

Town of Acton Health Department, Fee Calculation Worksheet

Flow of less than 540 GPD	Flow of 550 - 1,989 GPD	Flow of 2,000 - 5,989 GPD	Flow of 6,000 - 8,989 GPD	Flow of less than 540 GPD	Flow of 550 - 1,989 GPD	Flow of 2,000 - 5,989 GPD	Flow of 6,000 - 8,989 GPD	Alteration (checkbox, tank, line)	Flow of 550 - 1,989 GPD	Flow of 2,000 - 5,989 GPD	Flow of 6,000 - 8,989 GPD	Flow of less than 540 GPD	Flow of 550 - 1,989 GPD	Flow of 2,000 - 5,989 GPD	Flow of 6,000 - 8,989 GPD
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
\$27.37	\$27.37	\$27.37	\$27.37	\$49.71	\$49.71	\$49.71	\$49.71	\$27.37	\$27.37	\$27.37	\$27.37	\$27.37	\$27.37	\$27.37	\$27.37
15	30	45	60	15	30	45	60	15	30	45	60	15	30	45	60
\$49.71	\$49.71	\$49.71	\$49.71	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00	\$39.00
\$117.11	\$149.04	\$284.97	\$570.39	\$31.72	\$149.04	\$460.48	\$808.38	\$23.44	\$91.11	\$181.54	\$271.97	\$479.39	\$57.33	\$86.87	\$141.07
5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
\$128.82	\$163.94	\$313.46	\$627.43	\$34.89	\$163.94	\$506.51	\$899.22	\$25.78	\$100.22	\$198.69	\$299.16	\$527.33	\$60.00	\$90.00	\$155.00
\$95.00	\$125.00	\$250.00	\$500.00	\$30.25	\$140.25	\$440.00	\$880.00	\$10.00	\$50.00	\$100.00	\$200.00	\$400.00	\$50.00	\$75.00	\$125.00
\$130.00	\$165.00	\$315.00	\$630.00	\$35.00	\$165.00	\$510.00	\$1,000.00	\$25.00	\$100.00	\$200.00	\$530.00	\$60.00	\$90.00	\$155.00	\$200.00
36.84%	32.00%	26.00%	26.00%	15.70%	17.65%	15.91%	13.64%	150.00%	100.00%	100.00%	50.00%	32.50%	20.00%	20.00%	106.67%
\$0.47	\$0.13	\$0.08	\$0.08	\$0.13	\$0.129	\$0.127	\$0.125	\$0.37	\$0.16	\$0.07	\$0.07	\$0.21	\$0.07	\$0.04	\$0.02
None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee	Flat Fee

Review minutes include 15 minutes Engineering and 15 minutes Conservation

- Notes
- 1.4 multiplier for benefits was provided by Finance Department

Town Hall Multiplier was based on 11/2/04 calculation by Municipal Properties setting cost per square foot at \$20.16 (Health Department has 745 Square feet for a total cost of \$19,800 per year including conference rooms and telephones)/Septage is 30% of all Health budgets with a predicted revenue of \$120,000 making its contribution to be a 1.02% multiplier (\$5,8409 120,000)

Professional Minutes includes Review by the Engineering and Conservation Departments

Cost per gallon was calculated at certain thresholds with the expectation that permit fees would be based on the cost per gallon as appropriate

Overhead multiplier was based on anticipated Capital Expenditures over a ten year period.

Special Conditions or General Comments	Statutory Limit, if any	Cost per gallon per permit	% Increase	Recommended Rate in F.Y. 06	Current Fee Rates	Total Cost per Permit	5 Year Capital Overlays	Town Hall Multiplier ²	Total Salary Costs	Professional Hourly Rate (1.4 benefit ¹)	Professional Minutes per Permit ³	Director Hourly Rate (1.4 benefit ¹)	Director Minutes per Permit	Secretarial Hourly Rate (1.4 benefit ¹)	Secretarial Minutes per Permit	Note: Budgetary Dept. Name in cell above
New Construction Site Inspection																
Sanctic System																
Flow of less than 549 GPD	None	\$0.47	36.84%	\$130.00	\$95.00	\$128.82	5.00%	5.00%	\$117.11	\$39.00	140	\$49.71	15	\$27.37	30	Flow of less than 549 GPD
Flow of 550 - 1,999 GPD	None	\$0.13	32.00%	\$185.00	\$125.00	\$163.94	5.00%	5.00%	\$149.04	\$39.00	170	\$49.71	30	\$27.37	30	Flow of 550 - 1,999 GPD
Flow of 2,000 - 5,999 GPD	None	\$0.12	30.67%	\$480.00	\$375.00	\$486.64	5.00%	5.00%	\$444.21	\$39.00	605	\$49.71	45	\$27.37	30	Flow of 2,000 - 5,999 GPD
Flow of 6,000 - 9,999 GPD	None	\$0.10	29.60%	\$810.00	\$625.00	\$809.75	5.00%	5.00%	\$736.14	\$39.00	1035	\$49.71	60	\$27.37	30	Flow of 6,000 - 9,999 GPD
Private Sewer Connection																
Flow of less than 549 GPD	None	\$0.133	15.70%	\$35.00	\$30.25	\$36.51	5.00%	5.00%	\$33.19	\$39.00	30	\$49.71	30	\$27.37	30	Flow of less than 549 GPD
Flow of 550 - 1,999 GPD	None	\$0.129	17.65%	\$185.00	\$140.25	\$163.94	5.00%	5.00%	\$149.04	\$39.00	170	\$49.71	30	\$27.37	30	Flow of 550 - 1,999 GPD
Flow of 2,000 - 5,999 GPD	None	\$0.130	18.18%	\$520.00	\$440.00	\$520.81	5.00%	5.00%	\$473.46	\$39.00	650	\$49.71	45	\$27.37	30	Flow of 2,000 - 5,999 GPD
Flow of 6,000 - 9,999 GPD	None	\$0.129	17.61%	\$1,035.00	\$880.00	\$1,034.97	5.00%	5.00%	\$940.88	\$39.00	1350	\$49.71	60	\$27.37	30	Flow of 6,000 - 9,999 GPD
Replacement/Construction Site Inspection																
Sanctic System																
Alteration (d-box, tank, line)	None	Flat Fee	133.33%	\$35.00	\$15.00	\$36.51	5.00%	5.00%	\$33.19	\$39.00	30	\$49.71	15	\$27.37	30	Alteration (d-box, tank, line)
Flow of less than 549 GPD	None	\$0.37	100.00%	\$100.00	\$50.00	\$100.22	5.00%	5.00%	\$91.11	\$39.00	100	\$49.71	15	\$27.37	30	Flow of less than 549 GPD
Flow of 550 - 1,999 GPD	None	\$0.04	80.00%	\$180.00	\$100.00	\$178.87	5.00%	5.00%	\$162.61	\$39.00	210	\$49.71	15	\$27.37	30	Flow of 550 - 1,999 GPD
Flow of 2,000 - 5,999 GPD	None	\$0.03	35.00%	\$408.00	\$300.00	\$406.41	5.00%	5.00%	\$366.46	\$39.00	490	\$49.71	45	\$27.37	30	Flow of 2,000 - 5,999 GPD
Flow of 6,000 - 9,999 GPD	None	\$0.03	64.00%	\$820.00	\$500.00	\$820.48	5.00%	5.00%	\$745.89	\$39.00	1050	\$49.71	60	\$27.37	30	Flow of 6,000 - 9,999 GPD
Public Sewer Connection																
Flow of less than 549 GPD	None	\$0.21	20.00%	\$60.00	\$50.00	\$57.33	5.00%	5.00%	\$52.11	\$39.00	40	\$49.71	15	\$27.37	30	Flow of less than 549 GPD
Flow of 550 - 1,999 GPD	None	\$0.06	6.67%	\$80.00	\$75.00	\$78.15	5.00%	5.00%	\$71.04	\$39.00	50	\$49.71	30	\$27.37	30	Flow of 550 - 1,999 GPD
Flow of 2,000 - 5,999 GPD	None	\$0.04	120.00%	\$185.00	\$75.00	\$166.89	5.00%	5.00%	\$151.72	\$39.00	155	\$49.71	45	\$27.37	30	Flow of 2,000 - 5,999 GPD
Flow of 6,000 - 9,999 GPD	None	\$0.03	220.00%	\$240.00	\$75.00	\$241.33	5.00%	5.00%	\$219.39	\$39.00	240	\$49.71	60	\$27.37	30	Flow of 6,000 - 9,999 GPD
New Construction Soil Testing																
Flow of less than 549 GPD	None	Flat Fee	33.33%	\$380.00	\$270.00	\$357.62	5.00%	5.00%	\$325.11	\$39.00	460	\$49.71	15	\$27.37	30	Flow of less than 549 GPD
Flow of 550 - 1,999 GPD	None	\$0.52	32.00%	\$680.00	\$500.00	\$680.23	5.00%	5.00%	\$600.21	\$39.00	845	\$49.71	45	\$27.37	30	Flow of 550 - 1,999 GPD
Flow of 2,000 - 5,999 GPD	None	\$0.36	44.50%	\$1,445.00	\$1,000.00	\$1,443.57	5.00%	5.00%	\$1,312.34	\$39.00	1845	\$49.71	120	\$27.37	30	Flow of 2,000 - 5,999 GPD
Flow of 6,000 - 9,999 GPD	None	\$0.25	33.33%	\$2,000.00	\$1,500.00	\$2,000.86	5.00%	5.00%	\$1,818.98	\$39.00	2395	\$49.71	300	\$27.37	30	Flow of 6,000 - 9,999 GPD
Replacement Soil Testing																
Flow of less than 549 GPD	None	\$0.09	153.33%	\$190.00	\$75.00	\$189.60	5.00%	5.00%	\$172.36	\$39.00	225	\$49.71	15	\$27.37	30	Flow of less than 549 GPD
Flow of 550 - 1,999 GPD	None	\$0.28	140.00%	\$380.00	\$150.00	\$359.94	5.00%	5.00%	\$327.22	\$39.00	425	\$49.71	45	\$27.37	30	Flow of 550 - 1,999 GPD
Flow of 2,000 - 5,999 GPD	None	\$0.14	146.67%	\$555.00	\$225.00	\$553.41	5.00%	5.00%	\$503.10	\$39.00	600	\$49.71	120	\$27.37	30	Flow of 2,000 - 5,999 GPD
Flow of 6,000 - 9,999 GPD	None	\$0.10	156.67%	\$770.00	\$300.00	\$771.08	5.00%	5.00%	\$700.96	\$39.00	675	\$49.71	300	\$27.37	30	Flow of 6,000 - 9,999 GPD

