Appendix A-E
Draft Existing Conditions Report Appendices

POUND RIDGE WASTEWATER TASK FORCE

Appendix A: Historical Wastewater Reports

Appendix for Wastewater Reports

1992 Proposed Scotts Corners Wastewater District, Folchetti & Associates **Page 2**

1. Comprehensive study and proposal for a Wastewater Treatment Plant (WWTP) for pre-treating wastewater and pumping to a Subsurface Disposal System (SSDS).
2. Two parcels in Scotts Corners area are under consideration for wastewater treatment plant location, Berman and Quade; neither is acceptable.
3. Town parcel Lot 86 Block 9820 Tax Map 19 in Town Park is a potential solution, but requires either 9,000 feet or 6,300 feet of pumping.

Sept., 1998, Malcolm Pirnie, Letter to Clay Fowler PR Planning Board, Pound Ridge Treated Wastewater Effluent Well Injection **Page 46**

1. Technically and regulatorially, a bad idea – see report.

Sept. 3, 1999 Malcolm Pirnie, Wastewater Disposal Evaluation, Letter to Clay Fowler PR Planning Board **Page 52**

1. MP was retained to evaluate and provide alternatives separate sewage treatment systems
    i. Wastewater Treatment Plant, On site treatment, Pump to "Ball Fields".
    ii. Upgrading selected ssts Needs more study
2. Includes Table of existing conditions

June 29, 2000, Malcolm Pirnie to Malcom Pirnie, Scotts Cornet Test Pits and Percolation Test **Page 59**

1. Summary of the test, but no results.

July 11, 2000, Malcolm Pirnie to Clay Fowler, Scotts Corners Wastewater Treatment System **Page 68**

1. This solution could be used to treat wastewater from only a particular area.
2. Results of test pits and percolation tests behind lots 60, 61 and 62, Block 9320

Sept.26, 2000 Malcolm Pirnie, Letter to Clay Fowler PR Planning Board, Scotts Corner Septic Evaluation – Scope of Work and Cost Estimate **Page 75**

1. Propose some kind of hybrid system, a combination of new leach fields (behind lots 59 through 63), maximizing the efficiency of the existing systems, and tying them all together.
2. Inventory water supply wells, Calculate water uage and wastewater discharge volume, Figure out individual septic system details; tank and field locations and size, Calculate hydraulic loading
3. Support creation of a community water supply

April 2002, Scotts Corners Potable Water and Wastewater Conceptual Investigation Letter from Folchetti & Associates to Joy Simpkins, Waste WaterWastewater **Page 80**

1. System investigation for Scotts Corners northwest parking lot.
2. Quad Parcel (9320-56) found unsuitable for SSDS.
3. Town Park site may be suitable for SSDS, would need variances.
4. Golf Course option for disposal through irrigation may be feasible.
5. Potable Water assessment, neither of two Stamford systems suitable.
6. Water service via Golf Course may be viable alternative. BHC was supportive (out dated).

1992
Feasibility Study
Proposed Scotts Corners Wastewater District
Prepared by Folchetti & Associates

Comprehensive study and proposal for a Wastewater Treatment Plant (WWTP) for pre-treating wastewater and pumping to a Subsurface Disposal System (SSDS). 5 Sites identified and tested with recommendations.
• Estimated Cost for plant and collection system is $1,570,000.
• Wastewater flow of 24,700 gpd.
• Sq. Ft. has increased annual average of approx. 3.4%/year since 1974 (inflated because of size of Trinity Corners Shopping Center).
• Adjusted growth rate without TCSC is 0.75%/year.
• Estimated 2012 design flow is 28,000 gpd.
• Westchester County Health Department (WCHD) and Stamford Water Company is willing to relax separation distances in case of subsurface discharge of treated effluent.

<u>Technical notes extracted by TD on Folcetti study 1992; 3/6/2016</u>

1.1.2 DEC regulations prohibit point discharges into AA streams, aprt of the Stamford Water Company
1.1.4 The estimated existing combined commercial and residential waste water flows in Scotts Corners is 24,700 gpd
1.1.5 The growth rate of Scotts Corners is 3.4% per year since 1974, but EXCLUDING Trinity Corners shopping Center is 0.75% per year.
1.1.8 Based upon the 0.75% growth rate the estimated design flow for 2012 is 28,000 gpd
1.1.9 The Quade and Berman parcels are unsuitable for discharge sites.
1.1.10 WCHD and Stamford Water might work with Pound Ridge to reduce separation distances in the case of subsurface discharge of treated effluent.
1.1.11 WCDH will not consider relaxation of standard application rates even though effluent is treated.
1.2 Conclusions:
1.2.1 A wastewater treatment system with subsurface disposal of treated effluent will alleviate the existing sewage problems in the Scotts corner area.
1.2.2 Based on the nature of the soils, pretreatment with a conventional system, is recommended prior to subsurface discharge.
1.2.3 Two parcels in Scotts Corners area are under consideration for wastewater treatment plant location.
1.2.4 Base upon a reconnaissance and a soil test program, the Town Parcel Lot 66, Block 9820, Map 19 may be suitable for subsurface disposal of plant treated effluent.
1.2.5 The estimated cost in 1992 dollars is $1,570,000 for a collection system and SSDS.

3.1 The Scotts Corners Commercial District is about 41.1 acres. The primary zone is 24.43 acres. Fig 3.1
3.1.1 Table 3-1; Building square footage

Commercial –	159,680
Residential –	13,222
Total	172,902

3.1.2 Table 3-2

Remaining developable square footage

Commercial	62,193
Residential	67,699
Total	129,892

3.2.1 Estimated Existing Flows

Based upon the DEC "Design Standards for wastewater Treatment Works 1988"

Commercial flows	20,393
Residential flows	4,520
Total	24,643 (noted above)

3.2.2.1 Existing and Saturation flow projection results in unreasonable flows of 64,062.

3.2.2.2 Revised projection using dry and wet commercial results in a 2012 flow of 27,900 or 28,000. See text for projection methodology.

4.2 Design Loads

Table 4-1 Design loads for 28,000 gpd or 0.028 mgd based upon ten states standards

Suspended solids	240 mg/l	56.05 #/d
BOD5	220 mg/l	51.4 #/d
NH3-N	25 mg/l	5.8 #/d
Phosphorus	10 mg/l	2.3 #/d

4.3 Treatment Required

1. 3rd paragraph page 15 "the use of innovative/alternative using wetlands, land treatment, do not seem acceptable to DEC and WCHD".
2. Could pump the effluent to a different watershed
3. Subsurface discharge system (SSDS)

4.4 Collection System

8 inch gravity sewer pipe, and 4 inch force mains, and two pump stations, See fig 4-1
Ten States requires 4.0 factor so collection system would have to handle 120,000 gpd.

4.5 Treatment Alternatives

See report for treatment plant suggestions - Sequencing Batch Reactor (SBR)
See Fig 4.2 for process flow diagram

5.0 Three SSDS Treatment Site Alternatives

Berman Parcel on Trinity Pass Rd.
Quade Parcel behind the PR Fire Department
Town Parcel Lot 86, Block 9820, Tax Map 19

5.0 Site Alternatives

Page 20 - Treatment requirements result in the need for 2 acres plus.

5.1 Berman parcel - see text for discussion

5.2 Quade parcel – see text for discussion
Neither are acceptable

5.3 Town parcel

Did perc test and given this result and the area of land available it would work
Would require 9,000 of force main.
Or with an easement this could be reduced to 6,300 feet

5.4 Conclusion is that the treatment plant should be in Scotts Corners and the treated effluent pumped to the Town Park.

6.1 Cost for it all is $1,570,000 plus 20 year loan at 6%. O&M at $38,000 per year.

6.5 Cost Allocation Alternatives

6.5.1 Scotts Corner alone – a, assessed property value; b, metered use; c, prorating

6.5.2 Town wide allocation

6.5.2.1 Single tier – Capital and operating costs borne town wide – based upon flat fee or property value.

6.5.2.1 Double tier – Captital costs town wide
O&M covered by users

6.6 Alternative Financing
SRF, FMHA, HUD,

WASTEWATER TREATMENT FEASIBILITY STUDY

SCOTTS CORNERS POUND RIDGE, NY

JUNE 1992

J. ROBERT FOLCHETTI & ASSOCIATES

ENVIRONMENTAL ENGINEERS
P.O. BOX 374
BREWSTER, NY 10509
SOMERS

FEASIBILITY STUDY

PROPOSED SCOTTS CORNERS WASTEWATER DISTRICT

POUND RIDGE, NEW YORK

May 1992

J. ROBERT FOLCHETTI & ASSOCIATES
P. O. Box 374
Brewster, New York 10509
(914) 279-3346

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FIGURES

APPENDICES

1.0 Summary of Findings, Conclusions and Recommendations

1.1 Findings

1.1.1 That the Scotts Corners Commercial District of Pound Ridge is primarily composed of low water use, retail establishments that are individually served by SSDS's and private wells.

1.1.2 That Scotts Corners lies in the watershed of the Stamford Water Company. All streams in this watershed are classified 'AA' Special. NYSDEC regulations prohibit point discharges into waters so classified.

1.1.3 That the Trinity Corners Shopping Center has a long history of SSDS failures. Samples taken from the shopping center storm drain in the third quarter, calendar year 1991, show elevated levels of fecal coliform and fecal streptococci. These failures have the potential to impact directly on the quality of water in the Stamford Water Company watershed.

1.1.4 That the estimated existing combined commercial and residential wastewater flow in Scotts Corners is 24,700 gpd.

1.1.5 That square footage in Scotts Corners has increased an annual average rate of approximately 3.4% per year since 1974.

1.1.6 That this growth rate is inflated due to the size of the Trinity Corners Shopping Center.

1.1.7 That the adjusted growth rate without Trinity Corners Shopping Center is 0.75% per year.

1.1.8 That based on this rate of growth, the estimated 2012 design year flow is 28,000 gpd.

1.1.9 That the Quade and Berman parcels are unsuitable for use as subsurface discharge sites.

1.1.10 That the Westchester County Health Department (WCHD) and Stamford Water Company both have stated that they are willing to work with the Town of Pound Ridge to resolve existing problems in terms of some relaxation of separation distances in the case of subsurface discharge of treated effluent.

1.1.11 WCHD will not consider relaxation of standard application rates, even though treated effluent would be applied.

1.1.12 That Scotts Corners will qualify for SRF status once the wastewater district formation process is commenced.

1.2 Conclusions

1.2.1 That a wastewater treatment system with subsurface disposal of treated effluent will alleviate the existing sewage problems in the Scotts Corners area.

1.2.2 That, based on the nature of the soils, pretreatment with a conventional system is recommended prior to subsurface discharge.

1.2.3 That two parcels in the Scotts Corners area are under consideration for wastewater treatment plant location.

1.2.4 That based on a reconnaissance and soil test program the Town parcel (Lot 86, Block 9820, Map 19) may be suitable for subsurface disposal of plant treated effluent.

