

# KENT COUNTY WATER AUTHORITY

## BOARD MEETING MINUTES

October 20, 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 October 20, 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 September 15, 2004 and the Special Board meeting minutes of September 20, 2004 and September 30, 2004 were moved for approval by Board Member Boyer and seconded by Board Member Graham and the minutes were unanimously approved.

### **Guests:**

Mr. Keith White of Reservoir Road, Coventry, Rhode Island appeared at the meeting and told the Board that he is the owner of two vacant lots near his property and that a family member is elderly and sick and that he has plans and has engaged a designer and builder to make a home for that family member. He was under the impression that this matter would be routine and now had found it to be problematic due to the high service gradient.

Chairman Perry explained the history and the ramifications of the high service gradient and pointed to the simple problems and how product sources have been delayed due to the inaction of the Department of Environmental Management.

Mr. White told the Board that he would be willing to stipulate to no outdoor watering on all of his other property and that he would not build on the remaining vacant lot.

The Board reminded him that no decision would be made since the matter had not been on the Agenda and the Board could not take any action.

## Universal Properties Discussion, Center of New England

Nicholas E. Cambio, President of Universal Properties Group, Inc. appeared before the Board and gave a diatribe which included the Home Depot approval letter of September 30, 2004 by this Board. Chairman Perry reminded him that the Board had extended every courtesy to the Center of New England. Mr. Cambio still emphatically stated that he would not do any of the 20 conditions of the Home Depot approval and that he would install the waterline himself with or without Kent County Water Authority approval and would activate the water with or without Kent County Water Authority approval. He further stated that if any court told him that he could not activate the water line, he would sue the Authority and the Public Utilities Commission. He reiterated that unless he gets what he wants, he would sue everyone. He then abruptly left without discussion and stated that his people who were there would take care of the rest.

Discussion ensued without Mr. Cambio, with John Caito, Professional Engineer for Center of New England and Robert Rapoza, Vice President of Center of New England.

The Chairman reminded them that this Board has tried on many occasions to move forward with Center of New England by a series of agreements and the conditions of the agreements have not been met. In fact that the agreement stated that the waterline would be installed by the Center of New England from Hopkins Hill Road to the New London Turnpike and that the agreement was to be completed in three (3) years. However, when that three (3) years period ended, the Authority extended it for another three (3) years together with conditions which also expired.

The General Manager stated that the Center of New England was to provide the Authority with as-built drawings of the water infrastructure already built on the property and the Board kept that matter on its Agenda for many years in a futile attempt to obtain the Center of New England as-builts which have not been produced as of this meeting.

The Chairman continued that now the properties are being sold and the Center of New England is still engaging in more delays in providing information, and, or in passing information to the Authority. The Chairman continued that in spite of all that, the Authority on September 30, 2004 gave great consideration and acted with great dispatch to provide water to the Home Depot in the Center of New England property with reasonable conditions. At that time, it was understood by all that the as-builts were never going to be produced and as a result, the only alternative would be master metering which was a condition in item no. 20. The Board also on September 30, 2004, stated that if there were further problems that the situation could be re-examined. The Chairman continued that instead of a re-examination, the Board got threats for its consideration and cooperation with the Center of New England.

Chairman Perry explained in great detail the supply capacity issue and the water alternatives which were currently being studied. He reiterated that the Mishnock

Wellfields were to be online now and would have been installed had it not been for the Department of Environmental Management and its inaction for over 4 ½ years.

The Chairman reminded everyone that although the Authority has attempted to help this project, the system can not be sacrificed for one property or entity.

Mr. Caito stated that Mr. Cambio was upset because he believes that the water that should have gone to Center of New England that was now going to Amgen.

Chairman Perry stated that Mr. Cambio's beliefs have run afoul of the facts in this matter. The General Manager stated that Amgen had invested mega amounts of monies in infrastructure in the high service gradient through a booster station and other improvements which brought water from the low service gradient. The General Manager went through the maximum day existing water needs and future demands which included Center of New England and as stated in the past that maximum day has been reached.

The General Manager stated that 13 projects have been approved and not built and 11 more are pending and are all competing for the same water. Mr. Caito stated that Center of New England is no longer interested in master metering. The General Manager pointed out that the alternate is to produce as-builts.

Mr. Caito also asked that the Authority assist Center of New England in its submission with the Department of Environmental Management for construction of a crossing of a wetlands via a letter of support. The Chairman reminded Mr. Caito again that the Board was not attempting to create an untenable situation for Center of New England and the Authority needs to protect the system. The Chairman reiterated that the Center of New England agreement mandated that the Authority would take over the waterline, but it had never received as builts in order to take it over. Mr. Caito acknowledge this to be the case.

Board Member Gallucci confirmed that the reason that master metering was required in stipulation no. 20 was required since the as builts were not produced and in order to assist Center of New England, it had put in the master metering in provision no. 20 to avoid the production of the as builts.

The Chairman stated that there can only be two alternatives, either the Authority would own the waterline or there would be master metering pursuant to no. 20 which would be more beneficial to the Center of New England. The General Manager urged that master metering issue in that it certainly is the best device for a large development to determine the flows to help the fire protection and supply flow issues. The General Manager stated that the Authority does not set aside water, especially when a project does not come to fruition for a great period of time. The Chairman stated and it was confirmed by Legal Counsel that all counterproposals by Center of New England are welcome.

Board Member Boyer stated that as far as he was concerned the as-builts were important for security issues and should be produced and the General Manager agreed. Board Member Graham reiterated that for many years the Authority has been demanding the as-builts from the Center of New England to no avail and has carried it as an agenda item.

The Chairman stated that since Center of New England came into being there has been unprecedented economic development expansion with a concomitant huge demand in West Warwick, Coventry and West Greenwich and unfortunately those areas are in the high service gradient and the water is not in the right place for this expansion.

The Chairman stated that the Authority is working on finalizing its strategic plan in order to work on alternative solutions to get water.

Mr. Rapoza, Vice President of Center of New England was surprised to learn from the General Manager that master metering could eliminate the necessity of easement as long as the Rules and Regulations are followed.

Technical Service Director, John Duchesneau, stated that he had sent a review letter regarding design in August, 2004 and has not heard back from Center of New England.

The General Manager stated that Home Depot and Randolph Bank have been approved. Mr. Rapoza also agreed that the Kent County Water Authority had been accommodating and has granted an extension in the past.

## **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.

### **Washington Village Litigation**

A consent judgment was filed in the Kent County Superior Court on September 22, 2004 thereby ending the litigation. The Defendant, Washington Village did tender

\$15,000 to the Authority for damages and the Authority will use those funds to buy materials and relocate the waterline within the easement sometime prior to December, 1, 2004.