Notes

- 1.4 multiplier for benefits was provided by Finance Department
- Town Hall Multiplier was based on 11/20/04 calculation by Municipal Properties setting cost per square foot at \$20.16 (Health Department has 785 Square feet for a total cost of \$19,600 per year including conference rooms and telephones)(Septage is 30% of all Health budgets with a predicted revenue of \$120,000 making the contribution to be a 1.05% multiplier (\$5,840/\$120,000)
- Professional Minutes Includes Review by the Engineering and Conservation Departments
- Cost per gallon was calculated at certain thresholds with the expectation that permit fees would be based on the cost per gallon as appropriate
- Overhead multiplier was based on anticipated Capital Expenditures over a ten year period

Head Description, Dept, Name, in cell above	Secretary Minutes per C1.4 benefit	Director Minutes per Permit	Director Hourly Rate C1.4 benefit	Professional Minutes per Permit	Professional Hourly Rate C1.4 benefit	Total Salary Scale	Town Hall Overhead Multiplier	5 Year Capital Overlays	Total Cost per Permit	Current Fee Rates	Recommended Rate In F.Y. 08	% Increase	Cost per gallon per permit	Statutory Limit (if any)	Special Conditions or General Comments
Sewer Treatment Plant Construction															
8,989 gpd or less	60	\$27.37	\$48.71	1975	\$39.00	\$1,323.53	5.00%	5.00%	\$1,455.89	\$700.00	\$1,460.00	108.57%	\$0.29		Flat Fee
10,000 gpd to 14,999 gpd	60	\$27.37	\$49.71	2890	\$39.00	\$1,813.13	5.00%	5.00%	\$1,984.45	\$1,750.00	\$2,000.00	14.29%	\$0.16		Flat Fee
15,000 gpd to 29,999 gpd	80	\$27.37	\$49.71	5045	\$39.00	\$3,418.43	5.00%	5.00%	\$3,760.27	\$3,150.00	\$3,770.00	19.68%	\$0.17		Flat Fee
30,000 gpd to 59,000 gpd	60	\$27.37	\$49.71	8700	\$39.00	\$6,017.83	5.00%	5.00%	\$6,619.62	\$6,300.00	\$6,635.00	5.32%	\$0.15		Flat Fee
60,000 gpd to 119,000 gpd	60	\$27.37	\$49.71	16000	\$39.00	\$11,433.85	5.00%	5.00%	\$12,577.23	\$12,600.00	\$12,600.00	0.00%	\$0.14		Flat Fee
120,000 gpd to 240,000 gpd	60	\$27.37	\$49.71	28600	\$39.00	\$20,531.98	5.00%	5.00%	\$22,585.18	\$25,200.00	\$22,635.00	-10.18%	\$0.13		Flat Fee
Sewer Treatment Plant Operation															
8,989 gpd or less	30	\$27.37	\$49.71	20	\$39.00	\$39.11	5.00%	5.00%	\$43.03	\$32.50	\$45.00	38.46%	\$0.009		All Wastewater Flows will be charged at \$ 0.09 per gpd
10,000 gpd to 14,999 gpd	30	\$27.37	\$49.71	100	\$39.00	\$103.54	5.00%	5.00%	\$113.89	\$81.25	\$115.00	41.54%	\$0.009		
15,000 gpd to 29,999 gpd	30	\$27.37	\$49.71	185	\$39.00	\$183.64	5.00%	5.00%	\$202.01	\$146.25	\$200.00	-6.75%	\$0.009		
30,000 gpd to 59,000 gpd	30	\$27.37	\$49.71	370	\$39.00	\$353.60	5.00%	5.00%	\$386.96	\$292.50	\$390.00	33.33%	\$0.009		
60,000 gpd to 119,000 gpd	30	\$27.37	\$49.71	760	\$39.00	\$706.52	5.00%	5.00%	\$777.17	\$585.00	\$780.00	33.33%	\$0.009		
120,000 gpd to 240,000 gpd	30	\$27.37	\$49.71	1515	\$39.00	\$1,395.10	5.00%	5.00%	\$1,535.71	\$1,170.00	\$1,540.00	31.62%	\$0.009		
Miscellaneous															
Title 5 Inspection File Review	45	\$27.37	\$49.71	20	\$39.00	\$45.66	5.00%	5.00%	\$50.55	\$0.00	\$50.00				Flat Fee
I/A Operation	30	\$27.37	\$49.71	40	\$39.00	\$52.11	5.00%	5.00%	\$57.33	\$0.00	\$60.00				Flat Fee
Title 5 Inspector	30	\$27.37	\$49.71	15	\$39.00	\$31.72	5.00%	5.00%	\$34.89	\$0.00	\$35.00				Flat Fee
Disposal Works Installer License Renewal	45	\$27.37	\$49.71	130	\$39.00	\$117.46	5.00%	5.00%	\$129.20	\$0.00	\$130.00				Flat Fee
Plan Revision Resubmittal	30	\$27.37	\$49.71	5	\$39.00	\$30.83	5.00%	5.00%	\$33.91	\$0.00	\$35.00				Flat Fee
Deed Restrictions for additions	30	\$27.37	\$49.71	20	\$39.00	\$30.83	5.00%	5.00%	\$33.91	\$0.00	\$35.00				Flat Fee
Septage Pumping Slip	20	\$27.37	\$49.71	10	\$39.00	\$17.41	5.00%	5.00%	\$19.15	\$15.00	\$20.00	33.33%			Flat Fee
Permit Renewal	30	\$27.37	\$49.71	100	\$39.00	\$91.11	5.00%	5.00%	\$100.22	\$75.00	\$100.00	33.33%			Flat Fee
Septage Hauler	30	\$27.37	\$49.71	100	\$39.00	\$91.11	5.00%	5.00%	\$100.22	\$75.00	\$100.00	33.33%			Flat Fee
Disposal Works Installer License	75	\$27.37	\$49.71	160	\$39.00	\$150.64	5.00%	5.00%	\$165.71	\$125.00	\$165.00	32.00%			Flat Fee
Drain Layer	55	\$27.37	\$49.71	220	\$39.00	\$180.52	5.00%	5.00%	\$198.57	\$200.00	\$200.00	0.00%			Flat Fee
Plan Mitigate	2	\$27.37	\$49.71	1	\$39.00	\$3.22	5.00%	5.00%	\$3.54	\$0.00	\$4.00				Flat Fee
Amplifier															
Septic System Replacement	30	\$27.37	\$49.71	10	\$39.00	\$24.33	5.00%	5.00%	\$29.76	\$25.00	\$30.00	20.00%			Flat fee
Impervious Area less than 2,000 sq. ft.	30	\$27.37	\$49.71	40	\$39.00	\$52.11	5.00%	5.00%	\$57.33	\$25.00	\$60.00	140.00%			Flat fee
Impervious Area 2,000 sq. ft. to 4,999 sq. ft.	30	\$27.37	\$49.71	85	\$39.00	\$81.36	5.00%	5.00%	\$89.50	\$25.00	\$90.00	260.00%			Flat fee
Impervious Area 5,000 sq. ft. to 9,999 sq. ft.	30	\$27.37	\$49.71	130	\$39.00	\$110.61	5.00%	5.00%	\$121.67	\$25.00	\$125.00	400.00%			Flat fee
Impervious Area 10,000 sq. ft. and up	30	\$27.37	\$49.71	175	\$39.00	\$139.86	5.00%	5.00%	\$153.85	\$25.00	\$155.00	520.00%			Flat fee

Notes

1. 1.4 multiplier for benefits was provided by Finance Department
- 2.
3. Town Hall Multiplier was based on 11/2/04 calculation by Municipal Properties setting cost per square foot at \$20.18 (Health Department has 785 Square feet for a total cost of \$19,800 per year including conference rooms and telephones)(Septage is 30% of all Health budgets with a predicted revenue of \$120,000 making its contribution to be a 1.05% multiplier (\$5,940/\$120,000))
4. Professional Minutes includes Review by the Engineering and Conservation Departments
5. Cost per gallon was calculated at certain thresholds with the expectation that permit fees would be based on the cost per gallon as appropriate

Overhead multiplier was based on anticipated Capital Expenditures over a ten year period.

DRAFT

TOWN OF ACTON

WASTEWATER

MANAGEMENT

PLAN

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MANAGEMENT

Town of Acton
Wastewater Management Plan

Doug Halley
Health Director
Acton Board of Health
Town of Acton

Introduction

The Town of Acton is a suburban community of 20 square miles, located northwest of Boston, with a population of approximately 19,000 people. For its drinking water supply the Town relies upon nine gravel packed wells. The wells are operated by the Acton Water District with an average daily yield of 3,000,000 gallons. Each of these wells draw upon the surficial soil groundwater reserves of the Town.

In recent years these water sources have been contaminated by industrial uses, most notably the W. R. Grace Superfund Site. However, at the present time the water from the wells that were contaminated are being treated through aeration towers and charcoal filtration. In response to the presence of these contaminants the Water District has passed drinking water standards which allow no more than one part per billion of any one volatile organic compound and no more than five parts per billion of total volatile organic compounds. Presently the water quality delivered to Acton's residents is well within Federal, State & Town drinking water requirements.