1.2.5 That the estimated capital cost, in 1992 dollars, for the treatment plant, collection system and SSDS is approximately $1,570,000.

1.3 Recommendations

1.3.1 That the conceptual cost estimate be evaluated by the Town.

1.3.2 That, if this conceptual estimate is acceptable, the Town of Pound Ridge proceed with the major tasks shown on Figure 7-1.

1.3.3 That the Town of Pound Ridge continue to explore innovative systems for subsurface disposal with the agencies.

2.0 Introduction

The Scotts Corners area of the Town of Pound Ridge is not presently served by a municipal sewer system. The structures in the area are served by a Sub-Surface Disposal System (SSDS) handling domestic and commercial wastewater flows. The geologic and hydrogeologic conditions of the area are not well suited for this type of treatment. These conditions have resulted in frequent failures. While all of these failures have not been documented, the Westchester County Health Department and Stamford Water Company as well as many residents and business owners are well aware of the problem.

The notable exception to this lack of documentation is the Trinity Corners Shopping Center. Since its construction in the early 1970's, the SSDS for this facility has been subjected to a series of failures resulting in discharges of untreated sewage to the ground surface and drainage of the local watershed. The fact that this watershed serves the Stamford Water Company and the City of Stamford, Connecticut is cause for concern. Recent reclassification of surface waters in this area to 'AA Special' further complicates the situation. NYSDEC "Water Quality Regulations for Surface Waters and Ground Waters" (6 NYCRR Part 701.3.C.) prohibits discharge into waters so classified.

As a result of these problems, the Pound Ridge Sewage Treatment Committee, through the Town Board of the Town of Pound Ridge, retained JRFA to study the feasibility of forming a Municipal Wastewater District and constructing a collection system and sewage treatment plant to serve the Scotts Corners area.

The following sections describe the present and projected future conditions, treatment options, estimated costs and other concerns for the Scotts Corners Wastewater District.

3.0 Existing Conditions and Projections

3.1 Land Use

Scotts Corners is situated in the southeast corner of the Town of Pound Ridge. It is bordered on the northeast by the Town of Lewisboro, on the west by the Town of Bedford and on the south by the City of Stamford, Connecticut.

The Scotts Corners Commercial District area encompasses approximately 41.1 acres. This is divided into primary and secondary zones (see Figure 3.1). The primary zone encompasses 24.43 acres and the secondary zone encompasses 16.68 acres.

The zones were termed primary and secondary based on density and history. The primary zone has a history of SSDS failures, particularly at the Trinity Corners Shopping Center. It also has a higher population and use density. The secondary zone is primarily a low density, residential area and has virtually no documented history of SSDS failure. The Pound Ridge Sewage Treatment Committee issued a questionnaire to the owners/residents in both districts. Those responses are indicated in Figure 3-2. The secondary zone was eliminated from consideration for three reasons:

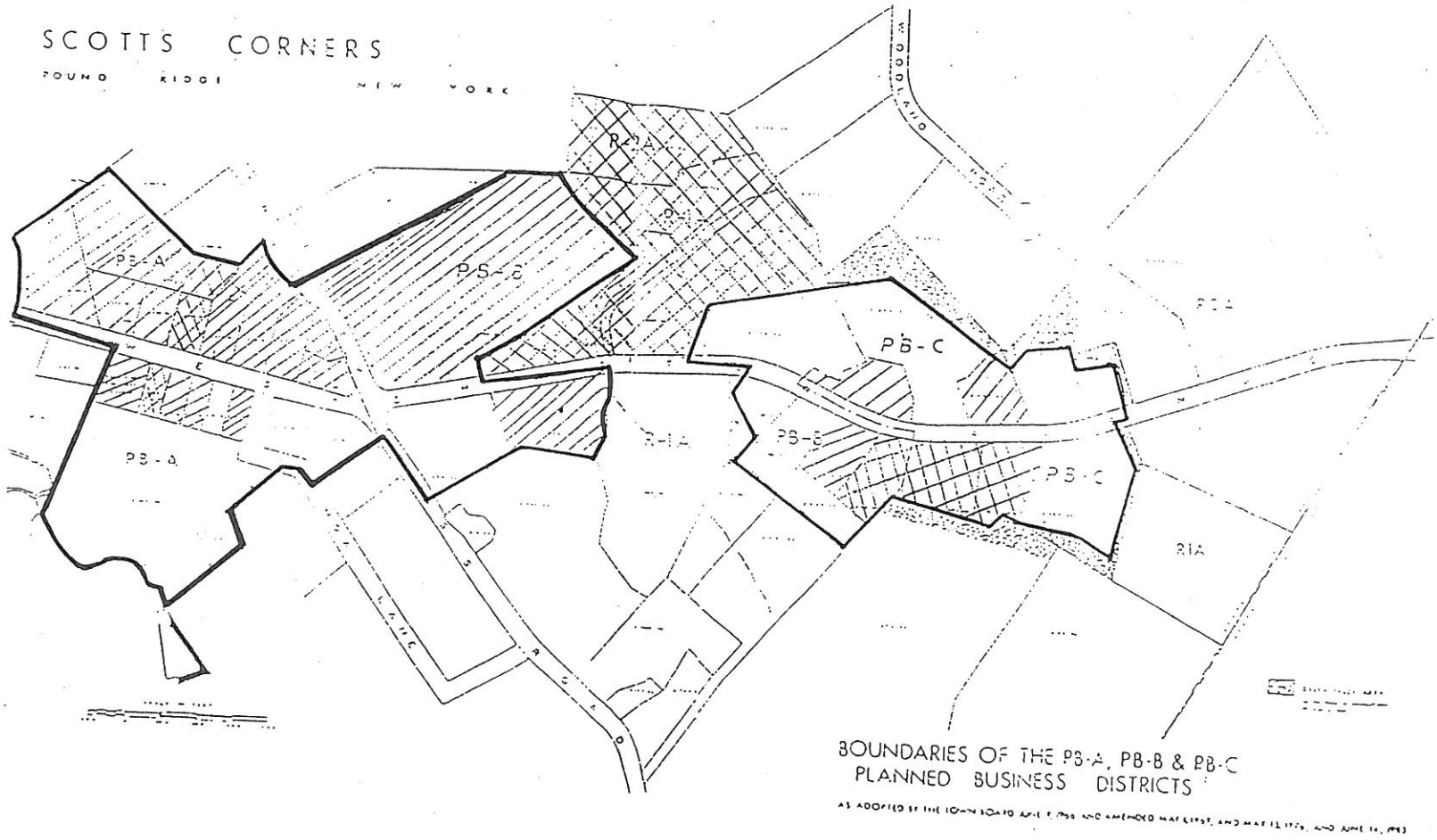
1. No substantial history of SSDS failures.
2. Low density population/water use.
3. Predominantly unfavorable response to the District Formation questionnaire. Over 50% of this zone

LEGEND

/// - Favorable Response

XX - Unfavorable Response

BLANK - No Response



BOUNDARIES OF THE PB-A, PB-B & PB-C
PLANNED BUSINESS DISTRICTS

AS ADOPTED BY THE TOWN BOARD APRIL 5, 1988 AND AMENDED MAY 17, 1989, AND MAY 15, 1990, AND JUNE 14, 1991

Figure 3-2

SCOTTS CORNERS WASTEWATER
DISTRICT COMMISSION
QUESTIONNAIRE RESPONSES

JRFA 4/92

either responded in the negative or failed to respond at all.

Consequently the primary zone constitutes the proposed wastewater district. Should the future bring about a change in conditions, the secondary zone may petition to enter the proposed District.

3.1.1 Existing Use

F. P. Clark Associates 1990 Planning Study provided the basis for all land use and demographic data. A field survey was conducted to verify and update existing uses.

Land use within Scotts Corners is based on the zoning regulations of the Town of Pound Ridge. Each lot in planned business district A has a building envelope. Each lot in planned business district B has a maximum 2,500 square foot allowable building footprint size.

Table 3-1 illustrates the existing uses of the primary zone in Scotts Corners.

Table 3-1

Existing Land Use in Scotts Corners

Building Square Footage	Primary Zone
Commercial	159,680
Residential (Apartments)	13,222
TOTAL	172,902

There is presently a total of 172,902 square feet in existence in the primary district.

Presently, wastewater disposal in Scotts Corners is through use of individual SSDS's. There is some evidence on record documenting to a pattern of system failure in the area. Personal review of available records at the WCHD revealed approximately a dozen complaints on private SSDS's. In addition the Trinity Corners Shopping Center has experienced multiple failures and is presently pending court action with the WCHD. The Stamford Water Company has determined this system to be a detriment to their raw water quality. Pertinent information has been requested under the Freedom of Information Act from both the WCHD and Stamford Water Company and is included in Appendix A.

3.1.2 Future Use

The Pound Ridge Zoning Ordinance limits the maximum allowable floor space per lot. In PB-A each lot has a legislated building envelope; in PB-B each lot has a maximum 2,500 square foot building footprint size and a 'floor area ratio' that defines the amount of second story floor space allowed. Additionally, a percentage of this second floor space must be used for residential purposes. The zoning ordinance and the Clark Study define these numbers explicitly.

Table 3-2 illustrates the maximum remaining square footage developable in the proposed District.

Table 3-2

Remaining Developable Square Footage in Scotts Corners

	Primary Zone
Commercial	62,193
Residential	67,699
TOTAL	129,892

These values are influenced by several factors, as follows.

- First, the available commercial square footage in the primary zone does not include lot 1.9. This lot contains the shopping center and exceeds the maximum allowable F.A.R. per the zoning ordinance.
- Second, there was no allowance made in these figures for future residential square footage on this lot. Though the code permits second story residential use above the Shopping Center, the nature of the structure and its current use suggest that it is not appropriate for residential use. Therefore, residential potential for lot 1.9 was not included in the residential square footage depicted in Table 3-2.

3.1.3 Demographic Data

The Clark Study established several patterns between 1974 and 1990 regarding growth in Scotts Corners. These patterns reflect changes in existing square footage over

that period of time. Table 3-3 summarizes the Clark Study Findings.

Table 3-3

Change in Square Footage in Scotts Corners 1974-1990

	Commercial Use		Residential Use	
District	Total % Change	% Change/Year	Total % Change	% Change/Year
PB-A	+ 25.8%	+ 1.6%	- 8%	- .5%
PB-B	+245%	+15.3%	-49%	-3%
Average		+ 8.45%		-1.75%

These changes reflect some significant issues. First, the decrease in residential use in PB-A is a result of changeover to small commercial establishments in older buildings. The loss of residential square footage in PB-B is assumed to reflect demolition in conjunction with construction of Trinity Corners Shopping Center.

Second, the increase in commercial square footage is skewed due to the shopping center. This is assumed to be a one time, non repetitive event. The increase in commercial square footage in PB-A is assumed to be representative of reasonable commercial growth in the area.

