time to time, upon the request of the Entity, the Guarantor shall execute and deliver such further documents and do such other acts and things as the Entity may reasonably request in order to effect fully the purposes of this Guaranty. The Guarantor agrees to be liable for any reasonable expenses incurred by Entity and/or its successors and assigns with respect to any reasonable action or proceeding to enforce this Guaranty.

SECTION 4.11 *Effectiveness.* This Guaranty shall become effective upon the Contract becoming effective. Guarantor further agrees that in the event of the Subsidiary entering insolvency proceedings any indebtedness of the Subsidiary to the Guarantor existing at the time of such insolvency proceedings being initiated shall be subordinated to the payment of the Guaranteed Obligations.

IN WITNESS WHEREOF, the Guarantor has executed this Guaranty by its duly

authorized officer as of the date first above written.

GUARANTOR:

TYCO INTERNATIONAL GROUP S.A.

By: _____
Name: Michelangelo Stefani
Title: Managing Director
Facsimile: + 352 46 43 51
Address: 17, Bd. Grande-Duchesse Charlotte
L-1331
Luxembourg

EXHIBIT C

COMPANY PROPOSAL

The Company's Proposal is a voluminous, multi-volume set, together with several clarification documents, and is available for inspection upon request to the Chief Engineer of the Pawtucket Water Supply Board.

EXHIBIT D

FORM OF CONSTRUCTION PERFORMANCE BOND



Document A312

Performance Bond

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Principal Place of Business):

OWNER (Name and Address):

CONSTRUCTION CONTRACT

Date:

Amount:

Description (Name and Location):

BOND

Date (Not earlier than Construction Contract Date):

Amount:

Modifications to this Bond:

☐ None

☐ See Page 3

CONTRACTOR AS PRINCIPAL

Company:

(Corporate Seal)

SURETY

Company:

(Corporate Seal)

Signature: _____

Name and Title:

Signature: _____

Name and Title:

(Any additional signatures appear on page 3)

(FOR INFORMATION ONLY-Name, Address and Telephone)
AGENT or BROKER:

OWNER'S REPRESENTATIVE (Architect, Engineer or
other party):

1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

3 If there is no Owner Default, the Surety's obligation under this Bond shall arise after:

3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and

3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and

3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.

4 When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

4.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or

4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or

4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or

4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or

.2 Deny liability in whole or in part and notify the Owner citing reasons therefor.

5 If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6 After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:

6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

6.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and

6.3 Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or nonperformance of the Contractor.

7 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators or successors.

8 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

9 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation avail-

able to sureties as a defense in the jurisdiction of the suit shall be applicable.

10 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

11 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12 DEFINITIONS

12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of

any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

12.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

12.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

12.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company: _____ (Corporate Seal)

Signature: _____

Name and Title:

Address:

SURETY

Company: _____ (Corporate Seal)

Signature: _____

Name and Title:

Address:

Willis

Document A312

Payment Bond

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Principal Place of Business):

OWNER (Name and Address):

CONSTRUCTION CONTRACT

Date:

Amount:

Description (Name and Location):

BOND

Date (Not earlier than Construction Contract Date):

Amount:

Modifications to this Bond:

☐ None

☐ See Page 6

CONTRACTOR AS PRINCIPAL

Company:

(Corporate Seal)

SURETY

Company:

(Corporate Seal)

Signature: _____
Name and Title:

Signature: _____
Name and Title:

(Any additional signatures appear on page 6)

(FOR INFORMATION ONLY-Name, Address and Telephone)
AGENT or BROKER:

OWNER'S REPRESENTATIVE (Architect, Engineer or
other party):

1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.

2 With respect to the Owner, this obligation shall be null and void if the Contractor:

2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2 Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.

3 With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.

4 The Surety shall have no obligation to Claimants under this Bond until:

4.1 Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2 Claimants who do not have a direct contract with the Contractor:

.1 Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

.2 Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and

.3 Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.

5 If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.

6 When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2 Pay or arrange for payment of any undisputed amounts.

7 The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

9 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

11 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this

Bond shall be construed as a statutory bond and not as a common law bond.

14 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15 DEFINITIONS

15.1 Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract,

architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

15.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company:

(Corporate Seal)

SURETY

Company:

(Corporate Seal)

Signature: _____

Name and Title:

Address:

Signature: _____

Name and Title:

Address:

DUAL OBLIGEE RIDER

To be attached to and form a part of contract bond number _____ issued by the _____

on behalf of _____

in the amount of _____

_____ Dollars (\$ _____)

and dated _____ in favor of _____

in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration receipt of which is hereby acknowledged, the Undersigned hereby agree as follows:

1. The _____

_____ is hereby added to said bond as an additional obligee.

2. The Surety shall not be liable under this bond to the Obligee, or either of them unless the said Obligees, or either of them, shall make payments to the Principal strictly in accordance with the terms of the said contract as to payments, and shall perform all other obligations to be performed under said contract at the time and in the manner therein set forth.

3. No suit, action or proceeding by reason of any default whatever shall be brought on this bond after two (2) years from the day on which the final payment under said construction contract falls due.

4. Aggregate liability of Surety hereunder to Obligees is limited to the penal sum above stated and Surety, upon making payment hereunder, shall be subrogated to, and shall be entitled to an assignment of all rights of the payee with respect to the particular obligation discharged by the payment, either against principal or against any other party liable to the payee on the discharged obligation.

Signed, Sealed and Dated this _____ day of _____, _____

By _____

By _____

By _____

By _____

EXHIBIT E
FORM OF OPERATIONS BOND

PERFORMANCE BOND

Amount \$

That we,

(hereinafter called the Obligee),

Dollars

Sealed with our seals and dated this _____ day of _____ 02

NOTWITHSTANDING ANYTHING CONTAINED IN THE CONTRACT TO THE CONTRARY, THE LIABILITY OF THE PRINCIPAL AND THE SURETY UNDER THIS BOND IS LIMITED TO THE TERM OF THE CONTRACT FROM _____ TO _____. ANY EXTENSIONS OR RENEWALS OF THIS BOND MUST BE CONSENTED TO IN WRITING BY THE PRINCIPAL AND THE SURETY. FAILURE TO EXTEND OR RENEW THIS BOND BY THE PRINCIPAL AND THE SURETY SHALL NOT CONSTITUTE A DEFAULT UNDER THIS BOND.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Obligee named herein or the heirs, executors, administrators or successors of the Obligee.

Principal

By: _____

FEDERAL INSURANCE COMPANY

By: _____

TABLE OF SCHEDULES

PWSB—EARTH TECH SERVICE AGREEMENT

SCHEDULE	TOPIC
SCHEDULE 1	PERFORMANCE STANDARDS
SCHEDULE 2	OPERATION AND MAINTENANCE STANDARDS
SCHEDULE 3	FACILITY PLANS
SCHEDULE 4	INSURANCE
SCHEDULE 5	ESCALATION INDICES
SCHEDULE 6	PERMITS AND CONSENT AGREEMENTS
SCHEDULE 7	PWSB CONTRACTS
SCHEDULE 8	MAXIMUM UTILITIES UTILIZATION
SCHEDULE 9	EQUIPMENT AND CHEMICALS INVENTORY
SCHEDULE 10	PASS THROUGH COSTS
SCHEDULE 11	SERVICE FEE
SCHEDULE 12	CAPITAL IMPROVEMENTS
SCHEDULE 13	ACCEPTANCE TEST
SCHEDULE 14	SUMMARY OF FIXED CONSTRUCTION PRICE COST
SCHEDULE 15	CERTAIN STATE AND FEDERAL LAWS
SCHEDULE 16	TERMINATION PAYMENTS
SCHEDULE 17	EXAMPLE ADJUSTMENT METHODOLOGY FOR ANNUAL SERVICE FEE USING THE CONSUMER PRICE INDEX (CPI)
SCHEDULE 18	UNION/CITY MEMORANDA OF AGREEMENT

SCHEDULE 1

PERFORMANCE STANDARDS

1.1 TREATMENT REQUIREMENTS

The Company shall operate and maintain the Facility in accordance with all applicable federal, State, and local regulations pertaining to water treatment standards, including the 2004 and 2010 requirements as specified in this Agreement. In addition, the Company shall operate the Facility to be in compliance with the specific performance standards described herein. All analytical methods used to demonstrate compliance shall be according to methods approved by the USEPA, PWSB and RIDOH. The interim water quality requirements and the longer-term water quality performance requirements are presented in Table S1-1 on the next page.

1.2 FUTURE TREATMENT REQUIREMENTS

PWSB shall require that all raw water sources (surface water or well water) be treated to the 2004 standard and all other applicable water quality standards. The parameters specified above represent only a partial listing of the finished water quality requirements. The PWSB will be required to meet 2004 anticipated requirements for finished water by January 1, 2004.

Production volumes for finished water in 2004 and thereafter shall be based upon historical usage by the PWSB system. Commencing no later than January 1, 2004, it is the objective of the PWSB that all raw water sources (surface water or well water) be treated to the 2004 standard and all other applicable water quality standards within the recognized limitations of the existing water treatment plant's capabilities to meet these standards. Provided the company has demonstrated best efforts to meet the 2004 standards, the PWSB shall be responsible for non-compliance with regulatory requirements and standards above those in effect prior to January 1, 2004, until such time as the new water treatment plant is completed per the established Company schedule. Failure to complete the new facility and commence operations by the established date of the Company's schedule shall not relieve the company of financial, regulatory or any other responsibility associated with complying with the 2004 standards in future time periods beyond the established completion and operations commence date for the new water treatment facility. The parameters specified in Table S1-1 represent only a partial listing of the finished water quality requirements.

By no later than January 1, 2010, the PWSB anticipates the need to meet additional regulatory requirements for treated potable water. These additional requirements are referred to as 2010 Requirements throughout this Agreement and are also summarized on Table S1-1.

Table S1-1: PWSB Treatment Plant Finished Water Requirements⁽¹⁾

Constituent	Units	Until January 1, 2004***	January 1, 2004 to May 2010***	Beyond May 2010*** FreeChlorine	Beyond May 2010 **** Chloramines
Total Organic Carbon (TOC)	mg/L	% Removal per Stage 1 D/DBP Rule	<2.0 annual average	<1.6 annual average	% Removal per D/DBP Rule
Corrosivity*	ppm	Minimum of 0.80 to a maximum of 1.10			
Color**	Pt-Co Units	<5/<10	<5/<10	<5/<10	<5/<10
Turbidity	NTU	0.3 NTU combined filter effluent 95% of the time	0.1 NTU combined filter effluent 95% of the time	0.1 NTU combined filter effluent 95% of the time	0.1 NTU combined filter effluent 95% of the time
Iron	mg/l	<0.3	<0.3	<0.3	<0.3
Arsenic	ug/l	<5	<5	<5	<5
Radon	Pico curies/l	<300	<300	<300	<300
TTHM RAA	ug/l	<50	<40	<25	<40
HAA5 RAA	ug/l	NA	<30	<25	<30
Cryptosporidium removal/inactivation	--	NA	NA	99.99%	99.99%
Giardia removal/inactivation	--	99.9%	99.9%	99.9%	99.9%
Virus removal/inactivation	--	99.99%	99.99%	99.99%	99.99%
Bromate	ug/l	NA	<10	<10*****	<10*****
Fluoride Target Level	mg/l	1.0	1.0	1.0	1.0
Taste and Odor (Combined MIB and geosmin)	ng/L	Higher of < 10 ng/L or at least 60% removal of the influent levels			
Free Chlorine (< 60°F)	mg/l	1.3	1.3	1.3	NA
Free Chlorine (> 60°F)	mg/l	1.6	1.6	1.6	NA
Chloramine	mg/l	NA	NA	NA	2.0
Minimum Alkalinity (As CaCO ₃)	mg/l	NA	50	50	50
Minimum Hardness (As CaCO ₃)	mg/l	NA	50	50	50
Langelier Index	- -	NA	0 ±0.2	0 ±0.2	0 ±0.2
Temperature Target	° F	65	65	65	65

* New plant to meet existing corrosion control practice (CalciQuest liquid at a feed rate of 0.80 – 1.10 ppm).

** 5 color unit standard applies when raw water color is less than 75 color units. If raw water color exceeds 75 units, 10 unit

treated water standard applies.

*** With distribution system on free chlorine.

**** With Distribution system on chloramines

***** Company shall address actions necessary if bromate standard is 5. ug/L.

(1) These limits are a partial listing of water quality requirements of RI-DOH permit. These and other documents should be reviewed to determine additional finished water quality limitations currently in effect.

The water quality requirements listed above are based on a monthly average demand for finished water of 13.3 MGD. These parameters represent only a partial listing of the finished water quality requirements.

The Company has agreed to provide an ultra-violet (UV) light based disinfectant system in addition to the original disinfection system provided by the Company. Treated water disinfection shall be provided by either system as mutually determined by the PWSB and the Company. Usage of either disinfection system does not relieve or alter the regulatory performance requirements, contractual requirements, or any performance standard or other requirement established for the Company or the PWSB.

SCHEDULE 2

OPERATION AND MAINTENANCE STANDARDS

2.1 GENERAL

The Company shall operate, maintain and manage the Facility in accordance with the terms and provisions set forth herein. Operational decision-making shall always be based on the following overall objectives:

- Protection of health and welfare of the public
- Protection of the health and safety of the Facility operating staff
- Preservation of the long-term capability to supply water treatment services
- Protection of the environment
- Protection and preservation of the Facility equipment and facilities
- Maximization of Facility operational efficiency and minimization of operational costs

2.2 OPERATIONS AND MAINTENANCE

The Company shall maintain the Facility in good working order and repair and in a neat and orderly condition utilizing maintenance standards and procedures consistent with industry standards and manufacturer specification. A computerized maintenance management system shall also be utilized. The Company shall maintain the aesthetic quality of the Facility as originally constructed and subsequently modified, with due allowance for reasonable wear and tear and depreciation. The Company shall maintain on behalf of the PWSB all manufacturers' warranties on new Equipment purchased, and shall fully cooperate and assist the PWSB, at the Company's sole cost and expense, in enforcing existing Equipment warranties and guaranties relative to the Facility.

The Company's Service Fee shall be based on treating raw water within 75% of the historical average values and 125% of the historical average values (i.e., +/- 25% variance from the historical average) presented in Table S2-1 and Table S2-2 for raw surface water and ground water quality, respectively. Should the minimum and maximum ranges for raw water quality, as measured on a 12-month moving basis, fall outside this 75-125% range, the Company and the PWSB shall negotiate in good faith to adjust upward or downward the Service Fee per the adjustment methodology specified in Schedule 11.

Table S2-1: Happy Hollow Reservoir Water Quality

Constituent	Units	Minimum	Maximum	Average
Temperature	Degrees C	0.5	28	13.9
Hardness	mg/L as CaCO ₃	1	38	18.5***
pH		5.9	7.7	6.8
Color	Pt-Co Units	5	128	14.0
Turbidity	NTU	0.6	9.0	1.5
Iron	mg/L	0.01	0.60	0.2
Dissolved Oxygen	mg/L	4.0	13.0	9.6
Alkalinity	mg/L as CaCO ₃	1	30	17.6
Chloride	mg/L	10	56	31.7
Coliform Bacteria	MPN/100	20	24,000	653
Arsenic	mg/L	<0.005	<0.005	<0.005
Radon*	Picocuries/L	65	65	65
e. coli	Per 100 ml	0	92	46***
UV 254	cm ⁻¹	0.09	0.20	0.15***
Cryptosporidium	Per 100 L	0	210	105***
Giardia	Per 100 L	0	208	104***
Bromide	mg/L	Non-detect	0.032	0.016***
Taste and Odor **	Combined MIB and Geosmin, ng/L	Non-detect	25	12.5***
Total Organic Carbon (TOC)	mg/L	0.7	6.8	3.91
Ammonia	mg/L as Nitrogen	0.1	0.2	0.15***

* A single radon sample was collected on 8/16/99

** No data available on actual taste-and-odor levels

*** Average values are estimated.

Table S2-2: Ground Water Quality

		Color	Arsenic (mg/L)	Turbidity (NTU)	pH	Alkalinit y (mg/L)	Hardness (mg/L)	Chloride (mg/L)	Temp (Deg. C)	Conductivity	Fe (mg/L)	Mn (mg/L)	Radon* (Picocuries/L)
WELL 2	AVG	0	<.005	0.50	6.4	45	70	33	14.0	195	0.08	0.04	
	MAX	0	<.005	11.10	6.9	90	98	83	17.9	240	0.83	0.11	904
	MIN	0	<.005	0.08	5.7	24	59	23	10.6	149	ND	ND	
WELL 3	AVG	0	<.005	0.27	6.1	37	59	32	13.4	188	0.08	0.03	
	MAX	0	<.005	0.91	6.6	78	86	62	22.6	221	0.38	0.08	899
	MIN	0	<.005	0.02	5.4	20	5	23	9.4	0	ND	ND	
WELL 4	AVG	0	<.005	0.15	6.2	36	64	32	13.9	169	0.12	0.03	
	MAX	0	<.005	0.44	6.3	58	93	58	17.0	209	0.58	0.04	1189
	MIN	0	<.005	0.02	6	28	50	25	8.3	4	ND	ND	
WELL 5	AVG	0	<.005	0.25	6.5	34	61	48	16.9	158	0.10	0.02	
	MAX	0	<.005	0.38	6.7	42	75	146	20.5	180	0.18	0.03	825
	MIN	0	<.005	0.13	6.3	26	46	28	9.4	138	ND	ND	
WELL 6	AVG	0.05	<.005	0.56	6.4	35	51	32	13.3	165	0.29	0.17	
	MAX	3	<.005	2.34	6.8	68	130	54	18.6	212	0.78	1.00	922
	MIN	0	<.005	0.12	5.6	3	4	26	7.8	16	0.01	0.02	
WELL 7	AVG	0	<.005	0.28	6.2	34	55	36	12.9	195	0.16	0.07	
	MAX	0	<.005	1.15	6.6	64	84	66	17.6	1174	0.78	0.45	1161
	MIN	0	<.005	0.04	5.6	26	44	27	8.9	0	ND	0.02	
WELL 8	AVG	0.06	<.005	0.31	6.1	32	56	28	16.1	176	0.15	0.05	
	MAX	4	<.005	2.92	6.5	68	72	47	17.7	229	0.75	0.18	770
	MIN	0	<.005	0.03	5.4	24	48	18	8.7	0	ND	ND	
WELL 9	AVG	0.07	<.005	0.24	6.0	28	54	32	12.7	181	0.09	0.02	
	MAX	5	<.005	1.10	6.5	52	76	53	25.0	263	0.38	0.04	912
	MIN	0	<.005	0.05	5.4	6	33	24	8.5	0	ND	ND	

* Radon levels are based on a single sample collected 8/16/99

The Company shall continue to meet the performance standards specified in Schedule 1 if the finished water quantity and/or raw water quality fail to fall within the established ranges on a daily, monthly, or other short-term basis. The $\pm 25\%$ raw water quality range is intended to protect the City and the Company from extraordinary changes, on an annual average basis, over the Term of the Agreement.

The subsequent sections set forth requirements for the operation and maintenance (O&M) of Facility components, and are intended to address the major activities required. The following sections, however, are not intended to include all specific activities that are necessary for meeting the performance requirements set forth in the Agreement.

In addition to the general requirements of the Agreement, the Company is responsible for the specific performance requirements below. The Company shall refer to the Operations Manual, and associated operation and maintenance manuals to understand additional operations and maintenance requirements.

The Facility shall at all times be operated, controlled, and supervised by a qualified manager and with supervisory controls capable of responding immediately and effectively to any and all anticipated and unanticipated circumstances. The combination of automated and human oversight shall assure compliance with the Agreement.

2.2.1 SCADA System

The PWSB requires that Facility operations will have a supervising control and data acquisition (SCADA) system installed at the new Facility and shall be utilized for the purpose of managing and improving operational efficiency and effectiveness. Read-only access to SCADA system information and reports shall be provided to three (3) designated PWSB staff locations by the Company. The Company shall be responsible for ongoing integration of such system with Facility operations, including the associated staff training required. The Company shall modify and/or reconfigure the SCADA system subsequent to implementation of the proposed Capital Improvements to insure the SCADA system receives cost effective upgrades and improvements throughout the term of the Service Agreement.

2.2.2 Maintenance Management System

The Company shall develop and implement a comprehensive computer-based maintenance management system and program that develops readily available historical data, including an inventory of spare parts and provisions for enforcing existing Equipment warranties and guarantees and maintaining all warranties on new Equipment purchased after the Commencement Date. The Company shall implement such a maintenance management program to include preventative, predictive, and corrective maintenance for all components of the Facility, including but not limited to:

- Buildings, grounds, and structures
- Electrical systems and instrumentation
- Mechanical equipment
- Vehicles and other related Rolling Stock
- Instrumentation

- Laboratory, monitoring and sampling equipment
- Heating, ventilation, and air conditioning
- Communication equipment (i.e., telephones, modems, facsimiles, etc)
- Computer equipment (software and hardware)
- Chemical feed systems
- Pumping systems
- Auxiliary power facilities
- Air pollution control devices (if any)
- SCADA facilities and programmable logic controllers (“PLCs”)
- Other facilities, equipment, and Systems contained within the Facility
- Other specialized tools and Equipment

Non-critical items that are regularly replaced at the end of useful life will be excluded from preventative maintenance system as mutually agreed upon by Company and PWSB. Access to the records, reports, and system documentation shall be provided to the PWSB Chief Engineer or designated representative on an “as requested” basis and as specified by all reporting requirements established by this Agreement.

2.2.3 Pump Stations

The Company shall operate and maintain the pump stations to provide uninterrupted, economical flow of water through the Distribution System. The Company shall be responsible for inspecting and conducting maintenance of the pump stations to ensure their uninterrupted functioning. Pump stations shall be addressed within the maintenance management system as an identifiable sub-system.

2.2.4 Analytical Services

The Company shall perform sampling, testing, and any other analytical procedures of Facility raw water and finished water to demonstrate compliance with the Agreement, applicable regulatory requirements, and permit provisions. The Company shall perform all applicable testing related to process control at its own expense. All testing and analytical procedures, with the exception of process control testing, shall be performed by a laboratory certified by the RIDOH and subject to approval by the PWSB, utilizing either an in-house or outside laboratory. The Company shall prepare laboratory data for all applicable regulations, permits monitoring, and operating reports and shall forward the results from the laboratory to the appropriate State

and regulatory agencies, including the PWSB. The PWSB, at its sole expense, may also perform testing, sampling and analytical procedures as it deems necessary. To the extent additional testing, sampling and analytical procedures are required by a Change in Law applicable to the Facility, including any revisions to RIDOH requirements, the Company shall be responsible for such activities.