Due to these past experiences with water contamination, the Town, in 1989, contracted Goldberg Zoino Associates (GZA) to analyze and map its water resources fully. Based on this work, and its concern for its water sources, the Town has passed many regulations designed to protect its drinking water supply. Among the regulations adopted by the Town have been an Aquifer Zoning Bylaw, a Hazardous Materials Control Bylaw and a Board of Health Aquifer Regulation, each designed to protect the Town from any type of contamination of its drinking water supply. It is the Town's goal to continue to protect its water resources by identifying potential concerns and creating regulations or management systems to address those concerns.

In addition to identifying chemical contamination as a concern the Town also is concerned that nitrate contamination of its drinking water supply could be a potential problem. With the exception of one small private wastewater treatment plant (16,000 gpd), which discharges into the Assabet River, all wastewater generated by the Town is discharged into the subsurface. It should be noted that along with that sole surface discharge there are also a total of nine private treatment plants, with an approximate Title 5 capacity of 390,000 gpd. The remainder of the town (approximately 7,000 homes) relies upon on-site septic systems, which have an approximate Title 5 capacity of 2,600,000 gpd.

Town of Acton Wastewater Management Plan

Given these facts, the Town of Acton recognizes that it is important to manage all private on-site systems in a manner that is protective of its water resources. Presently, the Town has regulations more restrictive than Title 5; it samples its two major streams (Nashoba Brook & Fort Pond Brook) on a quarterly basis for fecal coliform contamination, it samples a dozen monitoring wells on a quarterly basis for nitrate loadings and groundwater levels, and it informs homeowners every two years to pump their septic tank. The beginnings of a wastewater management system have been implemented and Acton is ready to define and advance this system, so that, along with greater life spans, the existing septic systems can be more protective of the environment.

Throughout Massachusetts wastewater management is usually handled by either municipal sewers or with on-site, passive subsurface discharge systems. Municipal sewer systems are generally managed by Departments of Public Works, Sewer Authorities or Sewer Districts and their operations are overseen by D.E.P. In non-sewered areas on-site systems are managed by the homeowner and their ongoing operation are only indirectly overseen by the D. E. P. and the Boards of Health.

Treatment plants by their design are managed daily, with close oversight by D.E.P. and Local Boards of Health, regarding their effluent input and output. However, on-site septic systems have traditionally not been managed closely, nor do they receive close oversight, especially after their initial construction. In response to that knowledge Acton is adopting the premise that on-site wastewater systems, whether for individual homes or clusters of homes, need to be managed from the moment of their technological selection.

Wastewater management should continue through the following elements; the design, siting and installation of a septic system; the maintenance, pumping and inspection of the septic system; and the removal and/ or replacement of the septic system. In this way the Town can ensure longer life spans for each systems, as well as ensure that surface waters and groundwater remain protected and safe.

Acton takes this approach because of the number of on-site septic systems currently operating (7000) in Town and because of the advanced age that many septic systems have reached (66% are older than 20 years). In addition, two areas of the Town have been identified as needing sewers (South Acton Center & Kelly's Comer) based on environmental concerns. The Town has also formed a Sewer Action Committee to consider more areas of Town which may be needed to be sewerred in the future. However, even with the past studies and the current interest in sewers the Town has been unable to achieve this goal due to the unavailability of both financial resources and discharge locations.

In addition to the pre-existing known problems the rest of the town's septic systems are under more scrutiny with the implementation of the newly revised Title 5. In 1984 a total of 80 systems were replaced or repaired. After the implementation of Title 5, in March 1986, more than 160 systems were replaced or repaired prior to December 31st of that year. The Town anticipates that this number will continue increase over the next five years.

Town of Acton Wastewater Management Plan

In order to address these concerns the Town believes it must continue to develop its rudimentary pumping notification program into a comprehensive wastewater management program. This document is written to define a process for choosing an appropriate program and develop a geographic data base for managing the chosen program. Specifically the Town is seeking grant money which could be placed towards the development of a such a program and in return assist other communities to use the model that Acton develops. The following is the outline of the proposed wastewater management program.

Objective

The objective of Acton's Wastewater Management Program is to manage all wastewater discharges comprehensively, with the goal of prolonging the life span of all systems and ensuring that environmental impacts are minimized, if not eliminated. These goals will be achieved through educating and advising homeowners regarding the operation of their system, promulgating and enforcing appropriately protective bylaws, monitoring environmentally sensitive areas and potentially converting privately owned septic systems to municipally owned common systems.

The key to any wastewater management system is the operation and maintenance of all wastewater facilities. For individual on-site systems that would primarily mean periodic pumping and inspections. In order to achieve that goal a systematic computer data base would have to be developed for all operating septic systems. The location, size, pumping dates and status of each system are some of the data areas that would be required. Ideally the size of the house or building, the size of the property and their relative location to environmentally sensitive areas would also be part of the data base system.

In addition, the dimensional relationship between each septic system with adjacent water resources (both surface & subsurface) is extremely important. Mapping of all wastewater discharge locations, wetlands and high groundwater elevations will be a key objective in any maintenance program. This type of information will allow the town to monitor coliform and nitrate levels and take appropriate action when levels exceed statutory limits. The ability to monitor the Town's resources is a key goal of this grant proposal.

The Town assumes that well maintained septic systems will also be environmentally protective. However, environmental protection can not be ensured without a mechanism for monitoring. Sampling of streams and groundwater wells is essential in monitoring any degradation of the Town's water resources. As part of any monitoring system, standards would have to be established to determine when water sources are at risk from either surface or subsurface pollution. Mapping of groundwater contours and the horizontal and vertical relationship between sampling points will be a key objective in a monitoring program.

Prolonging Septic System Life Spans

A key element to the management program is to increase the life-span of existing and proposed systems. Whether wastewater is discharged to the subsurface from on-site septic systems or from treatment plants it is beneficial to delay additional capital costs by prolonging their functional life. This is particularly true with on-site systems which are scheduled to be replaced by sewers.

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Therefore it is essential that the Town define the necessary steps that must be taken to ensure the proper maintenance and management of each system. The following sections seek to address those issues.

Maintenance

There are four primary reasons which could lead to the premature failure of a septic system. They are the insufficient design, the improper installation, the inappropriate use and the inadequate maintenance of a septic system. Each one of these reasons can significantly reduce the life-span of a septic system. As such they each must be addressed directly by the wastewater management plan if the goal of longer life-spans for septic systems is to be achieved.

Insufficient design is one of the prime reasons for the latest revisions of Title 5, promulgated by D.E.P. However, Acton has long recognized the importance of correct design criteria and has had a more restrictive standard since the Acton Board of Health regulations passed its Article I 1 in 1978 & Article 16 in 1988 (See Attachment A). The minimum size for a leaching field, the encouragement of leaching trenches and increased setbacks to both surface water bodies and groundwater are some of the additional protections that have been provided by those regulations.

It is the goal of Acton to further supplement the revisions of Title 5 by requiring an additional increase in the separation from groundwater and to wetlands, decreasing the loading per acre in environmentally sensitive zones and encouraging alternative technology which will treat wastewater. The Town will examine the possibility of replacing existing systems through the utilization of municipally owned common systems, municipally owned treatment plants or if necessary on-site septic systems.

In order to reduce the possibility of improper installation of a septic system, it is incumbent that the Town require that each installer be experienced and knowledgeable of the requirements of Title 5 and local regulations. Currently the Town requires each installer to either pass a septic system installation test or provide references from three towns where they currently have licenses. In addition, periodic inspections of all critical construction elements of a septic system are performed by the Town.

With the present staffing the Town is able to inspect septic systems for the initial excavation, fill placement, bottom of system, pipe installation, septic tank placement and final grading. It is important for the Town to increase these inspections to ensure good workmanship and properly built septic systems. Requiring that all systems be certified by the design engineer is an additional check which would also help towards guaranteeing the proper construction performance of each installer.

Inappropriate uses, or discharges, speaks to the need to educate homeowners regarding the capabilities of their septic systems. The types of materials discharged and the manner in which they are discharged can have a detrimental impact on a system. Grease, solid objects or chemicals can have immediate and long term negative impacts on how their system functions. The use of garbage grinders or pumps prior to the septic tank can also be harmful to a septic system.

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Educational mailings should be periodically sent, through the Town's quarterly newsletter, to homeowners addressing these issues. Articles in the local newspapers can be written explaining the dangers of improper use and maintenance of a septic system. An educational program for Acton students based on Rhode Island's Department of Environmental Management's "Oscar's Options" could also be developed to help the next generation of septic system users understand the importance of using a system properly.

Nothing has more negative impact on a septic system than the inadequate maintenance of it. Historically systems which are not pumped periodically have a shorter life-span and encounter more problems than systems which do. In addition, periodic inspections can discover any problems prior to the need of a full replacement of the septic system. Title 5 recommends pumping every three years and requires inspections at the time of any property transfer.

Acton has required that residential septic tanks be pumped every other year and non-residential tanks every year since 1978. Since 1990 the Board of Health has been able to send letters to property owners who haven't pumped their septic tank in accordance with that schedule. Currently the Town averages 2,200 pumps per year for its existing 7,000 septic tanks. Pumpings from each septic tank are taken to the Upper Blackstone Facility in Millis (In accordance with a current three year contract. The current septic pumping notification program that is utilized by the Health Department is enclosed with this report (See Attachment B), along with the contract with Upper Blackstone.

The goal of the wastewater management program is to increase the maintenance of septic tanks so that pumpings would occur at least every other year. Also periodic inspections indicating the status of each septic tank and/ or the "D" box of the septic system would be additional goals. The following is a list of action goals that the Town will examine and place before town meeting for its approval:

1. Mandatory pumping
Every other year for Residential
Every year for Non-Residential

2. Performance Inspections
Septic Tank
Every other year for Residential
Every year for Non-Residential

Leaching Field
Every ten years for Residential
Every five years for Non-Residential

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3. Educational Program

Develop a series of educational brochures for
Water usage
Septic System Maintenance
Dangers of Chemical or Biological Treatments
Garbage Grinders

Mail brochures in quarterly newsletters

Develop an educational program for schools
Based on the "Oscar's Options" Program

4. Increase the number of inspections required for the construction of systems

5. Require design engineer certification for all systems being constructed

Management

The question regarding management of individual septic systems must be addressed if a town-wide wastewater management program is to be successful. The choices can range to the continued private management of each system to the conversion of each system to a public utility. Each option must be examined in detail and the final management structure will be dependent on decisions made by Town Meeting.