#### 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. A judgment will enter after the transcript is filed by the Court Stenographer.

#### Setian Lane Tank Painting/Enc.

The Kent Superior Court in the case of Kent County Water Authority vs. Clavin was dismissed by the parties and was filed with the Court on September 21, 2004 and a stipulation of withdrawal with prejudice of arbitration statement notices of April 2, 2004, April 14, 2004 and April 30, 2004 was executed by the parties on September 20, 2004 by Clavin and on September 21, 2004 by the Authority. The matter is now fully settled and adjudicated.

#### 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. If this discovery is not forwarded on that date, a motion to default will be promptly filed thereafter.

John Rocchio Corporation (Dig Safe) – Report filed May 11, 2004 regarding incident on Cedar Avenue, East Greenwich of 5/3/04

An informal hearing was held by the Department of Public Utilities and Carriers and the Hearing Officer found for the Authority that it had marked the services in accordance with the law.

Electronic Filing

All filings have been completed and accomplished to the Secretary of State Office on a regular basis.

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 which will be after this meeting. Pursuant to previous board direction, if the Town Solicitor is unable to obtain the payment, Legal Counsel will proceed with litigation.

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. The General Manager will schedule a meeting with Joseph J. McGair, Esq. and the engineer based upon new information to determine the best course of action.

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.

Universal Properties Group, Inc. APRA request

Universal Properties Group, Inc, sent an APRA request on September 15, 2004 to which the Authority timely responded together with an estimate of charges and on September 27, 2004 Universal Properties Group, Inc. sent a unusual amended records request which appeared to be unclear, however, despite the lack of clarity, the Authority timely responded together with an estimate on October 7, 2004 by certified mail, return receipt requested. The Authority is awaiting the payment and when the payment is received, the Authority will proceed with the request.

### **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 September, 2004 which is attached as "A" 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 September, 2004 be approved as presented and be incorporated herein and are made a part hereof as "A".

### **POINT OF PERSONAL PRIVILEGE AND COMMUNICATIONS**

The Chairman stated that the Council President of Coventry had stated that there was a lawsuit against North Smithfield regarding water issues.

He also had read that Council Candidate Constantino wanted a splash pad for kids which may be contrary to the Kent County Water Authority odd/even conservation policy.

Board Member Graham stated that she was perturbed that the Department of Environmental Management has not seen fit to reply to the response of the Authority which was sent on October 1, 2004 and that this points to the unprofessional approach to the issue and Board Member Boyer concurred.

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

### **OLD BUSINESS**

#### **Abbreviated Rate Filing Status**

The General Manager stated that he has met with financial advisors and legal counsel will be filing an infrastructure and a rate filing hopefully to be targeted in November, 2004.

### **NEW BUSINESS:**

#### **Bid Awards**

##### **Rock and Boulder Removal/Middle Road**

The General Manager stated that the bid for \$225,000 which is attached as "B" was too expensive for the joint purchasing with the Town of East Greenwich and at \$225,000 the Authority can not afford to do the project at this time and he recommended that the Board reject the bid. It was moved by Board Member Masterson and seconded by Board Member Boyer to reject the bid of \$225,000 for rock removal as too expensive and therefore unwarranted at this time and it was unanimously,

VOTED: To reject the bid of \$225,000 for rock removal as too expensive and therefore unwarranted at this time.

##### **Billing Forms**

The General Manager stated that there was one respondent, Moore Wallace North America, Inc. in the amount of \$15,482.80. The bid was acceptable as advertised however, Moore Wallace North America, Inc. improperly added conditions to the bid. Board Member Boyer moved and it was seconded by Board Member Graham that the bid be awarded as advertised without the conditions imposed on the bid which are considered a nullity and it was unanimously,

VOTED: To award the bid to Moore Wallace North America, Inc. in the amount of \$15,482.80 as advertised without the conditions imposed on the bid which are considered a nullity which is attached hereto as "C".

### Discussion Strategic Plan

The General Manager recommends that the preliminary strategic plans be sent to the subcommittee for final revision prior to approval by the Board. That without further comment from the Board, the Chairman directed that the subcommittee revise the preliminary plan for final revision.

### North Kingstown Interconnection Agreement Approval

The North Kingstown Interconnection Agreement will be reviewed by Legal Counsel and the General Manager and it is the sense of the Board that the Agreement after review should be approved.

### Water Systems Consulting Group-Request for Additional Fee

The consulting group responsible for the strategic plan were seeking an additional \$3,000 which is attached as “D” and the General Manager recommended that it was unwarranted and it was the sense of the Board that this increase be rejected. It was moved by Board Member Graham and seconded by the entire Board to reject the increase of \$3,000 for Water Systems Consulting Group and it was unanimously,

VOTED: To reject the increase of \$3,000 for Water Systems Consulting Group which is attached as “D”.

### CDM Request for Additional Fee

The General Manager stated that Camp, Dresser & McKee report needed revision because of mistakes as pointed out by the Department of Health and this needed to be corrected. The Authority can not be held responsible for vendor errors. Additionally, Camp, Dresser & McKee was paid to coordinate approvals with the Town of Coventry and Amgen regarding transmission lines and approvals are still not in place.

Board Member Graham moved that the Authority reject the \$29,000 additional fee for Camp, Dresser & McKee as unwarranted as attached as “E” and it was seconded by the entire Board and it was unanimously,

VOTED: To reject the \$29,000 additional fee for Camp, Dresser & McKee as unwarranted as attached as “E”.

### Pare Engineering Request for Additional Fee

The request is for \$5,000 additional fee concerning water supply system management plan for 2001 as monies in unused expenses be shifted into Pare

Engineering fees. The General Manager stated that they had a not to exceed fee. It was moved by Board Member Graham and seconded by the entire Board to reject Pare Engineering request for additional fee as attached as “F” as unwarranted and it was unanimously,

VOTED: To reject Pare Engineering request for additional fee as attached as “F” as unwarranted.

### Actuary Services

Summit Financial which had been present at the September 15, 2004 board meeting stated that it would be interested in assuming the actuarial duties from NRS Company for the amount of \$2,400 and the Authority is paying much less than that with NRS. The Chairman stated, and it was the sense of the Board that there was no need to change at this time.

### Kent County Water Authority Water Conservation Action Plan Approval

The General Manager stated that it was his recommendation that the Board should authorize the Kent County Water Authority Water Conservation Action Plan which is attached as “G”. Board Member Gallucci stated that his concern was that coordination with the City of Warwick Water Department is essential and did not want to interfere with the ability of the Authority to obtain water from other services, including Warwick.