Consistent with the watershed and distribution sampling requirements of the PWSB, the Company shall also perform the required sampling, testing and other analytical procedures required by the PWSB and all regulatory requirements.

2.2.5 Equipment and Chemicals

The Company shall keep all Equipment in good operating condition and maintain adequate Equipment in inventory in order to facilitate the repair and replacement of used or no longer useful Equipment, if necessary, in a timely fashion so as not to disrupt the operation of the Facility. Such Equipment shall be of a quality and durability equal to or greater than the Equipment being used, in inventory, or required herein to be secured as of the Commencement Date; and shall at a minimum meet the specification provided for in the Operations Manual or future operations manuals issued with new equipment.

The Company shall operate all used or useful Equipment, including Equipment placed in service, and perform all tests and testing as may be required or recommended pursuant to applicable warranties, commercial or industrial standards and federal, State, and local laws, regulations and permits. The Company shall be responsible for promptly notifying the PWSB in the event of any major Equipment failure.

All Equipment, including Rolling Stock, and chemicals provided by the PWSB or the Company on and after the Contract Date, including any Equipment or chemical ordered by the Company or the PWSB for the Facility, shall be deemed to be owned by the PWSB and shall remain a part of the Facility upon termination or expiration of the Agreement. All such Equipment, including Rolling Stock, shall be in good operating condition, as adjusted for normal wear and tear. All property and equipment, including Rolling Stock and chemicals, designated for disposal or replacement shall be replaced or disposed of as defined in the Agreement.

2.2.6 Vehicle Maintenance

The Company shall operate and maintain the vehicles and/or any additional equipment provided by the Company as part of the services. All maintenance of the vehicles shall be performed in accordance with the O&M Plan, manufacturer warranties, and standard industry practice. If the Company wishes to reduce the existing inventory of vehicles, the Company shall request the same from the PWSB for review and approval. The procedures for disposition of such vehicles shall be at the discretion of the PWSB and the PWSB shall retain all proceeds from the sale of such equipment. Schedule 9 shall be updated accordingly, as a result of changes in the vehicle inventory.

2.2.7 Buildings Services

The Company shall perform buildings services to maintain the current condition of the Facility throughout the term of the Agreement. The Facility structures shall be maintained at a level adequate for the efficient, long-term reliability and preservation of the capital investment. The Company shall, at a minimum, perform or have performed by third parties the following activities relevant to the buildings and grounds:

- a. Maintain the buildings, grounds and landscaping in an aesthetically attractive and clean condition, snowplow all roadways and parking areas and maintain sidewalks and access to the Facility free of ice and snow.
- b. Wash all windows twice per year or more frequently on an as-needed basis.
- c. Repair all roof leaks within 10 days of discovery.
- d. Implement regularly scheduled pest control measures, or more frequently as required, and immediately upon discovery of potential pest infestations.
- e. Repair all plumbing leaks and failures immediately.
- f. Damp mop all floors twice per week or more frequently as needed with a cleaning solution appropriate for use in such facilities. Immediately clean all spills.
- g. Strip all floors and apply new floor finish on a periodic basis and to the extent necessary to maintain appearance and safety standards.
- h. Wash down wall tiles and clean all other walls every sixth month commencing with the first Billing Month of the Agreement.
- i. Apply paint as necessary and appropriate, but at a minimum every 5 years all paint surfaces shall be repainted.
- j. Clean offices and restrooms Monday through Friday.

2.2.8 Utilities

As of the Commencement Date, the Company shall be responsible for supplying and paying for all utilities, including but not limited to natural gas, heating, fuel oil, telephone, Internet access, and water. The cost for electricity shall be a Pass through Cost including such maximum limits specified in Schedule 10.

2.2.9 Watershed and Water Distribution

The PWSB will retain responsibility for maintenance, cleaning, repair, and construction of the watershed and water distribution system. The Company shall be responsible for the operation and maintenance of the aerators located at the raw water reservoir. The Company shall coordinate its activities with the PWSB, as directed by the PWSB, to minimize disruption of the

Facility operation and maintenance and to prevent any interference with distribution system cleaning and maintenance activities.

2.3 OPERATION AND MAINTENANCE COSTS

The Company shall provide, at its sole cost and expense, all labor, materials, machinery, vehicles, except Equipment and Chemicals initially provided by the PWSB for the Company's use and identified in Schedule 9, including, but not limited to office equipment, copiers, computers, fuel, chemicals, supplies, materials, spare parts, expendables, consumables, testing and laboratory analysis, and any items required for the operation, maintenance and management (including all repair and replacement) of the Facility in accordance with the terms and provisions of the Agreement. The transmission and distribution system facility and PWSB administrative office facility are not included for purposes of this 2.3 requirement.

2.4 OPERATIONS MONITORING AND REVIEW

The PWSB will actively participate in review of Facility management, operation and maintenance throughout the term of the Agreement. The PWSB shall designate the Water Resource Manager position, or such alternative position as designated by the PWSB in writing, as the daily contact person. The Water Resource Manager will be physically located at the new water treatment plant office facility provided for PWSB staff.

The following information shall be provided on a daily, weekly, and monthly (see below for monthly) basis for access by the Water Resource Manager and the General Manager using the SCADA system to provide the information: 1) Daily raw water production from the ground water wells by individual well; 2) Daily raw water production from the surface water supply; 3) raw water and finished water average temperature; 4) finished water production; 5) finished water quality. Augmenting these requirements, the PWSB shall be supplied, via the SCADA system, in a format approved by the PWSB, the following daily and weekly information:

Daily	
1) Raw water supply:	temperature, turbidity, color, odor, pH, alkalinity, and bacteria, and particle count
2) After DAF or settled water:	temperature, turbidity, color, odor, pH, bacteria, and particle count
3) After each membrane or filter unit:	temperature, turbidity, color, odor, pH, bacteria, particle count
4) Clear or wet well:	temperature, turbidity, color, odor, pH, chlorine, bacteria, fluoride (if applicable)
5) Pump effluent:	temperature, turbidity, color, odor, pH, chlorine, bacteria, alkalinity, and fluoride

6) Storage:	temperature, turbidity, color, pH, chlorine, bacteria
7) Wells at plant influent:	temperature, turbidity, color, odor, pH, bacteria
8) Wells at well head:	temperature, turbidity, color, odor, pH, bacteria and conductivity
9) Weekly Staffing Plan	

Weekly	
1) Raw water supply:	sodium, iron, chlorides, phosphates, and algae analysis (type & count)
2) Pump effluent:	phosphate, alkalinity, sodium
3) Wells at well head:	alkalinity, hardness, iron, manganese, and chlorides

2.4.1 Monthly Operating Reports

The Company shall prepare the monthly operating reports (Monthly Reports) summarizing the operations of the Facility for submission to the RIDOH and RIDEM, as required. The Monthly Reports shall be prepared by the 15th or other date, as applicable, of every month for the previous month of Facility operation. The Monthly Reports shall be submitted to the PWSB for review prior to submission to the RIDOH or RIDEM. The Company shall prepare the Monthly Reports in a format subject to approval by the PWSB and RIDOH or RIDEM. The Monthly Reports shall include data pertaining to the Facility performance, analyses required by the RIDOH or RIDEM Permit, water flows, and other pertinent information. At a minimum, the Company shall include the following data in the Monthly Reports and any other information in compliance with RIDOH or RIDEM requirements:

- a. Maintenance activity summary, maintenance backlog by prioritized category, and a summary of anticipated maintenance activity for the next month time period.
- b. Raw water production (weekly and monthly averages in MGD) from surface water sources and well field production by individual well.
- c. Finished water production in weekly and monthly displays of minimum, maximum and average MGD for each day of the reporting period and averages for each weekly and monthly reporting period.

- d. Water quality parameters for raw and finished water production.
- e. Twelve (12) month moving averages and trend line graphics for water quality (raw and finished water) parameters and finished water quantity.
- f. Electrical power consumption for water treatment plant, main pump station, ancillary facilities, and total usage summarizing kwh usage and time of day usage information.
- g. Staffing summary
- h. Safety and training report (accidents – number and severity; training classes conducted and attendance)
- i. Operational plans for the next thirty (30) day period.

2.4.2 Annual Operation and Maintenance Report

The Company shall prepare an annual operation and maintenance report (Annual Report). This report shall include detailed information about the completed contract year's operation and maintenance of the Facility and current Facility conditions. The report shall include, at a minimum:

- An assessment of the condition of the Facility, details of any modifications made (design details and as-built drawings) and an analysis of the effectiveness of any repairs, replacements, or upgrades.
- A summary of the information provided in the monthly reports.
- A summary of environmental, safety, and regulatory compliance.
- An assessment of outstanding issues, including any recommendations for changes to plant operations.
- Operating budget summary.

The Annual Report shall be finalized by the Company and issued approximately two weeks prior to the annual Facility inspection and in all cases shall be issued within sixty (60) days of the last day of the contract year.

2.4.3 Facility Inspections

The City or its authorized agents and representatives from the governing regulatory agency (e. g., RIDOH) reserves the right to visit or inspect the Facility at any reasonable time, including “blind” inspections without prior notice to the Company. The PWSB or its authorized agents and representatives may call upon the Company at any time for an oral review of any matter pertaining to the Facility. The Company shall provide the PWSB and/or authorized

agents and representatives adequate office working space during inspections and reviews as necessary.

The PWSB or its authorized agents and representatives anticipate performing an annual inspection of the Facility, which shall be scheduled at a time of mutual consent between the Company and the PWSB or its authorized agents or representatives. The purpose of this annual inspection is to verify that Facility operations and maintenance is properly performed in accordance with this Agreement. At least two weeks prior to the annual inspection, the Company shall submit to the PWSB three copies of the Company's Annual Report.

In the event that any such inspections reveal work not in accordance with the Agreement or a lack of repairs or necessary maintenance to the Facility or Facility facilities or equipment, the PWSB or its authorized agent shall bring to the attention of the Company such items and the Company shall perform the repairs and maintenance activities identified by the PWSB in accordance with the terms and provisions set forth in the Agreement. Failure of the PWSB or its authorized agents to identify such items, shall not release the Company of its obligations and responsibilities under this Agreement.

The Company shall maintain all records of operating data and information relevant to the Facility, including accounting and financial records. The Company shall provide the PWSB access to all such records upon reasonable request.

2.4.4 Operations Records

The Company shall maintain a computerized record keeping system for all operation and maintenance functions performed on the Facility. Records shall include, but not be limited to, records of Facility operation, operation and maintenance costs, maintenance procedures, emergency incidents, personnel, and inventory (equipment and chemicals).

2.4.5 Monthly Meetings

The PWSB and the Company shall meet on a monthly basis at the Facility or other mutually agreed upon location to discuss the prior Monthly Report and Facility performance, including maintenance issues, Facility conditions, environmental and permit compliance, invoicing issues, public relations, and other relevant issues. Copies of documentation of these meetings shall be the responsibility of the Company and shall be distributed to all attendees. The Company shall provide Monthly Reports to the City of the previous month's operation and maintenance of the Facility by the 15th or other date, as applicable, of the current month. These status reports shall present the operating, maintenance and financial information for the previous month.

2.4.6 Review at Expiration of Agreement

Prior to the final Contract Year, the PWSB and Company shall select an independent, technically qualified firm (Auditor) to conduct a complete Facility audit to determine the

condition of the Facility. The cost of services provided by the Auditor shall be divided equally between the PWSB and Company.

The Auditor will conduct a detailed, comprehensive survey and inspection of the Facility to identify the physical and operational conditions and general status of repair of all equipment, buildings, structures, pavements, grounds, utility lines, spare parts inventories, operation and maintenance records, etc. The Auditor will prepare a detailed report documenting the findings of the survey/inspection during the first six months of the final Contract Year.

A draft version of the Auditor's report will be provided to the PWSB and Company for review and comment. In the case of disagreement between the PWSB and Company as to the appraised condition of items or portions of the Facility, or estimated cost for repair, renewal, or replacement, the Auditor will make the final decision, which shall be binding to both parties.

In addition to the Audit described above, the Company should anticipate that, every four (4) years, the PWSB will have conducted by an outside third party a review of the Facility condition, the maintenance records and equipment condition. The Company shall cooperate with and participate in these reviews, as requested. Third-party review costs shall be the responsibility of the PWSB.

2.4.7 PWSB Office and Conference Room at the Facility

The PWSB intends that offices for usage by PWSB staff shall be provided for designated PWSB staff. These offices in the main operations building shall be provided for exclusive use by PWSB staff. The Company shall equip each office with two phone outlets, power outlets cable network connection with Internet access, desk, chair, computer, file cabinet, light, and general office provisions. The computer shall, at a minimum, have the following features or their market equivalents at the time of purchase: 750 MHz Pentium processor, 256 MB RAM, 30 GB Hard drive, internal ZIP drive, internal 3.5" floppy drive, internal CD-DVD writeable drive, 19" color monitor and color printer. The phone lines shall be separate from the operations building phone lines and provided for the exclusive use by PWSB. The PWSB shall be responsible for all fees and charges associated with the phone lines. Currently, the PWSB envisions that the Source Water Manager and Water Supply Technician positions will require the following facilities:

- a. Office with minimum 4 outlets, 4 phone jacks, and space for 2 desks, 6' table, file cabinets, 2 computers, printer, fax, minimum 150 sq. ft.
- b. Storage room, accessible from drive or drive-in area, minimum 96 sq. ft.

If not included as part of the re-located facility for PWSB administrative functions, then the PWSB also requires that the Water Treatment Facility contain a Training/Conference Room suitable for PWSB public meetings (monthly) and additional meetings as determined by the PWSB. A Training/Conference room reservation system shall be maintained by the PWSB. The conference room shall have the following:

- a. Seating capacity of 30 at tables

- b. Countertop with outlets and with lower cupboards, minimum length 12 feet
- c. White boards at front of room and one side wall, minimum 8 feet wide
- d. Cork board on one side wall, minimum 8 feet wide
- e. Pull down screen, front of room
- f. Outlet on floor for visual equipment
- g. Lockable storage room, minimum 18 sq. ft. with shelves on one side
- h. Lockable coat room, minimum 8 foot width
- i. Phone jacks and telephones, minimum of two (2) telephone lines with speaker/conferencing facility on at least one of the telephone systems

SCHEDULE 3

FACILITY PLANS

3.1 GENERAL

The Company shall be responsible for developing the following plans (all such plans are collectively referenced herein as the “Plans”):

- Customer Service and Emergency Response Plan
- Staffing and Training Plan
- Operations and Maintenance Plan
- Safety and Security Plan
- Transition Plan

3.2 CUSTOMER SERVICE AND EMERGENCY RESPONSE PLAN

The PWSB (Customer Service) shall be the focal point for all customer problems and emergencies. Customer service problems shall be directed from the Customer Service Department to the Company for Company involvement and resolution. The Company shall respond promptly (within 2 hours) and in a reasonable manner to all customer problems and emergencies pertaining to the Facility in accordance with the Service Agreement. While the Customer Service Department of the PWSB shall be the focal point, the Company shall also maintain a toll-free 24-hour telephone number throughout the term of the Agreement so that customers of the Facility can report any problems and emergencies to the Company. Such calls shall be reported to the PWSB Customer Service Department. The Company shall notify the PWSB of any activity, problem, or circumstance of which it becomes aware that threatens the safety, health or welfare of the customers of the Facility. The Company shall maintain a complete log with the start and end date and time of all problems and emergencies identified and measures and response time taken by the Company to remedy such problems and emergencies.

The Company shall develop emergency operations procedures, including on-call backup capability to be utilized during an emergency event. As part of the emergency plan, emergency operations procedures shall be developed to address at a minimum:

- Chemical Spills – On-Site and from Off-Site Transportation (freeway and railroads)
- Personnel Emergencies
- Fire and Explosions
- Pipe, Valve, or Pump Failure

- Equipment and Process Failure
- Power Failure
- Acts of God (i.e., Hurricanes, Wind storms, and Floods)
- Finished Water Quality Requirement Violation
- Unauthorized Access to Facilities
- Emergency Telephone Numbers
- Emergency Equipment Inventory
- Records Preservation
- Coordinating Instructions with Public Safety Agencies

The Company, if requested by the PWSB, shall participate in emergency preparedness drills and preparedness demonstrations at the facilities.

3.3 STAFFING AND TRAINING PLAN

The Company shall provide staff qualified and experienced in the operation, maintenance, and management of water treatment systems similar in nature and character to the Facility in accordance with the terms and conditions defined in the Agreement. The Company shall also provide additional third party support, on an as needed basis, to perform its duties and obligations of this Agreement. Such third parties shall be equally qualified for the specific services to be performed. The Company is responsible for maintaining the required number of staff and third party contractors as deemed appropriate to operate, maintain and manage the Facility in accordance with the provisions and terms of this Agreement. The Company shall provide:

- Qualified management, supervisory, technical, laboratory, operations and maintenance personnel.
- Duly licensed and certified personnel hired or contracted by the Company to perform the services required.
- Specialists, as necessary, for process control, instrumentation, troubleshooting, emergency management, and other similar activities.
- Office and clerical support staff.

- Technical support to provide on-call backup and process expertise for process control, management, maintenance and Facility repair, as necessary, to support operations and maintenance staff in performing the services of this Agreement.

Within thirty days after the Commencement Date, the Company shall submit to the PWSB a staffing plan for the personnel requirements during both the interim operations phase and future operations. The Company shall include, at a minimum, the following information, in accordance with the provisions of this Agreement:

- Organization chart
- List of all personnel required for the Facility, with contact telephone numbers
- Job classifications and wage rates
- Number of staff required for the transition phase and long-term operations
- Resumes of personnel employed within the Facility to demonstrate qualifications to perform assignment.

The Company shall notify the PWSB of any change in personnel within 10 days effective of such personnel change which is subject to review and approval of the PWSB. Long-term reduction or modification of staffing levels and capabilities shall require PWSB approval prior to implementation by the Company. PWSB approval shall not relieve the Company of any and all regulatory compliance requirements and responsibilities.

3.3.1 Training Programs

The Company shall provide training programs for all personnel employed. Such training shall include, but not limited to, modern water process control, equipment operation, repair, and maintenance, sampling and analytical procedures, regulatory requirements, supervisory skills, and safety and occupational health procedures. It is the PWSB's desire to maximize continued employment opportunities for existing personnel. Therefore, interim operations shall include training and development provisions for existing personnel to transition to future operations. The Company shall maintain records of all training programs.

No later than 60 days after the Commencement Date, the Company shall submit five copies of a draft Operator Training Plan (Training Plan) as an attachment to the staffing plan for review and comment by the PWSB. The Training Plan shall clearly define the classroom and hands-on training curriculum for each operator position and classification. Calendar dates and milestones shall be assigned to each portion of the training and a training schedule shall be submitted in the Training Plan. The date and duration of on-site training by each of the equipment manufacturer's technical representatives will be shown in the schedule.

The PWSB will review the draft Training Plan and return one copy with comments and reasonable and acceptable corrections within 30 days of the initial submittal. The Company shall

submit five copies of a final version of the Training Plan incorporating requested changes and comments 30 days following the return of the draft version.

3.4 OPERATIONS AND MAINTENANCE PLAN

The Company shall prepare and submit to the PWSB for approval a comprehensive Operation and Maintenance Plan (O&M Plan) within 60 days after the Commencement Date. The O&M Plan shall specify all procedures and tests to be conducted for the operation and maintenance of the Facility, inclusive of all facilities and Equipment. The O&M Plan shall be a comprehensive manual organized into separate sections addressing each of the unit processes involved, the overall Facility operation and control, auxiliary Facility equipment, and grounds and building maintenance. At a minimum, this O&M Plan shall include the following:

- a. Routine maintenance schedule for all major systems and schedule of expected shutdowns.
- b. Copies of all permits, licenses, and other regulatory documents obtained for the Company's services, if not previously submitted.
- c. Operation procedures for all major equipment within the Facility during start-up, normal, alternate, and emergency operation modes.
- d. Equipment and Facility manufacturers/suppliers O&M manuals.
- e. Forms and checklists to be used to monitor equipment and process Facility operation and preventative maintenance.
- f. Monitoring and reporting requirements.
- g. Updates to the O&M Plan.

Each separate unit process, auxiliary Facility processes and grounds/building section of the O&M Plan shall include a detailed written explanation of the following:

- The process or Facility including its key components.
- The Facility function including its purpose and normal operating parameters.
- Equipment summary including nameplate data, supplier/local representative, and manufacturer.
- Description of instrumentation and control Facility, including an alarm summary.
- Description of normal Facility operations including startup and shutdown, adjustment of variable settings, interface with other plant systems, routine monitoring checklists and record keeping forms.

- Maintenance, including predictive and preventative maintenance for process functions; mechanical functions, such as changing lubricating fluids and filters, checking rotating equipment balance, and changing valve seals and packing; electrical functions, such as checking tightness of wiring terminal connections, exercising breakers, and recalibrating meters; instrument and control functions, such as sensor calibration; and structural maintenance, such as crack repairs and restoration of surface corrosion protection Systems.
- Trouble shooting Facility malfunctions.

The PWSB will review the draft O&M Plan and return one marked-up copy with comments and conditions for approval within 30 days of the initial submittal. The Company shall submit five copies of a final version of the O&M Plan incorporating the PWSB's reasonable and acceptable changes and comments 30 days following the return of the draft manual.

