

# KENT COUNTY WATER AUTHORITY

## BOARD MEETING MINUTES

November 17, 2004

The Board of Directors of the Kent County Water Authority held its monthly meeting in the Joseph D. Richard Board Room at the office of the Authority on November 17, 2004.

Chairman Perry opened the meeting at 3:30 P.M. Chairman Perry, Board Members, Mrs. Graham, Mr. Masterson, Mr. Boyer and Mr. Gallucci, were present together with the General Manager Timothy J. Brown, Director of Administration & Finance Arthur Williams Technical Service Director John Duchesneau, Kevin J. Fitta, System Engineer, Legal Counsel, Joseph J. McGair and other interested parties.

The minutes of the Board meeting of October 20, 2004 were moved for approval by Board Member Graham and seconded by Board Member Boyer and the minutes were unanimously approved.

### **Guests:**

#### C&E Engineers

Modeling Task Order #3 and Treatment Plant Study

Russell Houde, P.E., gave an overview presentation of Task Order #3 conclusions and recommendations which was a continuation of Task Order #2 which is attached as "A". General discussion followed the presentation and no action was taken.

#### Woodcock & Associates Rate Issues

The General Manager stated that he, Christopher Woodcock and Legal Counsel, Joseph J. McGair, are working on the abbreviated rate case. The General Manager and Mr. Woodcock stated that a 25% increase is the maximum increase allowed by the abbreviated filing. Mr. Woodcock put together a comparison chart for the similarly situated water systems attached as "B" and explained the same in detail. He passed out a comparison to current rates chart for other water systems and explained the same in great detail which is attached as "C". He passed out an impact of proposed rates for quarterly bills as "D". He explained that the percentage is not as sharp as the dollars increase.

Board Member Gallucci stated that labor increases are a small piece of the rate increase but necessary for a two (2) year increase and that the rainy weather has decreased sales.

Mr. Woodcock stated that water costs are increasing at a rate greater than inflation due in large part to increased water quality regulation. Providence water supply will apply for another rate in the very near future.

Board Member Gallucci stated that Warwick rates will not increase and the Warwick customers of Kent County Water Authority will pay an additional 25% which is not fair.

Mr. Woodcock stated that the difference between Warwick and Kent County Water Authority is that the Authority has no taxing authority and is limited to a revenue stream.

The Chairman agrees that the abbreviated rate filing is the wiser course at this time.

Mr. Woodcock stated that his advice would be not to ask for a phase-in water rate since the notice would be abrupt to the customers. He further stated that a seasonal higher priced water rate would be positive to encourage conservation. It does work in the southwest portion of the country, but other issues must be examined prior to its implementation.

Mr. Woodcock recommends the abbreviated rate case.

It was moved by Board Member Graham and seconded by Board Member Masterson to file the abbreviated rate filing at the Public Utilities Commission at the not to exceed limitation and it was unanimously,

VOTED: To file the abbreviated rate filing at the Public Utilities Commission for the not to exceed limitation on abbreviated filings.

### Universal Properties

John Caito, P.E., Robert Rapoza, Vice President of Universal Properties and Jeff Hanson, P.E. appeared before the Board.

Mr. Caito stated that the September 30, 2004 Special Board Meeting has been reconsidered and now Universal Properties is asking the Authority to amend that Board action which Universal Properties had sought. Universal Properties is asking that the Board amend its approval of September 30, 2004 to allow for the elimination of the master meter since it would be extremely difficult and costly, if not impossible for Universal Properties to perform because it did not incredibly keep accurate records of the installation of the infrastructure.

The General Manager stated that private locating companies can assist in location of the test pits and elevation for use in the “as built” preparations. There are no accurate records of where the lines were installed. If Kent County Water Authority takes over the line, it would be difficult to locate the water main for dig safe.

Board Member Boyer stated that he was more comfortable with Kent County Water locating the water main, if possible and with a fee paid to Kent County Water Authority for that service.

Legal Counsel stated that the location and ownership issues are important and that amendment of easement issues would arise.

Mr. Caito stated that the valve points are located from surface locations but the curves and water main alignment are not. He pointed out that he didn't supervise the construction.

Board Member Masterson stated that he was concerned about the sewer/water pipe crossing separations.

The General Manager stated that there are definitely easement issues on 88 foot road.

Jeff Hanson replied that there is plenty of easement room since the roads have 20 feet on either side for an 88 foot road.

The General Manager stated that there is a different issue about metering and sub master metering.

Board Member Boyer stated that caution is paramount and he moved to authorize the General Manager to assist the Developer to locate the water line with Kent County Water Authority equipment and that all issues be resolved prior to the Authority taking a position on the amendment sought including the other utilities and the Developer will pay an hourly rate for same to Kent County Water Authority and it was seconded by Board Member Graham and it was unanimously,

VOTED: To authorize the General Manager to assist the Developer to locate the water line and resolve all of the issues prior to the Authority taking a position on the amendment sought including the other utilities and the Developer will pay an hourly rate for same to Kent County Water Authority.

## Legal Matters

### Welgen Tank (Amgen/Immunex) Mechanics Lien

Counsel for the Defendant (Amgen/Immunex) entered an appearance just prior to the September 13, 2004 Superior Court hearing. Kent County Water Authority counsel requested two week continuance for Kent County Water Authority motion to intervene. Legal Counsel agreed to a continuance to September 27, 2004 and forwarded to the counsel for the Defendant documents evidencing ownership interest of Kent County Water Authority in and to tank and perpetual easement rights. Counsel for Defendant contacted Legal Counsel on September 14, 2004 and stated that the Defendant had no objection to the motion of Kent County Water Authority. Plaintiff's counsel did not object to the motion of Kent County Water Authority, therefore, Legal Counsel will proceed without objection from either party on September 27, 2004 to intervene in order to protect the rights of the Authority in this matter. That Legal Counsel has drafted a reply to the action which will be filed.

### Washington Village Litigation

The water line was installed by the Authority and other than spring reseeding, if necessary, the matter is closed.

### E. J. Prescott lawsuit

On October 12, 2004 the Court denied Prescott's Motion for Summary Judgment and allowed Kent County Water Authority to move for summary judgment which the Court granted. The transcript has been reviewed and the order drafted and the other side is reviewing our proposed order, however, it is anticipated that E.J. Prescott will have picayune objections and ultimately the Judge will decide the form of order.

### Dig Safe Violation/John Rocchio Corporation

On June 15, 2004, a hearing was held by the Division of Public Utilities and Carriers Hearing Officer, David Gentile, regarding the Tiogue Avenue/Williams Street breach by John Rocchio Corporation. The Authority presented witnesses and legal authorities and Mr. Rocchio did not. A decision is pending.

