

TOWN BOARD
OCTOBER 26, 1994

A regular meeting of the Town Board of the Town of Bethlehem was held on the above date at the Town Hall, 445 Delaware Avenue, Delmar, NY. The meeting was called to order by the Supervisor at 7:30 p.m.

PRESENT: Sheila Fuller, Supervisor
Frederick C. Webster, Councilman
George Lenhardt, Councilman
Freeman T. Putney, Councilman
Doris M. Davis, Councilman
Bernard Kaplowitz, Esq., Town Attorney
Kathleen A. Newkirk, Town Clerk

- - -

SUPERVISOR FULLER: Good evening and welcome to a meeting of the Bethlehem Town Board. Special welcome to our participation in government students. Tonight we have 2 public hearings, the first is on the presentation of the budget for 1995. I would ask the Clerk to read the call of the meeting.

Public
Hearing,
1995
Preliminary
Budget

TOWN CLERK NEWKIRK:

NOTICE OF PUBLIC HEARING
UPON PRELIMINARY BUDGET

NOTICE IS HEREBY GIVEN that the Preliminary Budget for the fiscal year beginning January 1, 1995 has been completed and filed in the Office of the Town Clerk at the Town Hall, 445 Delaware Avenue, Delmar, NY where it is available for inspection by any interested person during office hours.

NOTICE IS FURTHER GIVEN that the Town Board of the Town of Bethlehem will meet and review said Preliminary Budget and hold a public hearing thereon, at the Town Hall, Delmar, NY at 7:30 p.m. on the 26th day of October 1994 and that at such hearing any person may be heard in favor of or against any item or items therein contained. Disabled individuals who are in need of assistance in order to participate should contact David Austin at 439-4131. Advanced notice is requested, and

BE IT FURTHER RESOLVED, that pursuant to Section 108 of the Town Law, the proposed salaries of the following officers are hereby specified as follows:

| | |
|---------------------------------|-------------|
| Supervisor | \$63,475.00 |
| Councilmen (each) | 8,861.00 |
| Town Clerk | 43,724.00 |
| Superintendent of Highways | 60,802.00 |
| Receiver of Taxes & Assessments | 42,775.00 |

and

BE IT FURTHER RESOLVED, that such Notice shall be published once in the following newspapers: THE SPOTLIGHT, the official newspaper of the Town on October 12, 1994 and the TIMES UNION, an Albany newspaper, on October 18, 1994.

BY ORDER OF THE TOWN BOARD
TOWN OF BETHLEHEM
KATHLEEN A. NEWKIRK
TOWN CLERK

- - -

State of New York)
County of Albany)

CAROL STUART of the Town of Bethlehem, being duly sworn, says that she is the Advertising Coordinator of THE SPOTLIGHT, a weekly newspaper published in the Town of Bethlehem, County of Albany, and that the notice of which the annexed is a true copy, has been

regularly published in said THE SPOTLIGHT ONCE A WEEK FOR 1 WEEK consecutively, commencing on the 12 day of October 1994.
/s/ Carol Stuart

Sworn to before me this 13th day of October 1994.
/s/ Kathryn Olsen
Notary Public, Albany County

- - -

STATE OF NEW YORK)
COUNTY OF ALBANY) ss.:

CATHERINE T. PICARAZZI, being duly sworn, deposes and says that she is the Deputy Town Clerk of the Town of Bethlehem, Albany County, New York and that I posted on September 28, 1994, a Notice of Public Hearing, a copy of which is hereto attached, on the sign board of the Town maintained pursuant to subdivision six of Section thirty of the Town Law.

/s/ Catherine T. Picarazzi
Deputy Town Clerk

Sworn to before me this 26th day of October 1994.
/s/ Kathleen A. Newkirk
Notary Public

- - -

The motion was made by Mr. Lenhardt and seconded by Mr. Webster to indent the Notice of Public Hearing, Affidavit of Publication and Affidavit of Posting on the minutes of the meeting. The motion was passed by the following vote:

- Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney, Mrs. Davis.
- Noes: None.

- - -

SUPERVISOR FULLER: This evening we are presenting our proposed Town budget for 1995 which was revised at budget workshops which were held October 11 and October 13. Tonight's public hearing enables residents to ask questions and make comments.

The Town has made good use of the additional sales tax monies. They have been applied to nonrecurring costs to avoid our dependence on a source of funds that is subject to discontinuance. The funds were used to reduce debt, to provide for needed maintenance of equipment and facilities that had been deferred in prior years due to insufficient resources. It was also used to create reserves to enable us to reduce our need for new debt on planned purchases of capital items and major repairs.

A portion of the monies were also used to significantly reduce the tax levy in the general fund. With the recent receipt of the third quarter sales tax check, we have been able to adjust our original projections and to increase the 1995 budget for sales tax to \$5.5 million. This change will decrease the tax levy to \$800,000.

The continuance of the eight percent sales tax through November 1995 has placed the Town in a position to better cope with the significant expenses to be incurred with the creation of a composting facility and closure of our landfills. North Street yard waste disposal site is slated for closure in the fall of 1996. The cost will be \$430,000. The Rupert Road landfill will also require closure within the next 3 years with costs similar to the North Street closure. The proposed new yard waste composting facility is estimated to cost \$650,000.

I thought you were looking for a seat.

MR. BURKHARD: I am, thank you.

SUPERVISOR FULLER: Plans and approval process for this will begin in 1995. These 3 projects will cost at least \$1,000,000. By creating reserves for these projects now and by applying the additional 1 percent sales tax monies, we continue our policy of wisely using these temporary funds.

Negatively impacting the Town's finances, the County is insisting on payment of election board charge backs despite a State Comptroller's decision such payments are not appropriate. In 1994 they are planning to withhold \$122,000 from our mortgage tax proceeds for 93 and 94 charge backs and are seeking \$60,000 in 1995. There have been a number of changes in the assessment base for the Town wide taxes which includes the general fund and highway fund. Most notably is the approval of the new veterans' exemption. The granting of these exemptions will result in the reduction to the assessment rolls of approximately \$44,000,000. While the Town has had other additions to its residential and commercial tax base in 1994 and has been successful in its certiorari proceeding with a large commercial tax payer, there is actually a decrease of about \$22,000,000 in the assessment base, largely do to the granting of the veteran's exemptions. To prevent a tax increase to our residents, who are not eligible for the veteran's exemption, the 1995 budget proposes a reduction of \$170,000 in the general town and highway fund tax levies.

There are no significant changes in composition of Town personnel in 1995. We continue to strive to offer superior services to our residents with existing employees who efficiently handle an ever increasing workload. We are proud of our employees who consistently prove themselves as dedicated and hardworking. We recommend that employees be given a raise of 4 percent in 1995. As you may recall, the tax levy in the general fund decreased approximately \$103,000 in 1994, to \$935,000. The tax levy in the Highway Fund increased 2.5 percent, but because of the decrease in the General Fund, there was an overall decrease in the town wide tax levies of approximately \$37,000. We are happy to announce that in 1995, we propose to further reduce the tax levy by \$135,000 in the General Fund and reduce the tax levy in the Highway Fund by \$35,000. Water and sewer rates will see an approximate 3 percent decrease. These rate reductions should result in a tax decrease for most residents.

Give you an example, if an individual's property is assessed at \$130,000 there 1994 taxes (excluding county taxes and special districts) were \$412.35 versus \$397.68 in 1995, representing a 3.6 percent decrease.

Judi, I would ask you to provide some of the specifics in the various funds, if you would.

MRS. KEHOE: Appropriations in the General Fund will increase by approximately \$315,000 or 3.5 percent which is in line with the inflation rate. The 1995 budget appropriations are \$9,382,506.

The Highway Fund budget reflects expenditures of \$3,688,000. Appropriations have increased by approximately \$192,000, or 5.5 percent. This change reflects the increase in personnel costs, including a 10 percent increase in overtime appropriations to more closely match actual overtime incurred over the last few years. Contractual items have increased based on anticipated inflation, and on a proposed contribution of \$30,000 to a reserve fund.