If septic systems are to remain as privately managed entities stringent regulations along with financial enticements will be necessary to guarantee each system is built and maintained properly. Required pumping of septic tanks is one option but it could be enhanced through education and relaxation of Title 5's inspection program if pumping occur at a prescribed rate. The Town will need the State's assistance as it develops an inspection and pumping program.

However, there may be financial advantages if the town takes possession of all septic systems and treat them as a single wastewater utility. The town could then advertise and award a pumping contract to the lowest bidder. With the assurance of 3,500,000 gallons pumped each year the Town would be in a good position to reduce the current price of pumping. The contract could also be awarded to several contractors if it was broken down into percentage of total pumpings.

In addition, the replacement of systems could also be placed out to bid as yearly contracts which could help reduce those expenditures. The Town would also be in a better position to determine the need for shared septic systems or sewers, as well as, find appropriate construction locations and building the shared systems as needed. As individual homes encounter problems they can be tied directly to a pre-existing shared system or an adjacent sewer line or if necessary replaced within the bounds of their property.

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As stated previously the Town has an existing contract for septage disposal at the Upper Blackstone Facility in Millis. By creating a wastewater utility it may give the Town more leverage in contract negotiations with Upper Blackstone or other similar facilities. Eventually the existence of a wastewater utility in Acton may allow considering construction of a septage treatment facility in Town, or assisting in creating a regional facility.

However the Town decides to manage a wastewater management program it is important that it be defined clearly so that it can be user friendly. In addition, the relationship between the Town's drinking water supply and all wastewater discharges has to be understood in order that the proper protective actions can be taken. The following are some of the action items the Town must consider regarding the management of the wastewater program:

1. Adoption of wastewater districts
Based on watersheds of the Nashoba & Fort Pond Brooks. Each watershed would be broken down in regards to the confluence of streams, the vicinity of environmentally sensitive zones and the location of major subdivisions or business complexes.
2. Adoption of a Wastewater Bylaw with the following options:
Continued private ownership & maintenance of septic systems
Private ownership but public maintenance of septic systems
Public ownership & maintenance of septic systems
3. Identification of areas of concern where the following could be done:
Common septic areas for 23 homes or less (10,000 gpd or less)
Treatment facilities for homes in excess of 23 (over 1 0,000 gpd)
4. Adoption of betterment bylaws for the following:
Operation of a public maintenance program
Funding for a public replacement program
Capital & Operation costs for a treatment system
5. Contract negotiations and bids
Request for Proposals regarding pumping of septic tanks
Request for Proposals regarding replacement of systems
Request for Proposals regarding septage disposal
6. Examine and identify the following:
The need for an in town Septage Facility
The potential and feasibility of alternative technology

Development of a Computer Data Base

The present septic pumping notification program is operated on a Digital VAX system with programming developed by Pamet Inc., of Acton. It was originally established for the Board of Assessors and its data fields are based on information important to the Assessors. In 1989 the program was modified so that the last septic tank pumping at each address could be entered. In addition, data could be chosen by pumping dates and reports could be requested based on that information (see Attachment B).

The Town has recently converted to a P.C. wide area network system from the existing Digital VAX system. It is anticipated that the Digital VAX system will be abandoned within the next 12 months. There is currently no data base system established in the network system and it is unlikely that the Town will have the resources to re-establish a data base for septic tank pumping within the next three years.

In order to have a comprehensive wastewater management program the Town recognizes that all data related to septic systems is extremely important. The location and size of each system, the maintenance history for each system, all witnessed deep test holes and percolation tests, surface and subsurface monitoring locations and results are some or all of that data is needed to operate and manage a wastewater management program.

The best way to manage all necessary information regarding septic systems would be to establish a GIS (Geographic Information System) data base. This type of system would not only allow the Town to relate information from one data field to another but it would also allow the Town to relate information geographically. Some of the ways this information could be useful are as follows:

Background Information

Town Boundaries, Street Locations and property lines will be necessary for any base map system. In addition, Wetland Maps, Flood Plain Maps, Soil Conservation Maps and Aquifer Maps would be important overlays to determine environmentally sensitive zones. Locations of all structures on each property would also be important.

Historical Soil Records

Since 1978 the Board of Health has required that all soil tests be recorded on a USGS elevation base. These records can be converted to coordinates within the GIS system. Maps can be made which would show the historical groundwater levels, as well as, types of soil and their infiltration rates.

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Septic System Locations

The Town has as built plans for septic systems dating as far back to 1955. Approximately 75% of all existing septic systems have as built plans, however, many of those plans are poorly drawn or do not have the required level of detail. By placing all available information on coordinates and updating it as new systems are built the relationship between septic systems and environmentally sensitive areas (surface waters, groundwater and aquifer zones) can be mapped. In this way the Town can identify areas where septic systems are impacting sensitive zones and should be replaced or receive additional treatment.

Surface Stream Monitoring

The Board of Health has been conducting quarterly sampling for fecal contamination of 44 locations on the Nashoba & Fort Pond Brooks since 1985. The past relationship between those results and failing septic systems could give the Town a better understanding regarding the impact of septic systems on surface water bodies. Future readings can help identify problem areas before they impact sensitive zones. Ideally this type of monitoring would occur on a monthly basis.

Subsurface Stream Monitoring

In the past year the Town has installed 12 monitoring wells near ma or subdivisions. As part of this grant request additional monitoring wells will be established throughout the Town. The Town has begun to sample its existing wells on a quarterly basis for both nitrate levels and groundwater levels. The results of these samples can be mapped in relationship to the Zone 1 & 2 locations of each water supply well and adjacent clusters of septic systems.

Utilize Data Base for Notification or Tracking

The initial use of the data base will be either for septic tank pumping notification or septic tank pumping tracking. If septic systems are left in private ownership than the Town will continue to rely on a notification process which would take shape in a form similar to Attachment C. This program was created by the Board of Health in the mid 80's but was never put into action. Implementation of that program would require significant alteration of the present notification program.

Essentially this proposed notification system would operate through a series of form letters which would be triggered by the data base system. The Town would notify and receive information from property owners regarding the maintenance of their septic system, based on the requirements of the data base system. Each of these letters would have a suspension date and would require additional action if a response is not received. In addition excessive water use can be tracked through Water District Records and property owners can be notified when they exceed or come near to design performances.

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It is probable that regulations would have to be developed by the Board of Health and passed by the Town to ensure responses from each letter category. However, it should be noted with the current non-enforced regulation approximately 75% of the homeowners, who are notified that its time to pump their septic tank, respond positively within 30 days. Regulations may be required for only the most non-compliant and resistant property owners.

Should the Town take on the responsibility of maintaining all septic systems than the data base can serve to assist the Town in scheduling pumpings. Contracted Pumpers could be given a list of properties to pump on a monthly basis and the amount of pumps could be distributed equally over the seasons when septic tanks are easily accessible.

The data base which will interact with the GIS will either be the SepTrack system shown in Attachment "D" or a similar data base system which can work in a GIS environment. Records which have been computerized by the Assessors Department will be transfer-red into this data base system. Additional information will be added by the Engineering, Planning, Building, Conservation, Fire and Health Departments.

Monitor Surface Environmental Impacts

In 1985 the Board of Health began a program of monitoring the two major brooks (Nashoba & Fort Pond) in town for Fecal & Total Coliform contamination. By initiating this program the Board hoped to identify problem areas and in particular to identify septic systems which were polluting either of those brooks. Initially samples were taken to a private lab for analysis but beginning in 1988 the Town established its own water analysis lab where samples could be analyzed. By analyzing its own samples the Town was able to effect cost savings which allowed the Town to increase the number of samples taken. (See Attachment E for Water Analysis Manual)

In order to manage this system better and to correlate the results of the samples the Town established 11 watershed districts based on the two major brooks (7 districts for the Fort Pond Brook Watershed & 4 districts for Nashoba Brook Watershed). Sampling locations were based in accordance with those districts. Working from the furthest down gradient location of each brook in a district, sampling points were distributed wherever brook branches occurred or major drainage systems discharged into the brooks. Each sampling location is labeled with the prefix of its wastewater district and a suffix of its location down gradient in that district. (See Attachment F)

The current sampling program has 44 sampling locations which are sampled four times a year (once each season). Historically the Town has found that exceedence of fecal coliform levels (200 PPM) occur approximately in 15% of the samples. However, many of these exceedences occur in the summer when dryer conditions create less dilution regarding wildlife contribution to contamination levels. Notably high levels occur where a large geese population congregates at Concord Road Ice House Pond, on Nashoba Brook.

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In the past several years this program has allowed the Town to discover direct discharges into the brook systems on an average of once or twice a year. In each case systems were collected in situations where the Town might have taken much longer to discover the problem. The goal of this program is to increase sampling from a quarterly basis to a monthly basis. In this way the Town can monitor more closely for any direct discharges, discovering and collecting them more responsively.

It should also be noted that the Town uses its lab to follow up on any break out complaints that occur at private homes. The existence of the lab has helped the Town to be more responsive to these complaints and to discover problems at a relatively inexpensive price. Statistically the Town tests between 20 to 30 locations each year for potential break out problems.

Monitor Subsurface Environmental Impacts

Although significant groundwater monitoring has occurred throughout the Town it has been primarily in relation to industrial chemical contamination. With the recent revisions to Title 5 the Town recognizes that monitoring of the groundwater for nitrate levels should no longer be postponed. To address this concern the Town, during the spring of 1995, determined potential locations for groundwater monitoring wells. During the summer of 1995 a well driller was contracted and the Town was successful in installing 12 monitoring wells (See Attachment "G").