Board Member Graham moved that the Board authorize the General Manager to proceed with developing the Kent County Water Authority Water Conservation Plan and it was seconded by Board Member Gallucci and it was unanimously,

VOTED: To authorize the General Manager to proceed with developing the Kent County Water Authority Water Conservation Plan.

### Middle Road KCWA/Town of East Greenwich Joint Effort

This matter was previously discussed under Rock and Boulder Removal/Middle Road. The General Manager stated that the joint effort with the Town of East Greenwich is now cost prohibitive at this time and costs could reach as high as \$500,000. He recommended that the \$60,000 should be returned to the Town of East Greenwich as the rock removal was rejected previously in this meeting.

It was moved by Board Member Masterson and it was seconded by Board Member Boyer to return the \$60,000 to the Town of East Greenwich and notify the Town of not proceeding with this project at this time and it was unanimously,

VOTED: To return the \$60,000 to the Town of East Greenwich and notify the Town of not proceeding with this project at this time.

It was moved by Board Member Masterson and seconded by Board Member Graham to add the Ladd School issue to the Agenda for discussion only and it was unanimously,

VOTED: To add the Ladd School issue to the Agenda for discussion only.

### Ladd School

The General Manager stated that Pare Engineering Corporation conducted a study for the Rhode Island Economic Development Corporation concerning the water supply at the former Ladd School facility which is attached as "H". The General Manager stated that the executive summary demonstrates that the main water at the former Ladd School may be low on the Authority priority list in that a maximum three million gallons per day may not be feasible and that Department of Environmental Management approval would be necessary which would certainly drive up the cost and impede the process. The General Manager stated that is worth consideration.

### Washington Wellfield Status

The General Manager stated that land for the wellfield had been transferred to the Town of Coventry in 1971 and that the well had been operable up until 1985. There had been quality issues and vandalization and the well has been capped and out of service. The amount of water previously withdrawn being approximately 750,000 per day and the General Manager will continue to monitor the alternatives and communicate with the Department of Health concerning probability of future use.

### Executive Management Coverage – Exclusions in the Policies

It was moved by Board Member Masterson and seconded by Board Member Graham to add the Executive Management Coverage issue to the Agenda for discussion only and it was unanimously,

VOTED: To add the Executive Management Coverage issue to the Agenda for discussion only.

That Legal Counsel and the General Manager will review this insurance with an edge toward exclusions and it will be brought to the Board after review.

### Adjacent Real Estate

It was moved by Board Member Masterson and seconded by Board Member Graham 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 General Manager informed the Board that Real Estate expert, Joseph Souliere of Souliere Realty and former West Warwick Tax Assessor will be doing an appraisal on the adjacent property as mentioned in previous Board minutes of September 15, 2004 and said appraisal will be done at a modest fee. The General Manager has been talking to the adjacent property owner and the property owner agrees that the appraisal should be done.

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

**Oaklawn Meter Pit (Revised Easement)**

The project was previously approved and awarded to C. B. Utility to relocate the Oaklawn meter pit which was undertaken and was erroneously installed outside of the permanent easement area and additionally was faulty through flooding and C.B. Utility is looking for an extension. Legal Counsel contacted the owner and Citizens Bank (Lessee) and suggested that the permanent easement area be expanded and has obtained permission from the same to expand the permanent easement area and record the same in the Cranston Land Evidence Records. Legal documents need to be done and Legal Counsel to negotiate the same.

All other Capitol Projects and Infrastructure Projects are addressed in an exhibit attached as "I" 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 Masterson and it was unanimously,

VOTED: To adjourn the meeting at 6:35 P.M.

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Secretary Pro Tempore

# **EXHIBIT A**

October 20, 2004









# **EXHIBIT B**

October 20, 2004

Kent County Water Authority  
Rock and Boulder Removal  
Bid Opening – September 30, 2004

At 10:00 a.m., September 30, 2004, Bids were open and read aloud at the offices of the Kent County Water Authority Relating to Rock and Boulder Removal. The Bid was advertised in the Providence Journal on September 15, 2004. Only one Bid was received.

The work involves furnishing all labor, materials, equipment, supplies, appurtenances, supervision, traffic control and incidentals as necessary and required to conduct pre- and post- construction survey, excavation, rock and boulder removal, trench backfill and temporary pavement installation for approximately 1,200 linear feet of trench in Middle Road, East Greenwich. Rock and/or boulder removal may require drilling and blasting work. The contractor shall furnish all materials, labor, equipment and incidentals necessary and proper to complete the work in accordance with the Bid documents and all state and municipal requirements.

1. **L. A. Patterson Inc.**, P. O. Box 533, North Kingstown, RI 02852

Acknowledged receipt of Addendum #1 dated September 24, 2004

Corporate Seal affixed

Signed by Daniel Patterson, Vice President, dated September 30, 2004

Three references were provided

Complete listing of equipment was provided

Bid Bond attached

Certificate of Liability Insurance attached

**Total Bid Amount \$224,790.00**

The Bid will be reviewed and provided to the Board for their review at the next regularly scheduled board meeting of October 20, 2004.

Bid opening closed at 10:06 a.m.

# **EXHIBIT C**

October 20, 2004

**Kent County Water Authority  
Material Purchase Only  
Billing Forms**

Sealed bids were accepted at the offices of the Kent County Water Authority no later than 10:00 a.m. on October 6, 2004. The Invitation to Bid was advertised in the Providence Journal on Wednesday, September 21, 2004. One bid we received.

1) **Moore Wallace North America, Inc., 2374 Post Road, Suite 201, Warwick, RI 02886**

- No addenda was issued.
- Acknowledged attending the pre-bid conference.
- Item #1 \$ 7,001.50
- Item #2 \$ 5,808.00
- Item #3 \$ 1,909.50
- Item #4 \$ 763.80
- Total Bid Amount Items 1, 2, 3, & 4 \$15,482.80
  
- Item #5 Bid Price escalation percentage on all indicated prices for first year to be applied in the second year of service 2.0%
- Item #6 Bid Price escalation percentage on all indicated prices in the first year to be applied in the third year of service 4.0%
- Item #7 Bidder indicated number of days from Purchase Order execution by Kent County Water Authority that proofs will be delivered within 10 days.
- Item #8 Bidder indicated number of days, after proofs are approved, to deliver product to Kent County Water Authority within 28 days.
- Item #9 Bruce Dawson signed the warrant section.
- Corporate Seal was affixed with note Incorporated in the State of Delaware.
- Signed by Rocco Matera, Vice President.

**Note:** Attached Additional Terms and Conditions Addendum signed by Rocco Matera was attached to Bid Documents but not required.