Water fund appropriations show an increase of approximately \$1,398,000. This is primarily due to an \$869,000 increase in debt service associated with the new water treatment plant which is offset by higher water rents for industrial users. Excluding debt service, appropriations have increased approximately \$529,000 or 18.4 percent. This increase reflects an additional \$485,000 for water rents to pay for the purchase of Albany water prior to completion of the new water plant. This too will be offset by industrial user fees. Because of our ability to recoup the water usage cost from industry, the general water district tax will decrease 2.7 percent from a rate of \$.75 to \$.73 per \$1,000 of assessed valuation. Residential water rates will remain the same in 1995 so assuming no

change in usage, residents can increase a decrease in their 1995 water payments.

The sewer budget appropriations show an increase of approximately \$34,000 or 1.2 percent. Increases in contractual and personnel costs have largely been offset by decreases in debt service. The tax rates in the Delmar/Elsmere Sewer District will decrease approximately 4 percent to \$.46 per thousand versus \$.48 in 1994 and the rate in the extensions will approximate \$.51 per thousand versus \$.53 in 1994, a 4 percent decrease. The water use surcharge rate will be approximately \$1.32 per 100 cubic feet versus \$1.36 in 1994, which is a 3 percent decrease.

SUPERVISOR FULLER: Are there any questions on the budget? I would ask those who wish to speak in favor of the budget to come forward. No one came. Those who wish to speak in opposition.

MR. DAVIES: My name is Sherwood Davies. A quick question, do I understand the sewer budget will be considered November 9th?

SUPERVISOR FULLER: Yes, that is grievance day for the sewer budget.

MR. DAVIES: It will not be considered tonight?

SUPERVISOR FULLER: No.

MR. DAVIES: I have reviewed portions of the proposed 1995 Bethlehem Town Budget. I am opposed to the projected water property tax rates and the proposed water rent charges for residential and industrial users. The water tax favors the industry versus the residential water user.

The residential water user pays over 50 percent of the water charges in the form of a property tax, whereas, the large industrial user pays less than 15 percent as a property tax for water. The explanation is that large volume users should get a better deal than the small user and that 3,000 meters must be read compared to only 1 industrial meter. These are self-service arguments not supported by a cost analysis nor has the Town Board evaluated the significant cost differentials. For example, in 1993, one residential user pays \$2.30 per thousand gallons whereas, another user pays \$4.75 per thousand gallons, the large industrial user pays \$1.30. In Albany, residential users pay \$1.66 with no water property tax and large users in Albany pay \$2.32 per thousand gallons.

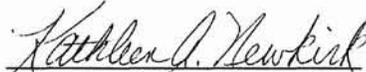
A significant reduction in the water property tax and needed adjustment of water rents would better fulfill the Board's policy of let the user pay. In 1992, we were advised that the water property tax would not be increased. In 1993, this tax was increased 20 percent. In 1993, the water budget was over funded by 1/2 million dollars. The 1995 water budget fails to separate O & M costs for the 2 water treatment plants. No detail has been provided on staffing or any detail on the O & M costs for the different plants. A February 1992 report by Mr. Fraser, the Town's consulting engineer, provided chemical analysis of the new well. There appears to be deterioration of the raw water quality, specifically iron is increased to a maximum of 5.6 parts per million and ammonia has been reported to have increased to 2.66 parts per million. Instead of speculating on the reasons for these changes, I urge that a surveillance and monitoring program be established to measure specific contaminants including PCB's, THM's, glycol and other organic contaminants that will not be monitored on a routine basis. There is no assurance that sampling based on the Health Department requirements would identify changes in water quality. The costs for the analysis should be included in the budget. Thank you.

SUPERVISOR FULLER: Thanks, Sherwood. Is there anyone else who would like to speak in opposition? There were none. May I have a motion to close the public hearing.

The motion was made by Mr. Putney and seconded by Mr. Webster to close the public hearing at 7:45 p.m. The motion was passed by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.

Noes: None.


Town Clerk

The Supervisor convened the regular meeting following the public hearing, noting there was time between the two public hearings and the Board would proceed with the agenda items.

The next item was a recommendation regarding appointment of Republican Election Inspectors and Polls Clerks for replacements on Election Day, November 8, 1994.

The following resolution was offered by Mr. Lenhardt and seconded by Mr. Webster:

Appoint
Election
Inspectors
and
Poll Clerks
as replacements

RESOLVED, that pursuant to Article 3 of the Election Law, the following persons be and they hereby are appointed Election Inspectors and Poll Clerks as recommended by the Republican Committee for the term beginning July 15, 1994 through July 14, 1995 as follows:

Dist. 5 Ann S. Drew, 52 Euclid Ave., Delmar, NY
Dist. 25 Sue LeMere, 12 Cottage Lane, Selkirk, NY
Dist. 25 Dorothy Rossman, 53 Gardner Terr., Delmar, NY.

The resolution was adopted by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

The next item was a recommendation from the Traffic Safety Committee regarding stop intersections.

Set Public
Hearing
Local Law
No. 10, 1994
Re: Stop
Intersections

The motion was made by Mr. Lenhardt and seconded by Mrs. Davis to hold a public hearing on November 22, 1994 at 7:30 p.m. to consider Local Law No. 10 amending the Code of the Town of Bethlehem as follows:

AMEND VEHICLE AND TRAFFIC ARTICLE VI, Section 119-33, Schedule VII, Stop Intersections as follows:

ADD: A stop intersection as follows:

Palmer Avenue at the intersection of Clarkson Road, north;
Palmer Avenue at the intersection of Wellington Road, north;
Palmer Avenue at the intersection of Wellington Road, south;
Palmer Avenue at the intersection of Douglas Road, south;
Fairway Avenue at the intersection of Clarkson Road, west;
Clarkson Road at the intersection of Wellington Road, north;
Sylvan Avenue at the intersection of Fairway Avenue, north;
Hannay Lane at the intersection of Frontage Road, south.

The motion was adopted by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

Conditional
Approval of
Final Plat
Cedar Ridge
Sections 2,3,4

The Supervisor next acknowledged receipt of Conditional Approval of Final Plat for the Cedar Ridge, Sections 2, 3 and 4 Subdivision from the Planning Board for information purposes.

Preliminary
Plat Clearview
Subdivision

The Supervisor next acknowledged receipt of Preliminary Plat for Clearview Subdivision from the Planning Board for information purposes.

The next item was a request from Kathleen A. Newkirk, Town Clerk, for approval of attendance of Deputy Town Clerk at seminar, Exceptional Assistant.

Seminar
Deputy Town
Clerk

The motion was made by Mr. Webster and seconded by Mr. Putney to approve the attendance of Deputy Town Clerk Picarazzi at a seminar, Exceptional Assistant to be held December 20, 1994 at Albany, NY with expenses paid. The motion was passed by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

The Supervisor next acknowledged receipt of Preliminary Plat Approval for McCormack's Hollow Subdivision from the Planning Board for information purposes.

Preliminary
Plat approval
McCormack's
Hollow Subdiv.

The next item was a request from the Administrator of Parks & Recreation Department for approval of seasonal personnel.

Approve
Seasonal
Personnel

The motion was made by Mrs. Davis and seconded by Mr. Putney to approve the appointment of seasonal personnel as per the Memorandum from David Austin, Administrator of Parks & Recreation Department, dated October 26, 1994. The motion was passed by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

The next item was a request from Engineering Services Administrator regarding acceptance of deeds.

The motion was made by Mr. Webster and seconded by Mr. Putney to approve the acceptance of deed for the Colonial Woodlands, Section 1 Subdivision. The motion was passed by the following vote:

Accept Deeds
Colonial
Woodlands
Sec. 1 Subdiv.

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

The next item was a request from the Building Inspector regarding attendance at the Capital District Building Officials Education Conference.

Seminar
Building
Dept.