As in the surface monitoring program the placement of the subsurface monitoring wells were based on the wastewater districts which were previously established. An attempt was made at placing wells down gradient of major subdivisions in accordance with a town wide hydrology study done by GZA in 1984. However, this was not always possible as it was also important to place the wells on Town owned property.

It is the Town's goal to supplement these initial wells with additional monitoring wells over the next five years. Ideally the Town's goal would be to have 4 subsurface monitoring wells in each wastewater district. The primary monitoring well would be located at the furthest down gradient point in each district and three secondary wells would be placed adjacent to and down gradient to the areas with the largest congestion of septic systems.

Each of these wells would have its water level and nitrate level sampled on a monthly basis. The Town is seeking to upgrade its water lab so that nitrate determinations could be done in house. Due to this additional testing requirement and the formalization of the wastewater program the Town will also seek to have its water lab certified appropriately. See Attachment H for information regarding nitrate testing and installation of additional monitoring wells.

ATTACHMENT "A"

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ARTICLE 11. MINIMUM REQUIREMENTS FOR THE DISPOSAL OF SANITARY
SEWAGE IN UNSEWERED AREAS.

Regulation 11-1. Authority

The Board of Health of the Town of Acton, Commonwealth of Massachusetts, acting under the authority of Chapter 111, Section 31, of the General Laws and amendments and additions thereto, and by any other power thereto enabling and acting thereunder and in accordance therewith, has, in the interest of and for the preservation of the public health, duly rescinded all previous Rules and Regulations pertaining to the construction or installation of cesspools or septic tank systems adopted by the Board of Health, Town of Acton, and has duly made and adopted the following rules and regulations pertaining to the construction or installation of on-lot sewerage disposal works.

Regulation 11-2.

The provisions of the Department of Environmental Protection, Commonwealth of Massachusetts, 310 CMR 15.000, The State Environmental Code, Title 5: Standard Requirements for the siting, construction, inspection, upgrade and expansion of on site sewage treatment & disposal-systems & for the treatment & disposal of septage plus any and all amendments and additions thereto, apply to all permits issued by the Board of Health, Town of Acton. Where the following rules and regulations of the Town are more stringent, they shall prevail. All work done by permit shall conform to the specifications, workmanship and requirements of the State and town rules and regulations. Any variance, additional clarification or unusual conditions not covered herein shall be noted in writing on the original Disposal Works Installation Permit Application, any variance approved, shall become a part of the permit.

Regulations 11-3 Permits

- 11-3.1 All sewerage work permits issued by the Board of Health shall expire two (2) years from date of issue. (amended 12/18/84) Permits may be renewed for one year after an expiration but no more than two renewals can be granted.
- 11-3.2 All Disposal Works Installers shall obtain a Disposal Works Installer's permit from the Board of Health. Such permit shall expire at the end of each calendar year. (Refer to fee schedule.) Applicants for such permits shall submit in writing a list of three (3) references (preferably State and local health inspectors) who can attest to the experience of the applicant in construction or repair of sewage disposal Works. For good and sufficient reason, the Board of Health may waive this regulation.

Regulation 11-4 Fees

- 11-4.1 The fee for a permit for sewage disposal installation shall be recommended by the Acton Board of Health and approved by the Acton Board of Selectmen.

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- 11-4.2 There shall be a fee recommended by the Acton Board of Health and approved by the Acton Board of Selectmen for the witnessing of percolation tests and deep observation holes based upon the maximum number of percolation tests and deep test holes to be conducted at a site. A percolation testing and deep observation hole testing permit will be good for one year from date of issue.

Regulation 11-5 Soil Classification

- 11-5.1 Deep test holes may be dug in all months except June, July, August, September, and October.
- 11-5.2 Depending on the soil conditions it may be necessary to increase the number of deep test holes.
- 11-5.3 The Acton Board of Health shall schedule the time and place that such tests are to made in conjunction with the owner, developer or agent of the land.

Regulation 11.6

Deep test holes witnessed by the Board of Health for the purpose of determining maximum groundwater elevation during the wettest season of the year may be excavated beginning November 1st of a calendar year and extending to May 31st of the next calendar year. The Board of Health will be the sole determinant as to whether or not maximum groundwater levels are in effect for the referenced months, or to utilize historical data pertinent to each site tested. (amended 10/7/86)

Regulation 11-7 Minimum Distances

- 11-7.1 Disposal facilities shall be constructed not less than the minimum distances away from items listed in (15.211) of Title 5, State Environmental Code with the following additions.
- 11-7.2 No sewage disposal system with a capacity of less than 2,000 gallons per day shall be constructed within seventy-five (75) feet of any wetland (Any land area or surface area so defined by the Massachusetts Wetlands Protection Act, M.G.L. C. 131,40).
- 11-7.3 No sewage disposal system with a capacity of 2,000 gallons/day or over shall be constructed within one hundred (100) feet of any wetland (Any land area or surface area so defined by the Massachusetts Wetlands Protection Act, M.G.L. C..131, 40).

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- 11-7.4 In the area designated as the Flood Plain District by 'Flood Insurance Rate Map of the Town of Acton, Massachusetts, Map No. 2, plus the map index and street index' and the associated data provided in-the 'Flood Insurance Study, Town of Acton, January 6, 1988', published by the U.S. Department of Housing and Urban Development, Federal Insurance Administration ('HUD Flood Insurance Study'), on-site waste disposal systems shall be located or designed so as to avoid impairment or contamination during flooding, and must comply with the Town of Acton Zoning Bylaw 4.1.
- 11-7.5 A sewage disposal system shall be located on the same lot as the structure it serves.
- 11-7.6 The Board of Health may grant variances to Regulation 11-7.5 if an applicant is able to document their ability to control the area where the septic system is located and if the applicant submits a financial plan detailing how the system will be maintained and replaced when necessary.

Regulation 11-8. Residential Septic Tanks - Minimum Requirements

- 11-8.1 Schedule 40 p.v.c. requires an approved sleeve where the pipe goes through the building foundation.
- 11-8.2 All residential septic tanks, cesspools, or other structures shall have their contents pumped out at least once every two years by a septage hauler licensed by the Town of Acton.
- 11-8.2.1 Septage Haulers shall be licensed by the Board of Health. A fee set by the Board of Health shall be required for said license. Septage Haulers licenses shall be valid for a period of one year, unless revoked for cause by the Board of Health, to run with the calendar year in accordance with 310 CMR 15.02 (3) Septage Handlers Permit. (amended date 3/24/87).
- 11-8.3 Business, industrial or any other type use of septic tank and/or grease traps shall have their contents pumped out by a septage hauler licensed by the Town of Acton as follows:
- Septic tank 1,000 gal & under - once/ 2yrs. minimum
Septic tank over 1,000 gal - once/ yr. minimum
- 11-8.4 Septic tanks and grease traps may be required to be pumped at more frequent intervals if directed by the Board of Health.

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Regulation 11-9 Leaching facilities - Minimum requirements

- 11-9.1 Leaching facilities for any use shall have a minimum of 800 square feet of leaching area for trenches, pits or chambers, 900 square feet for leaching fields or beds, or shall be constructed to meet the requirements given in Table 2.

TABLE 2
Town of Acton Leaching Requirements
(Classifications shall be as defined in Title 5)

Perc. Rate	M.P.I.	Sidewall Area Gallons/ Sq. Ft.			Bottom Area Gallons/ Sq. Ft.		
		Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
	2 mpi	0.74	0.6	xxxx	0.5	0.5	xxxx
	4 mpi	0.74	0.6	xxxx	0.53	0.53	xxxx
	6 mpi	0.7	0.6	xxxx	0.56	0.56	xxxx
	8 mpi	0.66	0.6	xxxx	0.53	0.53	xxxx
	10 mpi	0.66	0.6	xxxx	0.5	0.5	xxxx
	15 mpi	0.57	0.56	0.37	0.37	0.37	0.37
	20 mpi	0.5	0.5	0.34	0.33	0.33	0.33
	21 mpi	0.36	0.36	0.3	xxxx	0.30	0.30
	25 mpi	0.3	0.3	0.3	xxxx	0.27	0.25
	30 mpi	0.25	0.25	0.25	xxxx	0.22	0.20
	40 mpi	xxxx	xxxx	0.2	xxxx	xxxx	0.15
	60 mpi	xxxx	xxxx	0.15	xxxx	xxxx	0.10

- 11-9.2 The Board of Health may request that certain trees or foliage be removed if in their estimation they feel said trees may develop root growth that may interfere with proper operation of the system.
- 11-9.3 Leaching works constructed in areas where the underlying natural soil material is not sharp coarse sand or sharp gravel shall have a minimum of 6" of clean bank run gravel placed beneath the stone.
- 11-9.4 The Board of Health or its agents may require this minimum 6" of gravel at its discretion, regardless of the type of underlying soil material.
- 11-9.5 The 4'-0" minimum requirement of naturally occurring pervious soil material may not be lessened in order to provide room for this requirement.
- 11-9.6 The minimum depth of clean washed stone 3/4"- 1 1/2" in size shall be 12 inches measured below the invert of the distribution pipes.
- 11-9.7 The minimum distance between sidewalls of leaching trenches must be twelve (12) feet when the area between trenches is used for a reserve -area. (amended 8/17/@2)

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Regulation 11-10 Subdivision Requirements

- 11-10.1 Extreme care shall be practiced on the layout of a subdivision in unsewered areas. The number of lots to be tested in a subdivision shall be determined by the Board of Health based on the site examination. Such tests shall include deep observation holes and percolation tests for each area selected. A permit shall be required for each individual house lot per Regulation 11-3 but information from prior testing for subdivision approval can be used providing the leaching area falls within the area previously tested.