Interim Operation and Maintenance

A section of the O&M Plan shall be dedicated to the Company's maintenance, repairs and replacements, specifically required for operation during the interim operating period. This plan shall augment the information contained in the master O&M plan, and shall support the procedures for interim operation and maintenance, as set forth in the transition plan. This plan shall address the repair and replacement activities provided to satisfy the Proposal A requirements set forth in the RFP and summarized below:

- 1) Forecast of anticipated repair and replacements for the existing facility during the interim operations period (until new plant startup).
- 2) During the interim operations period, Earth Tech has committed to provide \$ 100,000 of funding for repair and replacement activities in addition to the normal maintenance activities required under this Service Agreement. This \$ 100,000 fund shall be made available to the PWSB without reimbursement by the PWSB. The funds are intended to be used for any and all repair and replacement activities exceeding \$ 10,000 as further outlined in # 3 below.
- 3) During this interim operations period of the existing facility, all repair and replacement activities exceeding \$ 10,000 will be funded by the PWSB, subject to PWSB approval, and shall be treated as a separate expenditure from the Base Service Fee for the Proposal A (interim operations) time period. Earth Tech has recommended that the PWSB set aside the following dollar amount of repair and replacement budget for the interim operations period:

Table S3-1: Repair and Replacement Budget for Interim Operations Period

	<i>Recommended Dollars</i>	
<i>Item</i>	<i>Year One</i>	<i>Year Two</i>
Clearwell Inspection	\$20,000	
Raw water pump #1; 100 HP; 10 MGD	\$10,000	
Raw water pump #3; 100 HP; 10 MGD		\$10,000
Filter backwash pump #1		\$10,000
Filter backwash pump #2	\$10,000	
9 MGD high service pump #1	\$10,000	
9 MGD high service pump #2		\$10,000
9 MGD high service pump #3	\$10,000	
9 MGD high service pump #4		\$10,000
Fuel Storage Monitoring System	\$15,000	\$10,000
Totals	\$75,000	\$50,000
TOTAL \$'S RECOMMENDED: \$125,000		

3.4.2 Repair and Replacement

A detailed repair and replacement program based on the specifics of the Equipment and systems at the new Facility shall be finalized and included in the O&M Plan and updated periodically. Expenditures for the Company's Renewal and Replacement Plan shall be covered as part of the Company's annual Service Fee for expenditures less than \$10,000 dollars, including ordinary maintenance and repair and replacement activities. Expenditures for repairs and replacements greater than \$10,000 dollars shall be funded by the Company and will require PWSB authorization for the expenditure of such funds. Such authorization shall not be unreasonably withheld.

Upon expiration of the Agreement, the Company shall return the Facility to the PWSB in good repair and in a sound, proper, and well-maintained condition without the necessity for the

PWSB to undertake major repairs or a major overhaul when assuming Facility management responsibilities. Failure to comply with this requirement shall obligate the Company for payment of all expenditures necessary to achieve compliance with this requirement.

3.5 SAFETY AND SECURITY PLAN

The Company shall provide for and maintain security and safety of all facilities and structures contained within the Facility. The Company shall develop and submit to the PWSB a safety plan within 30 days after the Commencement Date. The Company shall be responsible and obligated to enforce all safety, security and health laws, rules, regulations, and/or procedures. Any and all persons entering the Facility facilities shall be identified and provide appropriate documentation of authorization to have access to the Facility. The Company is responsible for providing the appropriate procedures to maintain a log of any and all persons accessing the Facility.

The structural integrity of the fences shall be maintained and kept in neat order. Gates, access points, and doors to the facilities and structures in the Facility shall be kept locked. Entrance to such facilities and structures shall be protected against unauthorized entry. The Company is responsible for maintaining all security alarms in working order.

3.6 TRANSITION PLAN

The Company shall develop a transition plan describing the operational procedures and the approach to initiating the Capital Improvements, including preparations for new construction while securing the operations of existing systems. At least 180 days prior to the anticipated Acceptance Date, the Company shall submit to the PWSB a detailed transition plan defining the activities required to conduct final inspections, commence start-up, perform preliminary tests, and undertake any other activities necessary to prepare the Facility for the Acceptance Test.

The transition plan shall address the interrelationship between the existing treatment Facility and the new Facility constructed under this Agreement. The transition plan shall describe, at a minimum, the Company's approach with respect to:

- Procedures for continuing operation of the Facility during construction.
- Appropriate safety and security measures implemented at the Facility during the transition period.
- The timing and duration of scheduled testing and interim operations procedures.
- The procedures to be employed during start-up of new Equipment and systems.
- Procedures for shutting-down and starting-up new and existing Equipment and systems.
- Coordination and transfer of raw water and finished water between the existing and new facilities and systems.

During the interim operating period, the Company shall be responsible for coordination and transitioning between construction and operation and maintenance activities. It is the PWSB's desire to minimize Facility interruptions during this period.

3.6.1 Design/Facility Plan Workshops

Company shall provide a Design and Construction Schedule that provides for PWSB review and understanding of Facility Plans and interim design documents. Unless otherwise agreed to in writing between the parties, the Company shall provide four (4) workshops for PWSB review and comment at: Project Initiation, 30%, 60%, and 90% Design (Plans and Specifications) Documents. Company shall allow for receipt of PWSB comments within 10 calendar days following each workshop session. The design Documents shall be provided five (5) working days prior to the Workshop date. Such workshop date shall be scheduled at mutually convenient times for the PWSB and the Company.

The purposes of the workshops with the designated representatives of the PWSB are:

- Familiarize PWSB and its agents with Facility concepts and details as they are being developed
- Provide opportunity for PWSB comment on Facility features that are “discretionary” and have no material impact on Facility operation and/or construction and design costs, schedule, or permitting.
- Provide a mechanism for PWSB and the Company to identify alternatives in the Facility that result in material impacts on Construction costs, schedule or permitting or on Operating costs for the Facility. Should alternatives be requested by either party as a result of these workshop reviews, the PWSB and the Company agree to negotiate in good faith to equitably resolve the desired alterations and the impacts (if any) on costs, schedule, or permitting.

The Company shall include in its Design and Construction Fee an allowance for PWSB directed alterations of ancillary features of the project that do not impact Facility performance or Facility capital costs beyond the incorporation of the ancillary feature(s) so requested. The alterations allowance shall equal one (1%) of the Design and Construction fee. Any unused portion of the alterations allowance fee shall not be due the Company. Any impact of Alterations to the O&M costs of the Company shall be equitably negotiated with the Company's annual service fee, appropriately adjusted.

3.6.2 Construction Inspection Activities

Throughout the construction period, the Company shall monitor the quality of all installations to insure work proceeds in accordance with the design drawings and specifications, manufacturer's recommendations and current installation standards. As installations are completed, documentation will be maintained noting satisfactory installation in accordance with the quality control standards. The transition plan shall address how successful completion of all

installation activities and supporting documentation will be provided prior to proceeding with the Acceptance Test.

As part of the envisioned documentation process, the Company shall develop a Construction Quality Assurance Program (CQAP) for review and acceptance by the PWSB. Such CQAP shall be utilized by the PWSB to monitor construction quality throughout the project. However, neither the CQAP document nor its acceptance by the PWSB shall relieve the Company of any of its responsibilities, contract commitments and guarantees provided by the Company. The Company shall remain solely responsible for assuring that all design, materials, equipment and construction meet or exceed industry standards and contract commitments.

The CQAP shall be submitted to the PWSB at the 60% design review workshop. PWSB shall comment on the CQAP within thirty (30) days of receipt, and Company shall submit a revised CQAP within thirty (30) days of receipt of PWSB comments that responds to PWSB comments and positively resolves the questions and comments. The CQAP shall be finalized prior to the 90% Design Workshop, again providing for PWSB review and comment.

The CQAP shall identify the certifications that will be performed to confirm the Facility is constructed within the design specifications.

The CQAP shall be consistent with and reference appropriate and applicable industry (ASTM, ACI, AWWA, etc.) and federal, state and local governmental standards.

Should the PWSB so request, the Company shall provide access for PWSB staff and consultants to the construction site and provide representative construction samples to enable the PWSB to perform independent tests. However, these independent tests (if performed by the PWSB) shall not relieve the Company of its contractual responsibilities for providing all quality control procedures and processes to insure that the Facilities meet generally accepted construction standards and practices, comply with design specifications, and meet all codes and regulations.

3.6.3 Start-up and Preliminary Testing

Start-up and preliminary testing shall be conducted prior to conducting the Acceptance Test. The transition plan shall address how such activities will be conducted to demonstrate that the Facility is acceptable to begin treating raw water. The transition plan shall specify the start-up and commissioning of major equipment and systems, including, but not limited to, the

- Major Valves
- Electrical Equipment (e.g., switchgear, starter panels, protection and control circuits, transformers, etc.)
- Instrumentation and Metering
- Generator Sets

- Automation Equipment
- Pipelines (e.g., pressure testing)
- Structures to Retain Water
- Pumps
- Filter Systems
- Backwash Systems
- Chemical Design Systems
- Storage Tanks and Basins
- SCADA System
- All Other Water Treatment Systems

The transition plan shall also address how the transition activities will eventually lead into the Acceptance Test, and if any down time will exist between the transition period and the commencement of the Acceptance Test. All transition activities shall be included in the Company's Fixed Construction Price. The Company may choose to combine the transition plan with the Acceptance Test Plan.

SCHEDULE 4

INSURANCE

The Company shall be required to procure and maintain the following types of insurance related to the Facility:

WORKERS' COMPENSATION

Statutory benefits as defined by Rhode Island State Statutes encompassing all operations contemplated by this contract or Agreement to apply to all owners, officers, and employees regardless of number of employees. Individual employees may be exempted per State Law. Employers Liability will have minimum limits for bodily injury by accident of \$1,000,000 per accident and for bodily injury by disease with a \$1,000,000 policy limit and \$1,000,000 per employee.

COMMERCIAL GENERAL LIABILITY

Coverage shall apply to premises and/or operations, products and/or completed operations, independent contractors, contractual liability, and broad form property damage exposures with minimum limits of \$10,000,000 per occurrence, and \$20,000,000 aggregate.

COMMERCIAL AUTOMOBILE LIABILITY

Coverage shall apply to owned vehicles and/or hired and non-owned vehicles and employee non-ownership use with minimum limits of \$1,000,000 CSL (combined single limit).

PROFESSIONAL LIABILITY INSURANCE

Professional Liability Insurance with a limit of \$100 million coverage.

POLLUTION LEGAL LIABILITY

Coverage shall be \$100,000,000 per occurrence and as an aggregate, and shall include product liability coverage for pollution conditions caused by water that is distributed or supplied by Company.

BUILDERS RISK INSURANCE

During such time as Company shall have facilities under construction, and until such facilities are Accepted by the PWSB, Company shall maintain Builders Risk insurance naming the PWSB as additional insured and loss payee as their interest may appear. The parties agree that, upon Acceptance, the Company shall no longer be required to carry Builders Risk insurance, and shall not be required to carry property insurance on the Facility."

CERTIFICATE OF INSURANCE

The PWSB and the City of Pawtucket shall be listed as certificate holders and a certificate of insurance shall be provided the PWSB for all insurances required above by the Commencement Data. The City of Pawtucket, as well as the PWSB and its employees, officers & consultants, shall be identified as an additional insured with respect to Commercial General Liability, Commercial Automobile Liability, and Environmental Impairment Insurance. Said certificate shall be maintained current, evidence the required coverage and amounts as contained herein and provide a thirty (30) day notice of cancellation for non-renewal or material change in coverage. If the Company does not maintain the insurance required herein, the PWSB shall have the right, but not the obligation, to obtain the required insurance coverage at the Company's cost, and the PWSB may deduct all such costs from the monies owed to the Company or which it subsequently owes to the Company.

SCHEDULE 5

ESCALATION INDICES

5.1 FIXED CONSTRUCTION PRICE INDEX

One hundred percent (100%) of the Fixed Construction Price Index set forth below shall be used to adjust the Fixed Construction Price from January 1, 2002 to the date of the Notice to Proceed but in no case shall the adjustment exceed three percent (3%) per annum. The Fixed Construction Price Index shall be an amount equal to the sum of:

1. Sixty percent (60%) of a fraction, the numerator of which is the CPI as published by the U.S. Bureau of Labor Statistics for the month in which the Notice to Proceed is issued and the denominator of which is the CPI for the month ending on December 31, 2001.
2. Twenty percent (20%) of a fraction, the numerator of which is the CE plant cost index (CE-PCI) - equipment, machinery, supports as published in Chemical Engineering for the month in which the Notice to Proceed is issued and the denominator of which is the CE-PCI for the month ending on December 31, 2001.
3. Twenty percent (20%) of a fraction, the numerator of which is the Engineering News Record (ENR) "Skilled Labor" Index of Boston Area as published in ENR for the month of which the Notice to Proceed is issued and the denominator of which is the same index for the month ending on December 31, 2001.

Provided, however, that if any of such indices or prices is not available at any time that the Fixed Construction Price Index is to be calculated, the calculation shall be made using a comparable index or price, and if the base used in any such index or price is altered, the Fixed Construction Price Index shall be calculated to reflect the actual percentage change in such index or price from January 1, 2002 to the date that the payment date is established.

The fixed construction price provided by the Company consistent with this Agreement and specified in January 1, 2002 dollars is \$41,989,639.

SCHEDULE 6

PERMITS AND CONSENT AGREEMENTS

The Company shall be responsible for renewing and/or obtaining and maintaining all applicable federal, State and local approvals, licenses, permits, and certifications required for performing the Services in accordance with the terms and provisions of this Agreement.

The Company must also comply with 2004 treatment requirements except for relief as provide for in Schedule 1 and 2010 treatment requirements as specified in the Service Agreement and associated schedules for treated/finished water quality. The Company shall be responsible for preparing all application reports in compliance with Federal, State and local requirements for submission by the PWSB to the appropriate agencies.

The Company shall comply with, satisfy, and pay all costs and/or fees associated with all regulatory requirements pertaining to the permits, including but not limited to, public notification in the event of non-compliance with water treatment standards.

The Company shall comply with all applicable federal, State, and local laws and regulations pertaining to the Facility and shall comply with all permits governing the performance of its Services hereunder issued for or with respect to the Facility. In the event that during the Term of the Agreement, an existing permit must be renewed, or additional permits required, the Company shall be responsible for obtaining, including the completion of the required application forms, supplying required data, and payment of required fees for such permits and permit renewals. All permit renewals shall be in the name of the PWSB as the permittee.

Permit Requirements

The Company shall operate the Facility to meet the requirements of all permits identified, but not limited to, those listed in Table S6-1.

**TABLE S6-1
PERMITS**

Permit No.	Permit/Agreement	Agency
Permit No. 0001589	NPDES	RIDEM

Subject to the limitations specified in Schedule 1 of the Service Agreement, the Company will also be responsible for maintaining ongoing adherence to the requirements of the RIDOH permit under which the Facility operates. These duties will include, but will not be limited to, the maintaining of all permit requirements related to potable water quality delivered to the PWSB distribution system. Additionally, the Company shall maintain and provide all reports required by the RIDOH under provisions of the RIDOH permit.

SCHEDULE 7

PWSB CONTRACTS

The PWSB has entered into the contracts, without limitation, as listed in Table S7-1. These contracts support the management, operation and maintenance of the System or systems that treat or dispose of by-products of the System. The intent of Table S7-1 is to present a summary of these contracts. The Company shall be responsible for reviewing the terms and provisions of these contracts. The Company is not obligated to use these same contractors, and may terminate or renegotiate such contracts. If termination penalties apply, the Company shall be responsible for all such termination penalties and costs.

The PWSB anticipates negotiating its contract with the local electric utility during 2003-2004. It is the responsibility of the Company to investigate the status of this and other contracts not identified herein to determine the impact of such contracts on the proposed Agreement. The PWSB may elect to coordinate with the Company to obtain the most advantageous terms and conditions for its electricity contract and other contracts.

The Company shall not terminate any outside contract prior to its expiration without prior notification to the PWSB. The Service Fee shall not be modified or otherwise adjusted if the Company decides to re-contract, extend, and/or assume responsibility for these outside contracts.

**TABLE S7.1
CONTRACTS**

Item		Vendor ⁽¹⁾	Expiration Date	Comments
1	Liquid Chlorine	<u>-Jones Chemical</u>	6/30/2004	
2	Sodium Aluminate	Holland Company	6/30/2004	.
3	Caustic Soda	Univar, Inc.	6/30/2004	.
4	Powder-Activated Carbon	Univar, Inc.	6/30/2004	
5	Aluminum Sulfate Liquid	Holland Company	6/30/2004	
6	Acid Alum	Holland Company	6/30/2004	
7	Flouride Hydroflorosilic	Coyne Chemical	6/30/2004	
8	Corrosion Inhibitor	Calciquest Inc.	6/30/2004	
9	Polymer	Polydyne Inc.	6/30/2004	
10	Carbon	Calgon Carbon	12/31/2006	<ul style="list-style-type: none"> Contract can be terminated after three additional filters are replenished.
11	Electric Maintenance	Elco Electric	6/30/2004	
12	Elevator Maintenance	Atlantic Elevator	6/30/2004	<ul style="list-style-type: none"> Min St. Facility ONLY

Notes:

(1) Contract, agreement or other legal arrangement.

SCHEDULE 8

MAXIMUM UTILITIES UTILIZATION

Table S8-1
Maximum Utilities Utilization

Item	Maximum Annual Usage (kWh/year)	Maximum Unit Usage (kWh/MGD)
Electricity (prior to completion of capital upgrades for new Facilities)	7,809,000	1657
Electricity (following completion of capital upgrades for new Facilities)	7,394,023	1569
Electricity (additional usage from implementation of UV disinfectant system)	78,840	17

NOTE:

The deregulation of electric utility has placed additional emphasis on time of day usage and demand charges as major determinates of electric power costs. The Company and PWSB agree to work together to develop a reasonable operational strategy for the new facility that will minimize electrical costs due to peak demand charges. Increased electric power costs, if any, experienced by the PWSB as a result of the Company's failure to implement and/or manage facility operations consistent with this strategy shall make the OPERATOR responsible for additional costs for power experienced by the PWSB for increased power costs.

Both parties agree that there is currently one single electric meter installed at the 85 Branch Street site that measures power for both the PWSB administrative offices and Pump Station #4. Until such time as a new independent meter is installed at the Branch street site for the new facility, the parties agree to develop an estimated kWh usage for the PWSB administrative offices (for both summer and winter months) that will be used to determine the actual kWh usage of Pump Station #4.

SCHEDULE 9

EQUIPMENT AND CHEMICALS INVENTORY

Within 60 days after the Commencement Date, the Company shall conduct a physical inventory and prepare an up-to-date report of Equipment and chemicals located throughout the System. The Inventory Report shall be provided in an electronic copy and attached to this Schedule 9 and contain, but is not limited to, the following information relative to the Equipment and chemicals of the System:

- Detailed description of items
- Date of purchase
- Identification number (i.e., serial number), if available
- Manufacturer's name
- Quantity (i.e., gallons of chemicals)

SCHEDULE 10

PASS THROUGH COSTS

Pass Through Costs shall be paid by PWSB to the Company, or in the case of electricity directly to the electric utility, based on the Company's documentation demonstrating that such costs have been incurred and are applicable pursuant to the provisions of this Agreement. Pass Through Costs shall be identified on the Company's monthly invoices as separate line items and shall include the following costs as Pass Through Costs pursuant to the Agreement:

1. Performance Bond costs; specify first year \$15,800
2. Insurance costs; first year \$0.00 and \$0.00 for each subsequent year of the service agreement.
3. Electricity costs to the extent the maximum utilization in Schedule 8 is not exceeded and/or the specified operation approach has been followed.
4. Major Repair & Replacement Fund (Proposal A only).
First year \$ 100,000
Second year \$ 100,000

Note:

These Pass Through Costs are not included as part of the Service Fee.

SCHEDULE 11

SERVICE FEE

The Company shall be paid a Proposal A and Proposal B Service Fee as indicated below, pursuant to the terms and provisions of this Agreement, for Facility operations, maintenance, and management. The Company shall be paid such Service Fee effective on the Commencement Date throughout the term of the Agreement.

**TABLE S11-1
SERVICE FEES**

SERVICE FEES	
Service Fee Component	Annual Amount
Proposal A Service Fee	\$991,804
Proposal A Service Fee Escalator (maximum of 100% of CPI)	100%
Proposal B Service Fee (subsequent to PWSB Acceptance of Capital Improvements for new Facilities)	\$1,372,315
Proposal B Service Fee Escalator (maximum of 100% of CPI)	100%
Proposal B Service Fee Escalation Date	As Discussed Below*

***Service Fee adjustments to occur on PWSB FY. Adjustments to be made in advance of FY use CPI analysis available in April of each year.**

Service Fee adjustment methodology for changes in raw quality should the minimum and maximum ranges, as measured on a 12-month moving average basis, fall outside the range specified in Schedule 2.

Proposal A Service Fee reflects adjustments for PWSB work performed included in vendor's proposal (\$60,000) offset by PWSB requested Well Capital Projects (\$60,000).

Service Fee adjustment methodology for changes in finished water quantity requirements should the minimum and maximum quantities, as measured on a 12-month moving average basis, fall outside the 90%-110% range of the then-established finished water quantity. Consistent with Schedule 1, the initial, 12-month average for finished water quantity is established as 13.3 MGD.

Earth Tech has proposed the following adjustment to the Service Fee for every 1 MGD / year increase over the 13.0 MGD quantity of finished water delivered to the PWSB:

Chemicals	\$ 20,329
Power (\$0.1016/kwh)	\$ 58,190
Sludge	\$ 4,530
Total (\$ / year / MGD)	\$ 83,050

The adjustment to the Service Fee for finished water delivery (12-month moving average) exceeding \pm 10% of the 13.3 MGD 12-month average, shall result in an adjustment to the Service Fee and electric power (kWh) cap as specified below. The costs and power usage presented below are consistent with the Company's proposal and the PWSB review. All dollar costs are in year 2001 dollars and subject to CPI adjustment to the date that the flow-related adjustment occurs.