The motion was made by Mr. Lenhardt and seconded by Mr. Putney to approve the attendance of 5 employees at the Capital District Building Officials Education Conference to be held November 13-16, 1994 at Colonie, NY with registration fee paid and transportation by Town vehicle. The motion was passed by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

The next item was a request from the Assessor for approval to hire appraiser to prepare analyses regarding court cases in regard to assessment certioraris.

Approve
hiring
Appraiser

The motion was made by Mr. Putney and seconded by Mr. Lenhardt to approve the hiring of an appraiser to prepare analyses regarding court cases in regard to assessment certioraris. The motion was passed by the following vote:

filled, feel free to take additional bags. The other item noted was that the bag is to be tied at the top.

Supervisor Fuller asked if anyone else wished to address the Board. Mr. Mike Royo presented a statement to the Board regarding cost analysis of the Hudson River Infiltration Gallery versus water purchase from Albany. Statement is following the minutes of this meeting. He noted he opposed the water plant for the infiltration gallery on health issues. He explained the method he used for the information contained in his statement. He requested the Town review the analysis and get back to him in terms of what the Board's interpretation is.

Cost Analysis
Hudson River
Infiltration
Gallery vs.
water purchase
from Albany

The Supervisor asked if anyone else wished to address the Board. There were none.

Hearing began: 8:00 p.m.

SUPERVISOR FULLER: It is now 8 o'clock. I ask the Clerk to read the call of the hearing.

TOWN CLERK NEWKIRK:

NOTICE OF PUBLIC HEARING

Public
Hearing
Local Law
No. 10, 1994
Partial Tax
Exemption
For Seniors

NOTICE IS HEREBY GIVEN that the Town Board of the Town of Bethlehem, Albany County, New York will hold a public hearing on October 26, 1994 at 8:00 p.m. at the Town Hall, 445 Delaware Avenue, Delmar, NY to consider proposed Local Law No. 10 of 1994, amending Chapter 111 Taxation, Article 1, Section 111.1 of the Code of the Town of Bethlehem permitting a partial real property tax exemption to persons who turn age 65 between March 1 and December 31 of a calendar year.

All parties in interest and citizens will have an opportunity to be heard at the said hearing.

The Town of Bethlehem provides reasonable accommodations for the disabled. Disabled individuals who need assistance in order to participate should contact David Austin at 439-4131. Advanced notice is requested.

BY ORDER OF THE TOWN BOARD
TOWN OF BETHLEHEM
Kathleen A. Newkirk
TOWN CLERK

- - -

State of New York)
County of Albany)

CAROL STUART of the Town of Bethlehem, being duly sworn, says that she is the Advertising Coordinator of THE SPOTLIGHT, a weekly newspaper published in the Town of Bethlehem, County of Albany, and that the notice of which the annexed is a true copy, has been regularly published in said THE SPOTLIGHT ONCE A WEEK FOR 1 WEEK consecutively, commencing on the 19 day of October 1994.

/s/ Carol Stuart

Sworn to before me this 19th
day of October 1994.
/s/ Kathryn Olsen
Notary Public, Albany County

- - -

STATE OF NEW YORK)
COUNTY OF ALBANY) ss.:

KATHLEEN A. NEWKIRK, being duly sworn, deposes and says that she is the Town Clerk of the Town of Bethlehem, Albany County, New York and that I posted on October 19, 1994, a Notice of Public Hearing, a copy of which is hereto attached, on the sign board of the Town maintained pursuant to subdivision six of Section thirty of the Town Law.

/s/ Kathleen A. Newkirk
Town Clerk

Sworn to before me this
26th day of October 1994.
/s/ Catherine T. Picarazzi
Notary Public

- - -

The motion was made by Mr. Lenhardt and seconded by Mrs. Davis to indent the Notice of Public Hearing, Affidavit of Publication and Affidavit of Posting on the minutes of the meeting. The motion was passed by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

- - -

SUPERVISOR FULLER: Change in the senior exemption law was signed into effect on July 6, 1994. It is an amendment to Section 467 of the Real Property Tax Law, exemption for persons 65 years of age or older. The new law increases the maximum income eligibility law for the full 50 percent exemption from \$16,500 to \$17,500. It also enables local governments to increase the income eligibility levels for the partial sliding scale real property tax exemption increasing the new upper limit for a 10 percent exemption from the current level of \$21,300 to \$25,000. The changes in levels indicated on the sheet in front of all of you shall apply to the assessment rolls prepared on the basis of taxable status dates occurring on or after January 1, 1995. This is the 1995 assessment year.

Are there any questions? There were none. I would ask those who wish to speak in favor. There were none. I would ask those who wish to speak in opposition. There were none. May I have a motion to close the public hearing?

The motion was made by Mr. Webster and seconded by Mr. Putney to close the public hearing at 8:04 p.m. The motion was passed by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.

Noes: None.


Town Clerk

The Supervisor asked if the Board wished to adopt this change in senior exemption law, noting anything to be done to help our senior citizens and keep them here in their homes and help with the taxes is a benefit.

Local Law
No. 10, 1994
re: Partial
Tax Exemption
for Seniors
Adopted

The motion was made by Mr. Webster and seconded by Mr. Lenhardt to adopt Local Law No. 10 of 1994. The motion was passed by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

The Supervisor asked for a motion to meet in Executive Session following the regular Town Board to discuss negotiations and pending litigation. The motion was made by Mr. Lenhardt and seconded by Mr. Webster to meet in Executive Session following the regular Town Board meeting to discuss negotiations and pending litigation. The motion was passed by the following vote:

Executive
Session

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

The motion was made by Mr. Putney and seconded by Mr. Webster to adjourn the regular Town Board meeting at 8:10 p.m. The motion was passed by the following vote:

Ayes: Mrs. Fuller, Mr. Webster, Mr. Lenhardt, Mr. Putney,
Mrs. Davis.
Noes: None.

Kathleen A. Newkirk
Town Clerk

EXECUTIVE SESSION

There was no action taken at the Executive Session.

Presented to Town Board at Town Board meeting 10/26/94
from Mike Royo.

**Cost Analysis of the Hudson River Infiltration Gallery
vs.
Water Purchase from Albany**

An attempt was made to verify the validity of the operating cost projections for the new Hudson River infiltration gallery plant versus buying water from Albany. The method used to estimate costs is similar to that used by the town in the attached spreadsheets dated REV: 06/17/94. The cost estimates for purifying water, however, were based on historical cost data from the existing plant at Vly Creek. We assumed that the cost to treat 1000 gallons of water would be the same at the new plant as at the Vly Creek plant despite the fact that the new plant is more complex and requires the use of ozone treatment.

Conclusions

- The analysis shows that it will cost the Town more to produce the water at the Hudson River plant ($> \$1.87$ per 1000 gals.) than the Town is charging Cogen ($\$1.69$ per 1000 gals. for the next 10 years).
- Two separate accounting systems are necessary for the new plant and the Vly Creek operation. Otherwise it will be impossible to determine the true cost of the Hudson River plant.
- This analysis shows the cumulative costs for the Hudson River plant to the year 2010 to be $\$34,931,000$. This is much higher than the Town's estimate of $\$22,495,000$ on the spreadsheet dated 6/17/94.
- Cost estimate for the option to purchase water from Albany appear to be overstated. This analysis shows the Albany Purchase option costs through the year 2010 to be $\$33,104,000$ versus the Town's estimate of $\$42,524,000$. The cumulative costs through the year 2010 are actually lower than the estimates for the infiltration gallery option, $\$34,931,000$. For the analysis we assumed that the Town could purchase water at a rate of $\$1.70$ for the first five years and $\$1.75$ for the next 10 years. We believe these are reasonable rates in view of our Cogen agreement at $\$1.69$ per 1000 gals. for the next 10 years and the current Albany resident rate of $\$1.66$ per 1000 gallons.