### John Rocchio Corporation – Monies Owed

Both Superior and District Court matters are in suit and the answer of the Defendant was just received. A motion to assign is scheduled in the Superior Court on July 26, 2004. Interrogatories were sent to Rocchio on July 6, 2004 and are due on August 15, 2004. No response has been received and a Rule 37 (meet and confer) letter was sent on August 18, 2004. Motions have been filed in both cases to compel Rocchio to answer the interrogatories.

On September 13, 2004, the Kent County Superior Court granted the Plaintiff's motion to compel the Defendant to provide answers to the discovery on or before October 13, 2004. On September 16, 2004, the Third Division District Court granted Plaintiff's motion to compel Defendant to answer discovery on or before October 16, 2004. The Attorney for the Defendant, Mr. Salvadore had contacted Legal Counsel and asked for an extension to November 8, 2004, which Legal Counsel granted. Mr. Salvadore asked for an extension until November 19, 2004 and that was granted, but if this discovery is not forwarded on that date, a motion to default will be promptly filed thereafter.

#### Electronic Filing

All filings have been completed and accomplished to the Secretary of State Office on a regular basis. Not surprisingly, a problem has arisen with the State of Rhode Island Secretary of State in that their system can not accept scanned exhibits for retrieval by the public and does not want to accept the exhibits after lengthy phone calls. The advice from the State was to check off the box which says that the exhibits were not produced. Petrarca & McGair, Inc. will have its computer expert attempt to coordinate with the State of Rhode Island to accomplish the same. Otherwise, the Authority will have to produce exhibits to watch dog groups which defeats the purpose of the electronic Town Crier.

#### Outstanding Bills/Coventry

In an effort to avoid litigation with the Town of Coventry, Legal Counsel, after a conference with the Town Solicitor, forwarded a letter demanding payment in the amount of \$6,341.43. The letter gave a ten (10) day period for action by the Town which after the ten days if unsatisfied, the Authority would file a complaint. Legal Counsel placed a telephone call to the Town Solicitor and learned that he was out of the Country until 10/21/04. Pursuant to previous board direction, if the Town Solicitor is unable to obtain the payment, Legal Counsel would proceed with litigation after the new deadline of November 8, 2004, and the Solicitor will accept service on behalf of the Town and Legal Counsel conversed subsequently to the Solicitor and it was determined that the payment would be forthcoming.

#### Blackrock Road Transmission Main/ C.B.

The contract specifies that the matter may be litigated at the option of the contractor either during or after the completion of the project. The General Manager and Legal Counsel have conferred and discussed the ramifications and the issues presented concerning the "borrow" materials. The General Manager and Legal Counsel will continue to monitor.

#### Read School House Road

The easements have been recorded. The as-built drawings have still not been received. It is the opinion of John Duchesneau that the surveyor/engineer for the Town

provide this and that the Town would now have to engage a surveyor to prepare as-built drawings and it is unlikely that the Town will do so.

**Director of Finance Report:**

Mr. Williams explained and submitted the financial report and comparative balance sheets, statements of revenues, expenditures, and cash receipts, disbursements through October, 2004 which is attached as "E" and after discussion, Board Member Boyer moved and seconded by Board Member Graham to accept the reports and attach the same as an exhibit and that the same be incorporated by reference and be made a part of these minutes and it was unanimously,

VOTED: That the financial report, comparative balance sheet statement of revenues, expenditure, cash receipts and disbursements through October, 2004 be approved as presented and be incorporated herein and are made a part hereof as "E".

**POINT OF PERSONAL PRIVILEGE AND COMMUNICATIONS**

Board Member Boyer stated that he had nothing but the highest praise for the General Manager and the staff after viewing them in action on a project.

**General Manager / Chief Engineer's Report:**

**OLD BUSINESS**

**Abbreviated Rate Filing Status**

Previously discussed.

**Discussion Strategic Plan**

Hopefully this matter will be ready for the December meeting.

**North Kingstown Interconnection Agreement Approval**

Legal Counsel has reviewed the Interconnection Agreement pursuant to direction of the Board at the October 20, 2004 meeting and it was moved by Board Member Masterson and seconded by Board Member Boyer to authorize the Chairman to execute the North Kingstown Interconnection Agreement and it was unanimously,

VOTED: To authorize the Chairman to execute the North Kingstown Interconnection Agreement.

## **NEW BUSINESS:**

### **High Service Review**

Santo Lombardi appealed the service denial and said documents are attached as “F”, including the chart of High Service Applications. It was moved by Board Member Masterson and seconded by Board Member Graham for the Chairman to grant approval because of emergency and extreme hardship consideration subject to standard stipulations, including rules and regulations and subject to due diligence by the General Manager in his discretion and it was unanimously,

VOTED: For the Chairman to grant approval because of emergency and extreme hardship consideration subject to standard stipulations, including rules and regulations and subject to due diligence by the General Manager in his discretion.

### **Task Order 5, C&E Approval Warwick Emergency Interconnection**

The General Manager presented for recommendation Task Order #5 to investigate the feasibility of constructing a multi directional interconnection for emergencies to C & E Engineering Partners, Inc. in the total amount of \$4,200.00 for the Task Order 5A and \$5,400 for the Task Order 5B which is attached as “G” and it was moved by Board Member Graham and seconded by Board Member Boyer to approve to C & E Engineering Partners, Inc. in the total amount of \$4,200.00 for the Task Order 5A and \$5,400 for the Task Order 5B which are attached as “G” and it was unanimously,

VOTED: To approve to C & E Engineering Partners, Inc. in the total amount of \$4,200.00 for the Task Order 5A and \$5,400 for the Task Order 5B which are attached as “G”.

### **Task Order Treatment Piloting Study Mishnock Wellfields**

This matter is on hold.

### **Office Discussion**

Board Member Graham wanted this on the Agenda and asked about carbon monoxide, smoke detectors, exit signs and doors being locked. She further stated that the Board Members are supposed to be part of the answer not part of the problem and that the Rules and Regulations should be our guide and defend the policies of Kent County Water Authority.

### Adjacent Real Estate

It was moved by Board Member Masterson and seconded by Board Member Boyer to add the Adjacent Real Estate issue to the Agenda for discussion only and it was unanimously,

VOTED: To add the Adjacent Real Estate issue to the Agenda for discussion only.

The Souliere Appraisal was received and the value is nominal, \$5,000.00 and the General Manager would like it discussed. The Chairman stated that the Board had previously indicated that the General Manager should proceed.

### Site Survey

It was moved by Board Member Masterson and seconded by Board Member Boyer to add the Site Survey issue to the Agenda for discussion only and it was unanimously,

VOTED: To add the Site Survey issue to the Agenda for discussion only.