Service Fee adjustment for every 1 MGD / year adjustment:

Chemicals	\$20,329
Sludge	\$ 4,530
	\$24,859

Electric Power (kWh) Cap Adjustment
1569 kWh / MGD

EXAMPLE ADJUSTMENT METHODOLOGY
FOR FINISHED WATER QUANTITY

1. Adjustment Methodology:

- a) **Service Fee*** = \$ 1,000,000 or \$ 83,333 / month
- b) **Finished Water Quantity Adjustment Factor** = \$ 24,860 / year / MGD
- c) **Initial 12-Month Moving Average** = 13.3 MGD
- d) **Latest 12-Month Moving Average** = 15.2 MGD (Note: 14.28 % increase)

2. Adjustment = (Latest 12-Month Moving Average – Initial 12-Month Moving Average)

x Finished Water Quality Adjustment Factor

$$= (15.2 - 13.3) \times \$24,860 / \text{year} / \text{MGD}$$

$$= \$47,234 / \text{year}$$

3. New Annual Service Fee = Service Fee + Adjustment

$$= \$1,000,000$$

$$= \$1,047,234 \text{ (Note: 4.72 \% increase)}$$

4. New Monthly Service Fee = $\frac{\text{New Annual Service Fee}}{12}$

$$= \frac{\$1,047,234}{12}$$

$$= \$87,269.5$$

**SCHEDULE 12
CAPITAL IMPROVEMENTS**

**SCHEDULE 12
MECHANICAL SYSTEMS⁽¹⁾**

General Information

Name of Equipment/System

Proposer-Specific Information

Mechanical

Proposer-Specific Information In This Section

Vertical Turbine Pump	Section 11212
Vertical Sump Pumps	Section 11214
Vertical Turbine In Plant Pumps	Section 11215
Sample Water Pumps	Section 11217
In Line Mixers	Section 11230
Raw Water Strainers	Section 11224
Jet Mixing System	Section 11221
Slide Gates	Section 11286

1. SCHEDULE 12
MECHANICAL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Vertical Turbine Pumps-Section 11212

Peerless Pump Co., Montebello, CA, or
approved equal

Three pumps to pump raw water from the
Happy Hollow Pond to the new water
filtration plant.

Two backwash pumps to pump clearwell
water to the filters for backwashing.

Three pumps to pump finish water from the
clearwell to the distribution system.

Design/Operational Parameters

Capacity

Proposer-Specific Information

Raw water pumps – 9,135 gpm, 62 ft TDH
with 200 HP Motor

Filter backwash pumps – 10,000 gpm, 46 ft.
TDH with 150 HP Motor

Finish water pumps – 8,680 gpm, 300 ft.
TDH with 900 HP Motor

Size/Dimensions

Power Requirements/Voltage

Premium efficiency electric motors

Raw Water Pumps – 460 V, 3 phase, 60 Hz

Filter Backwash Pumps – 460 V, 3 phase, 60
Hz

Finish Water Pumps – 4160 V, 3 phase, 60
Hz

Materials of Construction

Cast iron or fabricated steel

Grade 416 stainless steel

Steel pipe

Bronze Impellers

Grade 416 stainless steel

Other Features

Column pipe coating
system

Proposer-Specific Information

Discharge head

Top line shaft (head shaft) and line shafts

Outer column pipe

Impeller shaft

Proposer-Specific Information

NSF certified 100% solids epoxy coating

2. SCHEDULE 12
MECHANICAL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Vertical Sump Pumps-Section 11214

Hayward Gordon, Buffalo, New York, or
approved equal

2

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

900 gpm and 100 ft. Total dynamic head

The premium efficiency electric motors (50
HP) shall be 3 phase, 60 Hertz, 460 V.

Materials of Construction

Cast Iron

316 stainless steel

Steel pipe

Cast iron

Proposer-Specific Information

Discharge head

Line shafts

Outer column pipe and discharge pipe

Impeller

Other Features

Design

Proposer Specific Information

The pumps shall be capable of pumping
backwash waste with a solid concentration
of approximately 1,000 mg/L.

The pumps shall be capable of operating
with the jet mixing system as specified in
SECTION 11230, JET MIXING SYSTEM.

The spare vertical sump pump is to be used
for the jet mixing system as specified in
SECTION 11230, JET MIXING SYSTEM.

Coating

The column and discharge pipe shall be factory finished, inside and outside, with a durable, 100% solids epoxy coating system.

3. SCHEDULE 12
MECHANICAL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

Vertical Turbine In Plant Pump System-
Section 11215

The vertical turbine pumps shall be by
Peerless Pump Co., Montebello, CA, or
approved equal.

The pump controls assembly shall be
designed, assembled, and tested by
Syncroflo, or approved equal.

3 vertical turbine multistage pumps

Proposer-Specific Information

One 50 gpm pump, 139 ft TDH
with 5 HP motor.

Two 200 gpm pumps, 139 ft TDH
with 10 HP motor.

The premium efficiency electric motors
shall be 3 phase, 60 Hertz 460, TEFC, volts.

Materials of Construction

Cast iron

Grade 416 stainless steel

Steel pipe

Bronze Impellers

Grade 416 stainless steel

Cast iron

Type 304 or Type 316 stainless steel

Cast iron

Stainless steel

Other Features

Design

Coating

Proposer-Specific Information

Discharge head

Top line shaft (head shaft) and line shafts

Outer column pipe

Impeller shaft

Valve bodies and flanges-Pump isolation valves

Valve shafts-Pump isolation valves

Control valve bodies

Control valve shafts

Proposer Specific Information

The pumps shall in all respects conform to the American National Standards ANSI/AWWA-E101 for "Vertical Turbine Pumps, Line Shaft Type" and shall comply with all local and state sanitary and safety regulations.

The column pipe shall be factory finished, inside and outside, with a durable, 100% solids epoxy coating system, which shall be certified to be acceptable for potable water service by the NSF.

4. SCHEDULE 12
MECHANICAL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Sample Water Pumps-Section 11217

MTH Pumps or equal

12

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

2 gpm, 50 ft. total dynamic head, 1/2 HP

460 volt, 3 phase, 60 hertz, TEFC Motors

Materials of Construction

Cast iron or stainless steel

Bronze or stainless steel

Mechanical shaft seal Seals

Cast iron with factory finish

Stainless steel Bearings

Steel with factory finish

Proposer-Specific Information

Casing

Impeller

Frame

Base

Other Features

Design

Proposer Specific Information

Pumps shall be frame mounted, single stage, end suction, self priming, direct coupled driven through a flexible connection.

5. SCHEDULE 12
MECHANICAL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Materials of Construction

Cylindrical FRP mixer housing

Other Features

Proposer-Specific Information

In Line Mixers-Section 11230

Chemineer-Kenics, or approved equal

HEV FRP 3 High Efficiency Static Mixers

2

Proposer-Specific Information

9,145 gpm

36-inch diameter

No Power Requirements

Proposer-Specific Information

With a series of fixed, trapezoidal tabs mounted at acute angles relative to the downstream surface of the mixer housing.

The mixer shall be of monolithic construction.

Mixer shall be compatible with the following chemicals: Lime, Alum, Polymer, Sodium Hypochlorite, and Potassium Permanganate.

Proposer Specific Information

The FRP Static Mixer shall be an in-line part, for continuous mixing of pre-treatment and coagulation chemicals.

Mixer shall have two integrally molded injection nozzles for chemical injection.

6. SCHEDULE 12
MECHANICAL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Materials of Construction

Cast iron with 125 lb.

316 stainless steel screen basket

Proposer-Specific Information

Raw Water Strainers-Section 11224

Tate Andale, Inc. of Baltimore, MD, or
approved equal

Model F

2

Proposer-Specific Information

10,425 gpm

3/32" screen openings and 36" connectors

No Power Requirements

Proposer-Specific Information

ASA flanges

Screen shall be all-welded, continuous slot.

7. SCHEDULE 12
MECHANICAL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Jet Mixing System-Section 11221

Liquid Dynamics Corporation or equal

1

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

500 gpm at 40 ft TDH

8" diameter piping with nozzles

No additional power requirements – using
the Vertical Sump Pumps (Section 11214).

Materials of Construction

Piping/Nozzles

Proposer-Specific Information

Custom Molded FRP

Other Features

Design

Proposer Specific Information

The system shall consist of 10 fixed position
jet mixing nozzles, five in each basin.

8. SCHEDULE 12
MECHANICAL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Slide Gates-Section 11286

Whipps, Inc., or approved equal

2

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

Varies per water depth above weir.

2 ft wide adjustable weir

No Power Requirements

Materials of Construction

Proposer-Specific Information

Bronze for guide bar, thrust nut, lift nut and couplings - ASTM B98.

Aluminum for gate or sliding member.

Neoprene for disc seal and bottom closure seal, ASTM D-2000-2BC-615.

Stainless steel for fasteners including all necessary anchor bolts, etc.

Stainless steel for stems.

Ultra High Molecular Weight (UHMW) Polymer for seating and sliding surfaces

Aluminum for all embedded frames

Other Features

Design

Proposer Specific Information

Each slide gate shall be furnished and installed complete with frame, operating stem, lifting mechanism required and other appurtenances or accessories as shown on the drawings.

Each slide gate shall be used to independently control the supernatant flow from the top of each residuals lagoon.

SCHEDULE 12
ELECTRICAL SYSTEMS⁽¹⁾

General Information

Proposer-Specific Information

Name of Equipment/System

Electrical

Proposer-Specific Information In This Section

Engine Generators

Section 16612

9. SCHEDULE 12
ELECTRICAL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Engine Generators-Section 16612

Caterpillar

1750 KW and 400 KW

3

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

Two 1750 KW units at WFF
One 400 KW unit at Pump Station

Refer to Specification Section 16612

120/208 v for heater, battery charger

Materials of Construction

Each engine generator unit and auxiliaries shall be installed in a weatherproof enclosure. The engine generator unit shall be assembled on steel subbase on vibration isolation pads. Each engine-generator unit shall be furnished with the maximum standard sub-base double-walled tank. Tank shall be constructed of heavy gauge steel; epoxy coated interior, and rush proofed and finished painted exterior. Tank shall comply with UL142.

The weather-protective housing shall be constructed of 14 gauge rolled steel and shall include hinged locking access doors.

Proposer-Specific Information

Other Features

Design

Proposer Specific Information

Each engine generator unit shall be arranged for automatic starting and stopping on failure of, and restoration of the normal source of power, and for automatic load transfer.

Each engine generator unit shall include, but not be limited to excitation system, controls, keep warm system, cooling system, silencer, starting batteries, charger, sub-base tank, and enclosure.

SCHEDULE 12
STORAGE SYSTEMS⁽¹⁾

General Information

Proposer-Specific Information

Name of Equipment/System

Storage Systems

Proposer-Specific Information In This Section

Chemical Storage Tanks

Section 11521

10. SCHEDULE 12
STORAGE SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Chemical Storage Tanks-Section 11521

PolyProcessing

12

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

Refer to Specification Section 11521

Refer to Specification Section 11521

The mechanical mixer motors shall be standard efficiency, standard duty, 1/4 HP, 1800 rpm, 115/230 V, single phase, 60 Hz.

Materials of Construction

Molded seamless high density cross-linked polyethylene

All day storage tanks less than 550 gallons shall be fabricated with minimum 1/4-inch thickness linear polyethylene (FDA approved).

316L stainless steel

Proposer-Specific Information

Bulk storage tanks

Mechanical mixer shaft and impeller

Other Features

Proposer Specific Information

High density crosslinked polyethylene storage tanks shall be manufactured by the rotational molding process in accordance with the definitions of ASTM-D-1998-91 type.

BRANCH STREET WATER TREATMENT FACILITIES

PAWTUCKET, RHODE ISLAND

**TABLE 11521A
CHEMICAL STORAGE TANK SCHEDULE**

Chemical	Concentration	Type	Size in Gallons	Dia. (ft.)	Straight Wall Height (ft.)	Mixer	Number Required	Material		
								Bolt	Gasket	Overflow Box
Alum	50%	Bulk	5050	10'-0"	9'-10"	N/A	2	316SS	EPDM	1
Calciquest		Bulk	1,500	5'-4"	10'-0"	N/A	2	316SS	EPDM	1
Hydrofluosilicic Acid	25%	Bulk	2000	7'-1"	8'-3"	N/A	1	Monel	EPDM	1
Alum	50%	Day	879	4'-0"	10'-1"	N/A	1	316SS	EPDM	
Calciquest		Day	250	3'-10"	4'-3"	N/A	1	316SS	EPDM	
Hydrofluosilicic Acid	25%	Day	175	3'-2"	4'-0"	N/A	1	Monel	EPDM	
Polymer	0.5%	Day	250	3'-10"	4'-3"	N/A	1	316SS	EPDM	
Sodium Hypochlorite	12.5%	Day/bulk	1150	5'-4"	8'-2"	N/A	1	316SS	EPDM	1
Potassium Permanganate	4%	Mixing	800	5'-4"	5'-6"	1/4 HP	1	316SS		
Ammonium Sulfate	35%	Mixing	800	5'-4"	5'-6"	1/4 HP	1	316SS	EPDM*	

*For alternate bid.

SCHEDULE 12
PUMP STATION EQUIPMENT⁽¹⁾

General Information

Name of Equipment/System

Proposer-Specific Information

Pump Station

Proposer-Specific Information In This Section

Intake Screens

Section 11210

Vertical Turbine Pumps

Section 11212

1. SCHEDULE 12
PUMP STATION EQUIPMENT⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Intake Screens-Section 11210

Houston Well Screen Company or approved equal

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

10,400 gallons per minute

48 inches diameter, length 161 inches

No Power Requirements

Materials of Construction

Type 304 stainless steel

Proposer-Specific Information

All-welded, continuous slot construction

Other Features

Intake Screen Design

Proposer Specific Information

The intake screens shall be designed for tee shaped horizontal installation as shown on the contract drawings (resulting in overall "H" arrangement).

The open area of each screen shall be approximately 65 percent, each slot shall be approximately 1/8-inch wide. Surface wire shall be triangular in cross-section with the slots widening inwardly.

The maximum velocity of each intake screen shall be 0.5 ft per second through the slots.

The average velocity shall be approximately 0.35 fps at the design flow of 10,400 gpm.

Plate flange

Each screen shall have a plate flange with a minimum thickness of 1-inch. The plate flange shall be approximately 42-inches drilled and fitted to match the AWWA C115 ductile iron flange on the connecting intake pipe.

Future air pipe

A 2-inch stainless steel flange with stainless steel blind flange cover shall be furnished to accommodate a future air pipe to each screen.

11. SCHEDULE 12
PUMP STATION EQUIPMENT⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Vertical Turbine Pumps-Section 11212

Peerless Pump Co., Montebello, CA, or
approved equal

Three pumps to pump raw water from the
Happy Hollow Pond to the new water
filtration plant.

Two backwash pumps to pump clearwell
water to the filters for backwashing.

Three pumps to pump finish water from the
clearwell to the distribution system.

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

Raw water pumps – 9,135 gpm, 62 ft TDH
with 200 HP Motor

Filter backwash pumps – 10,000 gpm, 46 ft.
TDH with 150 HP Motor

Finish water pumps – 8,680 gpm, 300 ft.
TDH with 900 HP Motor

Premium efficiency electric motors
Raw Water Pumps – 460 V, 3 phase, 60 Hz
Filter Backwash Pumps – 460 V, 3 phase, 60
Hz
Finish Water Pumps – 4160 V, 3 phase, 60
HZ

Materials of Construction

Cast iron or fabricated steel

Grade 416 stainless steel

Steel pipe

Bronze Impellers

Grade 416 stainless steel

Other Features

Column pipe coating

Proposer-Specific Information

Discharge head

Top line shaft (head shaft) and line shafts

Outer column pipe

Impeller shaft

Proposer Specific Information

NSF certified 100% solids epoxy coating system

SCHEDULE 12
WATER TREATMENT SYSTEMS⁽¹⁾

General Information

Proposer-Specific Information

Name of Equipment/System

Water Treatment Systems

Proposer-Specific Information In This Section

Transfer Pumps	Section 11218
Chemical Metering Pumps	Section 11240
Gas Chlorination System	Section 11250
Chlorine Gas Scrubber System	Section 11251
Ultraviolet Disinfection	Section 11252
Hydrated Lime Feed System	Section 11349
Packaged Clarifier/Filtration System	Section 11373

12. SCHEDULE 12
WATER TREATMENT SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Materials of Construction

Proposer-Specific Information

Transfer Pumps-Section 11218

MET-PRO Corporation, or approved equal

5

Proposer-Specific Information

60 gpm, 15 ft. total dynamic head, 1 HP

The pumps shall have 1750 rpm, 1 HP, 60 Hz, 120 Volts TEFC motor.

Proposer-Specific Information

The pump's construction shall be compatible with the chemicals and the concentrations that they will come in contact with. Wetted components shall be Polypropylene/PVDF or Halar glass reinforced or carbon reinforced as required for complete chemical compatibility.

All pumps include a 99.5% Alumina ceramic shaft and thrust washers, Hi-purity carbon bushings, and Teflon o-rings.

There shall be no metal contact with the liquid being pumped.

The pumps shall have a replaceable volute cutwater.

Other Features

Design

Proposer Specific Information

Pumps shall be magnetic drive, sealless centrifugal.

Power shall be transmitted by a magnetic field traveling from a magnet attached to the motor, through the solid body of the pump, to a magnet attached to the impeller.

13. SCHEDULE 12
WATER TREATMENT SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Chemical Metering Pumps-Section 11240

Milton Roy, Ivyland, PA or equal

16

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

Refer to attached table – varies by chemical

Refer to attached table – varies by chemical

The motors shall be premium efficiency, inverter duty rated, 460 volt, 3 phase. Horsepower varies per chemical service.

Materials of Construction

PVC, Kynar, or TFE

Proposer-Specific Information

Permissible wetted parts materials for the chemical feed pumps, dependent upon specific chemical.

Other Features

Design

Proposer Specific Information

The pumps shall be hydraulically actuated high performance diaphragm (HPD), or hydraulically balanced tubular diaphragm type metering pumps, except for the polymer metering pumps which shall be a hydraulically actuated diaphragm metering pump capable of handling liquid viscosities up to 6,000 centipoise.

The pumps have an accuracy of plus or minus 1.0 percent of mean flow over a 10:1 turn down range.

The Chemical Metering Pumps (Diaphragm Type) shall be used in conjunction with variable frequency drives (refer to Section 13300 – Instrumentation).

CHEMICAL METERING PUMPS

Pump No.	Solution to be Fed	Primary Discharge Point	Capacity	Discharge Pressure	Minimum Motor Size	Type
AFP-351	50% Alum	Inline Mixer	55 gph	100 psi	3/4	MRoy B
AFP-352	50% Alum	Inline Mixer	55 Gph	100 psi	3/4	RM11
PFP-361	Polymer	Pre-coagulated Water/Inline Mixer	11.0 gph	50 psi	1/3	MRoy P
PFP-362	Polymer	Pre-coagulated Water/Inline Mixer	11.0 gph	50 psi	1/3	RP-11
KFP-311	4% Potassium Permanganate	Raw Water	30.0 gph	100 psi	1/3	MRoy A RA10
ALK-331	2% Lime	Raw Water pH Adjustment	498 gph	50 psi	1.5	Milroyal B MBH641
ALK-332	2% Lime	Filtered Water	419 gph	60 psi	1.5	Milroyal B MBH641
ALK-333	2% Lime	High Service Pump Discharge	587 gph	175 psi	1.5	Milroyal C MCH561
ALK-334	2% Lime	High Service Pump Discharge	587 gph	175 psi	1.5	Milroyal C MCH561
HPOFP-271	15% Hypochlorite	Raw Water	11.3 gph	100 psi	1/3	MRoyA RA12
OPFP-231	Calciquest	High Service Pump Discharge	5.6 gph	150 psi	1/3	MRoyA
OPFP-232	Calciquest	High Service Pump Discharge	5.6 gph	150 psi	1/3	RA12
FFP-341	25% Hydrofluosilicic Acid	Filtered Water	5.7 gph	100 psi	1/3	MRoyA
FFP-342	25% Hydrofluosilicic Acid	Filtered Water	5.7 gph	100 psi	1/3	RA12
NHFP-371	20% Ammonia Sulfate	High Service Pump Discharge	6.0 gph	200 psi	1/3	MRoyA
NHFP-372	20% Ammonia Sulfate	High Service Pump Discharge	6.0 gph	200 psi	1/3	RA11

PREDICTED CHEMICAL METERING PUMP SIZING

Pawtucket, RI
Option No. 5: Lime pre and post
8/15/2001

	Specific Weight (lbs/gal)	Dosage (mg/L)			Facility Flow (MGD)			Metering Pump Flow Required (gph)			Daily Use gpd Design	Daily Use gpd Max	Monthly Use gallon/month Design
		Min	Max	Design	Min	Max	Design	Min	Max	Design			
Alum*14H2O-50%	5.53	14	35.0	17.0	8.3	25.0	13.3	7.3	55.1	14.2	341.4	1,321	10,242
Sodium Hypochlorite 12.5%													
Pre-oxidation/disinfection	0.75	0.0	1.0	0.5	8.3	25.0	13.3	0.0	11.6	3.1	74.0	278	1000 ^δ
Potassium Permanganate 4%													
Pre oxidation	0.33	0.0	1.0	0.5	8.3	25.0	13.3	0.0	26.4	7.0	168.3	633	δ
Lime-2%													
pre pH Adj. for Coagulation	0.1668	5.0	9.0	7.0	8.3	25.0	13.3	86.9	469.3	194.2	4660.6	11,263	139,817
Post Filter	0.1668	3.0	7.0	5.0	8.3	25.0	13.3	52.1	365.0	138.7	3329.0	8,760	99,870
post for distribution pH Adj.	0.1668	7.0	11.0	9.0	8.3	25.0	13.3	121.6	573.6	249.7	5992.2	13,766	179,765
Hydrofluosilicic Acid-25%													
Clearwell	2.64	1.0	2.0	1.5	8.3	25.0	13.3	1.1	6.6	2.6	63.1	158	1,893
Caustic Soda 45%													
pH Adj.-Distribution System													
Soda Ash 3%													
Ammonium Sulfate													
Disinfection-Distribution System	1.495 *		1.0	0.5	8.3	25.0	13.3	0.0	5.8	1.5	37.1	140	1,114
Polymer	0.68	0.0	1.0	0.5	8.3	25.0	13.3	0.0	12.8	3.4	81.7	307	δ
Calciquest (as total phosphate)													
Corrosion Control-Distribution	4.1	0.5	3.0	1.1	8.3	25.0	13.3	0.4	6.4	1.2	29.8	153	894

Notes

Specific weights shown for chemicals are "dry" weights.

The dosages shown correspond to a "dry" weight to match the specific weight.

Values in the minimum dosage listed as 0.0 will be based on the 10:1 turndown ratio of the dosage pump

* Based on 25% of solubility

δ Chemical not continually dosed during the month

14. SCHEDULE 12
WATER TREATMENT SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Gas Chlorination System-Section 11250

Bailey/Fischer & Porter or approved equal

4

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

500 pounds per day (ppd) for chlorinators

Each gas chlorination unit shall be 120 volts.
Booster Pumps shall be 208 volts, 3 phase, 1
HP

Materials of Construction

Fiberglass

Schedule 80 CPVC

Schedule 80 PVC

Proposer-Specific Information

Housing and Mounting Panel

Vacuum gas piping and fittings

Solution piping

Other Features

Design

Proposer Specific Information

The chlorination system shall be a full vacuum system and be furnished with all necessary equipment for detection and transmission of high and low chlorine gas pressure and vacuum. Additionally, chlorine gas detectors shall be furnished and installed.