Page 11 was modified. Typed in by Moore Wallace North America, Inc. was "This Bid includes the Additional Terms and Conditions Addendum attached hereto." above Notice of acceptance should be mailed, telegraphed, or delivered to the undersigned Bidder at the following address.

Bid opening closed at 10:05 a.m.

MOORE WALLACE NORTH AMERICA, INC.  
AND  
KENT COUNTY WATER AUTHORITY

ADDITIONAL TERMS AND CONDITIONS ADDENDUM

THIS ADDITIONAL TERMS AND CONDITIONS ADDENDUM ("Addendum") to the Billing Forms Invitation to Bid ("Agreement") is effective September 30, 2004 (the "Addendum Effective Date") and is entered into by and between Moore Wallace North America, Inc., a Delaware corporation, ("MWNA"), having a principal place of business at 1200 Lakeside Drive, Bannockburn, Illinois, 60015, and Kent County Water Authority, with offices located at 1072 Main Street, West Warwick, Rhode Island 02893.

The purpose of this Addendum is to set forth additional terms and conditions pursuant to the Agreement. It is hereby agreed that this Addendum is a modification of the provisions of the Agreement and shall be binding upon MWNA and Customer. If any terms and conditions in this Addendum conflict with the terms and conditions in the Agreement or any document used to supplement the Agreement, the terms and conditions of this Addendum shall control.

This Addendum hereby amends and supplements the Agreement as follows:

1. **Indemnification.** The Section titled **INDEMNIFICATION** is hereby added to the Agreement:  
"Customer hereby represents and warrants to MWNA that Customer is entitled to use any trademark, logo or copyright embodied in or requested by it to be included in any Products (collectively, the "Marks") and that the use of such Marks by MWNA will not infringe the proprietary rights of a third party. Customer shall defend, indemnify and hold MWNA harmless against any and all claims alleging that the manufacture, sale or use of such Products violates any state or federal law or infringes any proprietary right of a third party."
2. **Warranty.** The Section titled **WARRANTY** is hereby added to the Agreement:  
"EXCEPT FOR ANY EXPRESS WARRANTY SET FORTH HEREIN, MWNA MAKES NO, AND DISCLAIMS ALL, WARRANTIES, REPRESENTATIONS OR GUARANTEES OF ANY KIND OR NATURE, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, TITLE, NON-INFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE OR USE, AND WARRANTIES OF UNINTERRUPTED OR ERROR-FREE PERFORMANCE OF PRODUCTS OR SERVICES. ALL THIRD PARTY MATERIALS AND HARDWARE PROVIDED BY MWNA ARE PROVIDED "AS-IS" WITH NO REPRESENTATIONS OR WARRANTIES WHATSOEVER."
3. **Limitation of Liability.** The Section titled **LIMITATION OF LIABILITY** is hereby added to the Agreement:  
"MWNA'S maximum liability for any and all claims arising directly or indirectly from the performance of its obligations under the Contract, whether resulting from MWNA'S negligence or otherwise, shall not in the aggregate exceed the purchase price of the products affected. IN NO EVENT SHALL MWNA BE LIABLE TO CUSTOMER OR ANY THIRD PARTY FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES, LOSS OF PROFITS, LOSS OF USE OR DATA OR INTERRUPTION OF BUSINESS, COSTS OF SUBSTITUTE PRODUCTS OR SERVICES, WHETHER SUCH DAMAGES OR LOSSES ARE ALLEGED IN TORT (INCLUDING NEGLIGENCE), CONTRACT OR INDEMNITY, EVEN IF MWNA OR ITS AGENTS WERE ADVISED OR AWARE OF THE LIKELIHOOD OF SUCH DAMAGES OR LOSSES OCCURRING."

**Confirmation.** Except as expressly amended, modified and supplemented hereby, the provisions of the Agreement are and shall remain in full force and effect. Each party acknowledges that it has read this Addendum, understands the changes affecting the Agreement and agrees to be bound by the terms of the Agreement as modified hereby as if fully restated herein.

IN WITNESS WHEREOF, MWNA and Customer have executed this Addendum as of the Addendum Effective Date.

KENT COUNTY WATER AUTHORITY

MOORE WALLACE NORTH AMERICA, INC.

By: \_\_\_\_\_

By:  \_\_\_\_\_

Title: \_\_\_\_\_

Title: Vice President

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

Date: 9/29/04

# **EXHIBIT D**

October 20, 2004

Wiley J. Archer, P.E.  
WATER SYSTEMS CONSULTING GROUP



9611 North Hollybrook Lake Drive-302  
Pembroke Pines, FL 33025  
Tel 954-431-6641

Providence, RI  
Tel 401-864-7671

e-mail wiley@archer.net

**INVOICE # 2004-25x**

**Client #:** Kent County Water Authority

**Date:** as of October 8, 2004

**Project:** Strategic Planning Program-Steps 2-4

**Description:** Additional time required as a result of Step II planning sessions postponements. Additional time to revise agenda, additional meetings with staff, and adjustments to agenda to provide for appropriate review.

**Amount:**

**EXTRA BILLING**

Wiley J. Archer 1.5 days @\$1000.00/day	\$ 1,500.00
Danny Warshay 1.5 days @ \$1000.00/day	1,500.00

**\$ 3,000.00**

**Time sheets and work descriptions are included with Invoice 2004-25**

**TOTAL THIS REQUEST \$3,000.00**

**Terms:** Net

# **EXHIBIT E**

October 20, 2004



One Cambridge Place, 50 Hampshire Street  
Cambridge, Massachusetts 02139  
tel: 617 452-6000  
fax: 617 452-8000



September 16, 2004

Mr. Timothy J. Brown, P.E.  
General Manager / Chief Engineer  
Kent County Water Authority  
1072 Main Street  
P.O. Box 192  
West Warwick, Rhode Island 02893

Subject: Out of Scope Services -  
Related to Permit Review by RIDOH and the Town of Coventry  
Mishnock Wellfield Expansion Project

Dear Mr. Brown:

As discussed at our meeting of September 10, Camp Dresser & McKee Inc. (CDM) has performed out-of-scope services for the Mishnock Wellfield Expansion project. These out-of-scope services were conducted during the period January 2003 through May 2004 and relate to:

- Additional Water Treatment Plant (WTP) permitting due to RIDOH; and,
- Additional water transmission main design due to the Amgen sewer force main and related Town of Coventry approvals.

The following provides further details of these out-of-scope efforts and related costs.