The General Manager stated that there are 800 square feet to the north of the building and a small wall. The boundary must be defined as it would be needed to install a side door and a ramp.

### Burlingame Park

It was moved by Board Member Masterson and seconded by Board Member Boyer to add the Burlingame Park issue to the Agenda for discussion only and it was unanimously,

VOTED: To add the Burlingame Park issue to the Agenda for discussion only.

The General Manager stated that the cul-de-sac loop may require Board action at a later date with an amendment to the Rules and Regulations for the benefit of the Authority.

### DEM Wellfield Expansion

It was moved by Board Member Masterson and seconded by Board Member Boyer to add the DEM Wellfield Expansion issue to the Agenda for discussion only and it was unanimously,

VOTED: To add the DEM Wellfield Expansion issue to the Agenda for discussion only.

The General Manager stated that the Governor has called a meeting regarding the permit with the Chairman. Board Member Masterson and Legal Counsel to attend on November 30, 2004 at 4:00 p.m.

**CAPITOL PROJECTS:**  
**INFRASTRUCTURE PROJECTS :**

**Setian Lane New Pumping Station and Frenchtown Rehabilitation**

It was moved by Board Member Graham and seconded by Board Member Boyer to take legal action and it was unanimously,

VOTED: To take legal action.

**Oaklawn Meter Pit**

The contractor, C.B. Utility Co., Inc. misplaced the placement of the meter pit again and the contractor went to owner himself albeit it is not a party to the easement. The General Manager stated that the contractor was extremely negligent in its lack of due diligence and its conduct in contacting the owner was shameful and not in the best interest of Kent County Water Authority.

It was moved by Board Member Graham and seconded by Board Member Boyer that the General Manager and Legal Counsel take appropriate action to resolve the matter and it was unanimously,

VOTED: That the General Manager and Legal Counsel take appropriate action to resolve the matter.

All other Capitol Projects and Infrastructure Projects are addressed in an exhibit attached as "H" as prepared and described to the Board by the General Manager with general discussion following.

Board Member Graham made a Motion to adjourn, seconded by Board Member Board Member Gallucci and it was unanimously,

VOTED: To adjourn the meeting at 7:00 P.M.

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Secretary Pro Tempore

# **EXHIBIT A**

November 17, 2004

# REVIEW OF TASK ORDER 3 CONCLUSIONS & RECOMMENDATIONS

## Task Order 2 - Previous

MDD approved projects is equal to 3.01 MGD.

High Service Gradient has a current surplus capacity of 3.17 MGD. OK for approved projects

Shortage of water supply in the High Service Gradient of approximately 4.62 MGD.

Task Order 3 - identify Authority's current and proposed projects to augment supply capabilities of the High Service Gradient. Evaluate effectiveness.

## Task Order 3 - Summary and Conclusions

1. The current overall water system maximum day demand multiplier has been determined through historical records analysis to be 2.13. The regulatory (Authority policy) maximum day multiplier of 2.5, which has been used to estimate water demand for all types of user classifications, may over estimate (i.e. result in to conservative estimate) of the required volume of water supply.
2. A maximum day multiplier was developed for various user types including residential, commercial and industrial and has been presented herein. These maximum day multipliers are reasonable and continue to provide a degree of conservatism in estimating water demands for various user types.
3. The identified developments in Attachment No.1 demand spreadsheet were readjusted based on these modified maximum day multipliers and the calculated demand was reduced by approximately 15% (e.g. 8.13 MGD to 6.90 MGD).
4. Even with the reduced maximum day demands, the High Service Gradient portion of the water system continues to lack the supply volume needed to meet these the water demands associated with these new developments.
5. The total supply deficit for the High Service Gradient is equal to 3.73 MGD (see Table 1). One of the major development projects, Center of New England, provided a phased development plan over 5 years. Taking this into consideration the shortfall for 2005 is 1.87 MGD and extends to 3.73 MGD in year 2009.
6. The total maximum day demand with these known developments when added to the existing system maximum day demand is equal to 26.74 MGD which is in excess of the current total system supply capacity of 22.0 MGD identified in the WSSMP. The WSSMP identified the 20 year projected grow out at 26.6 MGD, which occurred at a rate far greater than anticipated.
7. There exists potential to reduce the maximum day demands through customer water conservation including bans and outdoor water use restrictions as well as other conservation techniques. This would necessarily require a policy decision of the Authority and the success of any program would likely depend upon customer awareness, notification and participation. Ultimately, success will rely upon the customer's perceived need for water conservation and the Authority's method of enforcement. The Authority currently employs a year round outdoor water use restriction (odd/ even basis). The success of this restriction should be monitored.
8. It is expected that additional, as of yet unquantified growth will occur and further increase the supply shortfall of the system. It is considered prudent to develop a planning number (estimated at 20% over current maximum day demand) to account for this additional future demand. This would be assessed in at minimum five years (or with update of WSSMP) and supply figures and planning values adjusted accordingly for the future. A future planning supply number incorporating this 20% factor is equal to 30.72 MGD.
9. Supply projects were assigned a rating based on their stage of development. Projects that were well quantified were assigned an "A" or "B" rating along with an estimate of the potential increase in available supply associated with the project. Projects rated "C" are conceptual in nature or have undefined planning horizons.

"A"

10. The current supply capacity of the Low Service Gradient is 17.05 MGD. The projects rated "A" and "B" would increase the total supply capacity to 34.32 MGD or an additional 17.27 MGD. The current maximum day demand in this portion of the system is equal to 16.67 MGD. A total of 7.33 MGD of this available supply is dedicated to meet the needs of the High Service Gradient. This results in approximately 27.0 MGD (34.32 – 7.33) to meet the maximum day demand of the Low Service Gradient. This is in excess of the current Low Service maximum day demand of 16.67 MGD and results in supply surplus to this portion of the system of approximately 10.32 MGD.
11. The High Service Gradient draws directly from the Low Service Gradient for its source of supply. A total supply capacity from the Low Service to supply the High Service is equal to 7.33 MGD. Additional supply capacity from projects (Mishnock Well, Read School House Road Pumps in Clinton Avenue facility, Johnson Boulevard pump station increase) that would supply this portion of the system directly total 6.32 MGD for a total available supply capacity of 12.65 MGD. The total projected maximum day demand for this portion of the system from all known development projects are projected at 10.88 MGD, which results in a surplus capacity of approximately 1.77 MGD.
12. The following Tables 5A and 5B illustrate the potential water surplus as a result of the projects identified herein.