The system shall include four (4) electric v-notch actuators and flow proportional controllers. The wall cabinet mounted chlorinators shall all be vacuum operated type consisting of vacuum regulating valve at the gas supply, a modular control unit and an injector.

The vacuum regulator-check units shall permit manual gas shutoff and shall be designed to close automatically when operating vacuum stops.

Insulation shall be on all chlorine solution and water service piping in the building.

15. SCHEDULE 12
WATER TREATMENT SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Proposer-Specific Information

Chlorine Gas Scrubber System-Section
11251

Manufacturer

Powell Fabrication & Manufacturing Inc., or
equal

Identification/Model No.

Sentry 2000

Number of Units

1

Design/Operational Parameters

Proposer-Specific Information

Capacity

Capacity to remove 99.99% chlorine vapor
in a single pass from a full ton cylinder.

Size/Dimensions

Power Requirements/Voltage

480 volts, 3 phase, 60 Hz

Materials of Construction

Proposer-Specific Information

FRP

Caustic containment tank (double wall)

FRP

Caustic recirculation pump

CPVC

All internal caustic distribution headers

CPVC SCH80

Piping

Other Features

Proposer Specific Information

Design

The chlorine gas scrubber systems shall be a
four-stage, once-through absorber with
high-efficiency packing material, designed

to remove a minimum of 99.99 percent of chlorine vapor in a single pass.

Containment tank for 15-20% caustic shall be a minimum of 3500 gallons, sufficient to neutralize the chlorine gas from a full ton cylinder.

16. SCHEDULE 12
WATER TREATMENT SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Ultraviolet Disinfection-Section 11252

Calgon Carbon Corporation or approved equal

Sentinel™ UV Disinfection System

2

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

25 MGD (each unit)

480 V, 3 phase, 60 Hz (40 KW each unit)

Materials of Construction

Each UV lamp shall be protected from the water stream by a quartz cylinder.

The cleaning mechanism shall be constructed of materials which are not affected by high intensity UV radiation.

The power supply system shall be provided with cooling fans, thermal protection, safety access interlock, lamp run meters, lamp ammeters and lamp voltmeters.

Proposer-Specific Information

Other Features

Design

Proposer Specific Information

The complete system shall be furnished and installed to provide two (2), 25.0 MGD independent treatment systems.

The UV lamps used in the UV disinfection reactor shall be specifically designed to provide a broad spectrum of light emission

between 200 and 300 nm to maximize disinfection of microbial pollutants.

<u>Microbe</u>	<u>% Reduction</u>
Cryptosporidium	99.99%

A cleaning mechanism shall be provided for each quartz tube to maintain efficient transmittance of UV light.

17. SCHEDULE 12
WATER TREATMENT SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Hydrated Lime Feed System-Section 11349

CHEMCO Equipment Company,
Monongahela, PA, or approved equal.

Design/Operational Parameters

Capacity

Proposer-Specific Information

Each lime feed system shall be capable of handling and unloading a bulk bag (up to 2 tons).

Each volumetric screw feeder shall be capable of feeding 181 pounds per hour of hydrated lime with a bulk density of 35 pounds per cubic foot.

400-gallon capacity slurry tanks

Each lime slurry transfer pump must be capable of pumping 50 GPM of lime slurry.

Size/Dimensions

The slurry tanks shall be 4' diameter and 4' high.

Power Requirements/Voltage

460 volt, 3 phase power supply

Materials of Construction

Carbon steel structural tubing

304 stainless steel

3/16" carbon steel

Proposer-Specific Information

Bulk bag unloader support structure

Screw feeder housing

Slurry tanks

Cast iron

Lime slurry transfer pump casing

Water lines shall be Schedule 40 galvanized pipe.

Slurry lines shall be Schedule 40 carbon steel pipe.

Other Features

System Description

Proposer Specific Information

Provide two self-contained hydrated lime systems designed to feed the hydrated lime from a bulk bag to a slurry tank where it is mixed with water, and pump the slurry produced to a slurry feed tank for transfer to point of application.

18. SCHEDULE 12
WATER TREATMENT SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Design/Operational Parameters

Capacity

Size/Dimensions

Filters

Power Requirements/Voltage

Proposer-Specific Information

Packaged Clarifier/Filtration Systems-
Section 11373

Roberts Filter Group of Darby, PA.

Pacer II

4 clarifiers and 8 filters

Proposer-Specific Information

The system is a 26.31 MGD system
consisting of four (4) 6.58 MGD identical
contact clarifiers and eight (8) identical 3.75
MGD GAC filters.

Design (Max) Clarifier Process Rate: 10
gpm/sf

Design (Max) Filtration Rate: 5 gpm/sf

Filter Backwash Rate (Maximum): 10,450
gpm/sf

Clarifier Dimensions 38 ft (L) x 12 ft (W)
Surface Area 456 sf

Dimensions 38 ft (L) x 13 ft. 9 inches (W)
Surface Area 522.5 sf

Air blower motors shall be 150 HP, 230/460
V, 3 phase, 60 Hertz, TEFC motors.

Materials of Construction

Basins

Clarifier – Media Support Screens

Clarifier – Influent Distribution Pipe

Clarifier – Media

Filter – Underdrain

Filter – Media Top:
Bottom:

Filter – Air Scour Piping

Filter – Collection Launderers

Other Features

Design

Proposer-Specific Information

Concrete

316 Stainless Steel

Schedule 40 PVC (water) and Schedule 80
PVC (air)

4 ft

PVC Trilateral with HDPE porous plate

72” of Granular Activated Carbon (GAC)
12” of Silica Sand

316 Stainless Steel

Fiberglass

Proposer Specific Information

The package treatment systems shall include proprietary clarification process, GAC filtration with air scour valve for filter wash and backwash, automatic process valves and controls, air blowers, automatic coagulation control, and complete process monitoring, instrumentation, and control systems.

The drawings and specifications are based upon the equipment manufactured by Roberts Filter Group.

All instrumentation shall meet or exceed I.S.A. Standards and Recommended Practices, ANSI, National Electrical Code, OSHA, and any other applicable code or local regulation.

The media for the contact clarifier shall be NSF 61 Certified for potable water use.

Filter to Waste Rate

5 gpm/sf (maximum)

Backwash Rate	20 gpm/sf (maximum)
Backwash Water Source	Clearwell
Air Scour Rate	2.5 cfm/sf (maximum)
Air Scour System	Positive Displacement Blowers (2) with a stainless steel distribution grid positioned just below the media.

SCHEDULE 12
INSTRUMENTATION AND CONTROL SYSTEMS⁽¹⁾

General Information

Proposer-Specific Information

Name of Equipment/System

Instrumentation and Control

Proposer-Specific Information In This Section

Instrumentation and Control System

Section 13300 and 13400

19. SCHEDULE 12
INSTRUMENTATION AND CONTROL SYSTEMS⁽¹⁾

General Information

Name of Equipment/System

Proposer-Specific Information

Instrumentation and Control System-Section 13300 and 13400

Number of Units

Refer to Specification Section 13300 and 13400 and the attached Table for data acquisition equipment

Design/Operational Parameters

Capacity

Proposer-Specific Information

Refer to Specification Section 13300 and 13400

Size/Dimensions

Refer to Specification Section 13300 and 13400

Power Requirements/Voltage

120/210 v, 1 phase, 60 Hz for control panel.

Transmission to and from analog devices shall be 4-20mA_{dc} unless otherwise indicated.

Materials of Construction

Proposer-Specific Information

All instrumentation shall meet or exceed I.S.A. Standards and Recommended Practices, ANSI, National Electrical Code, OSHA and any other applicable code or local regulation. All panel instruments shall be of the same manufacturer and model type to provide uniform appearance.

Other Features

Proposer Specific Information

Design

The system shall include instrumentation and control panels for the Water Treatment Facility, as well as PLC (Programmable Logic Controller) based control panels and a

PLC based SCADA (Supervisory control and Data Acquisition) System to control, collect, store and report operating and alarm data from the facility.

Two computer systems are required at the water treatment facility and one computer at the 85 Branch Street office. All computers shall be identical, with respect to hardware and loaded software except as noted otherwise herein: At the WTF, one computer system will be the operating SCADA system, and one will be a “hot” standby for the SCADA system. Failure of the primary computer shall automatically switch to the “hot” standby unit. Both units can be used to operate and view all current plant and telemetry operations

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
FE-100	Flow Element	36" Venturi	Central Process Area	0-19000(present) 0-26000(future)	gpm	Raw Water Flow
FIT-100	Flow Ind/Transmitter	Electronic	Central Process Area	0-19000(present) 0-26000(future)	gpm	Raw Water Flow
I / I-100	Current to Current Converter	Electronic	MCP	none	none	Raw Water Flow
PE-101 PIT-101	Pressure Indicator Transmitter	Electronic	Central Process Area	0-50	Feet	Reservoir Level
AE-105 AIT-105	Turbidity Element	Flow Thru	Central Process Area	0-100	NTU	Raw Water Turbidity
AE-201	pH Element	Flow thru	Central Process Area	0-14	pH	Pre-Coagulated Water pH
AIT-201	pH Ind/Transmitter	Electronic	Central Process Area	0-14	pH	Pre-Coagulated Water pH
I / I-201	Current to Current Converter	Electronic	MCP	none	none	Pre-Coagulated Water pH
AE-202	pH Element	Flow thru	Central Process Area	0-14	pH	Coagulated Water pH
AIT-202	pH Ind/Transmitter	Electronic	Central Process Area	0-14	pH	Coagulated Water pH
I / I-202	Current to Current Converter	Electronic	MCP	none	none	Coagulated Water pH
FE-210	Flow Element	14"Venturi	Pipe Gallery	0-5000	gpm	Clarifier 210 Influent Flow (Sec. 11373)

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
FIT-210	Flow Ind/Transmitter	Electronic	Pipe Gallery	0-5000	gpm	Clarifier 210 Influent Flow (Sec. 11373)
FE-220	Flow Element	14"Venturi	Pipe Gallery	0-5000	gpm	Clarifier220 Influent Flow (Sec. 11373)
FIT-220	Flow Ind/Transmitter	Electronic	Pipe Gallery	0-5000	gpm	Clarifier 220 Influent Flow (Sec. 11373)
FE-230	Flow Element	14"Venturi	Pipe Gallery	0-5000	gpm	Clarifier 230 Influent Flow (Sec. 11373)
FIT-230	Flow Ind/Transmitter	Electronic	Pipe Gallery	0-5000	gpm	Clarifier 230 Influent Flow (Sec. 11373)
FE-240	Flow Element	14"Venturi	Pipe Gallery	0-5000	gpm	Clarifier 240 Influent Flow (Sec. 11373)
FIT-240	Flow Ind/Transmitter	Electronic	Pipe Gallery	0-5000	gpm	Clarifier 240 Influent Flow (Sec. 11373)
PE-210 PIT-210	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-30	psi	Clarifier 210 Inlet Pressure (Sec. 11373)
PE-220 PIT-220	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-30	psi	Clarifier 220 Inlet Pressure (Sec. 11373)
PE-230 PIT-230	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-30	psi	Clarifier 230 Inlet Pressure

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
						(Sec. 11373)
PE-240 PIT-240	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-30	psi	Clarifier 240 Inlet Pressure (Sec. 11373)
LE-210A LIT-210A	Level Element	Ultrasonic	Filter Room	0-16	feet	Filter 210A Level
LE-210B LIT-210B	Level Element	Ultrasonic	Filter Room	0-16	feet	Filter 210B Level
LE-220A LIT-220A	Level Element	Ultrasonic	Filter Room	0-16	feet	Filter 220A Level
LE-220B LIT-220B	Level Element	Ultrasonic	Filter Room	0-16	feet	Filter 220B Level
LE-230A LIT-230A	Level Element	Ultrasonic	Filter Room	0-16	feet	Filter 230A Level
LE-230B LIT-230B	Level Element	Ultrasonic	Filter Room	0-16	feet	Filter 230B Level
LE-240A LIT-240A	Level Element	Ultrasonic	Filter Room	0-16	feet	Filter 240A Level
LE-240B LIT-240B	Level Element	Ultrasonic	Filter Room	0-16	feet	Filter 240B Level

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
PE-210A PIT-210A	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-10	psi	Filter 210A Outlet Press. (Sec. 11373)
PE-210B PIT-210B	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-10	psi	Filter 210B Outlet Press. (Sec. 11373)
PE-220A PIT-220A	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-10	psi	Filter 220A Outlet Press. (Sec. 11373)
PE-220B PIT-220B	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-10	psi	Filter 220B Outlet Press. (Sec. 11373)
PE-230A PIT-230A	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-10	psi	Filter 230A Outlet Press. (Sec. 11373)
PE-230B PIT-230B	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-10	psi	Filter 230B Outlet Press. (Sec. 11373)
PE-240A PIT-240A	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-10	psi	Filter 240A Outlet Press. (Sec. 11373)
PE-240B PIT-240B	Pressure Element Ind/Transmitter	Electronic	Pipe Gallery	0-10	psi	Filter 240B Outlet Press. (Sec. 11373)
AE-210A	Turbidity Element	Flow Thru	Pipe Gallery	0-5	NTU	Filtered Water Turbidity Filter 210A

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
AIT-210A	Turbidity Indicator/ Transmitter	Electronic	Pipe Gallery	0-5	NTU	
AE-210B	Turbidity Element	Flow Thru	Pipe Gallery	0-5	NTU	Filtered Water Turbidity Filter 210B
AIT-210B	Turbidity Indicator/ Transmitter	Electronic	Pipe Gallery	0-5	NTU	
AE-220A	Turbidity Element	Flow Thru	Pipe Gallery	0-5	NTU	Filtered Water Turbidity Filter 220A
AIT-220A	Turbidity Indicator/ Transmitter	Electronic	Pipe Gallery	0-5	NTU	
AE-220B	Turbidity Element	Flow Thru	Pipe Gallery	0-5	NTU	Filtered Water Turbidity Filter 220B
AIT-220B	Turbidity Indicator/ Transmitter	Electronic	Pipe Gallery	0-5	NTU	
AE-230A	Turbidity Element	Flow Thru	Pipe Gallery	0-5	NTU	Filtered Water Turbidity Filter 230A
AIT-230A	Turbidity Indicator/ Transmitter	Electronic	Pipe Gallery	0-5	NTU	
AE-230B	Turbidity Element	Flow Thru	Pipe Gallery	0-5	NTU	Filtered Water Turbidity Filter 230B
AIT-230B	Turbidity Indicator/ Transmitter	Electronic	Pipe Gallery	0-5	NTU	

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
AE-240A	Turbidity Element	Flow Thru	Pipe Gallery	0-5	NTU	Filtered Water Turbidity Filter 240A
AIT-240A	Turbidity Indicator/ Transmitter	Electronic	Pipe Gallery	0-5	NTU	
AE-240B	Turbidity Element	Flow Thru	Pipe Gallery	0-5	NTU	Filtered Water Turbidity Filter 240B
AIT-240B	Turbidity Indicator/ Transmitter	Electronic	Pipe Gallery	0-5	NTU	
FE-210A	Flow Element	8"Venturi	Pipe Gallery	0-1250	gpm	Filter 210A Flow
FIT-210A	Flow Ind/Transmitter Transmitter	Electronic	Pipe Gallery	0-1250	gpm	Filter 210A Flow
FE-210B	Flow Element	8"Venturi	Pipe Gallery	0-1250	gpm	Filter 210B Flow
FIT-210B	Flow Ind/Transmitter Transmitter	Electronic	Pipe Gallery	0-1250	gpm	Filter 210B Flow
FE-220A	Flow Element	8"Venturi	Pipe Gallery	0-1250	gpm	Filter 220A Flow
FIT-220A	Flow Ind/Transmitter Transmitter	Electronic	Pipe Gallery	0-1250	gpm	Filter 220A Flow
FE-220B	Flow Element	8"Venturi	Pipe Gallery	0-1250	gpm	Filter 220B Flow

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
FIT-220B	Flow Ind/Transmitter Transmitter	Electronic	Pipe Gallery	0-1250	gpm	Filter 220B Flow
FE-230A	Flow Element	8"Venturi	Pipe Gallery	0-1250	gpm	Filter 230A Flow
FIT-230A	Flow Ind/Transmitter Transmitter	Electronic	Pipe Gallery	0-1250	gpm	Filter 230A Flow
FE-230B	Flow Element	8"Venturi	Pipe Gallery	0-1250	gpm	Filter 230B Flow
FIT-230B	Flow Ind/Transmitter Transmitter	Electronic	Pipe Gallery	0-1250	gpm	Filter 230B Flow
FE-240A	Flow Element	8"Venturi	Pipe Gallery	0-1250	gpm	Filter 240A Flow
FIT-240A	Flow Ind/Transmitter Transmitter	Electronic	Pipe Gallery	0-1250	gpm	Filter 240A Flow
FE-240B	Flow Element	8"Venturi	Pipe Gallery	0-1250	gpm	Filter 240B Flow
FIT-240B	Flow Ind/Transmitter Transmitter	Electronic	Pipe Gallery	0-1250	gpm	Filter 240B Flow
FE-280	Flow Element	6"Venturi	Blower Room	0-3000	scfm	Backwash Air Flow
FIT-280	Flow Ind/Transmitter	Electronic	Blower Room	0-3000	scfm	Backwash Air Flow

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
	Transmitter					
PE-280 PIT-280	Pressure Indicator Transmitter	Electronic	Blower Room	0-40	psi	Backwash Air Pressure
AE-290 AIT-290	Turbidity Element Transmitter	Flow Thru	Pipe Gallery	0-5	NTU	Combined Filtered Water Turbidity
LE-291 LIT-291	Level Element	Ultrasonic	Clearwell	0-15	feet	Clearwell 1 Level
LE-292 LIT-292	Level Element	Ultrasonic	Clearwell	0-15	feet	Clearwell 2 Level
FE-295	Flow Element	24"Venturi	Pump Room	0-12,000	gpm	Filter Backwash Flow
FIT-295	Flow Ind/Transmitter Transmitter	Electronic	Pump Room	0-12,000	gpm	Filter Backwash Flow
AE-302	pH Element	Flow Thru	Sample Line	0-14	pH Units	Clearwell Effluent pH
AIT-302	pH Transmitter	Electronic	Analyzer Area	0-14	pH Units	Clearwell Effluent pH
AE-303	Chlorine Element	Flow Thru	Sample Line	0-5	mg/L	Clearwell Effluent Chlorine
AIT-303	Chlorine Transmitter	Electronic	Analyzer Area	0-5	mg/L	Clearwell Effluent Chlorine
FE-310	Flow Element	36" Venturi	Pump Area	0-26,000	gpm	Pawtucket Finish Water Flow

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
FIT-310	Flow Transmitter	Electronics	Pump Area	0-26,000	gpm	Pawtucket Finish Water Flow
LE-310	Level Element	Ultrasonic	Pump Area	0-16	Feet	Clearwell Basin 310 Level
LE-320	Level Element	Ultrasonic	Pump Area	0-16	Feet	Clearwell Basin 320 Level
LIT-310	Level Transmitter	Electronics	Pump Area	0-15	Feet	Clearwell Basin 310 Level
LIT-320	Level Transmitter	Electronics	Pump Area	0-15	Feet	Clearwell Basin 320 Level
AE-410	pH Element	Flow Thru	Sample Line	0-14	pH Units	Pawtucket Distribution Water pH
AIT-410	pH Transmitter	Electronic	Analyzer Area	0-14	pH Units	Pawtucket Distribution Water pH
AE-420	Turbidity Element	Flow Thru	Sample Line	0-5	NTU	Pawtucket Distribution System Turbidity
AIT-420	Turbidity Transmitter	Electronic	Analyzer Area	0-5	NTU	Pawtucket Distribution System Turbidity

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
AE-430	Chlorine Element	Flow Thru	Sample Line	0-5	mg/L	Pawtucket Distribution Water Chlorine
AIT-430	Chlorine Transmitter	Electronic	Analyzer Area	0-5	mg/L	Pawtucket Distribution Water Chlorine
LE-510	Level Element	Ultrasonic	Equalization Basin 510	0-16	Feet	Equal Basin 510
LIT-510	Level Transmitter	Electronics	Equalization Basin Area	0-16	Feet	Equal Basin 510
LE-520	Level Element	Admittance	Equalization Basin 520	0-16	Feet	Equal Basin 520
LIT-520	Level Transmitter	Electronics	Equalization Basin Area	0-16	Feet	Equal Basin 520
LE/LT-220D	Tank Level Transmitter	Ultrasonic	Lime Area	By 11349	By 11349	Mixing Tank Level (Supplied By 11349)
LE/LT-220E	Tank Level Transmitter	Ultrasonic	Lime Area	By 11349	By 11349	Holding Tank Level (Supplied By 11349)
LE/LT-271	Level Element/ Transmitter	Ultrasonic	Ammonia Sulfate Chemical Area	0-10	Feet	Ammonia sulfate Bulk Tank 271 Level

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
Recorder #1	Strip-Chart Recorder	Pen-1	MCP	0-26,000	gpm	Raw Water Flow
Recorder #2	Strip-Chart Recorder	Pen-1	MCP	0-26000	gpm	Combined Filter Flow
	Strip-Chart Recorder	Pen-2	MCP	0-26000	gpm	Distribution System
	Strip-Chart Recorder	Pen-3	MCP	0-4000	gpm	Discharge to Surface Water
Recorder #3	Strip-Chart Recorder	Pen-1	MCP	0-50	feet	Stump Hill Storage Tank
	Strip-Chart Recorder	Pen-2	MCP	0-50	feet	5 MG Ground Storage Tank
	Strip-Chart Recorder	Pen-3	MCP			Spare
Recorder #4	Strip-Chart Recorder	Pen-1	MCP			Spare
	Strip-Chart Recorder	Pen-2	MCP			Spare
	Strip-Chart Recorder	Pen-3	MCP			Spare
Recorder #5	Strip-Chart Recorder	Pen-1	MCP	0-15	feet	In Plant Clearwell No. 1
	Strip-Chart Recorder	Pen-2	MCP	0-15	feet	In Plant Clearwell No. 2