Finally, U.S. Census Data, as kept by the Westchester County Planning Department, shows 5.7% population increase from 1970-1980 and 13.5% population increase between 1980-1990. Hence, growth from 1970-1990 is less than 1%

per year. Since the annual population growth is less than the representative commercial growth (1.6%), it is assumed that commercial growth will decrease, until such time as future population growth causes an increase in commercial demand. Therefore it is reasonable to expect an annual commercial growth rate of 0.75% for a neighborhood shopping area under these conditions.

In addition to the Clark data, JRFA estimated the saturation density of the area. This saturation estimate is based on each zone achieving the maximum remaining square footage allowed by the current zoning ordinance. These figures were determined from the maximum square footage per lot allowed by the zoning ordinance. Existing square footage was subtracted from the maximum allowable. The difference, divided by the existing square footage, provides the percent change to saturation. Table 3-4 summarizes these percent changes from 1990 to the saturation condition.

Table 3-4

Percent Change 1990 to Saturation

District	Commercial Use			Residential Use		
	Exist SF	Saturation SF	% Change	Exist SF	Saturation SF	% Change
PB-A	81,239	143,522	+77	12,622	71,626	+470
PB-B*	78,441	58,225	---	600	11,604	+1834

* The PB-B saturation SF is lower than the existing SF figures because lot 1.9 is over built. The saturation SF is taken from the Pound Ridge Zoning Ordinance.

With the exception of the commercial growth in PB-B, the averages shown are extraordinary for both commercial and residential change. These rates are clearly unreasonable.

Based on a 0.75% per year increase over the next 20 years, a potential growth projection may be made. Table 3-5 summarizes this potential growth.

The 2012 square footage will be used to calculate the design flows.

Table 3-5

Projected 2012 Square Footage Increase at 0.75%/Year Growth

	Commercial Use		Residential Use	
District	1990 Existing (Sq.Ft.)	2012 Projected (Sq.Ft.)	1990 Existing (Sq.Ft.)	2012 Projected (Sq.Ft.)
PB-A	81,081	93,243	12,262	14,101
PB-B*	76,132	78,819	2,909	3,345

* PB-B commercial expansion predicted for lots 24 and 25 only. PB-B existing residential includes lot 24 only; the residential growth prediction is based on this figure only.

3.2 Flows

3.2.1 Estimate of Existing Flows

In the absence of metered water use data in Scotts Corners, the estimate of existing wastewater flows is based on the New York State Department of Environmental Conservation (DEC) Publication "Design Standards for Wastewater Treatment Works (1988)". This publication establishes average daily wastewater flows for a variety

of water users. The commercial use averages are based on a gallon per day (gpd) per square foot for dry users, or gpd per seat for wet users such as restaurants. Residential use averages are based on gpd per bedroom.

In general, the Scotts Corners area is occupied by dry use establishments. Per the DEC Standard, these are assigned a 0.10 gpd per square foot use factor. The most notable exception to this use is in restaurants and service stations. Ordinary restaurants are assigned a 35 gpd per seat use factor by DEC. Service stations are assigned a rate of 400 gpd per sanitary closet. Table 3-6 summarizes the estimated existing flows.

Table 3-6

Estimated Existing Flows in Scotts Corners
GPD

	Commercial Flow	Residential Flow	Zone Total
Primary Zone	20,393	4,250	24,643

3.2.2 Projection of Future Flows

Two future flow projections have been made. The first is based on maximum expansion of the District, called saturation flow. The second is based on District expansion at a rate of 0.75 percent per year up to 2012, the design year of the plant.

3.2.2.1 The projection of saturation flow for Scotts Corners is based on the combination of existing flow and

additional flow resulting from saturation. Table 3-7 summarizes this projection.

Table 3-7

Estimated Flow at Saturation
GPD

	Exist Comml	+	Exist Resid	=	Total Exist	+	Proj Comml	+	Proj Resid	=	Total Proj
Pri Zone	20393		4250		24643		10919		28500		64062

Clearly projecting an increase in use and flows to this extent is unreasonable.

3.2.2.2 The design year flow projection for District expansion at a rate of 0.75 percent per year is based on the estimated increase in square footage by the year 2012 (the design year).

The ratio of commercial wet users vs. total use, by square foot, was carried from the existing 1990 data to the projected 2012 figures. This ratio was established using the PB-A district as a standard, since the majority of the wet users in Scotts Corners are located in this District. The equation yielded approximately 6.3% wet use in the PB-A District. This percentage was applied to the total increase in projected square footage as a reasonable wet user increase at the design year.

Based on the Zoning Ordinance, F.A.R., and the Clark Study, the increase in residential square footage was assessed as two bedroom apartments.

Table 3-8 summarizes the projected flow increase at 0.75% growth per year.

Table 3-8

Estimated 2012 Flow
GPD

Flow Class	1990 Existing Sq.Ft.	1990 Existing Flow	2012 Estimated Sq.Ft.	2012 Estimated Flow
Commercial, Dry	153,031	15,218	164,647	16,809
Commercial, Wet	6,649	5,175	7,415	6,435
Residential	12,262	4,250	14,101	4,940
TOTAL		24,643		27,984

4.0 Treatment

4.1 Design Flows and Loads

4.1.1 Design Flows

Based on the established growth rate, existing zoning, Town Master Plan and discussions with the Pound Ridge Sewage Treatment Committee, an average day design year flow of 28,000 gpd is established. This flow assumes that the alleged infiltration problems at Trinity Corners Mall will be corrected.

4.2 Design Loads

As Scotts Corners does not have an existing treatment facility, a characteristic study to determine typical

wastewater quality parameters is not feasible. Existing literature and company experience were used to determine acceptable parameters that are in accordance with the Ten State Standards. Table 4-1 depicts these parameters.

Table 4-1

Design Loads

Parameter	Concentration	#/D @ .028 mgd
Suspended Solids	240 mg/l	56.05
BOD_5	220 mg/l	51.4
NH_3-N	25 mg/l	5.8
Phosphorus	10 mg/l	2.3

4.3 Treatment Required

The primary criteria for determining appropriate treatment in the Scotts Corners area is the 'AA' Special surface water classification. NYSDEC reclassified these waters at the request of the Stamford Water Company. Prohibition of point discharge into these waters applies to all surface waters in the Scotts Corners area.

Based on discussions with WCHD and NYSDEC this is interpreted as requiring subsurface discharge of treated wastewater effluent.

Consequently use of innovative/alternative systems utilizing wetlands, land treatment, etc. do not appear acceptable to the agencies. Two possible alternatives remain. One alternate is to pump effluent out of the

Stamford Water Company watershed and discharge into a different watershed where surface discharge is acceptable. Such an alternate would generate additional pumping and piping costs. Additionally, significant opposition can be expected from the residents and municipalities in whose watershed the proposed discharge may occur.

The second alternate is to use a Sub-Surface Discharge System (SSDS). The regulatory agencies have indicated that pretreatment is recommended prior to subsurface discharge. Subsurface discharge standards, in accordance with NYSDEC and WCHD regulations, will have to be met.

Pretreatment, in the form of a wastewater treatment plant (WWTP) is recommended for several reasons:

1. WCHD and Stamford Water Company are willing to consider relaxation of required separation distances for pretreated waste. Given the wide distribution of rock and surface water in the area, and relatively shallow depth to ground water, this may prove to be a significant benefit in locating an acceptable subsurface disposal area.
2. Pretreatment affords much more effective treatment of organic loads and solids than does subsurface discharge of septic tank effluent.
3. Consequently pretreatment will markedly extend the life expectancy of an SSDS.

4. Failure of a 30,000 gpd SSDS without pretreatment would present problems several orders of magnitude greater than those historically associated with the Trinity Corners Shopping Center.

5. Given the regulatory situation and geologic and hydrologic conditions in the Scotts Corners area, pretreated subsurface discharge is the most environmentally sound option.

4.4 Collection System

There are currently no base maps of the Scotts Corners area available. As a result, the collection system is currently a conceptual estimate based on field observations within the proposed District limits. Length of pipe run is based on a 1,000 scale USGS topographic map. All gravity sewer pipe is presently assumed to be 8 inch diameter minimum, and force mains 4 inch diameter. Two pump stations are assumed. The conceptual sketch is shown in Figure 4-1 utilizing a zoning map base. Based on the Ten State Standards, the Peak Hourly Flow factor is established at 4.0. This equates to a peak hourly flow rate of 0.12 mgd (120,000 gpd). The Peak Hourly Flow will be considered in the design of the collection system and plant as necessary. The concept is subject to change pending receipt of detailed topographic maps.