**TABLE 5A**  
**SUMMARY - LOW SERVICE CAPACITY ANALYSIS WITH SUPPLY PROJECTS**

Total Capacity (w/ supply projects)	34.32 MGD
Current Capacity	17.05 MGD
<b>Supply Capacity Increase</b>	<b>17.27 MGD</b>
Supply to High Service	7.33 MGD
<b>Increase in Available Supply Capacity</b>	<b>9.94 MGD</b>

Total Available Supply Capacity <sup>(1)</sup>	26.99 MGD
Current Maximum Day Demand <sup>(2)</sup>	19.03 MGD
<b>Surplus Available Capacity</b>	<b>7.96 MGD</b>

1.  $34.32 - 7.33 = 26.99$  MGD, Table 3 in column 3.
2.  $(16.67 - 0.81) = 15.86 * 1.2 = 19.03$

**TABLE 5B**  
**SUMMARY – HIGH SERVICE CAPACITY ANALYSIS WITH SUPPLY PROJECTS**

Total Capacity (w/ supply projects)	12.65 MGD
Current Capacity	6.33 MGD
<b>Increase in Available Supply Capacity</b>	<b>6.32 MGD</b>

Total Available Supply Capacity <sup>(1)</sup>	12.65 MGD
Current & Projected Maximum Day Demand <sup>(2)</sup>	11.68 MGD
<b>Surplus Available Capacity</b>	<b>0.97 MGD</b>

1. From Table 4 column 3.
2. Includes all identified development projects (6.90 MGD) plus current maximum day demand (3.17 MGD) plus current Read School House Road demand (0.81 MGD) plus 20% allowance for future development.
13. The water system would appear capable of meeting the planning number of 30.72 MGD (19.03 + 11.68) as these source augmentation projects supply sufficient capacity. It is important to note however that the surplus capacity is far greater in the Low Service and that further development in the High Service Gradient could easily surpass the available surplus capacity of 0.97 MGD.
14. Hydraulic modeling of the water system with these supply projects under a maximum day scenario for a 48 hour extended time period indicated that the system can satisfactorily meet these projected demands. The storage tanks are adequately replenished during peak demand periods and there are no identified adverse impacts to the system.

**Task Order 3 - Recommendations**

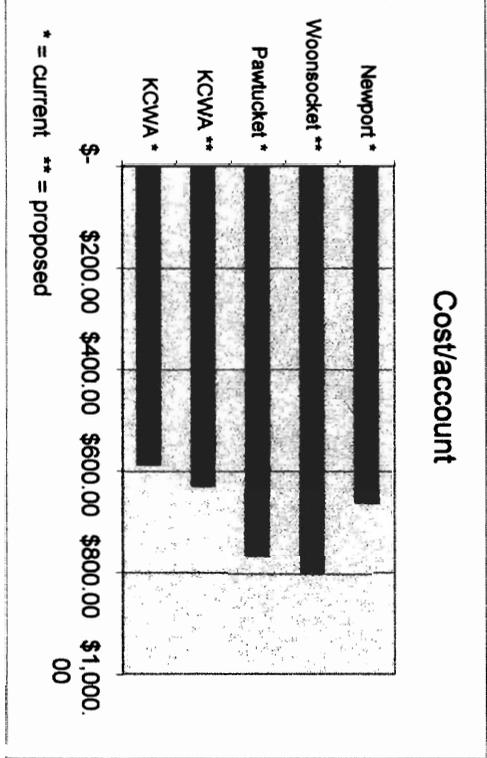
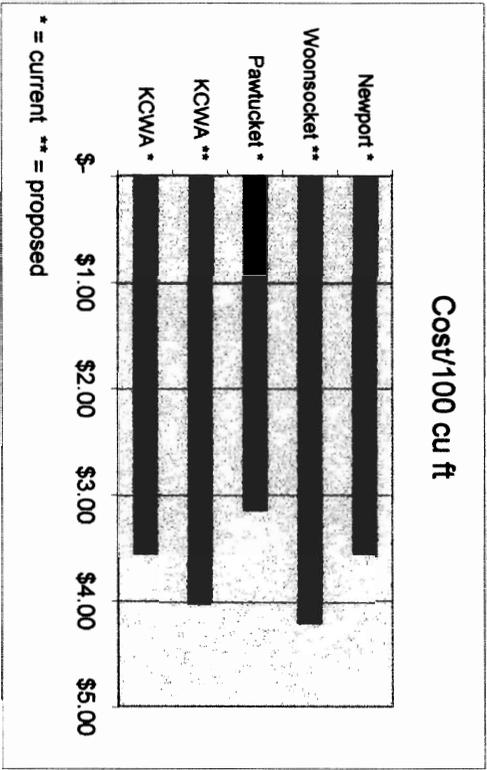
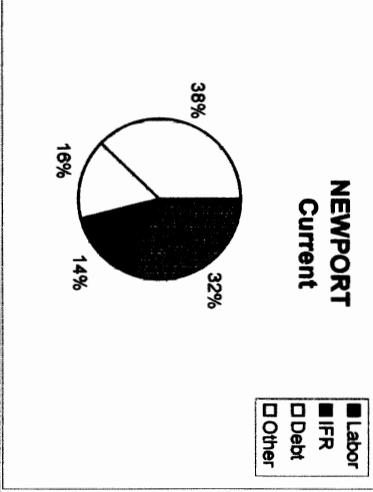
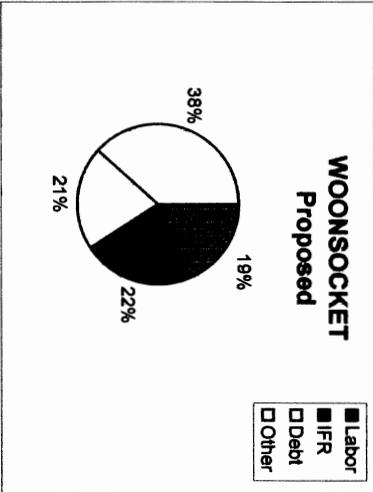
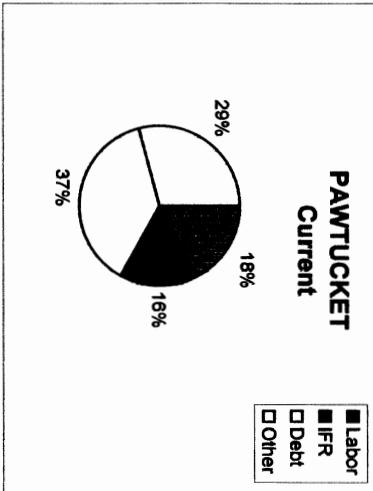
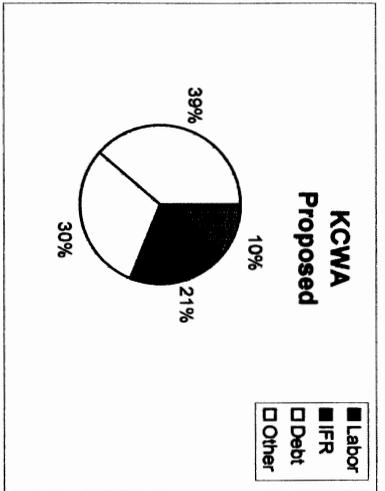
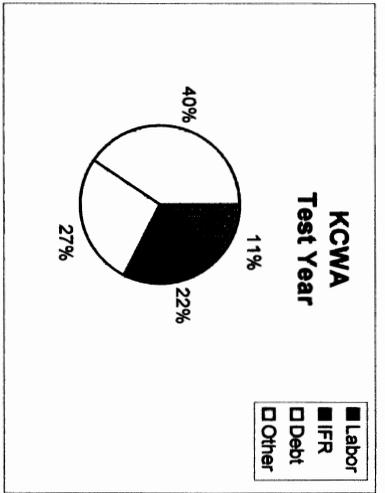
1. The Authority for purpose of estimating water demands should consider adopting the maximum day multipliers presented herein for purposes of planning and estimating water demands by user category. When possible, the estimates should be backed by actual or historical usage results.
2. The potential beneficial effects of customer water conservation should be considered as a potentially effective means of reducing maximum day water demands.
3. Even with adjusted maximum day demands, the existing High Service Gradient portion of the water system will continue to lack adequate supply volume needed to meet the needs of all projected growth without the supply augmentation projects. The need for source augmentation projects are clearly evident and should be actively continued and pursued. This is especially critical for projects as related to source augmentation in the High Service.