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
	Strip-Chart Recorder	Pen-3	MCP	0-14	units	Clearwell Effluent pH
Recorder #6	Strip-Chart Recorder	Pen-1	MCP	0-5	mg/L	Distribution Chlorine Residual
	Strip-Chart Recorder	Pen-2	MCP	0-14	units	Distribution System pH
	Strip-Chart Recorder	Pen-3	MCP	0-5	mg/L	Distribution System Fluoride Residual
Recorder #7	Strip-Chart Recorder	Pen-1	MCP	0-5	NTU	Turbidity Filter 210A
	Strip-Chart Recorder	Pen-2	MCP	0-5	NTU	Turbidity Filter 210B
	Strip-Chart Recorder	Pen-3	MCP			
Recorder #8	Strip-Chart Recorder	Pen-1	MCP	0-5	NTU	Turbidity Filter 220A
	Strip-Chart Recorder	Pen-2	MCP	0-5	NTU	Turbidity Filter 220B
	Strip-Chart Recorder	Pen-3	MCP			Spare
Recorder #9	Strip-Chart Recorder	Pen-1	MCP	0-5	NTU	Turbidity Filter

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
						230A
	Strip-Chart Recorder	Pen-2	MCP	0-5	NTU	Turbidity Filter 230B
	Strip-Chart Recorder	Pen-3	MCP			Spare
Recorder #10	Strip-Chart Recorder	Pen-1	MCP	0-5	NTU	Turbidity Filter 240A
	Strip-Chart Recorder	Pen-2	MCP	0-5	NTU	Turbidity Filter 240B
	Strip-Chart Recorder	Pen-3	MCP			Spare
AE-101	pH Element	Flow Thru	Sample Line	0-14	pH Units	Raw Water pH
AIT-101	pH Transmitter	Electronic	Analyzer Area	0-14	pH Units	Raw Water pH
LE/LT-101	Level Element/Transmitter	Pressure Transducer	Raw Water P.S.	0-50	Feet	Raw Water Pump Station Water Level
LE/LT-311	Level Element/Transmitter	Ultrasonic	Alum Bulk Tank	0-14	Feet	Alum Tank 311 Level
LE/LT-312	Level Element/Transmitter	Ultrasonic	Alum Bulk Tank	0-14	Feet	Alum Tank 312 Level
LE/LT-261	Level Element/Transmitter	Ultrasonic	Zinc Orthophosphate Chemical Area	0-15	Feet	Orthophosphate Bulk Tank 261 Level

TABLE 13300-1
INSTRUMENTATION LIST

TAG #	INSTRUMENT	TYPE	LOCATION	RANGE	SCALE	REMARKS
FE-600	Flow Element	Parshall Flume	Flow Meter Valve	0-2000	gpm	Supernatant to Blackstone River
FIT-600	Flow Transmitter	Ultrasonic	Flow Meter Valve	0-2000	gpm	Supernatant to Blackstone River

SCHEDULE 12
MOBILE EQUIPMENT⁽¹⁾

General Information

Name of Equipment/System

Proposer-Specific Information

Mobile Equipment

Proposer-Specific Information In This Section

Fork Lift

20. SCHEDULE 12
MOBILE EQUIPMENT⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

Fork Lift

Linde or equivalent

E15

1

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

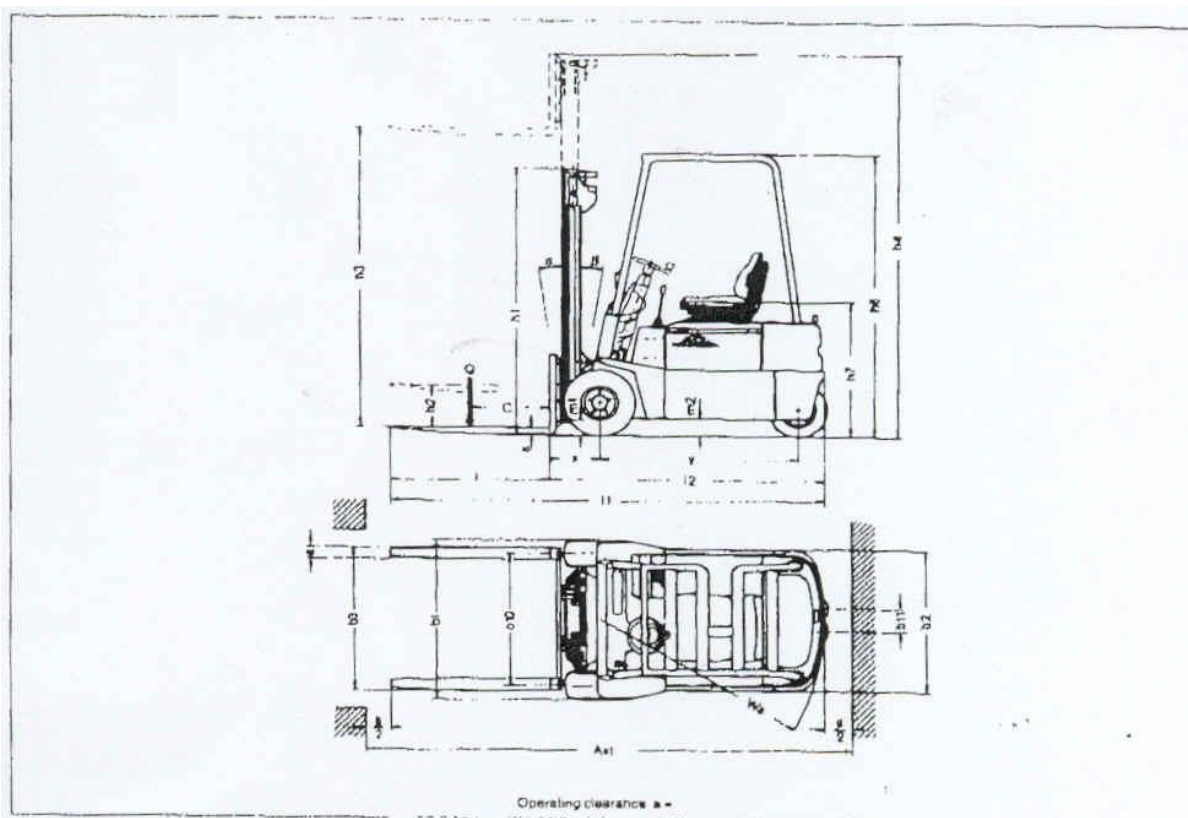
3,000 lbs.

Overhead Guard: 76.9 in.
Maximum Fork Height: 110.0 in.
Overall width: 43 in.
Weight: 4,815 lbs
Battery Weight: 1,490 lbs
Motor: 7 hp

Electric—24V

Proposer-Specific Information

The E15 model is a three-wheel electric fork lift with tight cornering ability. To be used for loading and unloading the lime super sack into the building and to the lime feeder system. See attached drawing.



MAST INFORMATION E15, E15C, E15S, E16

Type	Collapsed Height h1	Maximum* Fork Height h3	Free Lift h5		Tilt	
			With LBR	Without LBR	Forward	Back
Simple	72 (1,830)	110.0 (2,750)	—	—	5°	8°
	82 (2,080)	129.5 (3,250)	—	—	5°	8°
Dual	72 (1,830)	110.0 (2,750)	22 (560)	50 (1,267)	5°	8°
	82 (2,080)	129.5 (3,250)	33 (840)	60 (1,517)	5°	8°
Triple	72 (1,830)	156.0 (3,925)	24 (610)	50 (1,267)	5°	8°
	76 (1,930)	168.0 (4,225)	27 (685)	54 (1,367)	5°	8°
	82 (2,080)	185.5 (4,675)	33 (840)	60 (1,517)	5°	8°
	84 (2,130)	191.5 (4,825)	35 (890)	62 (1,567)	5°	8°
	92 (2,330)	215.0 (5,425)	43 (1,090)	70 (1,767)	5°	8°

CAPACITY INFORMATION E15, E15C, E15S, E16 - Capacity @ 24" Load Center

Type	Maximum* Fork Height In (mm)	Capacity 24" LC lb (kg)	Capacity 24" LC lb (kg)	Capacity 24" LC lb (kg)	Capacity 24" LC lb (kg)
	h3	E15	E15C	E15S	E16
Simple	110.0 (2,750)	3,000 (1,360)	3,000 (1,360)	3,000 (1,500)	3,500 (1,600)
	129.5 (3,250)	3,000 (1,360)	3,000 (1,360)	3,000 (1,500)	3,500 (1,600)
Dual	110.0 (2,750)	3,000 (1,360)	3,000 (1,360)	3,000 (1,500)	3,500 (1,600)
	129.5 (3,250)	3,000 (1,360)	3,000 (1,360)	3,000 (1,500)	3,500 (1,600)
Triple	156.0 (3,925)	3,000 (1,360)	2,800 (1,270)	3,000 (1,500)	3,500 (1,600)
	168.0 (4,225)	2,850 (1,295)	2,700 (1,230)	3,000 (1,500)	3,300 (1,500)
	185.5 (4,675)	2,725 (1,240)	2,575 (1,175)	2,900 (1,325)	3,025 (1,380)
	191.5 (4,825)	2,675 (1,220)	2,525 (1,150)	2,875 (1,310)	2,950 (1,340)
	215.0 (5,425)	2,200 (1,000)	2,325 (1,060)	2,375 (1,080)	2,600 (1,180)

* For overall height raised with LBR add 48 in (1,220 mm).

For Quad-Mast (E16) Capacity Information Contact Factory.

SCHEDULE 12
PIPE EQUIPMENT⁽¹⁾

General Information

Proposer-Specific Information

Name of Equipment/System

Pipe

Proposer-Specific Information In This Section

PE Pipe for Slip Lining

Section 15100

21. SCHEDULE 12
PIPE EQUIPMENT⁽¹⁾

General Information

Name of Equipment/System

Manufacturer

Identification/Model No.

Number of Units

Proposer-Specific Information

PE Pipe for Slip Lining-Section 15100

DuPont, Phillips or equal

N/A

Design/Operational Parameters

Capacity

Size/Dimensions

Power Requirements/Voltage

Proposer-Specific Information

30 MGD Raw Water
900 gpm residuals

36 inches diameter-Raw Water8 & 10 Inch
Residuals

No Power Requirements

Materials of Construction

Polyethylene

Proposer-Specific Information

AWWA C906/PE 3408 ASTM D 3550

Other Features

Joints

Proposer Specific Information

Fusion butt welded

SCHEDULE 13

ACCEPTANCE TEST

There are two main components to the Acceptance Test: 1) evaluation of the ability to treat raw water and deliver 25 MGD of treated water meeting regulatory requirements through the Facility for a 24-hour period, using representative quantities of surface water and well water supplies, and 2) determination of the ability of the Facility to reliably meet the performance standards in Schedule 1 for a continuous period of 14 days.

At least 120 days prior to the scheduled Acceptance Date, the Company shall submit to the PWSB a detailed acceptance test plan defining the test program as related to each specified objective. The acceptance test plan shall define the procedures to be used, the specific measurements to be made, the proposed usage of permanent and temporary instrumentation, the organization of the test team, the testing schedule, and the operating and maintenance schedule during testing. The acceptance test plan shall include specific, detailed sampling protocols to be utilized conducting the Acceptance Test. Preliminary tests shall be conducted at the Company's expense; however, the results of such tests shall not be made part of the test report. The Acceptance Test shall not be conducted until the acceptance test plan is approved, and written authorization is received from the PWSB. The acceptance test plan shall address the Company's approach and details for meeting the requirements of this Schedule. The PWSB shall comment on, or approve the acceptance test plan within thirty (30) days of receipt. However, the acceptance test plan shall not be considered complete and approved until all the PWSB's comments are resolved. PWSB approval shall not be unreasonably withheld, provided that the Company makes every effort to provide expeditious response to all comments.

The Acceptance Test shall demonstrate the ability of the Facility to treat the range of raw water quality as established from historical data. It is not likely, however, that all extreme conditions will exist during the test period. Therefore, the acceptance test plan shall describe how the tests will demonstrate the ability of the Facility to achieve the performance standards under the extreme ranges of raw water quality and quantities.

All labor, materials, equipment, and services required to perform the Acceptance Test shall be supplied by the Company. During the test, the Company will operate all systems under normal operating conditions, including, but not limited to, routine equipment operation, maintenance services and chemicals and electricity usage.

During the hydraulic test, the treatment Facility shall be operated at a flow rate of 25 MGD. However, the PWSB recognizes that plant raw water quality and quantity will be impacted by seasonal variations and regulatory restrictions. Therefore, the acceptance test plan shall identify means for testing the hydraulic capacity of critical components of the overall Facility. During the final week of the 14-day test, the Facility shall be capable of operating at its maximum rate (25MGD) unless the PWSB agrees to a lower rate. (During the 14-day test, the Facility shall be operated at production rates ranging from 10 to 25 MGD and at less than 1 MGD to illustrate turn-down.)

During the Acceptance Test, the following tests will be conducted:

1. Manual shutdown and start-up of the Facility.
2. Automatic shutdown and start-up of the Facility.
3. Simulated electric power failure and generator start-up.
4. Demonstrated performance of all computer and software systems to include SCADA and MMS.

During the Acceptance Test, the finished water will be regularly monitored for certain key parameters in order to evaluate the performance of the Facility. These key parameters are those listed in Schedule 1, plus any additional parameter required by the RIDOH. Samples shall be analyzed by an outside laboratory agreed to by both the Company and the PWSB, using laboratory analytical quality control standard procedures. The finished water at the clear well shall be sampled at least four times per day (early morning, early afternoon, late evening, and at least once during the night) for established parameters.

The Company shall staff the Facility according to the Agreement during the Acceptance Test.

Should the performance of the Facility be deemed to be unsatisfactory at any time during the acceptance period, immediate action shall be taken by the Company to ensure that the treated water produced by the plant does not exceed existing or interim limits, or pose a threat to human health or the environment. If remedial action is considered unlikely to satisfy this requirement, the Facility will be shut down and the trial terminated until such time as the above requirement is satisfied.

The Facility will be deemed to have passed the Acceptance Test if the results for each parameter comply with the performance standards in Schedule 1, and the shutdown and startup tests detailed above are completed successfully.

The Company shall submit to the PWSB ten (10) copies of the written report within 20 days following the conclusion of the Acceptance Test.

The acceptance test plan, as approved by the PWSB, shall specify the contents of such Acceptance Test report, including, but not limited to:

1. A certification that testing was conducted in accordance with the approved acceptance test plan;
2. A certification of the results of the testing, including a determination of the extent to which the Facility complies with the applicable Performance Guaranty(s);
3. All data measured and recorded during the test(s);

4. All calculations used in determining test results; and
5. Any other data reasonably requested by the PWSB to be included in such reports.

SCHEDULE 14

SUMMARY OF FIXED CONSTRUCTION PRICE COST⁽¹⁾

1) Water Treatment Plant and Pump Station

Project Development Costs:

Engineering and Design Costs	\$	<u>1,654,000.00</u>	
Permitting	\$	<u>66,000.00</u>	
Other (Specify)	\$	--	
Subtotal			\$ 1,720,000.00

Site Work:

Roads, Parking, Lighting, Utilities, Fencing, Gates, etc.	\$	<u>877,800.00</u>	
Other (Specify)	\$	--	
Subtotal			\$ 877,800.00

Plant and Process:

Water Treatment System		<u>\$15,533,600.00</u>	
Chemical Treatment System		<u>\$ 1,514,000.00</u>	
Residuals Handling System		<u>\$ 4,661,000.00</u>	
Instrumentation, Control Communication Systems:	\$	<u>1,160,000.00</u>	
Subtotal Excluding SCADA and Power Systems			\$22,868,600.00
SCADA System	\$	<u>931,500.00</u>	
Electrical/Emergency Power Systems	\$	<u>3,457,100.00</u>	
Subtotal			\$27,257,200.00

Transmission Line & Interconnects:

Construction	\$	<u>8,000.00</u>	
Subtotal			\$ 8,000.00

SUMMARY OF FIXED CONSTRUCTION PRICE COST⁽¹⁾

2). Storage Tank System:

Development Costs	<u>\$ 23,800.00</u>	
Construction	<u>\$ 2,001,500.00</u>	
Subtotal		\$ 2,025,300.00

3). Intake Structure and Aeration System (includes Raw Water Pump Station):

Development Costs	<u>\$ 88,200.00</u>	
Construction	<u>\$ 2,669,500.00</u>	
Subtotal		\$ <u>2,757,700.00</u>

4). Wells, Piping & Electrical Systems Upgrade

Development Costs	<u>\$ 8,200.00</u>	
Construction	<u>\$ 46,100.00</u>	
Subtotal		\$ <u>54,300.00</u>

5). Pipeline Mill St. – Branch Street

Design	<u>\$ 31,100.00</u>	
Construction	<u>\$ 2,919,200.00</u>	
Subtotal		\$ <u>2,950,300.00</u>

6). Existing 54-Inch Main Rehabilitation

Design	<u>\$ 20,800.00</u>	
Construction	<u>\$ 1,598,000.00</u>	
Subtotal		\$ <u>1,618,800.00</u>

7). Watershed Monitoring Program

Design	<u>\$ 12,500.00</u>	
Construction	<u>\$ 9,200.00</u>	
Subtotal		\$ <u>21,700.00</u>

8) Transmission and Distribution Facility			
Design	\$	<u>41,500.00</u>	
Construction	\$	<u>345,500.00</u>	
Subtotal	\$		<u>387,000.00</u>
9) Administrative Office Facility			
Design		<u>N/A</u>	
Construction		<u>N/A</u>	
Subtotal			\$ --
10) Other Direct and Indirect Costs:			
PWSB Allowance (1%)		\$ <u>415,739.00</u>	
Administrative		\$ <u>984,000.00</u>	
Insurance (During Construction)		\$ <u>344,000.00</u>	
Performance Bond (During Construction)		\$ <u>224,000.00</u>	
Other—Winter Construction		\$ <u>343,800.00</u>	
Subtotal			\$ <u>2,311,539.00</u>
TOTAL FIXED CONSTRUCTION PRICE			<u>\$41,989,639.00</u>

Note:

(1) Costs are in year-end 2001 dollars.

SCHEDULE 14: CONSTRUCTION SCHEDULE

Contract Price =	\$41,989,639.00	\$2,099,481.95	\$39,890,157.05
-------------------------	------------------------	-----------------------	------------------------

Months from Notice to Proceed	Major Milestone Description ⁽¹⁾	Percent Milestone Payment	\$ Invoice Amount	\$ Retained Amount	\$ Payment Amount
1	Construction Notice to Proceed Project Mobilization/Development Period Subcontracts Awarded and Equipment Ordered	3.9%	\$1,637,595.92	\$81,879.80	\$1,555,716.12
2	Prepare and Submit 60% WTP Earthwork Design Prepare and Submit 30% WTP Concrete Design Submit Construction Quality Assurance Plan (CQAP)	2.6%	\$1,091,730.61	\$54,586.53	\$1,037,144.08
3	Procurement of Equipment and Material Submit 60% Raw Water Pump Station (RWPS) Civil Design Submit 60% WTP Concrete Design	3.1%	\$1,301,678.81	\$65,083.94	\$1,236,594.87
4	Milestone #1 and #2 Prepare and Submit 90% WTP Earthwork Design Prepare and Submit 90% RWPS Civil Design	2.1%	\$881,782.42	\$44,089.12	\$837,693.30
5	Construction Notice to Proceed (NTP) Foundation Excavation Clear and Grub WTP / Lagoons	1.6%	\$671,834.22	\$33,591.71	\$638,242.51
6	Prepare and Submit WTP 60% Mechanical Design Lagoon Excavation RWPS Foundation Excavation	1.8%	\$755,813.50	\$37,790.68	\$718,022.83
7	Prepare and Submit WTP 60% Electrical Design Form / Rebar / Pour Slab-on-Grade for RWPS Prepare and Submit Intake Structure 60% Design	3.3%	\$1,385,658.09	\$69,282.90	\$1,316,375.18

8	Form / Rebar / Pour Slab-on-Grade for WTP Procure Intake Structure Material Underground Utilities at the Storage Tank	5.0%	\$2,099,481.95	\$104,974.10	\$1,994,507.85
9	Form / Rebar / Pour Foundation Walls for the WTP Install 10" Lines at Lagoon Install Vaults, Headwalls, and Pads at Lagoons	6.1%	\$2,561,367.98	\$128,068.40	\$2,433,299.58
10	Install Under Drains and Filters at the Lagoons Form / Rebar / Pour WTP Supported Slab at EL. 52 Prepare and Submit 36" Pipeline Design	5.7%	\$2,393,409.42	\$119,670.47	\$2,273,738.95
11	Excavate and Install 42" Intake Form / Rebar / Pour RWPS Foundation Walls Procure Material for the 36" Line	5.9%	\$2,477,388.70	\$123,869.44	\$2,353,519.27
12	RWPS Concrete Superstructure Start 36" Excavation and Installation Pressure Test and Backfill 42" Intake	7.6%	\$3,191,212.56	\$159,560.63	\$3,031,651.94
13	Form / Rebar / Pour WTP Supported Slab at EL. 68 Install RWPS Concrete Deck and Roof Continuing Form / Rebar / Pour of the Storage Tank Walls	9.6%	\$4,031,005.34	\$201,550.27	\$3,829,455.08
14	Start Mechanical / Electrical RWPS Backfill WTP Foundation Continue the Installation of the 36" Line	10.2%	\$4,282,943.18	\$214,147.16	\$4,068,796.02
15	WTP Yard Piping Erecting the Metal Building and Roof for the WTP Installing Building Finishes for the RWPS	5.2%	\$2,183,461.23	\$109,173.06	\$2,074,288.17
16	CMU Partitions at the WTP Test and Chlorinate the 36" Line Start Mechanical / Electrical WTP	7.0%	\$2,939,274.73	\$146,963.74	\$2,792,310.99
17	Start WTP Building Finishes Procurement of the Watershed Monitoring Equipment	6.3%	\$2,645,347.26	\$132,267.36	\$2,513,079.89

	Start Fire Protection at the WTP				
18	WTP Mechanical, Electrical, and Fire Protection continues WTP Building Finishes continues Install Baffles in the Storage Tank	5.0%	\$2,099,481.95	\$104,974.10	\$1,994,507.85
19	WTP Site Finishes for the WTP Storage Tank Mechanical and Electrical Complete WTP Mechanical, Electrical, and Fire Protection continues	2.3%	\$965,761.70	\$48,288.08	\$917,473.61
20	Install Watershed Monitoring Equipment and Devices Testing and Chlorination of the WTP Begins WTP Building Finishes continues	1.8%	\$755,813.50	\$37,790.68	\$718,022.83
21	Excavate Jack Pits and Start Slip-Lining 54" Pipe WTP Testing and Chlorination continues WTP Building Finishes complete	1.3%	\$545,865.31	\$27,293.27	\$518,572.04
22	WTP Punchlist and Testing continue Acceptance Testing Project Closeout and Review Operations	2.6%	\$1,091,730.61	\$54,586.53	\$1,037,144.08
23	Release Of Retainage	5.0%		\$2,099,481.95	

SCHEDULE 15

CERTAIN STATE AND FEDERAL LAWS

Requirements for Public Financing

The following is a list of Federal and State laws, regulations and other requirements which must be complied with by the Company in the construction, maintenance and operation of the Facility to assure PWSB and City eligibility for financing of the construction of the capital improvements through the RICWFA or the RIWRB. The PWSB and the City make no representation as to the completeness or accuracy of this list.