Assumptions & Other Comments:

Infiltration Option:

- Amortization costs are the same as in Town's revised spreadsheet dated 6/17/94.
- Pump costs are the same as in the Town's spreadsheet dated 6/17/94.
- Purification costs are based on 1994 budget costs for purification in the current water treatment plant. It currently costs \$838,000 to treat 3.79 million gallons per day at the Vly Creek plant. We actually expect treatment costs will be greater in the new, more complex plant using ozone.
- Salaries in the Town's analysis of 6/17/94 are underestimated at \$60,000/year. Existing salaries for two operators at Vly Creek are \$108,000/year including fringes.
- Costs for purification have increased 30% over the past 3 years based on the Town's budget. We assumed an increase of only 5% per year.
- It is probably appropriate to allocate a portion of the budgeted Administration costs of \$376,000 to the operation of the new plant. This additional cost was not included in these calculations.

Albany Purchase Option:

- Maintenance costs and pumping costs are the same as those used in the Town's analysis dated 6/17/94.
- The Town's Albany purchase option included an additional \$5 million, mostly for a 21 million gallon storage tank. Won't the infiltration gallery option also require this storage tank?
- Assumed a purchase rate from Albany of \$1.70 for the first five years, \$1.75 for the next 10 years and 2% per year after that.

Prepared by:

Mike Royo and Sherwood Davies
10/25/94

| Albany Purchase Option | | | | | | | | | | | | |
|--------------------------------------------|----------|-----------|---------|---------|---------|------------|------------|---------------------|----------------|-------------------|------------------|------------------|
| A | B | C | D | E | F | G | H | I | J | K | L | M |
| | | | | | | Cost of | | | | | (2.00%) | |
| | | | Use | | | Water/ | Total | Total | (5.0% Inc) | Water | Total | |
| | | Vly Creek | Est. by | | Yearly | 1000 gals. | Cost/ | Annual | Annual | Purch. | Pumping | Amort. |
| Year | No. Yrs. | & Wells | Year | Deficit | Deficit | from Alb. | 1000 gal. | Costs | Maint. | from Alb. | Costs | \$2,000,000 |
| | | | | | | | I/(F*1000) | J+K+L+M | | G*F*1000 | | |
| 1990 | 0 | 3.79 | 3.79 | 0.00 | 0.0 | | | | | | | |
| 1991 | 1 | 3.79 | 3.85 | 0.06 | 22.3 | | | | | | | |
| 1992 | 2 | 3.79 | 4.60 | 0.81 | 295.7 | | | | | | | |
| 1993 | 3 | 3.79 | 5.21 | 1.42 | 518.3 | | | | | | | |
| 1994 | 4 | 3.79 | 5.83 | 2.04 | 744.6 | | | | | | | |
| 1995 | 5 | 3.79 | 6.44 | 2.65 | 967.3 | | | | | | | |
| 1996 | 6 | 3.79 | 6.50 | 2.71 | 989.2 | \$1.70 | \$1.90 | \$1,882,985 | \$5,000 | \$1,681,555 | \$50,102 | \$146,328 |
| 1997 | 7 | 3.79 | 6.56 | 2.77 | 1011.1 | 1.70 | 1.90 | 1,922,624 | 5,250 | 1,718,785 | 52,261 | 146,328 |
| 1998 | 8 | 3.79 | 6.62 | 2.83 | 1033.3 | 1.70 | 1.90 | 1,962,963 | 5,513 | 1,756,636 | 54,487 | 146,328 |
| 1999 | 9 | 3.79 | 6.68 | 2.89 | 1055.6 | 1.70 | 1.90 | 2,003,402 | 5,788 | 1,794,486 | 56,800 | 146,328 |
| 2000 | 10 | 3.79 | 6.74 | 2.95 | 1077.8 | 1.70 | 1.90 | 2,043,927 | 6,078 | 1,832,337 | 59,185 | 146,328 |
| 2001 | 11 | 3.79 | 6.80 | 3.01 | 1100.1 | 1.75 | 1.94 | 2,139,543 | 6,381 | 1,925,193 | 61,642 | 146,328 |
| 2002 | 12 | 3.79 | 6.87 | 3.08 | 1122.4 | 1.75 | 1.94 | 2,181,358 | 6,700 | 1,964,156 | 64,173 | 146,328 |
| 2003 | 13 | 3.79 | 6.93 | 3.14 | 1144.6 | 1.75 | 1.94 | 2,223,265 | 7,036 | 2,003,120 | 66,781 | 146,328 |
| 2004 | 14 | 3.79 | 6.99 | 3.20 | 1166.9 | 1.75 | 1.94 | 2,265,267 | 7,387 | 2,042,084 | 69,468 | 146,328 |
| 2005 | 15 | 3.79 | 7.05 | 3.26 | 1189.2 | 1.75 | 1.94 | 2,307,368 | 7,757 | 2,081,048 | 72,236 | 146,328 |
| 2006 | 16 | 3.79 | 7.11 | 3.32 | 1211.4 | 1.75 | 1.94 | 2,349,570 | 8,144 | 2,120,011 | 75,087 | 146,328 |
| 2007 | 17 | 3.79 | 7.17 | 3.38 | 1233.7 | 1.75 | 1.94 | 2,391,877 | 8,552 | 2,158,975 | 78,022 | 146,328 |
| 2008 | 18 | 3.79 | 7.23 | 3.44 | 1256.0 | 1.75 | 1.94 | 2,434,291 | 8,979 | 2,197,939 | 81,045 | 146,328 |
| 2009 | 19 | 3.79 | 7.29 | 3.50 | 1278.2 | 1.75 | 1.94 | 2,476,817 | 9,428 | 2,236,903 | 84,158 | 146,328 |
| 2010 | 20 | 3.79 | 7.35 | 3.56 | 1300.5 | 1.75 | 1.94 | 2,519,457 | 9,900 | 2,275,866 | 87,363 | 146,328 |
| Cummulative Sub-Total (1996 - 2010) | | | | | | | | \$33,104,715 | 107,893 | 29,789,092 | 1,012,810 | 2,194,920 |
| 2011 | 21 | 3.79 | 7.41 | 3.62 | 1322.8 | 1.80 | 1.99 | 2,628,353 | 10,395 | 2,380,968 | 90,662 | 146,328 |
| 2012 | 22 | 3.79 | 7.48 | 3.69 | 1345.0 | 1.84 | 2.02 | 2,720,767 | 10,914 | 2,469,466 | 94,059 | 146,328 |
| 2013 | 23 | 3.79 | 7.54 | 3.75 | 1367.3 | 1.87 | 2.06 | 2,815,894 | 11,460 | 2,560,551 | 97,555 | 146,328 |
| 2014 | 24 | 3.79 | 7.60 | 3.81 | 1389.6 | 1.91 | 2.10 | 2,913,807 | 12,033 | 2,654,292 | 101,153 | 146,328 |
| 2015 | 25 | 3.79 | 7.66 | 3.87 | 1411.8 | 1.95 | 2.14 | 3,014,578 | 12,635 | 2,750,759 | 104,856 | 146,328 |
| 2016 | 26 | 3.79 | 7.72 | 3.93 | 1434.1 | 1.99 | 2.17 | 3,118,284 | 13,266 | 2,850,022 | 108,667 | 146,328 |
| 2017 | 27 | 3.79 | 7.78 | 3.99 | 1456.4 | 2.03 | 2.21 | 3,225,002 | 13,930 | 2,952,156 | 112,589 | 146,328 |
| 2018 | 28 | 3.79 | 7.84 | 4.05 | 1478.6 | 2.07 | 2.26 | 3,334,813 | 14,626 | 3,057,235 | 116,623 | 146,328 |
| 2019 | 29 | 3.79 | 7.90 | 4.11 | 1500.9 | 2.11 | 2.30 | 3,447,796 | 15,358 | 3,165,336 | 120,775 | 146,328 |
| 2020 | 30 | 3.79 | 7.96 | 4.17 | 1523.1 | 2.15 | 2.34 | 3,564,037 | 16,125 | 3,276,539 | 125,045 | 146,328 |
| 2021 | 31 | 3.79 | 8.02 | 4.23 | 1545.4 | 2.19 | 2.38 | 3,683,621 | 16,932 | 3,390,923 | 129,438 | 146,328 |
| 2022 | 32 | 3.79 | 8.09 | 4.30 | 1567.7 | 2.24 | 2.43 | 3,806,635 | 17,778 | 3,508,572 | 133,957 | 146,328 |