4. It is also likely that additional growth will continue to occur and should be monitored especially in the High Service Gradient where there is less of a surplus available water supply. It is recommended that additional supply augmentation in the High Service Gradient be pursued including those projects, which were identified as "C" rated. The time horizon for the need for these projects cannot be quantified at this time and will be a function of the rate of development as it is allowed to occur in this area of the water system.
5. Consideration should be given to projects that supply the High Service Gradient directly with water. Currently, the majority of water is boosted into the High Service from the Low Service that requires pumping water twice (higher energy costs). A potential source of supply may be from existing well stations, which could be converted to supply the High Service directly especially given the fact that the Low Service will have an apparent greater surplus of supply capacity.
6. The Authority should consider an evaluation of the storage supply capacity in the system. This will be critical in both the Low and High Service as the system is expanded and new supply sources are brought on line. As water demand increases throughout the system, the total available capacity of the storage tank systems may not be adequate.
7. The Authority should closely monitor development as it occurs throughout the entire water system. Water supply records (i.e. wholesale meter records, well pump station supply, etc.) should be closely monitored during periods of peak summer demands to ensure that customer demand is not outpacing supply capability. This should be performed in conjunction with any customer water conservation programs in order to gauge their effectiveness.

# **EXHIBIT B**

November 17, 2004

"B"



\* = current \*\* = proposed

\* = current \*\* = proposed

# **EXHIBIT C**

November 17, 2004

## COMPARISON TO CURRENT RATES

		<u>Current</u>	<u>New Rates</u>		
			<u>25%</u>	<u>45%+</u>	
<u>Metered Rates</u>					
1	(5/8-2" meters)	\$2.851	\$3.57	\$	4.16
2	(3&4" meters)	\$2.416	\$3.02	\$	3.54
3	(6" & up meters)	\$2.047	\$2.56	\$	3.02
<u>Service Charges</u>					
<u>Quarterly</u>					
	5/8 & 3/4	\$6.60	\$8.26	\$	8.83
	1	\$7.92	\$9.91	\$	11.18
	1 1/2	\$10.40	\$13.01	\$	15.59
	2	\$12.54	\$15.69	\$	19.41
	3	\$15.35	\$19.20	\$	24.41
	4	\$20.80	\$26.02	\$	34.11
	6	\$32.86	\$41.11	\$	55.57
	8 & up	\$53.83	\$67.35	\$	92.91
<u>Monthly</u>					
	5/8 & 3/4	\$5.50	\$6.88	\$	6.87
	1	\$5.94	\$7.43	\$	7.66
	1 1/2	\$6.76	\$8.46	\$	9.13
	2	\$7.48	\$9.36	\$	10.40
	3	\$8.42	\$10.53	\$	12.07
	4	\$10.23	\$12.80	\$	15.30
	6	\$14.25	\$17.83	\$	22.45
	8 & up	\$21.24	\$26.57	\$	34.90
<u>Fire Service (per quarter)</u>					
<u>Public</u>					
	/hydrant	\$95.30	\$119.23	\$	134.22
	/bill	\$4.95	\$6.19	\$	5.89
<u>Private (per quarter)</u>					
	4 in	\$41.59	\$52.03	\$	52.62
	6 in	\$109.46	\$136.95	\$	141.63
	8 in	\$225.85	\$282.57	\$	295.16
	10 in	\$402.60	\$503.71	\$	526.10
	12 in	\$646.64	\$809.03	\$	846.17
	hydrant	\$109.46	\$136.95	\$	141.63