STATE OF RHODE ISLAND GENERAL LAWS

- § 2-1, Fresh Water Wetlands
- § 37-2.1, Domestic Steel
- § 23-24, Air Pollution (R.I. Clean Air Act)
- § 37-12, Contractor's Bond
- § 37-12.1, Substitution of Security for Retained Earnings by Designers
- § 37-13, Labor and Payment of Debts by Contractors
- § 37-14.1, Minority Business Enterprise
- § 37-16, Public Works Arbitration Act
- § 42-10.1, Public Finance Management Board (debt issuance)
- § 42-35, Administrative Procedures
- § 42-45, Historical Preservation Commission (planning coordination)
- § 42-48, Farmland Preservation Act (eminent domain restrictions)
- § 45-22.2, Comprehensive Planning and Land Use Regulation Act (planning consistency)
- § 46-12, Water Pollution
- § 46-12.1, Underground Storage Tanks
- § 46-13, Public Drinking Water Supplies
- § 46-13.2, Drilling of Drinking Water Wells
- § 46-15, Water Resources Board (approval of public water supply facilities)
- § 46-15.4, Water Supply Management Planning
- § 46-15.6, Clean Water Infrastructure
- § 46-23, Coastal Resources Management Council

FEDERAL

- Archeological and Historic Preservation Act of 1974, Pub. L. 86-523, as amended.
- Clean Air Act, Pub. L. 84-159, as amended.
- Coastal Barrier Resources Act, Pub. L. 97-348
- Coastal Zone Management Act, Pub. L. 92-583, as amended
- Endangered Species Act, Pub. L. 93-205, as amended
- Environmental Justice, Executive Order 12898
- Flood Plain Management, Executive Order 11988 as amended by Executive Order 12148.
- Protection of Wetlands, Executive Order 11990
- Farmland Protection Policy Act, Pub. L. 97-98.
- Fish and Wildlife Coordination Act, Pub. L. 85-624, as amended.

National Historic Preservation Act of 1966, Pub. L. 89-665, as amended.
Safe Drinking Water Act, Pub. L. 93-523, as amended.
Wild and Scenic Rivers Act, Pub. L. 93-523, as amended.
Demonstration Cities and Metropolitan Development Act of 1966, Pub. L. 89-754, as amended, Executive Order 12372.
Procurement Prohibitions under Section 306 of the Clean Air Act and Section 508 of the Clean Water Act, including Executive Order 11738, Administration of the Clean Air Act and Federal Water Pollution Control Act with respect to federal contracts, grants and loans.
Uniform Relocation and Real Property Acquisition Policies Act, Pub. L. 91-646, as amended.
Debarment and Suspension, Executive Order 12549.
Age Discrimination Act of 1975, Pub. L. 94- 135.
Title VI of the Civil Rights Act of 1964, Pub. L. 88-352.
Section 13 of the Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92- 500 (Clean Water Act).
Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112 (including Executive Orders 11914 and 11250).
Equal Employment Opportunity, Executive Order 11246.
Women's and Minority Business Enterprise, Executive Orders 11625, 12138, and 12432.
Section 129 of the Small Business Administration Reauthorization and Amendment Act of 1988, Pub. L. 100-590, as amended.

SCHEDULE 16

TERMINATION PAYMENTS

Termination Cost Category	Termination Payment
Early Termination ⁽¹⁾	\$ 1,775,730
Demobilization and Other ⁽²⁾	\$ 316,978
Summary of Termination Payments	\$ 2,092,708

Notes:

- (1) The payments for “Early Termination” amount shall be prorated based upon the date of termination and the remaining length of the contract. The prorated amount will be calculated to the nearest month.
- (2) “Demobilization and Other” costs should be indicated to include all additional payments to the Company for termination for convenience by the PWSB.

SCHEDULE 17

EXAMPLE ADJUSTMENT METHODOLOGY **FOR ANNUAL SERVICE FEE** **USING THE CONSUMER PRICE INDEX (CPI)**

- 1) **Index:** CPI-U Northeast (Note: If the CPI-U Northeast ceases to be published, the parties shall designate a suitable replacement)

2) **Adjustment Methodology:**

- e) **First Year Service Fee** = \$ 1,000,000.00 or \$ 83,333.00 / month
f) **Service Fee Period** = Jan. 1, 2002 – Dec. 31, 2002
g) **CPI Adjustment %** (Use the most recently available 12 months periods for performing the calculation in Dec. 2002 to adjust the existing Service Fee for the subsequent 12 month period. Calendar year 2003 in this example)

1) Ending CPI Factor:

CPI Indices sum of 12 months, Dec. 2001 – Nov. 2002 = 1263.9

2) Beginning CPI Factor:

CPI Indices sum of 12 months, Dec. 2000 – Nov. 2001 = 1230.5

$$3) \text{ CPI Adjustment \%} = \frac{(\text{Ending CPI Factor} - \text{Beginning CPI Factor})}{(\text{Beginning CPI Factor})}$$

$$= \frac{(1263.9 - 1230.5)}{1230.5}$$

$$= 2.7\%$$

$$d) \text{ New Annual Service Fee} = (\text{Current Service Fee}) \times (100\% + \text{CPI Adjustment \%})$$

$$= (\$ 1,000,000.00) \times (100\% + 2.7\%)$$

$$= (\$ 1,000,000.00) \times (102.7\%)$$

$$= \$ 1,027,000.00$$

$$e) \text{ New Monthly Service Fee} = \frac{\text{New Annual Service Fee}}{12}$$

$$= \frac{\$ 1,027,000.00}{12}$$

$$= \$ 85,583.00$$

SCHEDULE 18

UNION/CITY MEMORANDA OF AGREEMENT

See attached hard copies for details.

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-5. Reference CW Schedule 3.4, page 2, Symbol O:

a. Provide any analysis since Docket No. 3945 which supports the reasonableness of the continued use of Symbol O developed in Docket No. 3945; or

b. Provide an updated analysis for Symbol O based on the most recent data available.

Response: a. There has been no analysis since then.

b. The PWSB has a total of material and labor costs for each of the past two years that were obtained from a detailed listing of work orders for the T&D department:

	<u>FY14 Costs</u>	<u>FY13 Costs</u>	<u>2 Year Total</u>	<u>Allocation</u>
Mains	\$ 91,419	\$116,775	\$208,194	23%
Services	\$207,215	\$267,794	\$475,010	51%
Hydrants	\$125,998	\$115,392	\$241,390	26%
TOTAL	\$424,632	\$499,961	\$924,594	100%

This data was retrieved from year end cost summaries for work orders issued in the T&D Department and is the only data that is readily available to respond to this question.

Prepared by: Christopher Woodcock and Robert Benson

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

-
- DIV. 1-6.** For each of the last three years, please provide:
- a. System average day production;
 - b. System maximum day production;
 - c. System maximum hour production;
 - d. Wholesale average day consumption;
 - e. Wholesale maximum day consumption; and
 - f. Wholesale maximum hour consumption.

Response: See the attached schedule RB – DR#6

Prepared by: Robert Benson

PAWTUCKET WATER SUPPLY BOARD RB-DR#6

DATA REQUEST NUMBER 6

1. For each of the last three years, please provide:

		<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>
a. System average day production;	MGD	7.11	7.56	8.55
b. System maximum day production;	MGD	13.48	12.34	14.72
c. System maximum hour production;	MGD	18.64	18.66	18.55
d. Wholesale average day consumption;	MGD	0.58	0.46	0.58
e. Wholesale maximum day consumption	MGD	2.62	2.22	2.62
f. Wholesale maximum hour consumption.	THE MAX HOUR IS NOT RECORDED THEREFORE IS NOT AVAILABLE			

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-7: Reference CW Schedule 3.0, page 1. Please explain and provide a breakdown of the costs included in Contractual Services – Mgt. Fees.

Response: Contractual Services – Management Fees represents an allocation of the City's administrative costs for services related to the Pawtucket Water Supply Board activities. See attachment RB – DR#7 for a copy of the City's memorandum and supporting calculations to the annual chargeback.

Prepared by: Robert Benson



CITY OF PAWTUCKET
PAWTUCKET CITY HALL
137 ROOSEVELT AVENUE
PAWTUCKET, RHODE ISLAND 02860

DIVISION OF FINANCE

DONALD R. GREBIEN
MAYOR

JEANNINE S. BOURSKI
DEPUTY FINANCE DIRECTOR

MEMORANDUM

TO: Jim DeCelles, Chief Engineer
Pawtucket Water Supply Board

FROM: Jeannine S. Bourski, Deputy Finance Director *JB*

DATE: July 11, 2014

RE: FY14 Charges

CC: Joanna L'Heureux, Director of Finance
Jennifer Legner, Chief Accountant
Robert Benson, Chief Financial Officer, PWSB

Attached you will find the detail supporting the charges allocated for Water Supply Board purposes by the City of Pawtucket. We have attached a copy of the journal entry charging 300-9510-652-3051 as instructed by Bob Benson.

In summary the charges are as follows:

Personnel	<i>City 9/6</i>	<i>ply</i>	\$ 38,667.90
Payroll	<i>15</i>	<i>10</i>	26,396.25
Purchasing	<i>15</i>	<i>15</i>	36,297.45
Data Processing	<i>—</i>		3,472.42
Collections	<i>15/100</i>	<i>10/100</i>	76,498.92
Accounting	<i>VARIOUS</i>	<i>VARIOUS</i>	<u>94,455.18</u>
	<i>NO CHANGE</i>		

TOTAL CHARGES \$ 275,788.12

FY14 City Budget \$260,000
FY15 City Budget \$280,000

City of Pawtucket
Water Chargeback for Personnel & Payroll
For the Fiscal Year 2014

	Personnel	Payroll
Wages	\$ 152,638.00	\$ 106,056.00
Longevity	3,625.00	7,925.00
Personnel Board	9,000.00	-
FICA	9,924.00	6,868.00
Medicare	2,321.00	1,606.00
Medical	52,232.00	34,821.00
Dental	3,608.00	2,405.00
MERS	22,879.00	15,254.00
TIAA CREF	1,559.00	1,040.00
Totals	\$ 257,786.00	\$ 175,975.00
15% Charge	\$ 38,667.90	\$ 26,396.25

City of Pawtucket
Water Chargeback for Purchasing
For the Fiscal Year 2014

	Purchasing
Wages	\$ 141,613.00
Longevity	5,592.00
Purchasing Board	5,400.00
FICA	9,214.00
Medicare	2,154.00
Medical	41,513.00
Dental	2,799.00
MERS	21,595.00
TIAA CREF	1,472.00
Educational Training	2,500.00
Office Maintenance	430.00
Telephone	1,874.00
Cellular Phones	480.00
Printing	1,000.00
Dues & Subscriptions	241.00
Travel	150.00
Office Supplies	1,200.00
Postage	756.00
Office Equipment	2,000.00
Totals	\$ 241,983.00
15% Charge	\$ 36,297.45

City of Pawtucket
Water Chargeback for Information Technology
For the Fiscal Year 2014

Payroll Processing	
Computer	\$50 per hour Times 13 hours
Total Cost for Computer Time	650.00

Water Billing / Payment	
Computer	\$50 per hour Times 26 hours
Total Cost for Computer Time	1,300.00
Operator	\$38.0903/hour Times 26 hours
	990.35
Benefits	23.32%
	230.95

Cost Recapitulation	
Payroll Processing Cost	650.00
Water Billing/Payment	2,521.30
Cost of Checks	301.12
Total Chargeback	3,472.42

**CITY OF PAWTUCKET
WATER DEPARTMENT
CHARGE BACK FOR FISCAL YEAR ENDING 06/30/14**

SALARIES	GROSS SALARY	TIME ALLOCATED	ALLOCATION	TOTAL ALLOCATION
Tax Collector	72,791.01	15%	10,918.65	
Cash Reconciliation Clerk	46,039.41	15%	6,905.91	
Tax Sale Clerk	40,431.83	15%	6,064.77	
Cashier/Clerk	34,652.04	100%	34,652.04	
				49,909.81

SHARED BENEFITS	TOTAL FICA	MEDICARE	MERS & TIAA	
Tax Collector	676.96	158.32	1,710.95	
Cash Reconciliation Clerk	428.17	100.14	1,082.16	
Tax Sale Clerk	376.02	87.94	950.35	
Cashier/Clerk	2,148.43	502.45	5,429.97	
	<u>3,629.57</u>	<u>848.85</u>	<u>9,173.43</u>	13,651.85

MEDICAL BENEFITS	YEARLY COST	TIME ALLOCATED	ALLOCATION	
Tax Collector	17,289.60	15%	2,593.44	
Cash Reconciliation Clerk	1,000.00	15%	150.00	
Tax Sale Clerk	17,410.56	15%	2,611.58	
Cashier/Clerk	6,813.00	100%	6,813.00	
				12,168.02

DENTAL BENEFITS	YEARLY COST	TIME ALLOCATED	ALLOCATION	
Tax Collector	1,202.52	15%	180.38	
Cash Reconciliation Clerk	100.00	15%	15.00	
Tax Sale Clerk	1,202.52	15%	180.38	
Cashier/Clerk	393.48	100%	393.48	
				769.24

COST OF CHECKS Transferred to the Information Technology Department's cost center.

TOTAL COLLECTIONS DIVISION CHARGEBACK 76,498.92

CITY OF PAWTUCKET
WATER DEPARTMENT
CHARGE BACK FOR FISCAL YEAR 14

SALARIES	<u>GROSS SALARY</u>	<u>TIME ALLOCATED</u>	<u>ALLOCATION</u>	<u>TOTAL ALLOCATION</u>
Chief Accountant	60,711.57	15%	9,106.74	
Accountant II	53,431.07	30%	16,029.32	
Senior Acct Pay Clerk	44,670.64	40%	17,868.26	
Finance Office Assistant	45,225.18	15%	6,783.78	
Fixed Asset Acct	45,613.12	25%	11,403.28	
				61,191.37

EMPLOYER SHARE BENEFITS

	<u>TOTAL WAGES</u>	<u>RATE</u>	<u>ALLOCATION</u>	
FICA	61,191.37	6.20%	3,793.86	
MEDICARE	61,191.37	1.45%	887.27	
MERS & TIAACREF	61,191.37	15.67%	9,588.69	
				14,269.83

MEDICAL BENEFITS

	<u>YEARLY COST</u>	<u>TIME ALLOCATED</u>	<u>ALLOCATION</u>	
Chief Accountant	17,745.36	15%	2,661.80	
Accountant II	3,000.00	30%	900.00	
Senior Acct Pay Clerk	17,745.36	40%	7,098.14	
Finance Office Assistant	17,622.00	15%	2,643.30	
Fixed Asset Acct	17,745.36	25%	4,436.34	
				17,739.59

DENTAL BENEFITS

	<u>YEARLY COST</u>	<u>TIME ALLOCATED</u>	<u>ALLOCATION</u>	
Chief Accountant	1,225.68	15%	183.85	
Accountant II	300.00	30%	90.00	
Senior Acct Pay Clerk	1,225.68	40%	490.27	
Finance Office Assistant	1,225.68	15%	183.85	
Fixed Asset Acct	1,225.68	25%	306.42	
				1,254.40

TOTAL ACCOUNTING DIVISION CHARGEBACK	<u><u>94,455.18</u></u>
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CITY OF PAWTUCKET
ADJUSTING JOURNAL UPDATE LIST

GROUP NUMBER : 09960 PWSB DEPT CHARGE BACKS
ACCOUNTING PERIOD: 12/2014
GROUP USER ID : JBORSKI
GROUP CREATED BY : JBORSKI
GROUP UPDATED BY : JBORSKI

TRANS NO	TRANS DATE	DOCUMENT BANK	ACCOUNT NUMBER	DESCRIPTION 1	PROJECT	DEBIT AMOUNT	CREDIT AMOUNT
DESCRIPTION 2	TYPE						
100 06/30/2014 9960			300-9510-652.30-51	PWSB DEPT CHARGE BACKS			
200 06/30/2014 9960			300-0000-101.01-00	PWSB DEPT CHARGE BACKS		275,788.12	275,788.12
300 06/30/2014 9960			100-0000-101.01-00	PWSB DEPT CHARGE BACKS			
400 06/30/2014 9960			100-6060-522.88-86	PWSB DEPT CHARGE BACKS		275,788.12	
PERSONNEL							
500 06/30/2014 9960			100-6080-522.88-86	PWSB DEPT CHARGE BACKS			38,667.90
PAYROLL							
600 06/30/2014 9960			100-6070-522.88-86	PWSB DEPT CHARGE BACKS			26,396.25
PURCHASING							
700 06/30/2014 9960			100-6050-522.88-86	PWSB DEPT CHARGE BACKS			36,297.45
DATA PROCESSING							
800 06/30/2014 9960			100-6040-522.88-86	PWSB DEPT CHARGE BACKS			3,472.42
COLLECTIONS							
900 06/30/2014 9960			100-6020-522.88-86	PWSB DEPT CHARGE BACKS			76,498.92
ACCOUNTING							
							94,455.18

GROUP TOTALS

COUNT: 9
DEBITS: 551,576.24
CREDITS: 551,576.24

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

Div. 1-8: Reference CW Schedule 3.0, page 4. Please provide a breakdown of Penalty revenues by type.

Response: There is only one type of penalty revenue and that is late payment of the monthly bill. The penalty is calculated on the delinquent account balance at 18% per annum or 1.5% per month as authorized in Tariff Schedule G from Docket 4113.

Prepared by: Robert Benson

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-9. Reference Schedule DGB-3A. Please provide a similar breakdown of consumption by class and meter size by month for FY 2014 and FY 2015 to date. Also include monthly whole consumption for FY 2014 and FY 2015. Provide a copy of the Company's response in Excel format.

Response: See the attached schedule RB – DR# 9 and #10. Monthly schedules are not maintained for the residential and commercial & industrial classifications as our rates are based solely on the size of the meter. The staff labor to prepare these monthly data summaries would be excessive and provides no value since our rate structure does not differentiate between the residential and commercial/industrial classifications.