Regulation 11-11. Backfill

- 11-11.1 All lines in leaching facilities shall be left uncovered until after inspection. Contractors shall leave the cover off the distribution box and have ten (10) gallons of water on site for use of the inspector to test the level of the distribution box and outlet water flow.
- 11-11.2 The owner shall take the necessary precautions to see that the works are not damaged by surface waters, animals or other agents while awaiting inspection.
- 11-11.3 All leaching facilities, except for those under pavement, shall have a final cover of sufficient loam to support a dense vegetative cover, preferably grass. Those leaching facilities and other parts of the subsurface sewage disposal system in paved areas shall be insulated when necessary to prevent freezing.

Regulation 11-12 Occupancy Permits

- 11-12.1 A Certificate of Occupancy shall not be issued until a Certificate of compliance shall have been issued first indicating that the sewage disposal has been located and constructed in compliance with the terms of the permits and the requirements of this code and Title 5 of the State Environmental Code. All applications for occupancy of houses without town water must be accompanied by a report from an approved private laboratory, certifying that the quality of the potable water meets the requirements of the U.S. Public Health Service recommendations for drinking water. The quantity of water should be 5 gallons per minute for 4 hours continuous pumping to meet F.H.A. and V.A. requirements.

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- 11-12.2 An application for an occupancy permit shall constitute a permit when signed by the Building Inspector, Gas and Plumbing Inspector and the Board of Health.

Regulation 11-13 Nuisance

- 11-13.1 Every owner or occupant of a premises in which there is a local sewage disposal works shall keep the same in a sanitary condition and shall have the same emptied and cleaned when necessary. The Board of Health can determine the necessity for emptying and cleaning a sewage disposal works. No septic- tank, cesspool or leaching pit shall be emptied except by persons licensed by the Board of Health. If the owner or occupant fails to comply with such order, the Board may cause the nuisance, source of filth or cause of sickness to be removed and all expenses incurred thereby shall be paid by the person who caused or permitted same, if he has had actual notice from the Board of Health of the existence thereof.

Regulation 11-15 Variances

- 11-15.1 Variances may be granted as follows:

The Board of Health may vary the application of any provisions of this Article with respect to any particular case when, in its opinion (1) the enforcement therefore would do manifest injustice; and (2) the applicant has proved that the same degree of environmental protection required under this article can be achieved without strict application of the particular provision.

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ARTICLE 16. MINIMUM REQUIREMENTS FOR ACTIVITIES WITHIN THE
GROUNDWATER PROTECTION ZONES

Regulation 16-1. Purpose

- 16-1.1 The purpose of this regulation is to protect the public health by protecting and improving the quality of the groundwater upon which the Town of Acton relies for its water supply, public and private.
- 16-1.2 Protecting and improving the groundwater shall include, but not be limited to the following actions:
- 16-1.2.1 preventing degradation of, and improving the quantity and quality of surface water, underground aquifers, public water supply, and groundwater within the Permit Area,
 - 16-1.2.2 maintaining, improving, and preventing reduction of groundwater recharge,
 - 16-1.2.3 preventing discharge, or potential discharge, onto or into the ground of any hazardous substance, or any other substance which may degrade the quality of groundwater,
 - 16-1.2.4 preventing any other activity which may degrade, reduce, interfere with, or otherwise adversely affect Regulated Waters,
 - 16-1.2.5 preventing any activity within the Permit Area that will alter quality of the Regulated Waters in such a way as to pose a threat to public health, safety or welfare.

Regulation 16.2. Definitions

- 16.2.1 Regulated Activities shall include, but not be limited to the following:
- 16.2.1.1 excavation, disposal, filling, construction, reconstruction, use, change or expansion of use, storage, or other activity involving any risk of discharge of any substance, including septic system leachate, directly, or indirectly, into the groundwater within the Permit Area,

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- 16-2.1.2 any change of the recharge characteristics of any property within the Permit Area,
- 16-2.2 Regulated Entity (Entities) shall include any individual(s), agent(s), corporation(s), or other entity (entities).
- 16.2.3 Action(s) shall include, but not be limited to any or all listed above in Section 16-1.2(1-5) - Purpose.
- 16.2.4 Regulated Waters shall mean the surface water, underground aquifers, public water supply, and/or groundwater within the Permit Area.
- 16.2.5 The Permit Area shall be the Well Protection Area (Zone 1), the Recharge Protection Area (Zone 2) and the Aquifer Protection Area (Zone 3) as defined in the "Groundwater Protection District Map of the Town of Acton, January 1989," contained in the Goldberg, Zoino Associates' "Final Report - Aquifer Protection/Areas, Town of Acton, Massachusetts," January 1989. (Copies of these may be obtained at the Acton Engineering and Planning Departments.)
- 16-2.6 Permit shall be a "Permit for Work in a Permit Area" which shall be granted by the Issuing Authority. The Permit shall specify in writing which of the Regulated Activity (Activities) may be undertaken by the Permit applicant.
- 16-2.7 The Issuing Authority shall be the Board of Health, or the Health Department of the Town of Acton, as delineated in Section 16-6., PERMITS GRANTED BY THE HEALTH DIRECTOR, and Section 16-5, Issuing Authority.
- 16-2.8 Information shall include, but not be limited to information supplied by the applicant, the Health Department, or any other information before the Board.
- 16-2.9 Risk(s) shall include, but not be limited to the reduction of quantity and/or quality of, or the discharge of any substance to, or any other risk to the Regulated Waters, which may in turn cause any threat to the public health or safety by contact with or ingestion of the Regulated Waters.

Regulation 16-3. Permit Required

- 16-3.1 No Regulated Entity (Entities) shall undertake, perform, or cause to be performed any Regulated Activity within the Permit Area without a Permit from the Issuing Authority.

Town of Acton
Wastewater Management Plan

Regulation 16-4. Issuance of Permits

- 16-4.1 Standards for Issuance. The Issuing Authority shall grant a Permit if it finds, based upon the Information, that the proposed activity poses no significant risk of reducing, interfering with, or degrading the groundwater or causing any threat to the public health and safety.
- 16-4.1.1 The Issuing Authority shall deny the permit if the Information does not demonstrate that the Regulated Activity, poses no significant risk to the Regulated Waters.
- 16-4.2 Conditions. The Board of Health, may take any Action(s) or impose such conditions and limitations on the Permit as may be required to prevent Risk to the Regulated Waters.
- 16.4.2.1 Such conditions and limitations may include substance containment requirements, depth to groundwater requirements, run-off containment requirements, requirements to preserve groundwater recharge, limits on density of use, limits on the extent of impervious cover, treatment of water run-off, or other condition or limitation necessary to further the purposes of this regulation. All construction, use, or other activity shall be conducted in strict compliance with any conditions or limitations imposed in the Permit.
- 16-4.2.2 The Board may require the applicant to provide, at its own expense, such studies, test results, analyses or other data as may be necessary in order to determine whether granting the Permit would be consistent with the standards in this regulation.
- 16-4.2.3 Prior to the Board recommending approval of any subdivision to the Planning Board, an evaluation of the site and a design by competent soil scientists and qualified personnel, shall be submitted by the applicant to the Board.
- 16-4.2.4 A nitrate loading assessment for any project or subdivision which will have a total effluent discharge over 2,000 gallons per day shall be submitted by the applicant to the Board.
- 16-4.2.5 Within the Well Buffer area, monitoring wells, down-gradient of all septic systems with a capacity of 550 gallons per day, or any commercial or industrial use, shall be provided.

Town of Acton
Wastewater Management Plan

- 16-4.2.6 Within the Recharge Protection area, monitoring wells, down-gradient of all septic systems with a capacity of 2,000 gallons per day, or any commercial or industrial use, shall be provided.
 - 16-4.2.7 Within the Well Buffer area, septic systems shall be set back 300' from any public, semi-public or private well supply system.
 - 16-4.2.8 Within the Recharge Protection area, septic systems shall be set back 150' from any public, semi-public or private well supply system.
 - 16-4.2.9 On site Sewer Treatment Plants, with advanced capabilities, shall be required for all projects in excess of 10,000 gallons per day within any aquifer protection zone.
 - 16-4.2.10 All leaching areas within an aquifer zone shall be set back 100' from any recharge, retention, detention or surface drainage area.
 - 16-4.2.11 Hydrogeological studies shall be submitted to the Board for any proposed effluent flow exceeding 5,000 gallons on any one property.
- 16-4.3 Issuance and Renewal. Permits shall be issued by the Issuing Authority, and shall remain in force so long as no significant change occurs in the extent or nature of the activity conducted by the applicant. If there has been any significant change in the extent or nature of the use or activity if new information suggests that the current use or activity poses a Risk to the groundwater or to public health or safety, a new Permit shall be required from the Issuing Authority.
- 16-4.3.1 Every applicant for a Permit shall complete and file a written application in a form prescribed by the Health Director and appear in person or by an authorized representative before the Issuing Authority at the hearing on the issuance of the Permit, unless the Issuing Authority waives the requirement for a personal appearance. The Board may also require the attendance of such other agents or employees of the applicant as may be necessary to provide Information relative to the application.

Town of Acton
Wastewater Management Plan

- 16-4.4 Revocation. The Board may revoke a Permit at any time if it concludes that the Regulated Activity or the manner in which the Regulated Activity is being conducted poses a significant Risk to the Regulated Waters or any, other public health or safety risk. Except in an emergency, no Permit shall be revoked without a hearing before the Issuing Authority prior to the revocation. If a Regulated Activity presents an immediate and significant Risk to the Regulated Waters or any other immediate and public health or safety risk, the Health Director may revoke a Permit without a prior hearing. In the event that a Permit is revoked by the Health Director, the permittee shall be entitled, upon request, to a hearing before the Issuing Authority within ten days after the revocation.

Regulation 16.5 Issuing Authority

- 16-5.1 The Board of Health shall be the Issuing Authority for all permits for all lands, properties, and realty trusts, regardless of ownership within the Permit Area except for those which meet the criteria given in Section VI, PERMITS GRANTED BY THE HEALTH DIRECTOR. The Board has delegated to the Health Director the authority to grant permits for the Health Director the authority to grant permits for the Health Director the authority to grant permits for properties that meet the criteria of Section 16-6.