# **EXHIBIT D**

November 17, 2004

**IMPACT OF PROPOSED RATES - QUARTERLY WATER BILLS**

METER SIZE	QUARTERLY USE - CU FT	CURRENT RATES	25% Incr.		45% + Incr.	
			Quart Bill	Increase	Quart Bill	Increase
Small						
5/8	2,000	\$63.62	\$79.66	\$ 16.04	\$92.03	\$ 28.41
5/8	2,500	\$77.88	\$97.51	\$ 19.64	\$112.83	\$ 34.96
5/8	3,500	\$106.39	\$133.21	\$ 26.83	\$154.43	\$ 48.05
5/8	4,000	\$120.64	\$151.06	\$ 30.42	\$175.23	\$ 54.59
5/8	5,000	\$149.15	\$186.76	\$ 37.61	\$216.83	\$ 67.68
5/8	6,000	\$177.66	\$222.46	\$ 44.80	\$258.43	\$ 80.77
5/8	6,666	\$196.65	\$246.24	\$ 49.59	\$286.14	\$ 89.49
5/8	8,000	\$234.68	\$293.86	\$ 59.18	\$341.63	\$ 106.95
5/8	10,000	\$291.70	\$365.26	\$ 73.56	\$424.83	\$ 133.13
5/8	12,000	\$348.72	\$436.66	\$ 87.94	\$508.03	\$ 159.31
5/8	14,000	\$405.74	\$508.06	\$ 102.32	\$591.23	\$ 185.49
5/8	15,000	\$434.25	\$543.76	\$ 109.51	\$632.83	\$ 198.58
5/8	20,000	\$576.80	\$722.26	\$ 145.46	\$840.83	\$ 264.03
5/8	25,000	\$719.35	\$900.76	\$ 181.41	\$1,048.83	\$ 329.48
1	30,000	\$863.22	\$1,080.91	\$ 217.69	\$1,259.18	\$ 395.96
1	40,000	\$1,148.32	\$1,437.91	\$ 289.59	\$1,675.18	\$ 526.86
1	46,666	\$1,338.37	\$1,675.89	\$ 337.52	\$1,952.49	\$ 614.12
1	75,000	\$2,146.17	\$2,687.41	\$ 541.24	\$3,131.18	\$ 985.01
2	100,000	\$2,863.54	\$3,585.69	\$ 722.15	\$4,179.41	\$ 1,315.87
2	200,000	\$5,714.54	\$7,155.69	\$ 1,441.15	\$8,339.41	\$ 2,624.87
2	300,000	\$8,565.54	\$10,725.69	\$ 2,160.15	\$12,499.41	\$ 3,933.87
2	400,000	\$11,416.54	\$14,295.69	\$ 2,879.15	\$16,659.41	\$ 5,242.87
2	600,000	\$17,118.54	\$21,435.69	\$ 4,317.15	\$24,979.41	\$ 7,860.87
Medium						
3	200,000	\$4,847.35	\$6,059.20	\$ 1,211.85	\$7,104.41	\$ 2,257.06
3	400,000	\$9,679.35	\$12,099.20	\$ 2,419.85	\$14,184.41	\$ 4,505.06
3	600,000	\$14,511.35	\$18,139.20	\$ 3,627.85	\$21,264.41	\$ 6,753.06
4	800,000	\$19,348.80	\$24,186.02	\$ 4,837.22	\$28,354.11	\$ 9,005.31
4	1,000,000	\$24,180.80	\$30,226.02	\$ 6,045.22	\$35,434.11	\$ 11,253.31
4	1,200,000	\$29,012.80	\$36,266.02	\$ 7,253.22	\$42,514.11	\$ 13,501.31
Large						
6	400,000	\$8,220.86	\$10,281.11	\$ 2,060.25	\$12,135.57	\$ 3,914.71
6	600,000	\$12,314.86	\$15,401.11	\$ 3,086.25	\$18,175.57	\$ 5,860.71
6	800,000	\$16,408.86	\$20,521.11	\$ 4,112.25	\$24,215.57	\$ 7,806.71
6	1,200,000	\$24,596.86	\$30,761.11	\$ 6,164.25	\$36,295.57	\$ 11,698.71
6	1,333,333	\$27,326.19	\$34,174.43	\$ 6,848.25	\$40,322.23	\$ 12,996.04
8	2,000,000	\$40,993.83	\$51,267.35	\$ 10,273.52	\$60,492.91	\$ 19,499.08
8	5,000,000	\$102,403.83	\$128,067.35	\$ 25,663.52	\$151,092.91	\$ 48,689.08
8	10,000,000	\$204,753.83	\$256,067.35	\$ 51,313.52	\$302,092.91	\$ 97,339.08
8	24,000,000	\$491,333.83	\$614,467.35	\$ 123,133.52	\$724,892.91	\$ 233,559.08
Municipal Fire	300 hydrants	\$28,594.95	\$35,775.19	\$ 7,180.24	\$40,271.89	\$ 11,676.94
Private Fire	6" Service	\$109.46	\$136.95	\$ 27.49	\$141.63	\$ 32.17

"D"

# **EXHIBIT E**

November 17, 2004



KENT COUNTY WATER AUTHORITY  
CASH RECEIPTS & DISBURSEMENTS  
FY 2004 - 2005

	JULY 2004		AUGUST 2004		SEPTEMBER 2004		OCTOBER 2004		NOVEMBER 2004		DECEMBER 2004		JANUARY 2005		FEBRUARY 2005		MARCH 2005		APRIL 2005		MAY 2005		JUNE 2005		RATE REVENUE FY 04-05		RATE REVENUE FY 03-04	
BEGINNING MONTH BALANCE																												
CASH RECEIPTS:																												
Water Revenues	1,336,534	1,270,930	1,332,028	1,743,524																								
Interest Earned	97,029	21,632	37,160	28,007																								
Contribution in Aid-Construction	60,000		1,500	49,500																								
Inspection Fees	18,500	950		16,775																								
Other																												
TOTAL CASH RECEIPTS	54,978,443	40,815,544	39,685,357	39,907,884																								
CASH DISBURSEMENTS:																												
Purchased Water	290,628	369,075	397,915	707,848																								
Electric Power	50,576	45,914	46,107	36,920																								
Payroll	129,477	131,186	138,455	125,654																								
Operations	124,600	65,554	75,148	120,650																								
Employee Benefits	50,766	48,958	45,501	50,844																								
Legal		19,701	5,839	11,058																								
Materials	39,438	7,122	4,877	11,749																								
Insurance	4,299		126,675	4,271																								
Sales Taxes	19,501	12,246	9,766	29,181																								
Refunds	69	285	1,316	60,000																								
Rate Case																												
Conservation																												
Pilot	8,339			349																								
Capital Expenditures (Other)	3,396	3,715	3,063	2,850																								
2002 Infrastructure	2,185	117,176		2,850																								
2003 Infrastructure	388,934	115,628	70,746	6,642																								
2004 Infrastructure	11,060	5,400	3,046	5,875																								
Methuon W-Up/Stonage/Trans.		18,894																										
Frenchtown - Seidan Tanks																												
Kaony Oak Road 20"	119,681	62,092	7,325	4,363																								
Oaklawn Meter Pit	99,680	12,315	1,841	3,503																								
Clinton Avenue Pump Station	128,788	3,982		6,210																								
E. G. Well Upgrade	28,548	14,419	5,401	6,210																								
GIS Development Mapping	267	1,643																										
Birchcock Road - 24"	10,360	12,030		44,419																								
Hydraulic Model - 8"	1,400,491	495,137	1,1850	1,906																								
Corbanova Road - 8"	5,403	6,887	9,866	2,893																								
Methuon Well Color Evaluation	6,720	2,775	4,450	11,481																								
Middle Road 16"		1,152	2,070	3,195																								
Quaker Lane P. S. Roof																												
Road Schoonhouse Road																												
U. S. Bank - Debt Service (P & I)	13,826,892	22,455	3,526	48,487																								
Water Protection	96,528																											
TOTAL DISBURSEMENTS	15,456,413	2,500,875	1,615,279	1,317,598																								
BALANCE END OF MONTH	39,522,032	38,314,669	38,070,078	38,590,266																								
RIOR YEAR	44,215,984	44,756,824	45,030,913	45,205,537																								

E

# **EXHIBIT F**

November 17, 2004



Timothy Brown  
General Manager  
Kent County Water Authority  
Main Street  
West Warwick, RI 02893



Dear Mr. Brown:

This letter is in reference to my conversation with the Kent County Water Authority regarding the supply of city water to my home. My home is located at 45 Sharon Drive in Coventry.