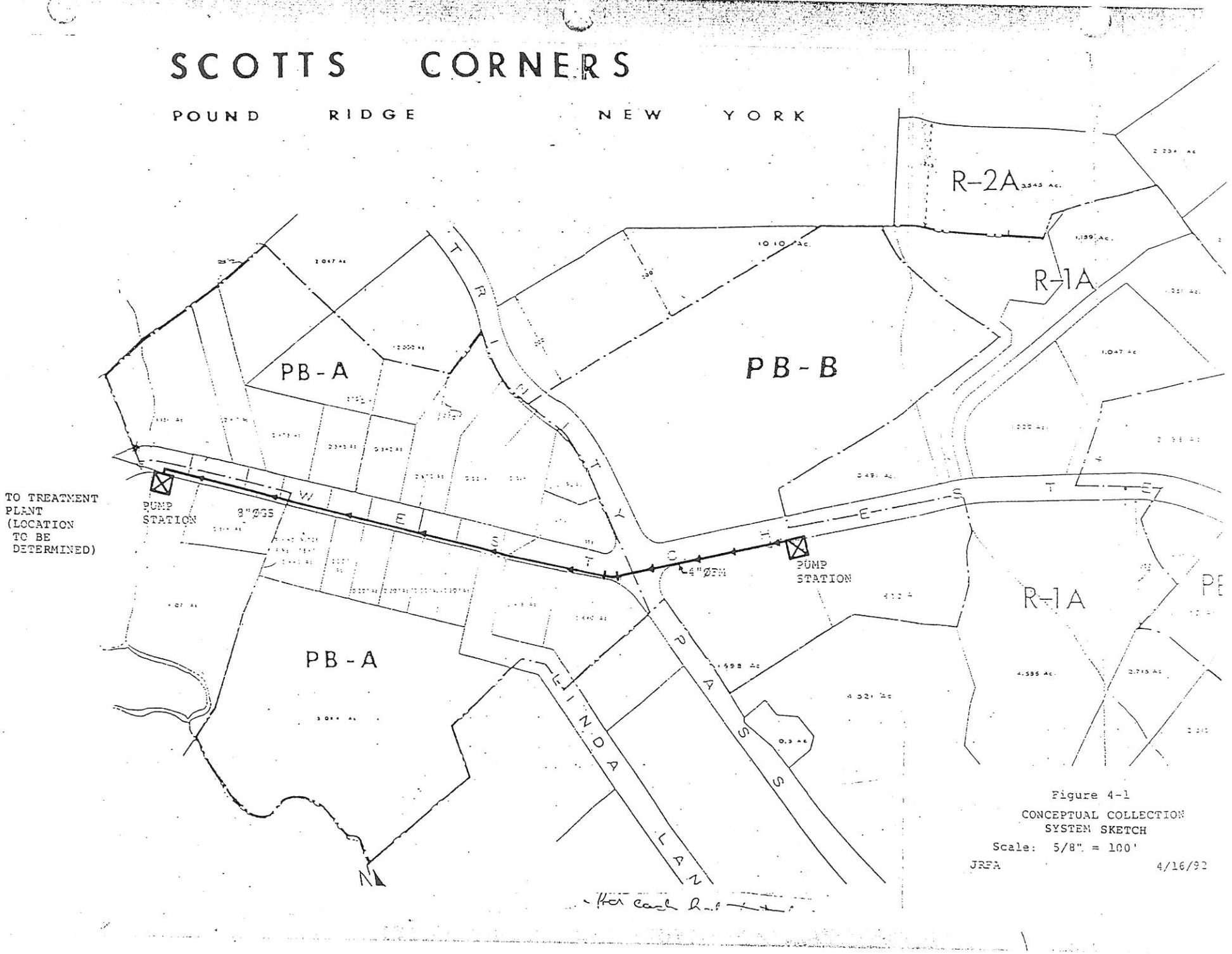


Figure 4-1
CONCEPTUAL COLLECTION SYSTEM SKETCH
Scale: 5/8" = 100'
JRFA 4/16/92

4.5 Treatment Alternatives

Several treatment processes were identified and evaluated. The Chromaglass Sequencing Batch Reactor (SBR) was considered. The SBR price is comparable to that of conventional treatment processes. WCHD is presently considering acceptability for use in Westchester County (see Appendix F). The evaluation was based on the following criteria.

1. Process reliability.
2. Total annual costs.
3. Process flexibility in meeting the increased flow volume over the design period.
4. Adaptability for future treatment requirements.
5. Site constraints including room and surroundings.
6. Regulatory agency considerations.

The processes considered are as follows:

Alternate 1 - Extended aeration

Alternate 2 - Rotating biological contactors

Both processes will be preceded by equalization and followed by filtration. This process train will produce a highly stabilized effluent which should result in maximizing the life of the subsurface disposal system. Figure 4-2, the process flow diagram, is a generic depiction of the process.

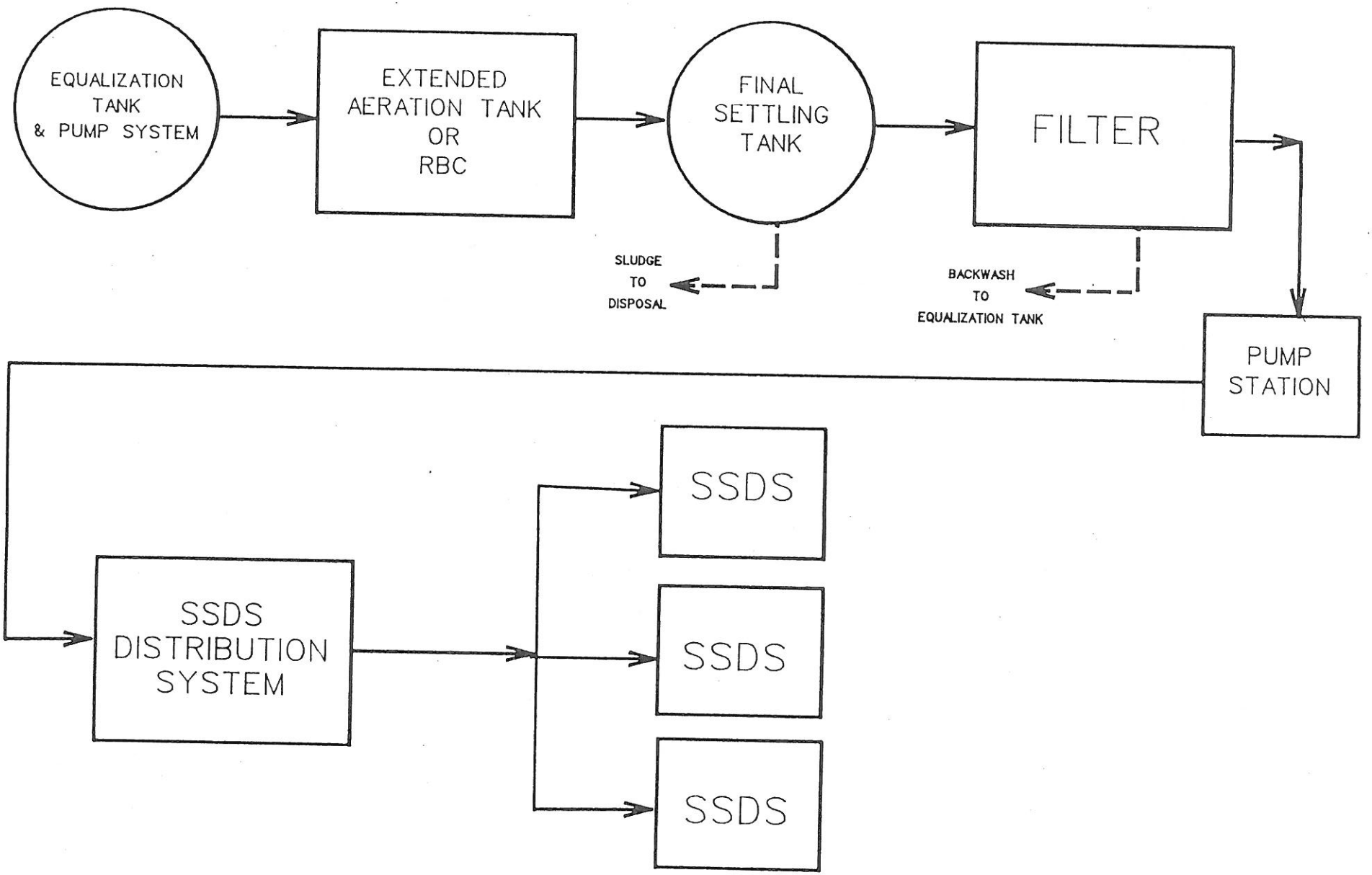


FIGURE 4-2
PROCESS FLOW DIAGRAM

The final selection of effluent standards will be decided by NYSDEC during the State Pollution Discharge Elimination System process. This information will be the basis for study and analysis during the Facility Report Stage and will determine the final selection of a treatment process.

5.0 Site Alternatives

Three SSDS sites were proposed for testing to JRFA by the Pound Ridge Sewage Treatment Committee. One was the Berman parcel located on Trinity Pass Road. The second was the Quade parcel located behind the Pound Ridge Fire House. The third was the Town owned parcel, Lot 86, Block 9820, Tax Map 19. Among other sites considered was the Stamford Water Company (SWC) parcel bounded by Fancher Road and Westchester Avenue. They were requested to consider this as a possible site for either the treatment plant or the SSDS. After due consideration, SWC declined use of this parcel for either purpose.

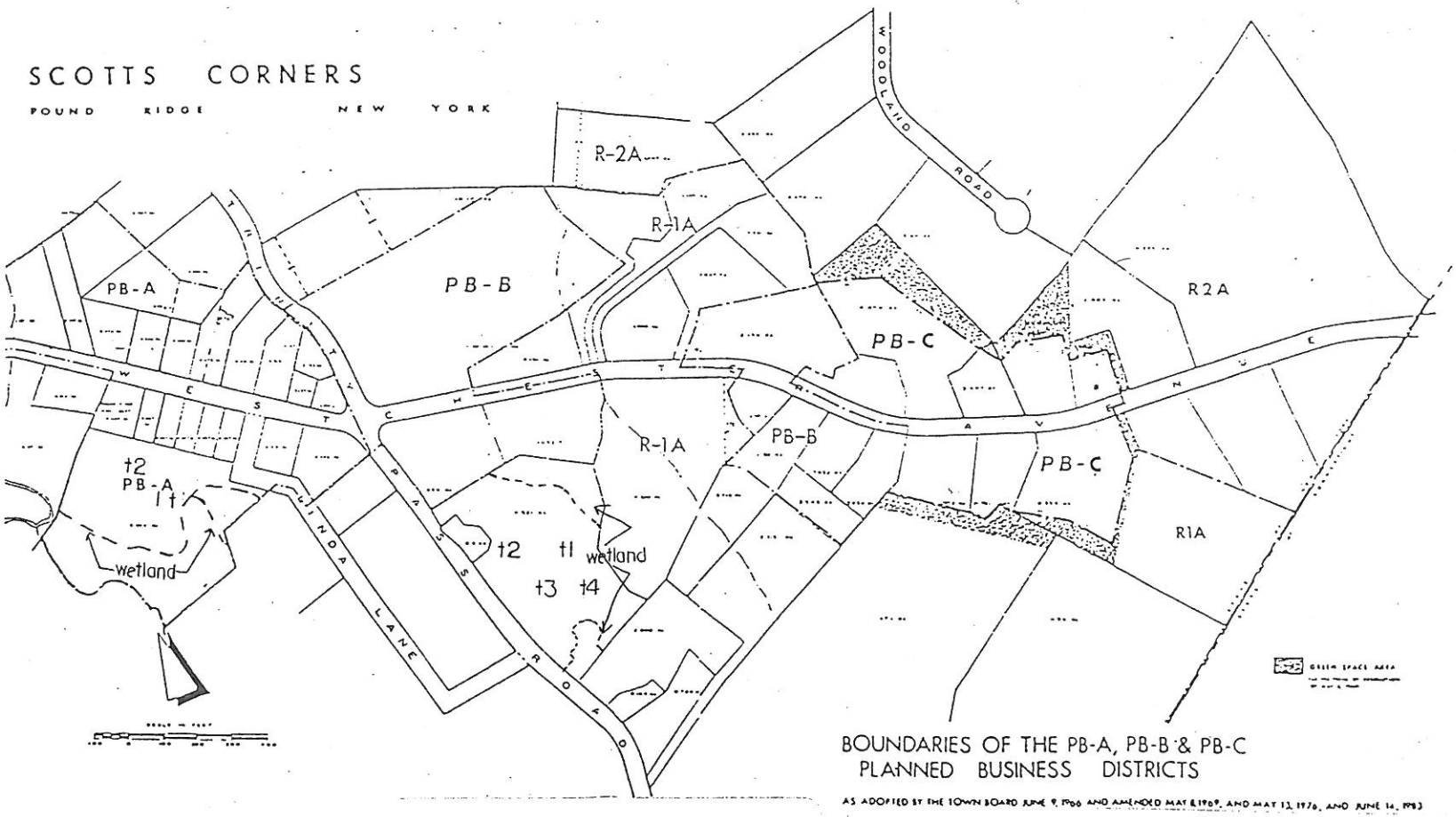
In view of a design flow of 28,000 GPD, SSDS requirements are extensive. Size of the system is based on acceptable application rate of effluent to soil. The WCHD has stated that they will not relax application rate standards. Assuming a percolation rate of 30-45 minutes, the application rate will be .5 gallons/day/square foot. Assuming use of rectangular galleys, and factoring in separation between galleys and between laterals, yields a

required minimum SSDS area of approximately 2 acres. Additional area would be required for buffers and pumping/distribution structures and expansion.