| HUDSON RIVER - INFILTRATION GALLERY OPTION | | | | | | | | | | | | |
|--------------------------------------------|----------|-----------|---------|---------|----------|-------------|--------------|-----------|--------------|------------|-----------|----------|
| A | B | C | D | E | F | G | H | I | J | K | L | M |
| | | Vly Creek | Use | | (MG/Yr.) | | | Total | | Cost/ | Purif. | Pump |
| Year | No. Yrs. | & Wells | Est. by | Deficit | Yearly | Purif. Cost | Amort. | Pump | Total Cost | 1000 | Costs/ | Cost/ |
| | | | Year | | Deficit | (L*E) | \$13,900,000 | Costs | (G+H+I) | Gallons | MGD | MGD |
| 1990 | 0 | 3.79 | 3.79 | 0.00 | 0.0 | | | | | J/(F*1000) | (5.00%) | (1.25%) |
| 1991 | 1 | 3.79 | 3.85 | 0.06 | 22.3 | | | | | | | |
| 1992 | 2 | 3.79 | 4.60 | 0.81 | 295.7 | | | | | | | |
| 1993 | 3 | 3.79 | 5.21 | 1.42 | 518.3 | | | | | | | |
| 1994 | 4 | 3.79 | 5.83 | 2.04 | 744.6 | | | | | | | |
| 1995 | 5 | 3.79 | 6.44 | 2.65 | 967.3 | | | | | | | |
| 1996 | 6 | 3.79 | 6.50 | 2.71 | 989.2 | \$599,060 | \$1,017,000 | \$233,855 | \$1,849,915 | 1.87 | \$221,055 | \$86,293 |
| 1997 | 7 | 3.79 | 6.56 | 2.77 | 1011.1 | 642,940 | 1,017,000 | 242,021 | 1,901,960 | 1.88 | 232,108 | 87,372 |
| 1998 | 8 | 3.79 | 6.62 | 2.83 | 1033.3 | 689,953 | 1,017,000 | 250,442 | 1,957,395 | 1.89 | 243,714 | 88,464 |
| 1999 | 9 | 3.79 | 6.68 | 2.89 | 1055.6 | 740,061 | 1,017,000 | 259,036 | 2,016,097 | 1.91 | 255,899 | 89,570 |
| 2000 | 10 | 3.79 | 6.74 | 2.95 | 1077.8 | 793,454 | 1,017,000 | 267,806 | 2,078,260 | 1.93 | 268,694 | 90,690 |
| 2001 | 11 | 3.79 | 6.80 | 3.01 | 1100.1 | 850,337 | 1,017,000 | 276,755 | 2,144,092 | 1.95 | 282,129 | 91,823 |
| 2002 | 12 | 3.79 | 6.87 | 3.08 | 1122.4 | 910,924 | 1,017,000 | 285,886 | 2,213,810 | 1.97 | 296,235 | 92,971 |
| 2003 | 13 | 3.79 | 6.93 | 3.14 | 1144.6 | 975,444 | 1,017,000 | 295,202 | 2,287,645 | 2.00 | 311,047 | 94,133 |
| 2004 | 14 | 3.79 | 6.99 | 3.20 | 1166.9 | 1,044,139 | 1,017,000 | 304,705 | 2,365,844 | 2.03 | 326,600 | 95,310 |
| 2005 | 15 | 3.79 | 7.05 | 3.26 | 1189.2 | 1,117,264 | 1,017,000 | 314,401 | 2,448,665 | 2.06 | 342,929 | 96,501 |
| 2006 | 16 | 3.79 | 7.11 | 3.32 | 1211.4 | 1,195,092 | 1,017,000 | 324,291 | 2,536,383 | 2.09 | 360,076 | 97,707 |
| 2007 | 17 | 3.79 | 7.17 | 3.38 | 1233.7 | 1,277,910 | 1,017,000 | 334,379 | 2,629,289 | 2.13 | 378,080 | 98,929 |
| 2008 | 18 | 3.79 | 7.23 | 3.44 | 1256.0 | 1,366,021 | 1,017,000 | 344,669 | 2,727,690 | 2.17 | 396,984 | 100,165 |
| 2009 | 19 | 3.79 | 7.29 | 3.50 | 1278.2 | 1,459,749 | 1,017,000 | 355,164 | 2,831,913 | 2.22 | 416,833 | 101,417 |
| 2010 | 20 | 3.79 | 7.35 | 3.56 | 1300.5 | 1,559,435 | 1,017,000 | 365,867 | 2,942,302 | 2.26 | 437,675 | 102,685 |
| Cumulative Sub-Totals (1996 - 2010) | | | | | | 15,221,781 | 15,255,000 | 4,088,613 | \$34,931,262 | | | |
| 2011 | 21 | 3.79 | 7.41 | 3.62 | 1322.8 | 1,665,439 | 1,017,000 | 376,783 | 3,059,222 | 2.31 | 459,558 | 103,969 |
| 2012 | 22 | 3.79 | 7.48 | 3.69 | 1345.0 | 1,778,146 | 1,017,000 | 387,914 | 3,183,060 | 2.37 | 482,536 | 105,268 |
| 2013 | 23 | 3.79 | 7.54 | 3.75 | 1367.3 | 1,897,960 | 1,017,000 | 399,264 | 3,314,224 | 2.42 | 506,663 | 106,584 |
| 2014 | 24 | 3.79 | 7.60 | 3.81 | 1389.6 | 2,025,310 | 1,017,000 | 410,838 | 3,453,148 | 2.49 | 531,996 | 107,917 |
| 2015 | 25 | 3.79 | 7.66 | 3.87 | 1411.8 | 2,160,649 | 1,017,000 | 422,639 | 3,600,288 | 2.55 | 558,596 | 109,265 |
| 2016 | 26 | 3.79 | 7.72 | 3.93 | 1434.1 | 2,304,460 | 1,017,000 | 434,670 | 3,756,130 | 2.62 | 586,526 | 110,631 |
| 2017 | 27 | 3.79 | 7.78 | 3.99 | 1456.4 | 2,457,250 | 1,017,000 | 446,937 | 3,921,186 | 2.69 | 615,852 | 112,014 |
| 2018 | 28 | 3.79 | 7.84 | 4.05 | 1478.6 | 2,619,558 | 1,017,000 | 459,442 | 4,095,999 | 2.77 | 646,645 | 113,414 |
| 2019 | 29 | 3.79 | 7.90 | 4.11 | 1500.9 | 2,791,953 | 1,017,000 | 472,189 | 4,281,143 | 2.85 | 678,977 | 114,832 |
| 2020 | 30 | 3.79 | 7.96 | 4.17 | 1523.1 | 2,975,039 | 1,017,000 | 485,184 | 4,477,223 | 2.94 | 712,926 | 116,267 |
| 2021 | 31 | 3.79 | 8.02 | 4.23 | 1545.4 | 3,169,454 | 1,017,000 | 498,430 | 4,684,884 | 3.03 | 748,572 | 117,721 |
| 2022 | 32 | 3.79 | 8.09 | 4.30 | 1567.7 | 3,375,873 | 1,017,000 | 511,931 | 4,904,804 | 3.13 | 786,001 | 119,192 |

EST. USE EST. BY YR. BY Y. = EST. ANNUAL USE = MX + B
 M = SLOPE OF LINE = 0.061 ±
 X = DATE (YEAR)
 B = Y INTERCEPT OR USE IN 1989 = 3.79 MGD