After furnishing the appropriate paperwork to the KCWA for the installation of city water to my home I was told that my request had been denied.

I am writing this letter today in the hopes that you will bring this matter to the Kent County Water Board to overturn this denial. I ask this because I am in a hardship situation with my current well. Approximately six months ago, my well went dry. I hired a well company to dig a new well, at a very costly price, and it is still not producing any water. We are using strictly bottled water at my home. We can no longer go without running water.

I have no other recourse to supply water to my home. I ask that you consider my situation and allow for city water to be supplied to my home by Kent County Water Authority

Thank you for your help and understanding.

Sincerely,

A handwritten signature in black ink, appearing to read "Sam Lombardi". The signature is written in a cursive style with a large, sweeping "S" at the beginning.

Sam Lombardi



Kent County Water Authority

November 8, 2004

Mr. Santo N. Lombardi  
45 Sharon Drive  
Coventry, RI 02816

Re: Service Request  
45 Sharon Drive  
Coventry, RI 02816

Dear Mr. Lombardi:

We have reviewed your request for water service and must inform you that accelerated development has caused a deficient condition in the service gradient that would ordinarily supply water to your proposed lot. Additional supply into the Kent County Water Authority system is necessary to service further growth in this area. The Kent County Water Authority is unable to provide final approval of the domestic supply necessary to service your lot until the deficient condition can be resolved.

The Kent County Water Authority will contact you when supply conditions have changed and the Board of Directors has determined that further growth can be serviced from the Kent County Water Authority water supply. Please feel free to call us if you have any questions regarding this matter.

Very truly yours,  
Kent County Water Authority

A handwritten signature in black ink, appearing to read "John Duchesneau", is written over the typed name.

John Duchesneau  
Director of Technical Services

cc: Board Members

JD/lms

# **EXHIBIT G**

November 17, 2004

# C & E Engineering Partners, Inc.

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Civil  
& Environmental  
Engineering Partners, Inc.

342 Park Avenue  
Woonsocket  
Rhode Island 02895  
Phone: 401-762-1711  
Fax: 401-235-9088  
Info@ceengineer.com

**TASK ORDER NO. 5  
BETWEEN  
KENT COUNTY WATER AUTHORITY  
AND ENGINEER FOR SERVICES**

**HYDRAULIC MODEL DEVELOPMENT**

**Task 5A – WARWICK EMERGENCY INTERCONNECTION(S) EVALUATION &  
Task 5B- BALD HILL PUMP STATION UPGRADE EVALUATION**

This is Task Order No. 5 attached and made part of the agreement between Kent County Water Authority (OWNER), and C&E Engineering Partners, Inc. (ENGINEER) dated September 9, 2003 for the Development of a Water System Computerized Hydraulic Model. This Task Order describes the Scope of Services, Period of Service and Method and Basis of Compensation associated with the completion of Task 5A of the Warwick Emergency Interconnection(s) Evaluation and Task 5B of the Bald Hill Pump Station Upgrade Evaluation.

## 1.0 SCOPE OF SERVICES

C&E Engineering Partners, Inc. will perform the following tasks requested by the Authority for the completion of the project that will be considered the scope of services for the project.

### **Task 5A – Warwick Emergency Interconnection(s) Evaluation**

C&E shall perform the following tasks related to investigating the technical feasibility of constructing a multidirectional interconnection for emergency water supply. The intent is to provide the ability for the Kent County Water Authority (KCWA) and the City of Warwick the ability to maintain an emergency water connection(s) that would allow each water system to temporarily feed the other in the event of an emergency event. It is envisioned that water from the KCWA system would be transferred by gravity (i.e. flow directly from 334 foot Gradient to 232 foot Gradient) with the use of a pressure reducing valve (PRV) and flow would be transferred from the City of Warwick to KCWA utilizing booster pumps. Therefore the facility(s) would consist a PRV/Booster Pump Station.

Two (2) potential locations have been identified for the location of the emergency interconnection(s). These are located at the approximate intersection of Post Road and Centerville Road and at the approximate intersection of Potters Avenue and Greenwich Avenue. The following are the scope of tasks for the project.

- Identify existing infrastructure for the KCWA water system in the location of the proposed emergency interconnections (i.e. water main size, material, location, etc.) It is

(1) 6 4

assumed that City of Warwick Water Officials will make available similar information to C&E.

- Determine and identify any limiting factors in existing infrastructure that would impact the installation of the proposed emergency interconnection (i.e. PRV/Booster Pump Station). Determine potential tie in location(s) and identify general locations for the installation of the emergency interconnection facility(s).
- Perform hydraulic model simulations utilizing the Authority's hydraulic model to determine potential flow rates through the proposed interconnections. The simulations will be performed to determine general viability only. Infrastructure components identified as limiting factors to hydraulic performance would be identified.
- Upon completion of the modeling effort, information regarding the proposed facility(s) will be summarized including expected flow rate (in both directions).
- Upon completion of this evaluation, a technical memorandum of our finding will be prepared and submitted to Authority staff for review and approval. It should be noted that this assessment does not include investigation of available land area for locating the interconnection(s).

### **Task 5B - Bald Hill Pump Station Upgrade Evaluation**

C&E shall perform the following tasks related to investigating the technical feasibility of expanding the pumping capacity of the existing Bald Hill Pump Station which supplies the Low Service Gradient. This facility has a rated production capacity in the range of 3,200 gpm (4.6 MGD). The Authority desires to evaluate the potential to increase the pumping capacity from this facility to a range of 7,000 gpm (10.0 MGD). In addition, the option of pumping a portion of the total capacity (i.e. estimated at 2.0 MGD) directly into the High Service Gradient is also to be evaluated. The project is to consider limitations in suction and supply mains, discharge mains as well as physical limitations in the pump station building infrastructure and identify improvements that will allow the expansion to occur. The following are the scope of tasks for the project.

- Obtain existing design drawings (as built drawings, if available) of the existing facility including suction and discharge piping connections. Review plans of local infrastructure piping extending into the station (suction and discharge mains).
- Perform a hydraulic analysis of the existing suction and discharge piping at the facility in order to determine any limitations for expansion. This will be premised on Hydraulic Institute Standards, water works design practice and physical limitations of the existing facility.
- Utilize the Authority's hydraulic model to evaluate the transmission and distribution piping in the area of this pumping facility to identify any infrastructure limitations in the area and to simulate improvements necessary to optimize the operation of the upgraded facility. Determine technical viability for expansion along anticipated capacity.
- Upon completion of this evaluation, prepare a technical memorandum of findings which will be submitted to the Authority.