Deep hole tests were conducted on the Quade and Berman parcels on January 15, 1992. Deep hole tests were conducted on the Town parcel on May 5, 1992 and percolation tests were conducted on May 19, 1992. The Town of Pound Ridge Highway Department provided equipment and operators for this job. Location of the test pits on each lot is depicted in Figures 5-1 and 5-2. Appendix B depicts individual data for each hole.

5.1 Berman Parcel. Four holes were dug on the Berman parcel. Two of them, numbers 2 and 3, encountered bedrock or boulders too large to move with a backhoe within 3 feet of the surface. Holes 1 and 4 both struck bedrock or rocks too large to move at seven feet. Both holes had high clay content in the A Horizon and sandy clay sand content in the B Horizon. Water flowed into Hole 1 at seven feet and into Hole 4 at five feet. General limitations for standard SSDS the Berman parcel include:

1. Tight soils.
2. Bedrock or rocks too large to move with a standard backhoe.
3. Groundwater rose to within 4 feet of the surface.
4. Useable area is extremely limited due to proximity to wetlands, rock and groundwater.



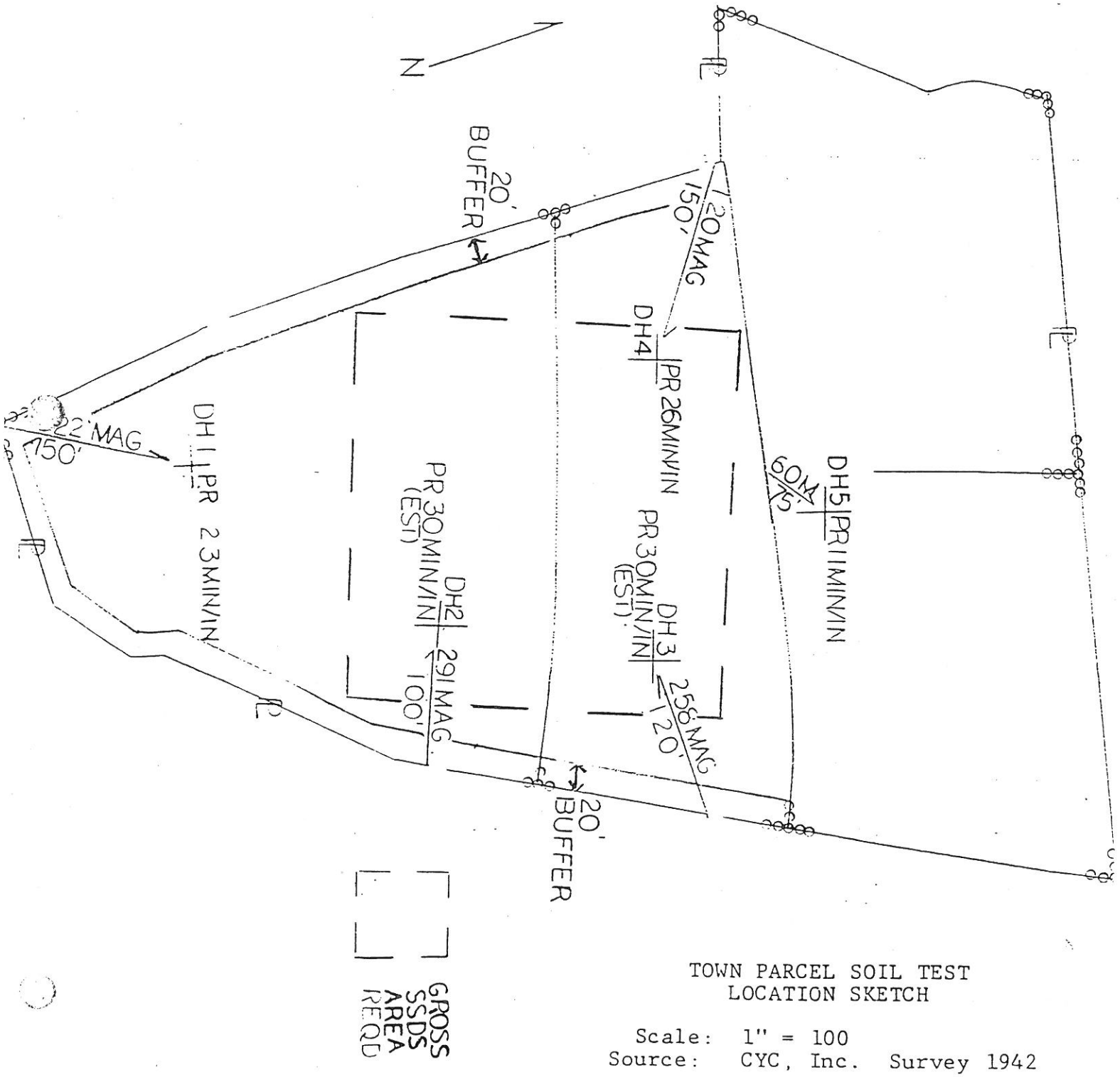
LEGEND

+ - D.H. Location

Figure 5-1

DEEP HOLE TEST LOCATIONS
BERMAN & QUADE PARCELS
January 15, 1992

JRFA 4/92



TOWN PARCEL SOIL TEST
LOCATION SKETCH

Scale: 1" = 100
Source: CYC, Inc. Survey 1942

JRFA 5/27/92

5.2 Quade Parcel. Two holes were dug on the Quade parcel. Hole 1 hit bedrock or rocks too large to move at five feet and Hole 2 hit the same at six feet. Both holes had a sandy A Horizon. Hole 1 had high clay content in the B Horizon that made a good cast. Hole 2 had high sand content in the B Horizon that cast poorly. Water flowed into Hole 1 at five feet and into Hole 2 at four feet. General limitations for standard SSDS aboard the Quade parcel include:

1. Bedrock or rocks too large to move with a standard backhoe within 5 feet of the surface.
2. Groundwater within 4 feet of the surface.
3. Useable area is extremely limited due to proximity to wetlands, rock and groundwater.

Both sites are unsuitable for standard SSDS. Even with pretreatment, waivers would still be necessary for rock, ground water and surface water/wetlands. Assuming approval of necessary waivers, both parcels are only large enough for the SSDS alone. There is not sufficient useable land on either parcel for the plant, SSDS and required expansion area.

5.3 Town Parcel Lot 86, Block 9820, Tax Map 19. Five holes were dug on the Town parcel. The most shallow hole was seven feet deep and the deepest hole was over nine feet deep. All holes had clayey sand in the A horizon. Hole 1 had clayey sand in the B horizon; holes 2, 3 and 5 had

sandy clay in the B horizon; hole 4 had coarse, sandy gravel in the B horizon. Holes 3, 4 and 5 all displayed a C horizon primarily composed of gravelly sand. Neither bedrock nor groundwater was encountered in any hole.

Percolation tests were conducted at all five locations in accordance with NYSDEC "Design Standards for Wastewater Treatment Works, 1988". All tests were conducted at a total depth of 4 feet. See Appendix B for water surface elevation in each hole. Perc holes 1, 4 and 5 were replenished after 1 inch of drop after each run. Holes 2 and 3 were filled and measured at the end of the test period without replenishment to test varying head conditions. Table 5-1 provides percolation data for each hole tested.

Table 5-1

Percolation Rates on Town Parcel, in min/inch

	Test #				
	1	2	3	4	Avg
Hole 1	22:40	22:17	23:30	23:20	22:40
Hole 2	30	-----	-----	-----	30
Hole 3	30	-----	-----	-----	30
Hole 4	22:49	25:00	26:30	26:50	26:40
Hole 5	10:40	10:50	11:43	-----	11

Based on the preliminary soil data, the Town parcel appears to be suitable for a SSDS location. It should be noted that this is data typically collected during SSDS

tests for a single dwelling unit. As such it only provides preliminary information on the suitability of this site for subsurface discharge of the flows estimated from Scotts Corners. Detailed analysis of soils, hydrogeology and permeability are necessary to properly evaluate this site. In the absence of suitable base maps, it is estimated that approximately nine thousand feet of force main will be required from the STP to the SSDS. This force main will carry treated effluent only. Part of this cost is offset since there is no cost to be borne for the acquisition of this parcel for SSDS.

Utilization of this site will require a treated effluent pump station at the plant location.

Routing the force main along Westchester Avenue via the Town park to the SSDS site results in a 9,000 (±) foot run. Alternatively the Town may secure an easement as shown in the map with a resulting run of 6,300 ± feet (see Figure 5-3).

5.4 Treatment Plant Location. All three sites discussed were proposed primarily as SSDS sites. Along with one other untested site in Scotts Corners, the Berman and Quade parcels could be suitable for locating the STP. The Town parcel could be suitable for both the STP and the SSDS. If the plant were located in Scotts Corners, the force main to the proposed SSDS location would carry highly