### **Additional WTP Permitting Due to RIDOH**

In correspondence of October 31, 2002, CDM submitted the Contract 1C - Water Treatment Plant design plans and specifications to the Rhode Island Department of Health (RIDOH) for review. On May 20, 2004, RIDOH issued approval of these design documents. The following outlines the chronology of submittals and exchanges with RIDOH:

- October 31, 2002 - CDM submits WTP design plans and specifications to RIDOH for review.
- January 24, 2003 - At RIDOH request, CDM submits a supplemental package of information.
- September 4, 2003 - RIDOH inquiry and CDM email response regarding the HVAC design.

MJ0338



Mr. Timothy J. Brown, P.E.

September 16, 2004

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- September 4-16, 2003 – Email exchange with RIDOH regarding the specific gravity of water treatment chemicals to compute dosages.
- October 15, 2003 – RIDOH forwards a DRAFT comment letter on the WTP, consisting of 116 comments.
- October 20, 2003 – Meeting with RIDOH to review the October 15 DRAFT comment letter. Present at this meeting were CDM's lead water treatment plant, hydraulic and well designers. Based on the meeting discussion, 40 comments were eliminated.
- October 21, 2003 – RIDOH issues final comments on the WTP, consisting of 76 comments. RIDOH required that each comment be addressed in writing, with corresponding changes incorporated into the design plans and specifications.
- December 29, 2003 – CDM submits correspondence responding to RIDOH comments, with accompanying revised plans and specifications.
- March 15, 2004 – At RIDOH request, CDM emails further clarifications on sequestering chemical dosage rate.
- April 19, 2004 – RIDOH forwards DRAFT comments on the CDM December 29 submittal, consisting of 12 comments.
- April 27, 2004 – RIDOH issues the April 19 letter in final form.
- May 17, 2004 – CDM submits correspondence responding to RIDOH's April 27 comments, with accompanying plan substitutions.
- May 20, 2004 – RIDOH issues "written conditional approval for the proposed" WTP.

As you can see, not only was the duration of this 1½ year review period unanticipated, the extent of RIDOH comments requiring response was unexpected.

When conducting design reviews, state agencies typically focus on the critical water treatment components and operations, which pertain to public health and safety. Further, we have found from our experience that state agencies typically defer to the judgment of the professional engineer relative to design execution. On this project, we found RIDOH's review to be more detailed than the norm, extending into other areas of practice (i.e., stormwater, HVAC, plumbing, etc.). Consequently, the time spent addressing and responding to comments was significantly higher than typically expended on a project such



Mr. Timothy J. Brown, P.E.  
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as this, and beyond that budgeted at the project's inception six years ago. It was not possible for us to predict in 1998, the level of effort required during the period of October 2002 to May 2004, to complete the WTP permit process with RIDOH.

CDM's incurred cost during this period was \$19,200, equivalent to 132 labor hours of senior engineering time.

### **Additional Water Transmission Main Design Due to Amgen and Coventry**

The Contract 1B - Water Transmission Main was accepted by the Authority in June 2002. CDM submitted copies of the draft final plans and specifications on March 22, 2002 to each of the Towns of Coventry, West Greenwich and East Greenwich for review, as well as the RIDOT. More than one year later, two issues arose impacting the design and causing CDM additional work:

1. Soon after our March 22, 2002 submittals, the Town of Coventry agreed to forward sewer lateral information in Hopkins Hill Road, as this data might impact the transmission main elevation in certain sections. CDM did not receive this data until October 2, 2003, nearly 1½ years later. Revisions to 8 design sheets were subsequently required.
2. In July 2003, more than a year following completion of the Contract 1B draft final design, CDM was told of plans by Coventry to design and construct a sewer force main in Hopkins Hill Road. Both the Authority and CDM shared the same concerns relative to potential conflicts of this sewer force main with the previously designed water transmission main. Between the period of July 2003 and May 2004, CDM worked with the Authority to address concerns regarding these conflicts.

The following summarizes key correspondence exchanged relative to the above referenced out-of-scope items.

- July 18, 2003 - CDM received telephone call from Weston & Sampson requesting boring logs for the 30" transmission main on Hopkins Hill Road. CDM relayed this request to the Authority. This was the first time CDM received information that Coventry was proceeding with a sewer force main in Hopkins Hill Road.
- October 2, 2003 - Correspondence from the Town of Coventry to CDM provided information on the sewer laterals along Hopkins Hill Road. Please note that sewer lateral



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information was previously requested from Coventry by CDM following our initial March 22, 2002 submission to the town.

- October 8, 2003 - CDM correspondence to the Town of Coventry acknowledging receipt of sewer lateral information and identifying CDM concerns relative to apparent conflicts between the Authority's proposed transmission main and the proposed sewer force main in Hopkins Hill Road.
- October 22, 2003 - CDM correspondence to the Authority outlining an approach to addressing the sewer laterals and transmission / force main conflict.
- October 31, 2003 - CDM submitted revisions to the 30-inch transmission main on Hopkins Hill Road to the Town of Coventry for review. The revisions were based on marked-up drawings provided by the Authority, showing the location of a proposed sewer force main in Hopkins Hill Road. In addition, conflicts with the sewer laterals provided in Coventry correspondence of October 2 were addressed in the revised drawings, with consideration of the proposed sewer force main.
- March 18, 2004 - CDM correspondence to the Authority acknowledging receipt of the Hopkins Hill Road sewer force main as-built.

When budgeting this project in 1998, the sewer force main was not known. Five years later when the proposed sewer force main was identified, CDM worked with the Authority to add it to the then completed drawings and address related sewer lateral conflicts. These efforts were clearly out-of-scope to the original project, as defined in 1998.

CDM's incurred costs for these services were \$9,800, equal to about 78 labor hours.

## Summary

Based on the information presented herein, CDM requests permission to submit an invoice for these out-of-scope services. The total amount will be:

Additional WTP Permitting	
Due to RIDOH	\$19,200
Additional Water Transmission Main Design	
Due to Amgen and Coventry	<u>\$ 9,800</u>
Total	\$29,000



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Also, please note that there remains one final invoice for project close-out tasks relative to the RIDEM permit effort. We expect the costs of this final invoice to be about \$14,000. This final invoice will be prepared once all printing costs are received.

We appreciate your consideration of these financial matters. At your convenience, we are available to meet and further discuss this request. Please call us if you have any questions or require additional information.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Andrew B. Miller'.