**2.0 PERIOD OF SERVICE**

The time period for performance of the services as set forth in the Scope of Services for Task 5A and Task 5B of the Project shall be approximately 45 days from receipt of a written authorization to proceed. Additional services may materially add to the time required to complete the work of the Project. C&E Engineering Partners, Inc. will be entitled to an equitable adjustment in the Period of Service as a result of services added.

**3.0 BASIS OF COMPENSATION**

Kent County Water Authority shall pay C&E Engineering Partners, Inc. for Basic Services rendered as described above a Not To Exceed Fee for completion of Task 5A of **Four Thousand Two Hundred Dollars (\$ 4,200.00)** and Task 5B a fee of **Five Thousand Four Hundred Dollars (\$ 5,400.00)** which includes Basic and Reimbursable Expenses (mileage, copy, etc.)

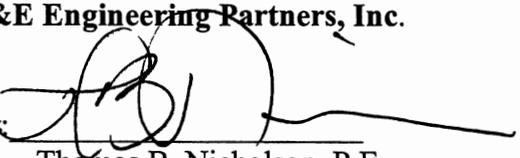
**4.0 ACCEPTANCE**

Acceptance of the terms of this Task Order is acknowledged by the following authorized signatures of the parties to this Agreement.

OWNER  
**Kent County Water Authority**

ENGINEER  
**C&E Engineering Partners, Inc.**

By: \_\_\_\_\_  
Mr. Francis J. Perry  
Chairman

By:   
Thomas B. Nicholson, P.E.  
President

Address for Giving Notices

Address for Giving Notices

Kent County Water Authority  
1072 Main Street  
P. O. Box 192  
West Warwick, Rhode Island 02893

C&E Engineering Partners, Inc.  
342 Park Avenue  
Woonsocket, RI 02895

Date: \_\_\_\_\_

Date: \_\_\_\_\_

# Project Budget - Task Order 5A and 5B

Nov-04

J0261.04

## Task 5A - Warwick Emergency Interconnection Evaluation

Task	Task Description	Chief Engineer \$90		Managing Engineer \$85		Sr. Engineer \$80		Engineer \$60		Subtask Totals	
		Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee
A	Evaluate Existing Infrastructure	0	\$0	4	\$340	0	\$0	0	\$0	4	\$340.00
B	Determine Potential Locations / Evaluation	0	\$0	4	\$340	0	\$0	0	\$0	4	\$340.00
C	Model Simulations	0	\$0	8	\$680	0	\$0	10	\$600	18	\$1,280.00
D	Flow Rate Determination	0	\$0	6	\$510	0	\$0	0	\$0	6	\$510.00
E	Technical Memorandum Preparation	4	\$360	8	\$680	0	\$0	9	\$540	21	\$1,580.00
<b>Task 5A Subtotal</b>		4	\$360	30	\$2,550	0	\$0	19	\$1,140	53	\$4,050.00

Expenses (travel, reproduction, etc.)

\$150.00

**Total Not To Exceed Fee - Task 5A**

**\$4,200.00**

## Task 5B - Bald Hill Pump Station Upgrade Evaluation

Task	Task Description	Chief Engineer \$90		Managing Engineer \$85		Sr. Engineer \$80		Engineer \$60		Subtask Totals	
		Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee
A	Obtain / Review Existing Drawings	0	\$0	6	\$510	0	\$0	4	\$240	10	\$750.00
B	Hydraulic Analysis - Suction/Discharge	0	\$0	8	\$680	0	\$0	0	\$0	8	\$680.00
C	Model Infrastructure Limitations	0	\$0	8	\$680	0	\$0	10	\$600	18	\$1,280.00
D	Technical Viability Determination	3	\$270	6	\$510	0	\$0	4	\$240	13	\$1,020.00
E	Technical Memorandum Preparation	4	\$360	8	\$680	0	\$0	8	\$480	20	\$1,520.00
<b>Task 5B Subtotal</b>		7	\$630	36	\$3,060	0	\$0	26	\$1,560	69	\$5,250.00

Expenses (travel, reproduction, etc.)

\$150.00

**Total Not To Exceed Fee - Task 5B**

**\$5,400.00**

# **EXHIBIT H**

November 17, 2004

**PLANNING DOCUMENT \$25,000/YEAR ALLOCATION**

<b>PROJECT</b>	<b>STATUS</b>
Water Supply System Management Plan WSSMP	Approved & completed 5 year update due 2007
Clean Water Infrastructure Plan	Approval June 13, 2003. 5 year update due 2008
Vulnerability Assessment Bio-Terrorism Bill	Submitted December 19, 2003
Revised Emergency Response Plan	By June 19, 2004
Simplified EFP Topic Sheets/Employee distribution	December 2004

**UPDATED CIP PROJECTS BOND FUNDING**

<b>PROJECT</b>	<b>STATUS</b>
Mishnock Well Field (new wells) CIP - 1A	Project closed out.
Mishnock Transmission Mains CIP - 1B	Project closed out.
Mishnock Treatment Plant CIP - 1C	Project closed out.
R-CIP 19 Tiogue Avenue Main	Project closed out.
East Greenwich Well Treatment Plant – CIP-2	Temporary Sequestering Online.
Blackrock Road Transmission Main – CIP-4	Construction on-going.
Clinton Avenue Pump Station Rehabilitation CIP - 7A	Bid to be set December
Mishnock 4 Well Installation	On hold. RFP 4 & 5 plus control facility / T.P.

**IFR FUNDED PROJECTS**

<b>PROJECT</b>	<b>STATUS</b>
IFR 2003	Construction complete except Pulaski Street
IFR 2004	Design ongoing. Bid to be set December or January
Geographic Information System Base Map	Completed.
Geographic Information System Second Phase	Mapping ongoing.
Tiogue Tank Modified Service Area	Station to be set November 18, 2004.
Knotty Oak Road. Old CIP 5	Construction completed.
Setian Lane new pumping station and Frenchtown vault rehabilitation.	Recommend legal action.
Setian Lane Tank painting	Completed.
Oaklawn Meter Replacement IFR	Pit mis-located, recommend legal action.
PWSB 78" / Johnson Blvd. P.S. Modification	Project to be delayed due to Setian Lane P.S.
Rehabilitation Mishnock #3	Redevelopment completed.
Revised Hydraulic Model	Task order 3 review.
Color Study Mishnock Wells	Piloting task order approval.
<b>PROJECT</b>	<b>STATUS</b>
Web site preparation	Up and running.
Strategic Plan	Sub-committee to develop plan.
Newsletter	Preperation for next issue.
CCR 2003	Mailed.
Colvintown Road	Pipe installed - Services to be installed.