Regulation 16-6. Permits Granted by the Health Director

- 16-6.1 Notwithstanding the provision of Section 16-3, Permits for installation of septic systems for single family homes may be granted by the Health Director, without conditions if all of the following criteria are met:
- 16-6.1.1 The total flow from the system, calculated in accordance with Title 5 of the Massachusetts Code of Regulations, will not exceed 1000 gallons per day.
 - 16-6.1.2 The percolation rates observed in accordance with required testing procedure exceeds six minutes per inch, or the depth from the bottom of the septic system to groundwater is at least six feet, or the system is at least 1.5 miles from any current or reasonably likely Well Protection Area.
 - 16-6.1.3 The proposed system is not located within any Well Protection Area (Zone 1).
 - 16-6.1.4 All other requirements of Title 5 of the Massachusetts Code of Regulations and the Acton Health Department are met.

Town of Acton
Wastewater Management Plan

16-6.1.5 There are no special circumstances which, in the opinion of the Health Director, could pose a risk of degradation of the groundwater or other public health or safety threat.

16-6.2 Notwithstanding the provisions of Section 16-3, permits for installation of septic systems for single family Homes in areas with percolation rates of less than 6 mpi may be granted by the Health Director, with conditions if all of the following criteria is met:

16-6.2.1 No underground fuel storage tanks shall be permitted on the site.

16-6.2.2 The septic tank shall be pumped a minimum of once every one/two years.

16-6.2.3 The site shall fully conform to the Town of Acton Hazardous Materials Control Bylaw.

16-6.2.4 The sewage disposal system for the proposed buildings at this site shall be approved by Acton Board of Health staff.

16-6.2.5 The leaching facility is designed and installed with pressure dosing of the system, said pressure dosing designed in accordance with the State Environmental Code, or it shall be in compliance with

16-6 Figure I.

ATTACHMENT “B”

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Main Menu

August 20, 1993

1992 by Pamet Systems, Inc.

Friday 09:25

Department Options		Office Applications	
PARC	Parcel Data Maintenance	LIST	Create Word-11 List
BYID	Parcel Detail Report	WORD	Word- I 1 Word Processing
PUMP	Septic Pumping Report	SPRD	Graphic Outlook Spreadsheet
INSP	Inspections	MAIL	Electronic Mail
PERM	Permits/Licensed	DTC	DeskTop Calendar
HAZM	Hazardous Materials	OFF	Misc. Office Options
CODE	Maintain Code Files		
PERS	Personnel and Payroll		System Manager
DEPT	Department Information		
OPT	Optional Software	MGR	System Management

Select an option, then press Next Screen or Return

The Town of Acton has a Digital Vax Computer System with programming provided by Pamet Systems, Inc. The information listed above are the options available when first entering the system. Parcel Data Maintenance is a data base program which all parcels of land in Acton are recorded within.

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Parcel Data Maintenance

August 20, 1993

1992 by Pamet Systems, Inc.

Friday 09:27

Search by

Parcel ID:

Class:

Owner Name:

Location:

98 Arlington Street

Parcel ID	Property Location	Owner	Class
-----------	-------------------	-------	-------

Enter Parcel, Name or Address to search for or press Insert to add a parcel.

No default for this item

Upon entering Parcel Data Maintenance the above screen would appear. To access a parcel you would need to s
Parcel ID, Owner Name or Location.

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Parcel Data Maintenance

August 20, 1993

1992 by Pamet Systems, Inc.

Friday 09:27

Search by Parcel ID: Class:
 Owner Name:
 Location: *98 Arlington Street*

Parcel ID	Property Location	Owner	Class
-E2-221	98 Arlington Street	Weier, Donald A	101

Press Select or Next Screen for Parcel Data; Gold-Next for Notes;
Find to search again; Insert Here to add a parcel; Gold Remove to delete one.

Move the Pointer to the desired parcel.

In the above screen a parcel has been chosen by location and is ready to be selected.

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Parcel Data Maintenance

August 20, 1993

1992 by Pamet Systems, Inc.

Friday 09:30

Parcel ID: E2-221

Location: 98 Arlington Street

■ Owner 1:	WEIER DONALD A	Lot Area:	33,225.00 sf
■ Owner 2:	WEIER ANNE M	Frontage:	sf
■ Addr 1:	98 ARLINGTON STREET	Wetland	%
■ Addr 2:		G. Floor Area:	1,954 sf
■ City/St.:	ACTON MA 01720	F.A. Ratio	0.05
■		Land Value	132,900
■ Class:	101 Single Family Residence	Bldg Value	111,900
■ Lot:	OOOB Last Pumped. 09/18/92	Credits	
■ Desc:	IA Dist:	Total Value:	244,800

Dated Added: 03/16/1988 Updated: 11/03/92 PL Only No Notes No

Press Next Screen for Zoning/Soil; Gold-Next for Notes;
Gold-Find to repeat last search, Find to start a new search.

No default for this item

This screen shows the selected parcel with the applicable information for this parcel note the data base for last pu

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Parcel Data Maintenance

August 20, 1993

1992 by Pamet Systems, Inc.

Friday 09:30

Zoning/Soil Inf.

Parcel ID: E2-221

Location: 98 Arlington Street

Zoning Districts

Code	Description	-Code-	Description
R2	Residential 20,000 SF		

Soil Types

Code	Description	-Code-	Description

Previous Screen: Parcel Data; Next Screen; Environmental; Gold-Next: Notes;

Gold-Find to repeat last search; Find to start a new search.

Press List Choices for the choices

No Default for this item.

This screen is available for any Zoning District Information and soil types information.

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Parcel Data Maintenance

August 20, 1993

1992 by Pamet Systems, Inc.

Friday 09

Zoning/Soil Information

Parcel ID: E2-221

Location: 98 Arlington Street

Business Name	Code	Generator Class
_____		_____
_____		_____
No records		

Miscellaneous Comments

Point to desired Site and press Next Screen to view additional data.
Press Insert to add a Site; Gold-Remove to delete a Site.

Move the Pointer to the desired Site.

This screen is available for any Environmental Site Data Information.

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Parcel Detail Report

August 20, 1993

1992 By Pamet Systems, Inc.

Friday 09:33

Report Parameters

For this report, please supply the following:

Starting Parcel to print: E2-221

Ending Parcel to print: E2-221

Number of copies to print: 1 (1-9)

Report Subtitle Report on 98 Arlington Street

No Default for this item.

This screen is for a parcel detail report which can be accessed from the screen on Page 1.
Parcels can be segregated by the Town's Map & parcel designations only at this time.

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Parcel Detail Report

August 20, 1993

1992 By Pamet Systems, Inc.

Friday 09:34

Preparing the List of Parcels by Parcel ID.

1 Page has been placed in line to print on the LN03 printer

called LNLETTER under the form name NORMAL.

Press any key to continue.

The program will prepared a list of parcels in accordance with their Parcel ID.

Town of Acton
Wastewater Management Plan

Planning Department of the Town of Acton,
List of Parcels by Parcel ID

August 20, 1993

Friday 09:34

Report on 98 Arlington Street

Parcel ID	Property Location	Owner Name	Class
E2-221	98 ARLINGTON ST	WEIER DONALD	101

*****Grand Totals*****

Taxable Parcels = 1

Exempt Parcels = 0

Total Parcels = 1

This is the information generated from a parcel ID data base. Future programming will allow the collation of information by septic tank size, leaching area, of bedrooms, aquifer district, Sewer district, age of septic system or any combination thereof.

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Septic Pumping Report

August 20, 1993

1992 By Pamet Systems, Inc.

Friday 09:36

Report Parameters

For this report, please supply the following:

Earliest pumping date 1 1/0 1/91 (Press Return for First)

Latest pumping date 12/31/91 (Press Return for Last)

Number of copies to print: 1 (1-9)

Exit or Previous: Return to the menu without running the report

Press Return to generate the report

This screen is for a septic pumping report which can be accessed from the screen on Page 1.