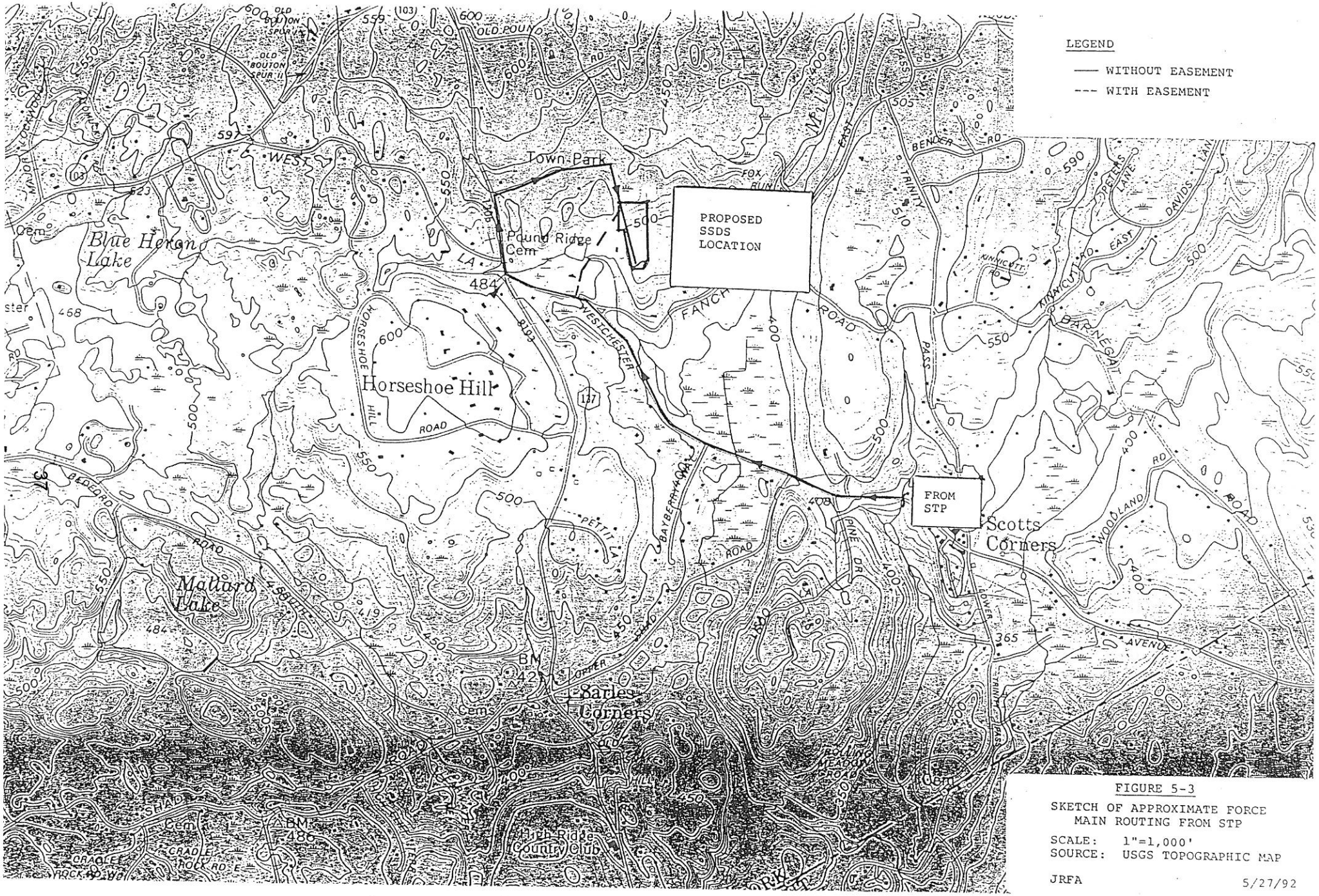


FIGURE 5-3

SKETCH OF APPROXIMATE FORCE MAIN ROUTING FROM STP

SCALE: 1"=1,000'
SOURCE: USGS TOPOGRAPHIC MAP

JRFA 5/27/92

treated effluent instead of raw waste. A comparison of these two options is depicted in Table 5-2.

Table 5-2

Comparison of Pumping Raw Waste vs. Highly Treated Effluent

Raw Waste	Treated Effluent
- Requires pretreatment in the form of comminution or grinding. - Pretreatment will require some type of additional odor control. - Requires separate Supplementary/Backup Power source. - Requires minimum 4-inch diameter pipe. - Pumps used are low efficiency.	- No additional treatment necessary. - No additional odor control required. - Uses STP Supplementary/Backup Power. - Will most probably require smaller diameter pipe. - Can use high efficiency pumps.

The advantages of pumping highly treated effluent are readily evident in this comparison. It is recommended that the STP be located in the Scotts Corners area.

6.0 Estimated Project Cost

6.1 Estimated Capital Costs

Capital cost estimates for the wastewater management facilities are based on the conceptual design, recent estimates from manufacturers and vendors, and prices for similar work. These estimates are subject to revision during the Facilities Report and the design phase.

The estimated 1992 construction costs for the plant and collection system are depicted on Table 6-1. It should be

noted that the cost of the land for the STP is NOT included.

Table 6-1

Estimated 1992 Construction Cost

Item	Cost
Site Work Site Preparation Earth Work Roads/Drainage	$ 48,000
Collection System Gravity Sewers Force Main & Pump Station	$ 450,000
Wastewater Treatment Facility Treatment Plant & Effluent P.S. Structures Electrical HVAC	$ 360,000
Subsurface Disposal System	$ 400,000
Subtotal	$1,258,000
25% Contingency	$ 315,000
Total	$1,570,000

6.2 Estimated Annualized Capital Costs

At present, the New York State Revolving Fund interest rate is approximately five percent (5%). It is assumed that the rate will rise between the submission of this report and final SRF approval of the project. A six percent (6%) loan rate is therefore assumed.

Table 6-2 summarizes the annualized capital costs and the parameters observed to determine them.

Table 6-2

Estimated Annualized Capital Cost & Parameters

Costs	
Total Estimated Capital Cost	$1,570,000
Annualized Capital Cost	$ 137,000
Parameters	
Eligibility	100 Percent of Proposed Facilities
Interest Rate	6.0 Percent
Loan Term	20 Years

6.3 Estimated Annual Operation and Maintenance Costs

In addition to the capital cost of construction, the District will incur additional costs for operation and maintenance. These costs are listed in Table 6-3.

Table 6-3

Estimated Annual O&M Costs

Electric	$26,000
Labor	$10,000
Maintenance	$ 1,500
TOTAL	$37,500

6.4 Estimated Total Annual Costs

Estimated total annual costs to the Scotts Corners Wastewater District are summarized in Table 6-4.

Table 6-4

Estimate Total Annual Costs Under
NYSDEC Loan Program

Annualized Capital Cost	Annual O&M Cost	Total Annual Cost
$137,000	$37,500	$174,500

6.5 Cost Allocation Alternatives

The total annual costs presented above are an estimate, based on the application of an assumed SRF interest rate. These costs may be allocated among those who benefit in several ways.

6.5.1 Scotts Corners District Only. This alternative provides a single tier allocation among the users in the district. The entire annual cost is borne by the Scotts Corners district property owners. It may be allocated based on assessed property value, metered water use or pro-rating.

6.5.2 Town Wide Allocation. The Scotts Corners area, represents the major commercial center in the Town of Pound Ridge. Hence, one could reasonably conclude that the entire Town would benefit from maintaining the area in a viable condition. Using this rationale, either a single or double tier system may be considered.

6.5.2.1 Single Tier Allocation. This alternative provides for allocation of the entire capital and operating cost to the property owners on a town wide basis. It may be allocated

based on a flat fee, assessed property value or other acceptable formula.

6.5.2.2 Double Tier Allocation. This alternative provides for allocation of the capital cost only to the property owners on a town wide basis. Those property owners served by the system would be allocated a second tier of payment to cover the O&M costs. This system may be allocated by flat fee, assessed property value, metered water use or other acceptable formula or combination of formulas.

Therefore, although double tier allocation is feasible, the Town might consider continuing to pursue available grants and other financing sources that would minimize the cost to the taxpayer.

6.6 Alternative Financing Sources. There are several additional sources of financing at the State and Federal levels. These additional sources typically apply to municipalities experiencing economic hardship. Basic qualifications for each are discussed below.

6.6.1 New York State Revolving Fund (SRF). In addition to their loan via sale of bonds, the SRF offers direct loans to two thirds or one third of the market rate, and also at zero percent interest. The Environmental Facilities Corporation, administrators of the SRF, assesses municipal

need based on individual application. The specific form is included as Appendix G.

6.6.2 Farmers Home Administration (FMHA). FMHA offers loans and grants to poor rural communities. Telephone conversations between JRFA and Mr. Roy Wittich highlight the following requirements.

- Loans are offered to communities that are not qualified under any other program (i.e., SRF) at comparable interest rates.
- Grants are available to communities where the mean income is below the State poverty level.

The FMHA Application Form is included as Appendix H.

6.6.3 Housing and Urban Development (HUD). HUD administers a Small Cities Community Development Block Grant Program. Telephone conversations between JRFA and Robert Guadagno indicate that fifty percent or more of the community population must consist of low to moderate income persons in order to quality for the program. The actual value of low-moderate income varies by County within the State. The HUD Application Form is included as Appendix I.

6.7 New York State Revolving Fund Low Interest Loan Milestones

JRFA contacted Mr. Michael Sheehan, Construction Management Division, NYSDEC. The following sequence of milestones is in accordance with his recommendations.

6.7.1 Establish Municipal Wastewater Treatment District.

6.7.2 Collect Water Quality data from Stamford Water Company.

6.7.3 Complete Facility/Engineering Report.

6.7.4 Meet with DEC for scoring of application.

6.7.5 See Appendix D for SRF Requirements.

7.0 Implementation Task Schedule

Figure 7-1 provides a graphic explanation of the various major tasks and estimated times associated with their completion.

8.0 Audit and Control Requirements

The New York State Board of Audit and Control reviews all applications for establishment of new sewer districts. Application must be made within ten days of adopting a resolution approving the establishment of the district. If the Town proposes to finance all or part of the cost it must prove that the formation of the district serves the public interest and that the cost does not pose an undue burden on the taxpayers. As recently revised, Part 85, Chapter III, 2 NYCRR outlines the application process in detail and is included in Appendix C.