Andrew B. Miller, P.E.  
Principal Engineer  
Camp Dresser & McKee Inc.

cc: J. Keane - CDM

# **EXHIBIT F**

October 20, 2004

DRAFT

Please  
Review

March 18, 2004

Mr. Timothy J. Brown, P.E.  
General Manager/Chief Engineer  
Kent County Water Authority  
P.O. Box 192  
West Warwick, Rhode Island 02893-0192

Re: **Kent County Water Authority (KCWA)**  
**Water Supply System Management Plan Update (WSSMP)**  
PARE Project No. 01006.00

Dear Mr. Brown:

There are currently two Pare Engineering Corporation (PARE) invoices outstanding for the above referenced project, Invoice No. 10 in the amount of \$822.50 and Invoice No. 11 in the amount of \$4,187.04. The reason these invoices are outstanding lies in the distribution of Engineering Fee and Expenses within the Not-to-Exceed Fee of \$66,055.00 as established by our agreement with the KCWA. PARE estimated an Engineering Fee of \$59,930.00 and estimated expenses at \$6,125.00 for the WSSMP effort, which resulted in the Not-to-Exceed Fee of \$66,055.00 within our agreement. As it turned out, we billed more in engineering effort and less in expenses as of our last invoices (Invoice Nos. 10 & 11). The primary reason for this is that much of the voluminous WSSMP plan reproduction was performed with our in-house labor and facilities rather than sending it out to a printer.

The purpose of this letter is to request that the KCWA utilize the Not-to-Exceed Fee of \$66,055.00 for the basis of billing and payment. This is in line with PARE's interpretation of the method of compensation within our agreement with the KCWA. We have always been of the understanding that the Not-to-Exceed Fee of \$66,055.00 was our primary yardstick and that there was flexibility in the make-up of the fee and expense estimate components. I point out the fact that PARE has adhered to the Not-to-Exceed agreement amount of \$66,055.00 and as of the last invoice issued (Invoice No. 11), had expended approximately \$1,100.00 in billings that were in excess of the Not-to-Exceed amount and not invoiced to the KCWA. In addition, since our last invoice was issued, additional effort was expended by PARE personnel and costs were incurred in the finalization and reproduction of the final submittal copies (20) of the WSSMP, after receiving final approval by the Rhode Island Water Resources Board. In total, I estimate that \$4,000.00 in billings over and above the Not-to-Exceed amount has been absorbed by PARE in completion of the KCWA Water Supply System Management Plan Update.

D'AFF?

Mr. Timothy J. Brown, P.E.

- 2 -

March 18, 2004

In light of the above, it is hoped that you and the Board will agree to utilize the Not-to-Exceed Fee of \$66,055.00 for the basis of billing and payment and that outstanding Invoices Nos. 10 & 11 will be approved for payment. Please feel free to contact me at your convenience should you desire to discuss the matter further.

Very truly yours,

George G. Palmisciano, P.E.  
Senior Vice President

GGP/abv

L:\Misc Files\Letters\KCWA Invoice letter-WSSMP(01006.00).doc

# **EXHIBIT G**

October 20, 2004

# KCWA

## WATER CONSERVATION ACTION PLAN

SEPTEMBER 2004

This action plan is intended to outline what is proposed for development for a more comprehensive conservation program in response to the deficient conditions that are currently present within the high service gradient. It is intended to utilize techniques and technologies that are present and are readily available. It is also intended to educate and encourage wise use of water with the assistance of the cities and town government bodies we serve with a public awareness program. It has been broken into two phases, year round programs which should be encouraged on a yearly basis for everyday water use and high demand periods such as the summer period and more specifically periods of drought which will be enforced differently from the year round programs. This is being provided as a working document prior to establishment of the complete approved action plan by the Authority.

### YEAR ROUND PROGRAMS

1. **Water Conserving Plumbing Devices** – Encourage KCWA customers to make plumbing retrofits, in accordance with the current building code requirements including
  - Low-flow Shower Heads
  - Low-flow Toilet Devices
  - Low-flow Faucet Aerators
  - Pressure Reduces for High Pressure Areas
2. **Major Appliances** – Encourage KCWA customers to install state of the art water conserving & energy wise appliances (i.e. clothes washer, dishwasher, water heaters).
3. **Odd/Even Water Use or other alternate Water Restriction Program** – This program to be promoted through the KCWA. Newsletter press releases and information printed on bills.
4. **Rain Barrel & Directional Down Spout Program** – KCWA to review viability of these measures to reduce outdoor water use by encouraging natural rainfall reuse.
5. **Landscaping/Plants** – KCWA to promote the use of drought tolerant native low water-use plantings. In addition, encourage customers to restrict turf areas and properly prepare them.
6. **Education** – Educate KCWA customers using the following:
  - Web Page – Keep KCWA web page maintained and up-to-date and provide water conservation tips (must bring in house).

- School System – promote water conservation through school programs, reactivate education program.
  - Brochure – develop our own water conservation pamphlet.
  - Demonstration – review value of demonstrations garden(s) in cooperation with communities to demonstrate planting using soil preparation, Xeriscape and drip irrigation techniques.
7. **Self Audit** – KCWA to promote a self water audit once or twice each year. Program components to include:
- Meter Check – Customer to check meter to determine if there may be a house hold leak.
  - Leak Detection – Provide simple approach for customers to check toilets for leaks.
  - Audit List – KCWA to develop an audit “checklist” and distribute to customers for their use.
8. **Permit Outdoor Water Use** – KCWA to review need and approach for approval of in-ground sprinkler systems.
9. **City/Town Involvement** – Coordinate with Town Councils and/or Town Planning Boards to include KCWA regulations regarding outdoor water use.
10. **Legislative Action** – Review need for new or amended legislation.

## **HIGH DEMAND PERIOD PROGRAM**

1. **Water Rates**
- Monthly Reading – Explore need and expense.
  - Seasonal Rates – Explore viability of seasonal rates effect on rate base and consumption. Cost of service study may be needed.
2. **Moratorium Protocol** – KCWA to develop a moratorium protocol.
3. **Public Awareness** – Explore all avenues to use awareness in stating message to public.
4. **Drought Policy** – KCWA to develop an enforcement program to fit policy.
5. **City/Town Participation** – Engage assistance as needed.

# **EXHIBIT H**

October 20, 2004

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**INTEGRATED WATER SYSTEM ASSESSMENT  
AT THE  
FORMER LADD SCHOOL FACILITY  
FOR THE  
WATER SUPPLY AND DISTRIBUTION SYSTEM**

PREPARED FOR:

RHODE ISLAND ECONOMIC DEVELOPMENT CORPORATION  
1330 DAVISVILLE ROAD  
QUONSET/DAVISVILLE PORT & COMMERCE PARK  
NORTH KINGSTOWN, RI 02852

PREPARED BY:

PARE ENGINEERING CORPORATION  
8 BLACKSTONE VALLEY PLACE  
LINCOLN, RI 02895

COPY SENT TO	
BOARD MEMBERS	10/12/04
CHIEF	
LAW COUNSEL	

SUBMITTED JANUARY 2000



# Executive Summary

The former Ladd School facility is located in Exeter, RI and is situated on approximately 331 acres of developed and undeveloped (woodlands and wetlands) property. At its peak in the 1950's and 1960's, the facility operated with an employee support staff of 1000 with approximately 1500 patients. The facility was officially closed in 1994, with a small portion of the complex having been kept operational. One of the utilities that remained active included an onsite potable water supply system that included supply sources, distribution and transmission mains, storage tank system and related appurtenances. The Rhode Island Economic Development Corporation (RIEDC) is currently proceeding with a plan for reuse of the facility to be redeveloped as an office, research and technology park.