Prepared by: Robert Benson

PWSB Monthly Consumption by Meter Size

SCHEDULE RB - DR 1-9 and 1-10

METER COUNT

Meter Size	Docket 4171	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	FY14	% of Docket
Irrigation Service															
5/8		3	3	3	2	2	2	2	2	2	2	2	2		
3/4		1	1	1	1	1	1	1	1	1	1	1	1		
1		8	8	8	8	8	8	8	8	8	8	8	8		
1 1/2		5	5	5	5	5	4	5	5	5	5	5	5		
2		11	11	11	11	11	11	11	11	11	11	10	11		
3		4	4	4	4	3	4	4	4	4	4	4	4		
Total		32	32	32	31	30	30	31	31	31	31	30	31		
Domestic Water Service															
5/8		21,547	21,547	21,548	21,552	21,551	21,548	21,551	21,549	21,548	21,538	21,546	21,542		
3/4		266	265	266	266	266	266	265	265	266	266	267	267		
1		503	503	502	502	501	501	502	502	503	505	508	508		
1 1/2		214	216	214	212	214	214	213	214	213	212	212	212		
2		302	301	301	301	300	300	299	299	299	299	300	300		
3		14	14	14	14	14	14	14	14	14	14	14	15		
4		9	9	9	9	9	9	9	9	9	9	9	9		
6		5	3	3	3	3	3	3	3	3	3	3	3		
8															
12		1	1	1	1	1	1	1	1	1	1	1	1		
Total	0	22,861	22,859	22,858	22,860	22,859	22,856	22,857	22,856	22,856	22,847	22,860	22,857		
TOTAL COUNT BY SIZE															
5/8	21,527	21,550	21,550	21,551	21,554	21,553	21,550	21,553	21,551	21,550	21,540	21,548	21,544		
3/4	259	267	266	267	267	267	267	266	266	267	267	268	268		
1	498	511	511	510	510	509	509	510	510	511	513	516	516		
Small	22,284	22,328	22,327	22,328	22,331	22,329	22,326	22,329	22,327	22,328	22,320	22,332	22,328		
1 1/2	227	219	221	219	217	219	218	218	219	218	217	217	217		
2	399	313	312	312	312	311	311	310	310	310	310	310	311		
Medium	626	532	533	531	529	530	529	528	529	528	527	527	528		
3	24	18	18	18	18	17	18	18	18	18	18	18	19		
4	12	9	9	9	9	9	9	9	9	9	9	9	9		
6	6	5	3	3	3	3	3	3	3	3	3	3	3		
Large	42	32	30	30	30	29	30	30	30	30	30	30	31		
8															
12	0	1	1	1	1	1	1	1	1	1	1	1	1		
Whlse	0	1	1	1	1	1	1	1	1	1	1	1	1		
Totals	22,952	22,893	22,891	22,890	22,891	22,889	22,886	22,888	22,887	22,887	22,878	22,890	22,888		

PWSB Monthly Consumption by Meter Size

SCHEDULE RB - DR 1-9 and 1-10

CONSUMPTION -HCF

Meter Size	Docket 4171	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	FY14	% of Docket
Irrigation Service															
5/8		18	29	44	38	28	0	0	0	0	0	0	51	208	
3/4		0	2	2	0	0	0	0	0	0	0	0	1	5	
1		250	340	360	290	10	0	0	0	0	0	10	150	1,410	
1 1/2		200	420	830	690	100	0	0	0	0	0	0	400	2,640	
2		3,180	3,520	5,920	2,980	620	0	0	0	0	50	10	770	17,050	
3		650	910	1,120	710	250	30	0	0	0	0	90	250	4,010	
Total		4,298	5,221	8,276	4,708	1,008	30	0	0	0	50	110	1,622	25,323	
Domestic Water Service															
5/8		196,697	246,176	246,842	189,327	194,131	187,073	185,748	191,607	162,915	169,310	176,831	207,430	2,354,087	
3/4		4,589	5,588	6,097	4,719	5,128	4,574	4,347	4,823	4,070	4,301	4,321	5,046	57,603	
1		12,480	15,020	15,940	12,920	13,220	11,920	11,980	12,500	10,640	11,260	11,870	13,620	153,370	
1 1/2		9,160	12,150	10,538	8,975	9,082	8,501	8,450	9,170	7,950	8,470	8,670	9,380	110,496	
2		40,110	43,660	45,860	39,180	41,630	44,150	38,740	46,010	36,370	37,440	38,110	44,880	496,140	
3		6,435	7,756	7,857	6,806	6,708	5,893	5,787	6,531	5,845	5,504	6,369	9,372	80,863	
4		7,214	6,839	7,028	4,790	4,708	4,012	4,064	4,146	3,532	4,030	4,576	5,753	60,692	
6		2,440	4,189	3,498	4,727	5,815	4,437	5,223	4,190	4,272	3,659	4,597	6,799	53,846	
8														0	
12		21,368	52,228	46,115	30,769	12,679	9,311	9,639	19,348	9,072	1,650	4,393	18,905	235,477	
Total		300,493	393,606	389,775	302,213	293,101	279,871	273,978	298,325	244,666	245,624	259,737	321,185	3,602,574	
TOTAL CONSUMPTION BY SIZE															100.00%
5/8	2,669,201	196,715	246,205	246,886	189,365	194,159	187,073	185,748	191,607	162,915	169,310	176,831	207,481	2,354,295	
3/4		4,589	5,590	6,099	4,719	5,128	4,574	4,347	4,823	4,070	4,301	4,321	5,047	57,608	
1		12,730	15,360	16,300	13,210	13,230	11,920	11,980	12,500	10,640	11,260	11,880	13,770	154,780	
Small		214,034	267,155	269,285	207,294	212,517	203,567	202,075	208,930	177,625	184,871	193,032	226,298	2,566,683	96.16%
1 1/2		9,360	12,570	11,368	9,665	9,182	8,501	8,450	9,170	7,950	8,470	8,670	9,780	113,136	
2	621,318	43,290	47,180	51,780	42,160	42,250	44,150	38,740	46,010	36,370	37,490	38,120	45,650	513,190	
Medium		52,650	59,750	63,148	51,825	51,432	52,651	47,190	55,180	44,320	45,960	46,790	55,430	626,326	100.81%
3		7,085	8,666	8,977	7,516	6,958	5,923	5,787	6,531	5,845	5,504	6,459	9,622	84,873	
4		7,214	6,839	7,028	4,790	4,708	4,012	4,064	4,146	3,532	4,030	4,576	5,753	60,692	
6		2,440	4,189	3,498	4,727	5,815	4,437	5,223	4,190	4,272	3,659	4,597	6,799	53,846	
Large	244,938	16,739	19,694	19,503	17,033	17,481	14,372	15,074	14,867	13,649	13,193	15,632	22,174	199,411	81.41%
Retail	3,535,457	283,423	346,599	351,936	276,152	281,430	270,590	264,339	278,977	235,594	244,024	255,454	303,902	3,392,420	95.95%
Cumulative Retail		283,423	630,022	981,958	1,258,110	1,539,540	1,810,130	2,074,469	2,353,446	2,589,040	2,833,064	3,088,518	3,392,420		
% of Prior Year															
8	569,178														
12		0	21,368	52,228	46,115	30,769	12,679	9,311	9,639	19,348	9,072	1,650	4,393	18,905	235,477
Whlse		21,368	52,228	46,115	30,769	12,679	9,311	9,639	19,348	9,072	1,650	4,393	18,905	235,477	41.37%
Cumulative Wholesale		21,368	73,596	119,711	150,480	163,159	172,470	182,109	201,457	210,529	212,179	216,572	235,477		
% of Prior Year															
Totals Cumulative YTD	4,104,635	304,791	398,827	398,051	306,921	294,109	279,901	273,978	298,325	244,666	245,674	259,847	322,807	3,627,897	88.39%
% of Prior Year		304,791	703,618	1,101,669	1,408,590	1,702,699	1,982,600	2,256,578	2,554,903	2,799,569	3,045,243	3,305,090	3,627,897		

PWSB Monthly Consumption by Meter Size

SCHEDULE RB - DR 1-9 and 1-10

CONSUMPTION -
GALLONS

Meter Size	Docket 4171	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	FY14	% of Docket
5/8	0	147,162,492	184,185,961	184,695,417	141,663,957	145,250,348	139,949,311	138,958,079	143,341,197	121,876,712	126,660,811	132,287,271	155,216,536	1,761,248,090	
3/4	0	3,433,031	4,181,879	4,562,662	3,530,284	3,836,257	3,421,809	3,251,991	3,608,086	3,044,767	3,217,578	3,232,540	3,775,661	43,096,545	
1	0	9,523,313	11,490,816	12,194,030	9,882,401	9,897,363	8,917,352	8,962,238	9,351,250	7,959,784	8,423,606	8,887,428	10,301,337	115,790,918	
Small	1,996,829,268	160,118,835	199,858,656	201,452,109	155,076,641	158,983,968	152,288,473	151,172,308	156,300,533	132,881,263	138,301,995	144,407,239	169,293,534	1,920,135,552	
1 1/2	0	7,002,216	9,403,617	8,504,401	7,230,387	6,869,054	6,359,598	6,321,445	6,860,077	5,947,395	6,336,407	6,486,027	7,316,418	84,637,042	
2	0	32,385,249	35,295,358	38,736,618	31,539,896	31,607,225	33,028,615	28,981,394	34,420,081	27,208,397	28,046,269	28,517,572	34,150,765	383,917,439	
Medium	464,807,996	39,387,465	44,698,975	47,241,019	38,770,283	38,476,279	39,388,213	35,302,839	41,280,158	33,155,792	34,382,676	35,003,599	41,467,183	468,554,481	
3	0	5,300,289	6,483,035	6,715,694	5,622,720	5,205,280	4,430,996	4,329,255	4,885,841	4,372,645	4,117,542	4,831,978	7,198,218	63,493,491	
4	0	5,396,793	5,116,256	5,257,647	3,583,399	3,522,055	3,001,377	3,040,278	3,101,623	2,642,289	3,014,843	3,423,306	4,303,819	45,403,685	
6	0	1,825,364	3,133,791	2,616,854	3,536,269	4,350,202	3,319,320	3,907,326	3,134,539	3,195,883	2,737,298	3,439,016	5,086,332	40,282,193	
Large	183,238,118	12,522,446	14,733,081	14,590,194	12,742,387	13,077,536	10,751,693	11,276,859	11,122,003	10,210,817	9,869,683	11,694,299	16,588,369	149,179,369	
Retail	2,644,875,382	212,028,746	259,290,712	263,283,322	206,589,311	210,537,783	202,428,379	197,752,006	208,702,694	176,247,871	182,554,354	191,105,137	227,349,086	2,537,869,402	
Cumulative Retail % of Prior Year		212,028,746	471,319,458	734,602,780	941,192,091	1,151,729,874	1,354,158,253	1,551,910,259	1,760,612,953	1,936,860,824	2,119,415,178	2,310,520,316	2,537,869,402		
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	0	15,985,401	39,071,767	34,498,632	23,018,289	9,485,160	6,965,559	7,210,936	14,474,239	6,786,763	1,234,365	3,286,403	14,142,831	176,160,344	
Whlse	425,802,062	15,985,401	39,071,767	34,498,632	23,018,289	9,485,160	6,965,559	7,210,936	14,474,239	6,786,763	1,234,365	3,286,403	14,142,831	176,160,344	
Cumulative Wholesale % of Prior Year		15,985,401	55,057,168	89,555,799	112,574,088	122,059,248	129,024,807	136,235,743	150,709,982	157,496,745	158,731,110	162,017,513	176,160,344		
Totals	3,070,677,444	228,014,147	298,362,479	297,781,953	229,607,600	220,022,943	209,393,938	204,962,942	223,176,933	183,034,635	183,788,719	194,391,541	241,491,917	2,714,029,746	88.39%
Cumulative % of Prior Year		228,014,147	526,376,626	824,158,579	1,053,766,179	1,273,789,122	1,483,183,060	1,688,146,002	1,911,322,934	2,094,357,569	2,278,146,288	2,472,537,829	2,714,029,746		

METER COUNT

Meter Size	Docket 4171	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	FY15	% of Docket
Irrigation Service															
5/8		2	2	2	2	2	2	2	2	2					
3/4		1	1	1	1	1	1	1	1	1					
1		8	8	8	8	8	8	8	8	8					
1 1/2		5	5	5	5	5	5	5	5	5					
2		11	11	11	11	11	11	11	11	10					
3		4	4	4	4	4	4	4	4	4					
Total		31	31	31	31	31	31	31	31	30	0	0	0		
Domestic Water Service															
5/8		21,547	21,547	21,553	21,554	21,560	21,558	21,561	21,564	21,556					
3/4		266	266	264	264	264	263	264	266	266					
1		510	510	510	509	508	509	511	511	511					
1 1/2		213	214	214	214	214	213	212	211	211					
2		300	300	300	301	300	299	299	299	299					
3		14	14	15	15	15	15	15	15	15					
4		9	9	9	8	9	9	8	8	8					
6		3	3	3	3	3	3	2	2	2					
8															
12		1	1	1	1	1	1	1	1	1					
Total	0	22,863	22,864	22,869	22,869	22,874	22,870	22,873	22,877	22,869	0	0	0		
TOTAL COUNT BY SIZE															
5/8	21,527	21,549	21,549	21,555	21,556	21,562	21,560	21,563	21,566	21,558	0	0	0		
3/4	259	267	267	265	265	265	264	265	267	267	0	0	0		
1	498	518	518	518	517	516	517	519	519	519	0	0	0		
Small	22,284	22,334	22,334	22,338	22,338	22,343	22,341	22,347	22,352	22,344	0	0	0		
1 1/2	227	218	219	219	219	219	218	217	216	216	0	0	0		
2	399	311	311	311	312	311	310	310	310	309	0	0	0		
Medium	626	529	530	530	531	530	528	527	526	525	0	0	0		
3	24	18	18	19	19	19	19	19	19	19	0	0	0		
4	12	9	9	9	8	9	9	8	8	8	0	0	0		
6	6	3	3	3	3	3	3	2	2	2	0	0	0		
Large	42	30	30	31	30	31	31	29	29	29	0	0	0		
8															
12	0	1	1	1	1	1	1	1	1	1	0	0	0		
Whlse	0	1	1	1	1	1	1	1	1	1	0	0	0		
Totals	22,952	22,894	22,895	22,900	22,900	22,905	22,901	22,904	22,908	22,899	0	0	0		

CONSUMPTION - HCF

Meter Size	Docket 4171	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	FY15	% of Docket
Irrigation Service															
5/8		70	75	80	85	22	0	0	0	0				332	
3/4		3	2	3	1	0	0	0	0	0				9	
1		230	380	380	300	80	0	0	0	0				1,370	
1 1/2		480	650	690	700	320	0	0	0	0				2,840	
2		2,180	4,240	3,110	2,680	1,040	250	0	80	0				13,580	
3		850	1,490	840	1,740	600	0	0	0	0				5,520	
Total		3,813	6,837	5,103	5,506	2,062	250	0	80	0	0	0	0	23,651	
Domestic Water Service															
5/8		221,617	246,482	241,365	207,883	183,504	185,080	186,075	184,533	165,277				1,821,816	
3/4		5,074	5,888	6,212	5,262	4,692	4,272	4,390	4,532	3,900				44,222	
1		13,730	16,000	17,440	14,620	13,090	12,170	11,950	12,030	11,140				122,170	
1 1/2		9,350	10,542	10,806	9,644	9,152	9,030	9,110	9,640	9,240				86,514	
2		41,840	46,710	48,780	45,750	43,320	40,640	40,730	42,130	39,710				389,610	
3		6,725	8,121	7,403	6,787	6,714	6,519	5,991	6,142	4,833				59,235	
4		5,133	7,419	7,858	5,538	4,744	4,525	4,426	3,416	3,811				46,870	
6		5,802	4,622	4,652	4,273	916	7,420	2,869	30	50				30,634	
8														0	
12		50,464	58,106	45,961	35,401	10,495	4,810	6,209	4,915	5,555				221,916	
Total		359,735	403,890	390,477	335,158	276,627	274,466	271,750	267,368	243,516	0	0	0	2,822,987	
TOTAL CONSUMPTION BY SIZE															
5/8		221,687	246,557	241,445	207,968	183,526	185,080	186,075	184,533	165,277	0	0	0	1,822,148	
3/4		5,077	5,890	6,215	5,263	4,692	4,272	4,390	4,532	3,900	0	0	0	44,231	
1		13,960	16,380	17,820	14,920	13,170	12,170	11,950	12,030	11,140	0	0	0	123,540	
Small	2,669,201	240,724	268,827	265,480	228,151	201,388	201,522	202,415	201,095	180,317	0	0	0	1,989,919	74.55%
1 1/2		9,830	11,192	11,496	10,344	9,472	9,030	9,110	9,640	9,240	0	0	0	89,354	
2		44,020	50,950	51,890	48,430	44,360	40,890	40,730	42,210	39,710	0	0	0	403,190	
Medium	621,318	53,850	62,142	63,386	58,774	53,832	49,920	49,840	51,850	48,950	0	0	0	492,544	79.27%
3		7,575	9,611	8,243	8,527	7,314	6,519	5,991	6,142	4,833	0	0	0	64,755	
4		5,133	7,419	7,858	5,538	4,744	4,525	4,426	3,416	3,811	0	0	0	46,870	
6		5,802	4,622	4,652	4,273	916	7,420	2,869	30	50	0	0	0	30,634	
Large	244,938	18,510	21,652	20,753	18,338	12,974	18,464	13,286	9,588	8,694	0	0	0	142,259	58.08%
Retail	3,535,457	313,084	352,621	349,619	305,263	268,194	269,906	265,541	262,533	237,961	0	0	0	2,624,722	74.24%
Cumulative Retail		313,084	665,705	1,015,324	1,320,587	1,588,781	1,858,687	2,124,228	2,386,761	2,624,722	2,624,722	2,624,722	2,624,722		
% of Prior Year		110.5%	105.7%	103.4%	105.0%	103.2%	102.7%	102.4%	101.4%	101.4%					
8															
12	0	50,464	58,106	45,961	35,401	10,495	4,810	6,209	4,915	5,555	0	0	0	221,916	
Whse	569,178	50,464	58,106	45,961	35,401	10,495	4,810	6,209	4,915	5,555	0	0	0	221,916	38.99%
Cumulative Wholesale		50,464	108,570	154,531	189,932	200,427	205,237	211,446	216,361	221,916	221,916	221,916	221,916		
% of Prior Year		236.2%	147.5%	129.1%	126.2%	122.8%	119.0%	116.1%	107.4%	105.4%					
Totals Cumulative YTD	4,104,635	363,548	410,727	395,580	340,664	278,689	274,716	271,750	267,448	243,516	0	0	0	2,846,638	69.35%
% of Prior Year		119.3%	110.0%	106.2%	107.2%	105.1%	104.1%	103.5%	101.9%	101.7%					

PWSB Monthly Consumption

SCHEDULE RB - DR 1-9 and 1-10

CONSUMPTION - GALLONS

Meter Size	Docket 4171	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	FY15	% of Docket
5/8	0	165,844,045	184,449,292	180,625,005	155,580,861	137,295,801	138,458,348	139,202,708	138,049,137	123,643,724	0	0	0	1,363,148,919	
3/4	0	3,798,104	4,406,309	4,649,442	3,937,250	3,510,085	3,195,883	3,284,159	3,390,389	2,917,590	0	0	0	33,089,211	
1	0	10,443,476	12,253,878	13,331,142	11,161,652	9,852,477	9,104,377	8,939,795	8,999,643	8,333,834	0	0	0	92,420,274	
Small	1,996,829,268	180,085,624	201,109,479	198,605,588	170,679,763	150,658,363	150,758,608	151,426,662	150,439,170	134,895,148	0	0	0	1,488,658,404	75.81%
1 1/2	0	7,353,823	8,372,735	8,600,158	7,738,346	7,086,003	6,755,343	6,815,191	7,211,684	6,912,444	0	0	0	66,845,727	
2	0	32,931,362	38,115,695	38,818,909	36,230,483	33,185,716	30,589,809	30,470,113	31,577,301	29,707,051	0	0	0	301,626,439	
Medium	464,807,996	40,285,185	46,488,430	47,419,067	43,968,829	40,271,719	37,345,152	37,285,304	38,788,985	36,619,495	0	0	0	368,472,166	18.77%
3	0	5,666,858	7,189,989	6,166,588	6,379,049	5,471,603	4,876,864	4,481,867	4,594,830	3,615,567	0	0	0	48,443,216	
4	0	3,839,997	5,550,154	5,878,570	4,142,978	3,548,986	3,385,153	3,311,091	2,555,510	2,851,009	0	0	0	35,063,447	
6	0	4,340,476	3,457,718	3,480,161	3,196,631	685,260	5,550,902	2,146,299	22,443	37,405	0	0	0	22,917,295	
Large	183,238,118	13,847,331	16,197,861	15,525,319	13,718,658	9,705,849	13,812,918	9,939,257	7,172,783	6,503,981	0	0	0	106,423,958	5.42%
Retail	2,644,875,382	234,218,140	263,795,770	261,549,974	228,367,250	200,635,931	201,916,679	198,651,222	196,400,937	178,018,624	0	0	0	1,963,554,528	100.0%
Cumulative Retail		234,218,140	498,013,911	759,563,884	987,931,135	1,188,567,066	1,390,483,745	1,589,134,967	1,785,535,904	1,963,554,528	1,963,554,528	1,963,554,528	1,963,554,528		
% of Prior Year		110.5%	105.7%	103.4%	105.0%	103.2%	102.7%	102.4%	101.4%	101.4%					
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	0	37,752,118	43,469,099	34,383,424	26,483,488	7,851,310	3,598,361	4,644,953	3,676,912	4,155,696	0	0	0	166,015,360	
Wholesale	425,802,062	37,752,118	43,469,099	34,383,424	26,483,488	7,851,310	3,598,361	4,644,953	3,676,912	4,155,696	0	0	0	166,015,360	
Cumulative Wholesale		37,752,118	81,221,217	115,604,641	142,088,129	149,939,439	153,537,800	158,182,753	161,859,664	166,015,360	166,015,360	166,015,360	166,015,360		
% of Prior Year		236.2%	147.5%	129.1%	126.2%	122.8%	119.0%	116.1%	107.4%	105.4%					
Totals	3,070,677,444	271,970,259	307,264,869	295,933,398	254,850,738	208,487,241	205,515,040	203,296,175	200,077,849	182,174,320	0	0	0	2,129,569,888	69.35%
Cumulative		271,970,259	579,235,128	875,168,526	1,130,019,264	1,338,506,505	1,544,021,544	1,747,317,719	1,947,395,568	2,129,569,888	2,129,569,888	2,129,569,888	2,129,569,888		
% of Prior Year		119.3%	110.0%	106.2%	107.2%	105.1%	104.1%	103.5%	101.9%	101.7%					

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-10: Reference Schedule DGB-3A. Please provide a similar breakdown for the number of customers by class for the same fiscal years, and a similar breakdown of the number of customers by month for FY 2014 and FY 2015 to date. Provide a copy of the Company's response in Excel format.

Response: See the attached schedule RB – DR# 9 and #10. The attached schedule provides the number of meters by size by month. The number of customers by meter size does not have any billable relevance and is not tracked in the detail requested. The total number of all customers issued a bill each month is recorded but does not affect the calculation of the rates. Monthly schedules are not maintained for the residential and commercial & industrial classifications as our rates are based solely on the size of the meter. The staff labor to prepare these monthly data summaries would be excessive and provides no value since our rate structure does not differentiate between the residential and commercial/industrial classifications.

Prepared by: Robert Benson

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-11: Please identify the current number of public fire service hydrants and the number of private fire service customers by size.

Response: See the attached schedule RB – DR#11.

Prepared by: Robert Benson

PAWTUCKET WATER SUPPLY BOARD

DATA REQUEST NUMBER 11

11. Please identify the current number of public fire service hydrants and the number of private fire service customers by size

	Number of Customers	Number of services/hydrants	DOCKET 4171
<u>Public Fire Hydrants</u>		<i>AS OF 3/1/2015</i>	
City of Pawtucket		1515	1513
City of Central Falls		202	202
Town of Cumberland		198	198
Town of Attleboro		2	2
TOTAL		1917	1915
<u>Private Fire Service Connections</u>		<i>AS OF 3/1/2015</i>	
2 inch connection	33	33	28
4 inch connection	65	67	55
6 inch connection	322	406	405
8 inch connection	71	92	89
10 inch connection	3	3	3
12 inch connection	0	0	2
TOTAL	494	601	582

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

DIV. 1-12: Reference PWSB item 2.9 (n)(1). Please identify all factors which PWSB believes have contributed to the significant increase in UFW.

Response: PWSB was concerned that unaccounted for water was underreported. As a result PWSB investigated the recording of the consumption and production numbers. Consumption numbers were tested over two billing periods and it was determined the billed consumption numbers were reliable. The investigation then focused on the plant production numbers and it was determined that the master meter located in the water treatment facility was underreporting water production by a factor of 10%. The correction to the production plant numbers was made in November 2013 and now results in reliable plant production water amounts. In addition, during FY14 three private fire services located in large industrial facilities were leaking for an extended period of time before the service connections were identified and eventually repaired.

Prepared by: Robert Benson

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

CERTIFICATION

I hereby certify that on March 18, 2015, I sent a copy of the within to all parties set forth on the attached Service List by electronic mail and copies to Luly Massaro, Commission Clerk, by electronic mail and regular mail.

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STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Division of Public Utilities And Carriers'

Data Requests

Set 1

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