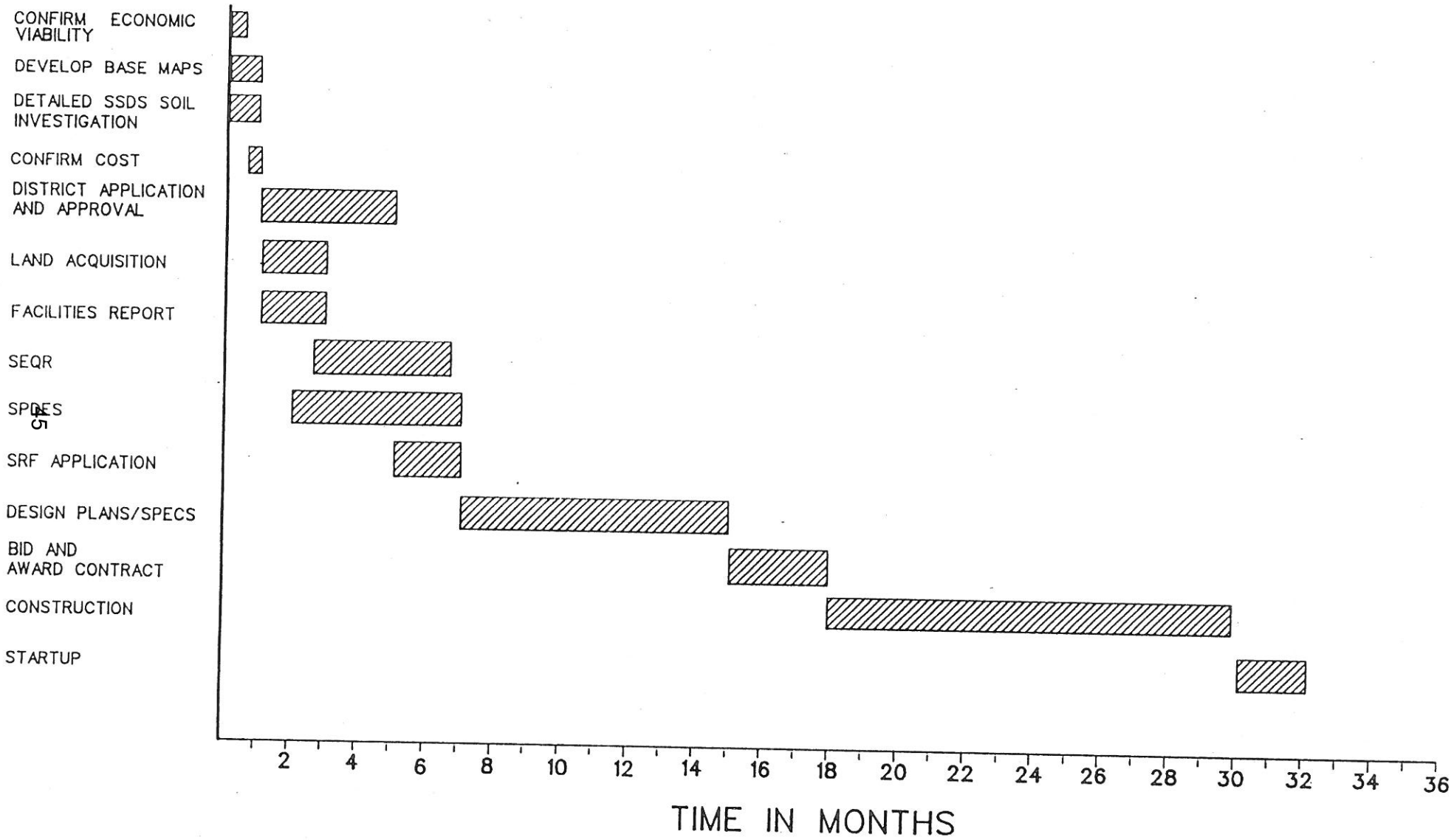


FIGURE 7-1
IMPLEMENTATION TASK SCHEDULE

Malcolm Pirnie Dec. 2, 1998
Pound Ridge Treated Wastewater Effluent Well Injection
Letter to Clay Fowler PR Planning Board
Summary
MP provides project approach and estimated rage of costs to prepare a permit application in support of deep well injection of wastewater for the Pound Ridge commercial area.

- Needs USEPA permit and NYS DEC has ”no regulatory mechanism for such permits”.
- EPA’s primary concern is that the wastewater effluent will be injected into a potable water aqueduct.
- There are no such wells in Westchester (1998).
- Would have to inject into crystalline bedrock at 30,000 gpd (20.8 gpm).
- There are technical issues with keeping the well open, and need sufficient fractures in the rock
- Proposal includes breakdown of costs totaling $100,000

Rec'd 12/7/98

MALCOLM PIRNIE

MALCOLM PIRNIE, INC.
ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

December 2, 1998

Mr. Clay Fowler
Planning Board Chairman
Town House
179 Westchester Avenue
Pound Ridge, NY 10576

Re: Pound Ridge Treated Wastewater Effluent Well Injection
Project Approach and Estimated Range of Costs

Dear Mr. Fowler:

Malcolm Pirnie, Inc. is pleased to provide you with this project approach and estimated range of costs to prepare a permit application in support of deep well injection of wastewater for the Pound Ridge commercial area. The injection of the treated effluent from the commercial area will require a Class V Underground Injection Control (UIC) permit administered by the United States Environmental Protection Agency (USEPA). Additionally, the State Pollutant Discharge Elimination System (SPDES) permit, administered by the New York State Department of Environmental Conservation (NYSDEC), would have to be modified, with the effluent limits being consistent with GA (groundwater) effluent standards.

1. BACKGROUND INFORMATION

We have had numerous discussions with Joe Marcogliese of the NYSDEC regarding effluent injection for similar projects. Mr. Marcogliese has stated that the NYSDEC would follow the lead of the USEPA regarding the permitting of the injection well, as the NYSDEC has no regulatory mechanism for such permits. Mr. Marcogliese has stated that the NYSDEC would modify an existing SPDES permit pending the issuance of a UIC permit by the USEPA.

We have also had numerous past discussions with Carol Lynes of the USEPA. Carol Lynes is in charge of administering UIC permits within the Westchester County area. The EPA's primary concern is that the wastewater effluent will be injected into a potable aquifer. Ms. Lynes has previously stated that the USEPA is in the process of modifying the UIC application requirements to include a specific classification for domestic effluent injection wells. While the "official" modified application requirements are not yet available, we have discussed what those additional requirements will be, and the USEPA has stated that they will send us written confirmation of the additional requirements. Ms. Lynes stated that because there are no existing effluent injection projects in Westchester County, the information and procedures will be reviewed carefully. Overall, the USEPA is not opposed

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to the concept of injecting wastewater as a disposal method. Some of the additional requirements mentioned by Ms. Lynes include maximum injection pressure calculations, geophysical logs, preliminary injection well design, breakthrough analyses, and monitoring and inspection plans.

2. TECHNICAL DISCUSSION

As with any deep well injection system, the hydraulic characteristics of the receiving geologic formation and the integrity of the overlying formations are the determining factors in evaluating the feasibility and ultimate success of the system. The geology in the vicinity of Pound Ridge, and northern Westchester County as a whole, typically consists of thin overburden deposits (predominantly glacial till) underlain by crystalline bedrock. The overburden is not of sufficient thickness or permeability to allow for the injection of wastewater at a rate of 30,000 gpd (equivalent to 20.8 gpm). Therefore, the receiving geologic unit will be in the underlying bedrock.

Groundwater occurs in bedrock in fractures and fissures. The degree to which groundwater can be transmitted through bedrock is dependent on the number and size of the fractures and the extent and interconnection of the fracture system. Therefore, it is necessary to locate a fracture system of sufficient size and areal extent to be able to effectively receive the injected wastewater.

As an injection medium, bedrock can be favorable over unconsolidated deposits because the borehole is open: in other words, there is no well screen or gravel pack. A common problem with injection systems is the fouling of well screens due to bacterial encrustation, chemical precipitation, high entrance velocities (due to the size of the screen openings), gas entrainment and the clogging of screens by particulate matter. These problems can be reduced with injection wells in bedrock, depending on the size of the fracture openings. Chemical precipitation may still occur along fracture surfaces, depending on the chemical and thermal characteristics of the entrance water compared to the receiving groundwater.

Because identifying prolific fractures is critical to the success of the deep well injection system, we would propose to conduct a geophysical investigation of the site utilizing the Very Low Frequency (VLF) system. Using the VLF will help optimize the siting of promising injection well locations. The VLF system receives frequencies that are transmitted through the earth's mantle (predominantly signals generated by the U.S. Navy). Depending on the strength and orientation of the received signals, more favorable fractures can be identified and differentiated from less favorable fractures. This will reduce the overall cost of the system because the VLF reduces the amount of "guess work" involved in siting a well. Furthermore, identifying and mapping site fractures will assist in determining recharge areas and potential hydraulic connection between the injection system and surrounding withdrawal systems. This information is required for the UIC permit application.

3. PROJECT APPROACH AND ESTIMATED COST RANGES

In support of the UIC permit application data requirements, and determining the actual feasibility of deep well injection of wastewater, we would propose to complete the following tasks.

A. Review Regional Data

We will review existing, available data on the hydraulic characteristics of the region, including recharge/discharge areas, depth to groundwater, and identify other groundwater users surrounding the site, including distance to the site, and the type and depth of each well. This information is needed to develop a framework of conditions and uses around the site. The estimated range of costs to complete this task is $2,500 to $3,500.

B. Site Visit/Geologic Mapping

We will conduct a site visit to map the geologic structure (strike and dip) of the bedrock surface expressions on outcrops (if they exist) and conduct a fracture trace analysis. We will then prepare a map showing the orientation of geologic features on the site relative to the surrounding area. The estimated cost range to complete this task is $2,000 to $3,000.

C. Geophysical Survey

We will conduct a geophysical survey using the VLF instrument to locate water-bearing fractures on the site. We will then interpret the data and, in conjunction with the field mapping, we will map fracture orientation and fracture depths on the site. This information will be used to locate injection wells and assist in the hydraulic isolation interpretation between the injection points and withdrawal points. The estimated cost range to complete this task is $5,500 to $8,500, depending on the size of the survey area.

D. Well Installation

Based upon the data obtained in Tasks A through D above, we will make an assessment as to the viability of an injection well at the site. If the geologic structure is not favorable for injection, no additional work would be completed. If the geology is favorable, we will locate an injection well site and drill an injection test well to a maximum depth of 600 feet, upon consultation with the Town. The injection test well will be designed to transmit water at a discrete depth interval different than that of surrounding withdrawal wells. A maximum of three monitoring wells (total footage of 900 feet) will be installed at different depth intervals to monitor the

mounding effect of the injected water during the injection pilot test (see Task E below) as required by the UIC permit application. The estimated Malcolm Pirnie labor cost range to complete this task is $10,000 to $15,000. The estimated drilling subcontractor cost range is $15,000 to $20,000 (depending on the actual depths drilled).

E. Injection Well Pilot Test

Upon completion of the well installation, we will conduct an injection well pilot test. The maximum injection rate will be determined by first completing a step-test, whereby the injection rate is gradually increased until the back pressure is stabilized. After the step-test is completed, the pilot injection test will be run at the optimal rate for seven days. A period of seven days is necessary to allow for stabilization of the induced hydraulic mound and pressures to determine the area of influence created by the injection. We would need a supply of water for the injection test.

During the injection test, we will monitor water levels in the newly installed wells and up to five off-site wells continuously (24 hours a day) for the seven days. Additional information to be gathered will include injection flow rate, injection pressure, back pressure, water temperature and pH. Upon completion of the injection test, we will analyze and interpret the data and make a determination of the viability of the geologic formation to assimilate the injected water. This analysis will include a geochemical compatibility analysis of the injected wastewater and the receiving groundwater. The estimated Malcolm Pirnie labor cost range to complete this task is $25,000 to $35,000. The estimated subcontractor cost range is $13,000 to $18,000.

F. Injection Well Preliminary Design/Monitoring Program

We will prepare a preliminary design of the injection well and the monitoring program to be put a place once the UIC permit is issued. The monitoring program will be a very important component of our permit application package, as the USEPA is concerned about breakthrough and subsequent monitoring activities. The preliminary design will include injection pressure calculations, a schematic design and piping diagram. The estimated cost range to complete this task is $10,000 to $15,000.

G. Engineering Report and Permit Application

We will prepare a detailed engineering report in support of the UIC permit application, and complete the UIC permit application for submission to the USEPA. The estimate cost range to complete this task is $8,000 to $10,000.

As we discussed on the telephone, the UIC permit application is a complicated process, particularly since the USEPA has little experience with domestic wastewater injection. The estimated cost ranges presented in this letter account for a heightened level of effort to provide the USEPA with technically sound and scientifically valid data in support of the UIC permit application. We would be happy to discuss our overall approach with you at your request.

We appreciate the opportunity to provide you with this information and look forward to assisting the Town of Pound Ridge on this project.

Please give me a call at 201-529-4700 if you have any questions.

Very truly yours,

MALCOLM PIRNIE, INC.