REV: 06/17/94

Town's Analysis

SAFE YIELD BETH (MGD) = 4.02 MGD; REVISED TO 3.84 MGD IN '83 REPORT

| NO. YEAR | B | USE EST BY YR | BETH WATER DEFICIT (MGD) (+) | TOTAL WATER DEF. MGD/YR | COST PER 1000 GAL | TOTAL ANNUAL COSTS | 1993 PRESENT WORTH 7.00% | CHEM. COSTS 3.00% | SALARIES 3.00% | ELECT. & FUEL 3.00% | ANNUAL MAINT. 3.00% | PUMP COSTS 1.25% | AMORT. SCHEDULE \$13,900,000 16 YRS | | |
|------------------------------|------|---------------|------------------------------|-------------------------|-------------------|--------------------|--------------------------|-------------------|------------------|---------------------|---------------------|------------------|-------------------------------------|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1990 | 3.79 | 3.79 | -0.05 | 971.3 | 1.41 | 1,391,324 | 1,135,736 | 50,469 | 60,000 | 20,000 | 10,000 | 233,855 | 1,017,000 | | |
| 1991 | 3.79 | 3.85 | 0.01 | 993.5 | 1.41 | 1,405,081 | 1,071,996 | 53,175 | 61,800 | 20,600 | 10,300 | 242,207 | 1,017,000 | | |
| 1992 | 3.79 | 4.60 | 0.76 | 1,037.3 | 1.40 | 1,419,098 | 1,011,803 | 55,977 | 63,654 | 21,218 | 10,609 | 250,640 | 1,017,000 | | |
| 1993 | 3.79 | 5.21 | 1.37 | 1,037.3 | 1.38 | 1,433,491 | 955,193 | 58,900 | 65,564 | 21,855 | 10,927 | 259,246 | 1,017,000 | | |
| 1994 | 3.79 | 5.83 | 1.99 | 1,059.6 | 1.37 | 1,448,365 | 901,982 | 61,969 | 67,531 | 22,510 | 11,255 | 268,120 | 1,017,000 | | |
| 1995 | 3.79 | 6.44 | 2.66 | 1,081.9 | 1.35 | 1,463,680 | 851,377 | 65,169 | 69,556 | 23,185 | 11,593 | 277,176 | 1,017,000 | | |
| 1996 | 3.79 | 7.06 | 3.32 | 1,104.1 | 1.34 | 1,479,367 | 804,683 | 68,506 | 71,643 | 23,881 | 11,941 | 286,417 | 1,017,000 | | |
| 1997 | 3.79 | 7.68 | 4.00 | 1,126.4 | 1.33 | 1,495,317 | 760,246 | 71,984 | 73,792 | 24,597 | 12,299 | 295,845 | 1,017,000 | | |
| 1998 | 3.79 | 8.29 | 4.68 | 1,148.7 | 1.32 | 1,512,082 | 718,375 | 75,609 | 76,006 | 25,335 | 12,668 | 305,464 | 1,017,000 | | |
| 1999 | 3.79 | 8.91 | 5.36 | 1,170.9 | 1.31 | 1,529,094 | 678,933 | 79,387 | 78,286 | 26,095 | 13,048 | 315,277 | 1,017,000 | | |
| 2000 | 3.79 | 9.53 | 6.04 | 1,193.2 | 1.30 | 1,546,564 | 641,762 | 83,323 | 80,635 | 26,878 | 13,439 | 325,288 | 1,017,000 | | |
| 2001 | 3.79 | 10.15 | 6.72 | 1,215.4 | 1.29 | 1,564,505 | 606,746 | 87,425 | 83,054 | 27,685 | 13,842 | 335,500 | 1,017,000 | | |
| 2002 | 3.79 | 10.77 | 7.40 | 1,237.7 | 1.28 | 1,582,931 | 573,733 | 91,697 | 85,546 | 28,515 | 14,258 | 345,916 | 1,017,000 | | |
| 2003 | 3.79 | 11.39 | 8.08 | 1,260.3 | 1.27 | 1,601,966 | 542,641 | 96,175 | 88,112 | 29,371 | 14,685 | 356,844 | 1,017,000 | | |
| 2004 | 3.79 | 12.01 | 8.76 | 1,283.0 | 1.26 | 1,621,557 | 513,336 | 100,838 | 90,755 | 30,252 | 15,126 | 367,586 | 1,017,000 | | |
| Cumulative Sub-Totals | | | | | | 22,494,985 | 11,768,985 | 1,100,003 | 1,115,935 | 371,978 | 185,869 | 4,485,170 | 15,255,000 | | |
| 2011 | 3.79 | 7.41 | 3.57 | 1,304.9 | 1.26 | 1,641,387 | 485,621 | 105,637 | 93,478 | 31,159 | 15,580 | 378,533 | 1,017,000 | | |
| 2012 | 3.79 | 7.47 | 3.63 | 1,326.8 | 1.25 | 1,661,753 | 459,491 | 110,632 | 96,282 | 32,094 | 16,047 | 389,697 | 1,017,000 | | |
| 2013 | 3.79 | 7.53 | 3.69 | 1,348.7 | 1.25 | 1,682,669 | 434,835 | 115,832 | 99,171 | 33,057 | 16,528 | 401,082 | 1,017,000 | | |
| 2014 | 3.79 | 7.59 | 3.75 | 1,370.6 | 1.24 | 1,704,152 | 411,570 | 121,244 | 102,146 | 34,049 | 17,024 | 412,689 | 1,017,000 | | |
| 2015 | 3.79 | 7.65 | 3.81 | 1,392.5 | 1.24 | 1,726,217 | 389,624 | 126,877 | 105,210 | 35,070 | 17,535 | 424,525 | 1,017,000 | | |
| 2016 | 3.79 | 7.71 | 3.87 | 1,414.4 | 1.24 | 1,748,879 | 368,926 | 132,736 | 108,367 | 36,122 | 18,061 | 436,591 | 1,017,000 | | |
| 2017 | 3.79 | 7.77 | 3.93 | 1,436.3 | 1.23 | 1,772,157 | 349,381 | 138,837 | 111,618 | 37,206 | 18,603 | 448,893 | 1,017,000 | | |
| 2018 | 3.79 | 7.83 | 3.99 | 1,458.2 | 1.23 | 1,796,067 | 330,925 | 145,183 | 114,966 | 38,322 | 19,161 | 461,435 | 1,017,000 | | |
| 2019 | 3.79 | 7.89 | 4.05 | 1,480.1 | 1.23 | 1,820,626 | 313,512 | 151,784 | 118,415 | 39,472 | 19,736 | 474,219 | 1,017,000 | | |
| 2020 | 3.79 | 7.95 | 4.11 | 1,502.0 | 1.23 | 1,845,854 | 297,053 | 158,651 | 121,968 | 40,656 | 20,328 | 487,252 | 1,017,000 | | |
| 2021 | 3.79 | 8.02 | 4.18 | 1,525.0 | 1.23 | 1,872,248 | 281,586 | 165,912 | 125,627 | 41,876 | 20,938 | 500,895 | 1,017,000 | | |
| 2022 | 3.79 | 8.08 | 4.24 | 1,548.0 | 1.23 | 1,899,364 | 266,975 | 173,467 | 129,395 | 43,132 | 21,566 | 514,804 | 1,017,000 | | |
| 2023 | 3.79 | 8.14 | 4.30 | 1,571.0 | 1.23 | 1,927,223 | 253,226 | 181,325 | 133,277 | 44,426 | 22,213 | 528,982 | 1,017,000 | | |
| 2024 | 3.79 | 8.21 | 4.37 | 1,594.0 | 1.23 | 1,955,846 | 241,262 | 189,498 | 137,276 | 45,759 | 22,879 | 543,434 | 1,017,000 | | |
| 2025 | 3.79 | 8.27 | 4.43 | 1,616.9 | 1.23 | 1,985,094 | 230,006 | 197,999 | 141,394 | 47,131 | 23,566 | 558,165 | 1,017,000 | | |
| 2026 | 3.79 | 8.33 | 4.49 | 1,639.9 | 1.23 | 2,014,979 | 219,456 | 206,839 | 145,636 | 48,545 | 24,273 | 573,179 | 1,017,000 | | |
| 2027 | 3.79 | 8.40 | 4.56 | 1,662.9 | 1.23 | 2,045,508 | 209,178 | 216,032 | 150,005 | 50,002 | 25,001 | 588,481 | 1,017,000 | | |
| 2028 | 3.79 | 8.46 | 4.62 | 1,685.9 | 1.23 | 2,076,693 | 199,413 | 225,589 | 154,505 | 51,502 | 25,751 | 604,076 | 1,017,000 | | |
| 2029 | 3.79 | 8.52 | 4.68 | 1,708.9 | 1.23 | 2,108,546 | 190,387 | 235,526 | 159,140 | 53,047 | 26,523 | 619,969 | 1,017,000 | | |
| 2030 | 3.79 | 8.59 | 4.75 | 1,731.9 | 1.23 | 2,141,179 | 181,914 | 245,912 | 163,914 | 54,638 | 27,319 | 636,165 | 1,017,000 | | |
| 2031 | 3.79 | 8.65 | 4.81 | 1,754.6 | 1.23 | 2,174,594 | 174,071 | 256,651 | 168,835 | 56,277 | 28,139 | 652,534 | 1,017,000 | | |
| 2032 | 3.79 | 8.71 | 4.87 | 1,777.2 | 1.23 | 2,208,801 | 166,858 | 267,945 | 173,897 | 57,966 | 28,983 | 669,212 | 1,017,000 | | |
| 2033 | 3.79 | 8.77 | 4.93 | 1,799.8 | 1.23 | 2,243,800 | 160,226 | 279,185 | 179,116 | 59,705 | 29,852 | 686,205 | 1,017,000 | | |
| 2034 | 3.79 | 8.83 | 4.99 | 1,822.4 | 1.23 | 2,279,599 | 154,136 | 291,176 | 184,487 | 61,496 | 30,748 | 703,518 | 1,017,000 | | |
| 2035 | 3.79 | 8.89 | 5.05 | 1,845.1 | 1.23 | 2,316,200 | 148,526 | 303,636 | 190,022 | 63,341 | 31,670 | 721,157 | 1,017,000 | | |
| 2036 | 3.79 | 8.96 | 5.12 | 1,867.7 | 1.23 | 2,353,614 | 143,349 | 316,580 | 195,722 | 65,241 | 32,620 | 739,127 | 1,017,000 | | |
| 2037 | 3.79 | 9.02 | 5.18 | 1,890.3 | 1.23 | 2,391,843 | 138,545 | 330,029 | 201,594 | 67,198 | 33,599 | 757,434 | 1,017,000 | | |
| 2038 | 3.79 | 9.08 | 5.24 | 1,913.0 | 1.23 | 2,430,997 | 134,061 | 344,156 | 207,642 | 69,214 | 34,607 | 776,083 | 1,017,000 | | |
| 2039 | 3.79 | 9.14 | 5.30 | 1,935.6 | 1.23 | 2,471,176 | 130,845 | 358,511 | 213,871 | 71,290 | 35,645 | 795,080 | 1,017,000 | | |
| 2040 | 3.79 | 9.20 | 5.36 | 1,958.2 | 1.23 | 2,512,480 | 127,837 | 373,583 | 220,287 | 73,429 | 36,715 | 814,430 | 1,017,000 | | |