Town of Acton
Wastewater Management Plan

Planning Department - Town of Acton,

October 5, 1995

Parcel ID List of Septic Pumping

Thursday 14:46

Pumping dates: 11/01/1991 to 12/31/1991

Parcel ID	Property Location	Owner Name	Class	I	Pump Date
D2-41	1 HURON RD	THOMAS DANIEL R &		101	11/14/1991
D2-52	5 LITTLEFIELD ROAD	SMALL MICHAEL C		101	11/08/1991
D2-171	404 CENTRAL ST	WOOD STANLEY C		101	11/12/1991
D2-178	19 ONEIDA RD	MCPHERSON RALPH D		101	12/17/1991
D4-13	217 NAGOG HILL ROAD	MCCONNOR THOMAS B		104	11/08/1991
D4-37	191 NAGOG HILL RD	GROENER E JOHN		016	11/25/1991
E2-84	382 CENTRAL ST	MCHUGH IRENE		101	12/27/1991
E2-85	385 CENTRAL ST	KAY JOSEPH		101	12/04/1991
E2-102	25 MOHAWK DRIVE	ELLIS STEWART K		101	12/12/1991
E2-165	23 AGAWAM RD	MISKIN MICHAEL		101	11/27/1991
E3-95-41	10 COWDREY LN	PALIZZOLO EDWARD M		101	12/30/1991
E3-119	41 MINUTEMAN RD	SAWYER JOYCE M		101	11/12/1991
E5-20-1	4 STRAWBERRY HILL	B & D REALTY TRUST		340	11/14/1991
F2-128-24	16 MALLARD RD	FITZPATRICK JOHN		101	12/27/1991
F2-129	139 PROSPECT ST	SPENCER CHARLES W JR		101	11/19/1991
F2.A-11-3	1 GREGORY LANE	FEYNMAN, CARL		101	11/14/1991
F2.A-42	303 CENTRAL ST	FRIEDRICHS NANCY L		101	11/04/1991
F2.B-36	46 WINDSOR AV	COOLIDGE MILDRED R		101	11/13/1991
F3-11-7	7 FIFE & DRUM RD	CROUSE BETTY JANE		101	12/18/1991
F3-24-24	1 JOHN SWIFT RD	FISHER, EDWARD		101	12/23/1991
F5-2	2 SIMON HAPGOOD	LONORATO, MICHAEL		101	12/17/1991
F5-12-21	49 STONEYMEADE WAY	BAKER, JOHN		101	11/22/1991
F5-12-37	17 STONEYMEADE WAY	GREGORITCH WILLIAM		101	12/10/1991
F5-12-39	13 STONEYMEADE WAY	SYIEK, JOSEPH		101	11/22/1991
G1-16	6 POWDER HORN LN	PUFF, CHRISTOPHER		101	11/16/1991
G1-34	4 FLINTLOCK DR	CLAPP DONALD E		101	12/06/1991
G1-41	416 ARLINGTON ST	WARFIELD WILLIAM A		101	11/11/1991
G1-156	3 TOWNSEND RD	ANNIS GEORGE S		101	12/09/1991
G2-57	11 TUTTLE DRIVE	NG, KING		101	11/05/1991
G2-101	226 MAIN ST	LUONGO JOSEPH E		101	11/06/1991
G3-19	83 TAYLOR ROAD	DOWNES RICHARD C		101	12/02/1991
G3-21	244 MAIN ST	VALLEY PROPERTIES INC		101	12/18/1991
G3-22	245 MAIN ST	POITRAS, BARRY		101	12/18/1991
G3-134	4 ASHWOOD RD	KAALSTAD TROND H		101	11/13/1991
G4-24	6 ALCOTT ST	LYONS, JAMES		101	11/06/1991
G4-119	4 HAWTHORNE ST	DEARBORN LEE H		101	11/04/1991
G4-202	94 HOSMER ST	MURPHY GEORGE H		101	11/08/1991
G5-88	2 GREAT RD	KELLEHER PAUL C		101	12/31/1991
H2-14	72 ROBBINS STREET	MACGREGOR MALCOLM S		101	11/09/1991
H2-79	21 LIBERTY ST	RUDY JEFFREY H		101	12/02/1991
H3-58	1 LILAC CT	SAWYER HERBERT F		013	11/13/1991
H3-121	19 OLDE SURREY DR	GOLEMESKI RICHARD M		101	11/19/1991
H3-250-2	10 BROOKSIDE CL	FRANCIS, RICHARD		101	11/26/1991

Town of Acton
Wastewater Management Plan

Planning Department - Town of Acton

October 5, 1995

Parcel ID List of Septic Pumping

Thursday 14:46

Pumping dates: 11/01/1991 to 12/31/1991

Parcel ID	Property Location	Owner Name	Class	Pump Date
H3.B-86	52 MAIN ST	PION, ROBERT	101	12/31/1991
H3.B-88-2	5 CONANT ST	FABER PAUL W	101	11/01/1991
H4-17-9	21ROBINWOOD RD	PANTON, GEORGE	101	11/11/1991
H4-105-4	36 HERITAGE RD	GALLAND PETER M	101	11/04/1991
H4-105-31	16 HERITAGE RD	MOORE JAMES E	101	11/04/1991
H4-111-7	5 AYER RD	GOKHALE, SUSHAMA	101	12/13/1991
H4-122	11 LAWSBROOK RD	BURKE, JAMES	101	12/16/1991
H4-146	54 LAWSBROOK RD	SHUTTLE JAMES C	101	11/01/1991
I2-39	4 FAIRWAY ROAD	BARNARD, JOHN	101	11/26/1991
I3-48-J5	130 PARKER ST	EPSTEIN SARA B	102	11/07/1991
I3-64-14	3 SILVER HILL RD	CATO, WILLIAM	101	11/15/1991

There were 54 Parcels listed.

This is a listing of all parcels pumped between November 1, 1991
and December 31, 1991

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Create WORD - 11 List

August 20, 1993

1992 By Pamet Systems, Inc.

Friday 09:41

These parameters define the parcels to be included.

Starting Class to include (Default is First)

Ending Class to include (Default is Last)

Starting Parcel to include (Default is First)

Ending Parcel to include (Default is Last)

Starting pumping date 11/01/91 (Default is First)

Ending pumping date 12/31/91 (Default is Last)

View/Modify field selection? No

Document name Pumping List November 1, 1991 to December 31, 1991

Return for Land Parcel List

This screen is for creating a Word-11 list (word processing) which can be accessed from the screen on Page 1.

Town of Acton
Wastewater Management Plan

TownServer - Board of Health

TownServer - Board of Health

Create Word- II List

August 20, 1993

1992 By Pamet Systems, Inc.

Friday 09:47

Creating Document: Pumping List November 1, 1991 to December 31, 1991

54 Parcels will be placed in document

Pumping List November 1, 1991 to December 31, 1991

%ASC2WOR-1, Creating WORD- I 1 document: (94) Pumping List
November 1, 1991 to December 31, 1991

Press any key to see the menu:

A list of parcels, owners and pump dates can be generated from the
Create Word-11 List.

Town of Acton
Wastewater Management Plan

WORD- I 1 Main Menu

August 20, 1993 9:48 AM

C	Create a document	L	List processing utility
E	Edit a document	M	Electronic mail
P	Print a document	S	Spelling maintenance
D	Delete a document	DK	UDK menu
V	View a document	OP	Option menu
I	List an index	CS	Change user settings
U	Enter printer utility	CD	Change document device
T	Document & transfer utility	RE	Recover changes from journal
F	Finished -- Exit WORD- 11	XU	Execute a UDK
WOW Words of Wisdom		ABOUT	About Word- 11

Type the option and press RETURN

This screen is for WORD-11 Word Processing which can be accessed from the screen on Page 1.

Town of Acton
Wastewater Management Plan

Index of (TOWDISK) [DOUG.WL 1]
1993 9:49 AM

August 20,

Doc#	Document Name	Last Edit	Creation
94	Pumping List November 1, 1991 to December 31, 1991	20-Aug-93	20-Aug-93
92	Beland Septic	20-Aug-93	20-Aug-93
91	Letter to Peter Vaillancourt	19-Aug-93	19-Aug-93
90	Time off	19-Aug-93	19-Aug-93
89	Aquifer Foster Street	18-Aug-93	18-Aug-93
88	Septic Foster Street	18-Aug-93	18-Aug-93
87	A/B High School	17-Aug-93	17-Aug-93

--More--

Use RETURN, NEXT or PREV SCREEN, GOLD-TOP, or GOLD-BOTTOM to move

This list is an index which shows all documents that are available. Note pumping list.

Town of Acton
Wastewater Management Plan

Index of (TOWDISK) [DOUG.WL 1]

August 20, 1993 9:49 AM

Doc#	Document Name	Last Edit	Creation
43	Nursing School Emergency Plan	3-May-93	3-May-93
24	Nursing Administrator Advertisement	7-May-93	7-May-93
54	SEPTIC NOTIFICATION MAILING	18-Jun-93	31-Mar-92
45	septic pumpers	5-Aug-92	17-Mar-92
53	SEPTIC PUMEPING NOTIFICATION	27-jul-93	31-Mar-92
14	Septic Review Form	1-Jun-93	18-Aug-92

--More--

Use RETURN, NEXT or PREV SCREEN, GOLD-TOP, or GOLD-BOTTOM to move

This list is an index showing septic documents, which can be merged with the pumping list.

Town of Acton
Wastewater Management Plan

List Processing Menu

August 20, 1993 09:51 AM

- P Merge a List with a Form and print the result
- D Merge a List with a Form and write the result to a document
- T Test a Selection Specification
- S Sort a List Document

Type the option and RETURN; use GOLD-MENU to return to the Main Menu.

This screen is a list processing utility located in Word-11 Main Menu (see page 15). The list of pumping must be merged with the proper form letter.

Town of Acton
Wastewater Management Plan

List Processing Menu (Merge)

August 20, 1993 09:52 AM

LD List Document

(94) Pumping List November 1, 1991 to December 31, 1991

FD Form Document

(53) SEPTIC PUMPING NOTIFICATION

Ss	Select Specification document	*None*
FR	First record to process	I
TO	Last record to process	*None*
AN	Automatic new page	YES
CO	Include commas in numbers	YES
NE	Negative value representation	LEADING

Make changes, then type GO or ACCEPT to process; use CANCEL to exit.

The form document is the Septic Pumping notification seen in the index on page 17. The list document is the pumping list seen on page 16.

Town of Acton
Wastewater Management Plan

List Processing Menu (Merge)

List Processing Status

Record 79 selected

79 Records were selected out of a total of 79 records processed.

Press RETURN to proceed to the Print Menu

The 79 list documents (pumping records) are merged with the form
document.

Town of Acton
Wastewater Management Plan

July 28, 1993

Laine Realty Trust
17 Bennett Road
Wayland, MA 01778

To Laine Realty Trust:

The Acton Board of Health is contacting homeowners in Acton who have no record of having their septic system pumped in the last two years. Our records indicate that your property at 920 MAIN STREET has not been pumped. Current Board of Health regulations require that each septic system be pumped at a minimum of once every two years. Immediate action should be taken to ensure the continued proper operation of your septic system.

Enclosed with this letter is a pamphlet on maintaining septic systems. The Board of Health requires periodic pumping in order to prevent the intrusion of solids into the leaching portion of the septic system. Solids within that portion of the system will cause it to fail prematurely by clogging the surrounding soils.

Should you have a record of having your septic system pumped in the last two years, please contact the Board of Health immediately. If you are in need of more information regarding the frequency of pumping, licensed pumpers or any other information please contact Doug Halley at 264-9634.

Sincerely,

Doug Halley
Health Director

This is the form document that is sent out to each parcel owner along with the attached pamphlet.