The existing water system consists of the two active well stations with a combined production capacity of approximately 0.90 million gallons per day (MGD) and a third well station which is non-operational; a 200,000 gallon elevated steel storage tank (a non operational 100,000 gallon storage tank which has been removed from service is also located onsite and is slated for demolition); a chemical treatment system (pH adjustment and chlorination), and upwards of 3.5 miles of water main. Estimates place the current average daily demand in the range of 10,000 gallons per day.

The scope of this study included assessing the existing onsite water system in terms of its suitability for reuse in the redevelopment scenario. This included quantifying the existing conditions and limitations of the water system and providing recommendations to meet current regulations for drinking water quality. A master plan for improvements to the water system was proposed based on a potential reuse scenario for the facility. The reuse scenario was depicted in a facility "Vision Plan" developed by Maguire Group and provided by the RIEDC for purpose of completing this study.

The findings and conclusions of this study are premised upon the infrastructure improvements deemed necessary to serve the layout proposed in the Maguire Vision Plan. The existing water main infrastructure, which consists primarily of an 8 inch looped asbestos cement pipe system, was determined to be in good condition with no significant leaks or loss of carrying capacity. Older cast iron pipe sections are also prevalent onsite and have been determined to be obsolete, due to tuberculation and reduction in flow carrying capacity, possible water quality problems and insufficient size for carrying capacity (fire flows). In any options for redevelopment the existing piping system,

both the asbestos cement and cast iron may have limited usefulness depending upon the proposed revised layout for building structures and new utilities.

The 200,000 gallon storage tank (constructed circa. 1975) was inspected and determined to be structurally sound. It is recommended that minor structural improvements and a complete recoat of the interior and exterior take place before significant metal loss can occur. A budget cost to complete this work was estimated at \$160,000.00 which includes a provision for lead based paint abatement. The 100,000 gallon tank is scheduled to be demolished. A budgetary cost to complete this work is \$75,000.00.

The water system is supplied via two active well stations identified as Stations No. 2 and 3, which have a combined yield of approximately 0.9 MGD (300 gpm and 350 gpm). Both stations are considered viable sources of water supply. Major recommended improvements include replacement and/or rehabilitation of the roof covering on Station No. 2 and various incidental building renovations; permanently plug floor drains, remove and dispose of existing transformers and replace with pad mounted transformers with environmentally desirable coolants; address recommendations of the RIDOH Sanitary Survey of 1997; contain chemical treatment systems; etc. An estimated cost to complete this work is in the range \$150,000.00. Well Station No. 1 has been inactive since approximately 1976. It would require significant improvement to reactivate this station, however the wellhead, as evidenced through a pump test, is still capable of supplying approximately 0.3 MGD (200 gpm).

A review of Safe Drinking Water Act compliance evidenced a history of good to excellent water quality derived from Well Stations No. 2 and 3. Testing conducted as part of this study supported this assessment of excellent water quality at all three stations. Well No. 3 exhibited a low level of a volatile organic compound (chloroform), detected at levels well below drinking water standards. It is recommended that monitoring for this compound be continued in the future. Microparticulate Analysis (MPA's) performed at all three well stations indicate a "low" risk factor for surface water influence based upon the USEPA Relative Surface Water Risk Factor. A lead and copper "Desk Top" study was performed for the facility. This study indicated that with the existing treatment system (soda ash for pH adjustment) and new plumbing fixtures to be included as part of the redevelopment scenario, the system should have no problem in complying with requirements of the Lead and Copper Rule.

A Wellhead Protection (WHP) Plan was developed for the facility and is provided as an Exhibit to this report. It is recommended that the RIEDC approach the Town of Exeter to present and consider for adoption the WHP Plan in order to ensure the continued proper protection of the wellheads at the facility. The WHP Plan outlines protection strategies that include a combination of design criteria, education, implementation, and enforcement of all necessary tasks for an effective protection plan. The goal of the WHP Plan is to promote policy and procedure to prevent or reduce the risk of contamination to onsite groundwater resources. An outstanding issue is an onsite underground storage tank release (June 1999) which is still being further quantified by the Rhode Island Department of Administration with respect to impact to the regional groundwater quality. The proposed redevelopment, which is premised on onsite wastewater disposal technology, will be conducted within the guidelines of the WHP Plan. This includes proper management of the proposed golf course, which is an identified use by the RIDOH in the Drinking Water Regulations as a potential contamination source to groundwater supplies due to fertilizer and pesticide use.

A major focus of this study was the quantification of groundwater resources for the watershed of the former Ladd School. Currently, there are a number of unregulated withdrawals occurring within the watershed from various commercial users primarily for irrigation of turf farms and golf courses. These unregulated withdrawals have had the effect of periodically reducing streamflow in the Usquepaug River near Route 2 to a near "no flow" condition largely due to the fact that the return of these withdrawals to the watershed is minimal. The return of water to the watershed from irrigation users amounts to only approximately 24% of the water that is withdrawn. If water were used principally for sanitary use, as is proposed under the Ladd School redevelopment scenario, about 85% would be returned to the watershed. There is, therefore, significantly less water that is lost through sanitary use as compared to uses associated with irrigation.

It is envisioned that withdrawal of water from supply wells at the Ladd Center will cause depletion of streamflow near and downstream of the wells by an amount virtually equal to the amount pumped, if water is exported from the basin. Due to RIDEM permitting constraints (i.e. wetlands), it may be prohibitive to transport water from the Ladd Center wells out of the basin. If however this water is used primarily for sanitary purpose onsite and returned to the watershed, the impact to streamflow is considered negligible. As part of the redevelopment, it is proposed that treated wastewater will be

returned locally to the watershed and therefor will result in depletion of streamflow only by the amount consumed.

The RIDEM in conjunction with the USGS are in the process of quantifying these unregulated withdrawals from the watershed. It is envisioned that any formal report or quantification as to rates of withdrawal is several years away. In the interim, any redevelopment plans for the facility should be cognizant of the fact of these various competing uses for water in the watershed. In the interim and given circumstances involved regarding water use in the watershed, it is recommended that methods of water conservation practice be explored especially related to water use for irrigation.