TOTALS:

\$65,133,759 \$17,756,040 \$7,566,947 \$5,563,192 \$1,854,397 \$927,199 \$21,763,025 \$27,459,000

EST USE EST BY YR BY: Y = EST ANNUAL USE = MX + B
 M=SLOPE OF LINE = 0.061 ±
 X=DATE (YEAR)
 B= Y INTERCEPT OR USE IN 1989 = 3.79 MGD

REV: 06/17/94

Town's Analysis

SAFE YIELD BETH (MGD) = 4.02 MGD; REVISED TO 3.84 MGD IN '83 REPORT

| YEAR | NO. OF YEARS | B | USE EST BY YR | BETH WATER DEFICIT MGD (+) | ANNUAL WATER DEF. MG/YR | COST OF WATER/ 1000 GAL FR. ALB. 2.00% | TOTAL COST PER 1000 GAL | TOTAL ANNUAL COST | 1993 PRESENT WORTH 7.00% | ANNUAL MAINT. 3.00% | WATER PURCHASE FROM ALBANY | TOTAL PUMP'G COST | AMORT SCHEDULE \$7,000,000 30 yrs. @ Var. % 16 |
|-----------------------|--------------|------|---------------|----------------------------|-------------------------|----------------------------------------|-------------------------|-------------------|--------------------------|---------------------|----------------------------|-------------------|------------------------------------------------|
| 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 15 | |
| 1990 | | 3.79 | 3.79 | -0.05 | | | | (12+14+15+16) | | | | (7 x 6) | |
| 1991 | 1 | 3.79 | 3.85 | 0.01 | | \$1.50 | | | | | | | |
| 1992 | 2 | 3.79 | 4.60 | 0.76 | | 1.58 | | | | | | | |
| 1993 | 3 | 3.79 | 5.21 | 1.37 | | 1.65 | | | | | | | |
| 1994 | 4 | 3.79 | 5.83 | 1.99 | | 1.65 | | | | | | | |
| 1995 | 5 | 3.79 | 6.44 | 2.60 | | 1.68 | | | | | | | |
| 1996 | 6 | 3.79 | 6.50 | 2.66 | 971.3 | 1.72 | 2.30 | 2,237,828 | 1,826,739 | 5,000 | 1,670,576 | 50,102 | 512,150 |
| 1997 | 7 | 3.79 | 6.56 | 2.72 | 993.5 | 1.75 | 2.33 | 2,312,188 | 1,763,968 | 5,150 | 1,743,048 | 51,639 | 512,150 |
| 1998 | 8 | 3.79 | 6.62 | 2.78 | 1015.4 | 1.79 | 2.35 | 2,388,185 | 1,702,752 | 5,305 | 1,817,100 | 53,631 | 512,150 |
| 1999 | 9 | 3.79 | 6.68 | 2.84 | 1037.3 | 1.83 | 2.38 | 2,468,513 | 1,643,536 | 5,464 | 1,893,415 | 55,484 | 512,150 |
| 2000 | 10 | 3.79 | 6.74 | 2.90 | 1059.6 | 1.86 | 2.40 | 2,547,918 | 1,586,716 | 5,628 | 1,972,736 | 57,404 | 512,150 |
| Cumulative Sub-Totals | | | | | | | | 11,952,632 | 8,523,711 | 26,546 | 9,096,676 | 266,460 | 2,560,750 |
| 2001 | 11 | 3.79 | 6.80 | 2.96 | 1081.9 | 1.90 | 2.43 | 2,631,808 | 1,531,739 | 5,798 | 2,054,475 | 59,390 | 512,150 |
| 2002 | 12 | 3.79 | 6.86 | 3.02 | 1104.1 | 1.94 | 2.46 | 2,718,526 | 1,478,686 | 5,970 | 2,138,689 | 61,716 | 512,150 |
| 2003 | 13 | 3.79 | 6.93 | 3.09 | 1126.4 | 1.98 | 2.49 | 2,808,287 | 1,427,593 | 6,149 | 2,225,453 | 64,535 | 512,150 |
| 2004 | 14 | 3.79 | 6.99 | 3.15 | 1148.7 | 2.02 | 2.53 | 2,900,782 | 1,378,133 | 6,334 | 2,314,832 | 67,467 | 512,150 |
| 2005 | 15 | 3.79 | 7.05 | 3.21 | 1170.9 | 2.06 | 2.56 | 2,996,086 | 1,330,292 | 6,524 | 2,406,895 | 70,517 | 512,150 |
| 2006 | 16 | 3.79 | 7.11 | 3.27 | 1193.2 | 2.10 | 2.59 | 3,094,274 | 1,284,000 | 6,720 | 2,501,716 | 73,689 | 512,150 |
| 2007 | 17 | 3.79 | 7.17 | 3.33 | 1215.4 | 2.14 | 2.63 | 3,195,425 | 1,239,250 | 6,921 | 2,599,366 | 76,968 | 512,150 |
| 2008 | 18 | 3.79 | 7.23 | 3.39 | 1237.7 | 2.18 | 2.67 | 3,299,619 | 1,195,947 | 7,129 | 2,699,922 | 80,419 | 512,150 |
| 2009 | 19 | 3.79 | 7.29 | 3.45 | 1260.3 | 2.23 | 2.70 | 3,407,769 | 1,154,314 | 7,343 | 2,804,272 | 84,005 | 512,150 |
| 2010 | 20 | 3.79 | 7.35 | 3.51 | 1283.0 | 2.27 | 2.74 | 3,519,163 | 1,114,061 | 7,563 | 2,911,716 | 87,734 | 512,150 |
| Cumulative Sub-Totals | | | | | | | | 42,524,372 | 21,657,727 | 82,965 | 33,754,210 | 994,917 | 7,682,250 |
| 2011 | 21 | 3.79 | 7.41 | 3.57 | 1304.9 | 2.31 | 2.78 | 3,632,157 | 1,074,610 | 7,790 | 3,020,647 | 91,571 | 512,150 |
| 2012 | 22 | 3.79 | 7.47 | 3.63 | 1326.8 | 2.36 | 2.83 | 3,748,502 | 1,036,496 | 8,024 | 3,132,770 | 95,559 | 512,150 |
| 2013 | 23 | 3.79 | 7.53 | 3.69 | 1348.7 | 2.41 | 2.87 | 3,866,287 | 999,643 | 8,264 | 3,248,169 | 99,704 | 512,150 |
| 2014 | 24 | 3.79 | 7.59 | 3.75 | 1370.6 | 2.46 | 2.91 | 3,991,606 | 964,013 | 8,512 | 3,366,932 | 104,012 | 512,150 |
| 2015 | 25 | 3.79 | 7.65 | 3.81 | 1392.5 | 2.51 | 2.96 | 4,118,551 | 929,596 | 8,768 | 3,489,146 | 108,468 | 512,150 |
| 2016 | 26 | 3.79 | 7.71 | 3.87 | 1414.4 | 2.56 | 3.00 | 4,249,221 | 896,373 | 9,031 | 3,614,901 | 113,139 | 512,150 |
| 2017 | 27 | 3.79 | 7.77 | 3.93 | 1436.3 | 2.61 | 3.05 | 4,383,715 | 864,249 | 9,301 | 3,744,292 | 117,972 | 512,150 |
| 2018 | 28 | 3.79 | 7.83 | 3.99 | 1458.2 | 2.66 | 3.10 | 4,522,135 | 833,203 | 9,581 | 3,877,411 | 122,993 | 512,150 |
| 2019 | 29 | 3.79 | 7.89 | 4.05 | 1480.1 | 2.71 | 3.15 | 4,664,586 | 803,242 | 9,868 | 4,014,358 | 128,210 | 512,150 |
| 2020 | 30 | 3.79 | 7.95 | 4.11 | 1502.0 | 2.77 | 3.20 | 4,811,174 | 774,262 | 10,164 | 4,155,232 | 133,628 | 512,150 |
| 2021 | 31 | 3.79 | 8.02 | 4.18 | 1525.0 | 2.82 | 3.26 | 4,965,181 | 746,763 | 10,469 | 4,303,225 | 139,337 | 512,150 |
| 2022 | 32 | 3.79 | 8.08 | 4.24 | 1548.0 | 2.88 | 3.31 | 5,123,677 | 720,184 | 10,783 | 4,455,475 | 145,268 | 512,150 |
| 2023 | 33 | 3.79 | 8.14 | 4.30 | 1571.0 | 2.94 | 3.36 | 4,774,631 | 627,243 | 11,106 | 4,612,095 | 151,430 | 512,150 |
| 2024 | 34 | 3.79 | 8.21 | 4.37 | 1594.0 | 2.99 | 3.40 | 4,942,467 | 606,787 | 11,440 | 4,773,196 | 157,831 | 512,150 |
| 2025 | 35 | 3.79 | 8.27 | 4.43 | 1616.9 | 3.05 | 3.46 | 5,115,160 | 586,913 | 11,783 | 4,938,696 | 164,480 | 512,150 |
| 2026 | 36 | 3.79 | 8.33 | 4.49 | 1639.9 | 3.12 | 3.53 | 5,292,839 | 567,551 | 12,136 | 5,109,317 | 171,385 | 512,150 |
| 2027 | 37 | 3.79 | 8.40 | 4.56 | 1662.9 | 3.18 | 3.59 | 5,475,636 | 548,766 | 12,500 | 5,284,578 | 178,557 | 512,150 |
| 2028 | 38 | 3.79 | 8.46 | 4.62 | 1685.9 | 3.24 | 3.66 | 5,663,686 | 530,461 | 12,875 | 5,464,608 | 186,005 | 512,150 |
| 2029 | 39 | 3.79 | 8.52 | 4.68 | 1708.9 | 3.31 | 3.73 | 5,857,130 | 512,733 | 13,262 | 5,650,129 | 193,739 | 512,150 |
| 2030 | 40 | 3.79 | 8.59 | 4.75 | 1731.9 | 3.37 | 3.80 | 6,056,108 | 495,450 | 13,660 | 5,840,679 | 201,769 | 512,150 |
| 2031 | 41 | 3.79 | 8.65 | 4.81 | 1754.8 | 3.44 | 3.87 | 6,259,478 | 478,600 | 14,069 | 6,035,336 | 210,071 | 512,150 |
| 2032 | 42 | 3.79 | 8.71 | 4.87 | 1777.2 | 3.51 | 3.94 | 6,468,623 | 462,248 | 14,491 | 6,235,442 | 218,690 | 512,150 |
| 2033 | 43 | 3.79 | 8.77 | 4.93 | 1799.8 | 3.58 | 4.01 | 6,683,701 | 446,338 | 14,928 | 6,441,139 | 227,636 | 512,150 |
| 2034 | 44 | 3.79 | 8.83 | 4.99 | 1822.4 | 3.65 | 4.08 | 6,904,865 | 430,933 | 15,374 | 6,652,569 | 236,922 | 512,150 |
| 2035 | 45 | 3.79 | 8.89 | 5.05 | 1845.1 | 3.72 | 4.15 | 7,132,278 | 416,026 | 15,835 | 6,869,660 | 246,561 | 512,150 |
| 2036 | 46 | 3.79 | 8.96 | 5.12 | 1867.7 | 3.80 | 4.22 | 7,366,097 | 401,526 | 16,310 | 7,093,223 | 256,565 | 512,150 |
| 2037 | 47 | 3.79 | 9.02 | 5.18 | 1890.3 | 3.87 | 4.29 | 7,606,497 | 387,551 | 16,799 | 7,322,751 | 266,947 | 512,150 |
| 2038 | 48 | 3.79 | 9.08 | 5.24 | 1913.0 | 3.95 | 4.36 | 7,853,647 | 373,912 | 17,303 | 7,558,623 | 277,721 | 512,150 |
| 2039 | 49 | 3.79 | 9.14 | 5.30 | 1935.6 | 4.03 | 4.43 | 8,107,724 | 360,794 | 17,823 | 7,801,001 | 288,901 | 512,150 |
| 2040 | 50 | 3.79 | 9.20 | 5.36 | 1958.2 | 4.11 | 4.50 | 8,368,910 | 348,063 | 18,357 | 8,050,050 | 300,502 | 512,150 |
| TOTALS: | | | | | | | | \$210,532,641 | \$40,862,263 | \$463,599 | \$189,910,483 | \$6,330,509 | \$13,828,050 |

107.8