USGS model analysis indicates that, as much as 2 million gallons per day (Mgal/d) can be sustained from sites of the existing Ladd Center supply wells. Currently, supply Wells 1, 2 and 3, are estimated, based on current pumping tests, to be capable of sustaining yields of 230, 625, and 380 gpm, respectively. This would necessarily require retrofits with new pumps, motors, etc. in order to capture this increased rate of withdrawal. This would equate to approximately 1.8 Mgal/d if all wells were pumped on a continuous basis. This rate is fairly close to the USGS model value of 2 Mgal/d.

A continuous withdrawal of as much as 1 Mgal/d (volume based on the capacity of the existing well stations) from the Ladd Center supply wells with return about 0.85 Mgal/d of treated wastewater to the watershed would result in depletion of streamflow by about 0.15 Mgal/d or 0.23 cubic feet per second (cfs). This equates to a non-return streamflow volume of 150,000 gallons per day. Again this assumes an 85% return of treated wastewater to the Ladd Center watershed. A streamflow depletion of this magnitude associated with any proposed redevelopment or other non-returned watershed withdrawal would have minimal impact on low streamflow. The streamflow depletion would be only a small fraction of that resulting from the existing irrigation withdrawals. Also, it amounts to only 5% of the 3 Mgal/d that the USGS indicates could be exported from the basin most of the time without causing appreciable problems of streamflow depletion. Actual estimates of peak water, as detailed below, for the redevelopment scenario are of significantly less magnitude than the example of 1 Mgal/d withdrawal.

PARE utilized the "Vision Plan" for redevelopment of the facility for identification of improvements to the existing water system. The layout is premised on a reuse plan for an office, research and technology park with a potential of 3,000 employees and a nine-hole golf course. The land area is

subdivided into 20 lots, one of which is reserved for the Town of Exeter as a potential site for an elementary school. It is proposed that all lots would be serviced by the onsite water system. Other potential users, both existing and proposed that will likely rely on the potable water system include Marathon House, Job Corps and the Rhode Island Veterans Cemetery and other ancillary uses associated with the cemetery.

A projected average day demand for the facility at full growout, which includes all identified potential users with allowances for irrigation of the Technology Park and the nine-hole golf course equates to 196,000 gal/day. The projected maximum day demand under similar full growout scenario is equal to 254,000 gal/day. This maximum day demand is normally expected to occur for a limited duration of one to two days during the year. Based upon these projected demands and the available yield of the existing wells (0.90 MGD), it was concluded that the water system would not be a limiting factor to the proposed redevelopment of the facility.

Based on this redevelopment scenario the proposed facility has a surplus of available water supply. The Town of Exeter has expressed interest in utilizing the available surplus, however as of yet the Town has not assessed the specifics with regard to how this water would be utilized or piped from the site. This appears to be a viable alternative however it shall be incumbent upon the Town to identify "need" with respect to quantity and location of use. The transfer of water out of the basin may be a limiting factor upon the proposed area to be served

It is proposed that approximately 3,600 feet of existing asbestos cement water main remain in service, as it does not appear to be significantly impacted by the "Vision Plan". A new ductile iron pipe, 8 inch looped system is proposed for the facility, which would underlie the new roadway proposed for redevelopment. This also includes installation of isolation gate valves, fire hydrants, service connection stubs to the lots, and a 12 inch ductile iron water main at the water storage tank. The total estimated cost is approximately \$700,000.00 for these onsite water system infrastructure improvements. This cost does not include providing water offsite to the Town of Exeter or the proposed emergency connection to the Town of North Kingstown.

In keeping with the proposed initiative of the Rhode Island Water Resources Board (RIWRB) for establishing emergency interconnections between water purveyors in Rhode Island, it is recommended that such an interconnection be pursued with the Town of North Kingstown water system. The

estimated cost of such an interconnection is \$550,000.00. There is a potential for funding of this interconnection through the RIWRB. The next nearest water system for possible interconnection would be the Kingston Water District located some 6 miles to the south. An estimated cost to connect to that system is \$2,400,000.00.

### **Conclusions**

Based upon the work carried out as part of this project, it is PARE's professional opinion that the capabilities of the onsite water system and related water resources of the former Ladd School site will not hamper or otherwise have an adverse effect on the proposed development in accordance with the proposed redevelopment scenario. The hydrogeological assessment indicated that a total withdrawal of up to 2 MGD could be sustained from the watershed. Not accounting for other withdrawals from the basin (which at times currently stresses the Usquepaug River), the watershed is capable of providing much more water than the volume projected for the project without impacts, so significant, that it would make this project unpermissible through the RIDEM Division of Freshwater Wetlands. The controlling factor is that the use of this water must be such that the majority will be returned to the basin at a quality that will not effect overall groundwater quality in the area. This requirement will result in the withdrawal volume not being the critical issue but rather the proposed development project's ability to utilize, treat and re-introduce the volume back into the basin without adverse environmental impacts as the critical factor in acceptable withdrawal. Based upon the projected water volumes anticipated at full build out for the proposed development scenario, addressing this critical issue appears to be achievable. It must be recognized that regulatory scrutiny will likely be forthcoming in future phases of this project in that this basin is routinely severely impacted by existing non-regulated withdrawals.

For this project to move forward substantial infrastructure improvements will need to be undertaken. This mainly relates to improvements the distribution system and rehabilitation of the storage facility. These costs are estimated to at \$1,085,000.00 not including the construction of an emergency connection to adjacent water system(s). Once these improvements are achieved, the water system should be fully capable of complying with the regulatory requirements for water purveyors in Rhode Island.

# **EXHIBIT I**

October 20, 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 15, 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. Change Order #3
Clinton Avenue Pump Station Rehabilitation CIP - 7A	Bid to be set.
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 ongoing.
IFR 2004	Design ongoing.
Geographic Information System Base Map	Completed.
Geographic Information System Second Phase	Mapping ongoing.
Tiogue Tank Modified Service Area	Construction submittals ongoing.
Knotty Oak Road. Old CIP 5	Construction completed. Final Paving November 2004.
Setian Lane new pumping station and Frenchtown vault rehabilitation.	Liquidated damages being assessed. Punch list pending. Serious concerns with contractor & health of business.
Setian Lane Tank painting	Completed.
Oaklawn Meter Replacement IFR	New Easement
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 awaiting finalization.
Color Study Mishnock Wells	Review Report
<b>PROJECT</b>	<b>STATUS</b>
Web site preparation	Up and running.
Strategic Plan	Sub-committee to develop plan.
Newsletter	Mailed week of October 18, 2004
CCR 2003	Mailed.
Colvintown Road	Pipe installed - Services late Fall
Middle Road extension	Review with Board