Michael van der Heijden, CGWP
Associate

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Malcolm Pirnie Sept. 3, 1999
Wastewater Disposal Evaluation
Letter to Clay Fowler PR Planning Board
Summary
MP was retained to evaluate and provide alternatives separate sewage treatment systems (ssts) in Scotts Corners (SC), preliminary findings.

- Interviews determined that Block 9454 (SC Market), Lot 6 (Moonstruck) and Lot 7 (Albano electric) were experiencing recurring failures
- Lots 13, 14, 15 have cesspools with issues
- Summary of findings is in Table 1
- An estimate of water usage was made using data form the PR Business Association (Rosalie Roth) divided by the area of the buildings for a rate of 0.142 gallons/square foot / day. This was applied to properties that did not have water usage rates. Adding data from WCDH resulted in a water usage rate of 27,000 gpd. Only present usage included.
- Solutions proposed are:
    - Combined system for all users
    - Upgrading selected ssts
- Combined System
    - Wastewater Treatment Plant – Previous study determined that it is a viable engineering solution; but the capital and operating costs render it not economically viable.
    - On-site septic and pump to "Ball Fields". Use ball fields as leach fields, versus disposal for treated effluent, would seem viable. Need septic tank maintenance. Would also have to address ball field underdrains.
    - On-site Treatment and Disposal, need 2.5 acres. Would have to negotiate waivers with DOH for reserve capacity or somehow spread the loading rate over 24 hours rather than business hours. Would result in restrictions to future development and might result in deed restrictions. Could truck effluent off site.
- Upgrade selected ssts's.
    - Upgrade selected ssts, for example Chubby's Lot 64, or Dinardo's Lot 60
    - Needs more study.
- See table 1 for existing Conditions Assessment

Rec'd 9/13/99

MALCOLM PIRNIE

MALCOLM PIRNIE, INC.
INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS & CONSULTANTS

September 3, 1999

DRAFT

Mr. Clay Fowler, Chairman
Pound Ridge Planning Board
Town House
179 Westchester Avenue
Pound Ridge, New York 1576-1743

Re: Scotts Corners, Pound Ridge, New York
Wastewater Disposal Evaluation

Dear Mr. Fowler:

Malcolm Pirnie, Inc. has been retained to evaluate and provide alternatives to the existing separate sewage treatment systems (SSTS) in Scotts Corners. It is our understanding that some of the existing SSTS in the Scotts Corners commercial business area have had reoccurring problems, and that previous studies have been conducted regarding sewage treatment alternatives in an effort to remedy these problems. The following paragraphs describe our preliminary findings and recommendations of this study.

A field visit was conducted to assess existing separate sewage treatment systems (SSTS) for individual property lots in the Scotts Corner commercial business area (Figure 1) on August 11, 1999. The field assessment included visual observations of the SSTS and their hydrologic setting and interviews with occupants of each building to determine previous problems with their systems. Data was also collected from the Westchester County Health Department and the Pound Ridge Building Department on the existing SSTS designs and capacities. Water usage rates were obtained from Rosalie Roth (a member of the Pound Ridge Business Association) and by incorporating an estimated water usage rate that was determined from this data. The square footage of each building was obtained from the Scotts Corners Planning Study written by Frederick P. Clark Associates in October 1990. Some businesses in Scotts Corners date back to the late 1930's, making it difficult to find information on their SSTS at this time.

Interviews with the occupants of each building revealed that the SSTS that serve Scotts Corners Market, Moonstruck and Albano Electric (Block 9454, Lots 6 and 7 respectively)

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were the only businesses that appear to experience recurring failures. Previous failures of these systems may be related to stormwater runoff patterns, a high groundwater table, poor soil conditions or the proximity to shallow bedrock. For example, the location of the absorption trenches for Scotts Corners Market are located on top of a hill adjacent to the existing parking lot. Rock outcroppings visible in the area may indicate that the shallow underlying rock could be creating a type of "bathtub" condition where stormwater runoff percolates through the ground and accumulates on top of the rock surface. The Moonstruck and Albano systems are downhill of a wooded area that directs stormwater runoff into the absorption field area. The true cause for system failures can be better understood once subsurface investigations are conducted.

The presence of a cesspool that serves the Country Shopper, Antiques and Tools and an adjacent lot (Block 9454, Lots 13, 14 and 15 respectively) was reported during the site visit. The cesspool may be in poor physical condition and have insufficient capacity based on the age of the system. Building occupants stated that the system could be in excess of 100 years old. Further investigations regarding the condition and capacity of the cesspool should be conducted as the project approaches more detailed stages.

Access hatches with holes on the lid were also noticed in various locations during the site visit as shown on Table 1. Therefore, runoff infiltrates into the pumping pit or septic tank increasing the volume of flow into the system. The existing hatches should be replaced with new watertight hatches to minimize infiltration. This condition should be also be addressed as the project approaches more detailed stages.

Obtaining water usage rates is a critical parameter in designing the size of new or upgrading existing SSTS. An estimated water usage rate was determined by taking the sum of the water usage rates provided by Rosalie Roth divided by the sum of the square footage of the respective buildings. The resulting water usage rate factor of 0.142 gallons/square foot/day was utilized for estimating water usage rates at properties where Rosalie Roth did not provide data. Multiplying this factor by the square footage of an existing building yields an estimated water usage rate for that building. By combining data from Rosalie Roth and the Westchester County Department of Health the estimated water usage rate for the Scotts Corners commercial district is approximately 27,000 gallons per day (Table 1). It should be noted that this water usage rate estimate only includes existing buildings and does not factor in future expansion of existing stores or the construction of new structures. Future building expansion and the increase in water usage must be considered as the project approaches more detailed stages.

Based on the current estimated water usage rate of 27,000 gpd for the entire commercial district, a variety of possible solutions are available. Potential solutions have been

subdivided into two general scenarios: 1.) using a combined system for all commercial uses or 2.) upgrading selected SSTS and continue using individual systems.

1. Combined System

a. Wastewater Treatment Plant: A study regarding the viability of a WWTP with a subsurface effluent discharge to serve the commercial area has been previously completed. While a WWTP is a viable engineering solution, both initial capital and operation and maintenance costs (O&M) make this option economically not viable.

b. On-site Septic and Pump Station to Ball Fields: The previously completed WWTP study proposed an on-site WWTP with the effluent being discharged at the ball fields located approximately 1.5 miles to the north. If the ball fields have sufficient area and capacity (which they appear to have), they could be used as a leach field, rather than disposal fields for treated effluent. This would involve having an on-site septic tank and a pump station to convey wastewater to leach fields located at the ball fields. This option would result in lower capital costs (no WWTP) and lower O&M costs. The only O&M would be associated with periodic septic tank cleaning and pump station maintenance. It should be noted that existing drainage patterns would have to be investigated during the next study phase. For instance, underdrains for the ballfield would have to be removed if they were discovered during further investigations.

c. On-Site Treatment and Disposal: There are several possible solutions under this option that involve a combination of reserve capacity reduction and flow equalization. First, based on a flow of approximately 27,000 gpd and a percolation rate of between 30 and 45 minutes, a leach field area of approximately 2.5 acres would be required. The two acres does account for 100 percent reserved capacity as required by the Westchester County DOH. It may be possible to negotiate with the DOH a waiver for the reserve capacity. The downside to this option is a likely deed restriction on types of commercial use and expansion.

   Second, if the flow rate were to be equalized, whereby the loading rate to the leach field would be dosed over a 24 hour period rather than normal working hours, the leach field size may be reduced by one-half. Incorporating equalization could reduce the required leach field area to approximately 1.5 acres. Combining reserve capacity reduction and flow equalization could reduce the leach field area to approximately 0.75 acres. Obviously, reducing reserve capacity is more of a business, as opposed to an engineering, decision. The balance between the need to occupy existing commercial space and the need for future expansion would have to be taken into account under this design scenario.

Flows above the 27,000 gpd design flow of the SSTS would require an additional method of sewage disposal. Trucking the sewage off-site is the most economical method (approximately $500 per 1000 gallon truck tank full) of sewage disposal for the flows above what the new system has been designed for.

2. Upgrading Selected SSTS

A second scenario is to construct a smaller system to treat wastewater from only a particular area or from existing SSTSs that experience recurring failures. Possible locations for this "pocket" treatment system could include the overgrown area behind Chubby's Hardware (Block 9320, Lot 64) or the parking lot behind what is known as DiNardo's (Block 9320, Lot 60). Existing absorption trenches and leaching pits would have to be removed from any area where a new system was installed. It should be noted that a majority of the existing SSTS are currently operating without problems. Most commercial properties are land-locked by other buildings or natural features such as bedrock outcroppings or wetlands, preventing significant expansion. Some properties currently want to expand, such as the Scotts Corners Market, but are not able to because of the lack of treatment capacity.

It should be noted that these potential solutions are based on limited site-specific subsurface characterization and that other critical issues may be encountered when detailed soil investigations are conducted. We recommend that additional investigations be performed, including soil sampling and percolation tests, prior to proceeding with design and construction of a new treatment system.

If you have any questions please call me at 201-529-4700.

Very truly yours,

MALCOLM PIRNIE, INC.

Michael van der Heijden, CGWP
Associate

c: D. Berman
K. Matscherz, MPI
D. Sweeten, MPI

DRAFT

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TOWN OF POUND RIDGE
SCOTTS CORNERS WASTEWATER TREATMENT STUDY
EXISTING CONDITIONS ASSESSMENT

STORE NAME	OWNER	BLOCK	LOT	LAND USE	WATER USAGE (gpd)	BLDG. SIZE (sf)	SEPTIC TANK CAPACITY (gallons)	OVERFLOW TANK CAPACITY (gallons)	GREASE TRAP CAPACITY (gallons)	METHOD OF WASTEWATER CONVEYANCE	METHOD OF SEWAGE TREATMENT DISPOSAL	INFLOW POTENTIAL NOTED
THE DELI	DALE METZGER	9320	59	COMMERCIAL	575	4,050	SEE NOTE 5)	SEE NOTE 5)	NONE	GRAVITY FLOW	LEACHING PITS	YES
Di NARDO'S	QUADE & ROTH INC.	9320	60	COMMERCIAL/RESIDENTIAL	4425 [4]	4,050	3,000	SIPHON TANK	750	GRAVITY FLOW	- 6.5' DIA. x 6' DEEP SEEPAGE PITS & 8 - 6.5' DIA. x 9' DEEP SEEPAGE PITS	NO
FASHION COIFFURES	CLEMONS TRUST	9320	61	COMMERCIAL/RESIDENTIAL	2700 [4]	4,050	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	NO
P.R. CLEANERS	DeGRAFF TRUST	9320	62	COMMERCIAL/RESIDENTIAL	1000 [4]	4,860	1,850	NONE	NONE	GRAVITY FLOW	660 L.F. ABSORPTION TRENCHES	YES
P.R. TRAVEL	TRINITY LANE LTD.	9320	63	COMMERCIAL	1000 [4]	4,050	1,000	NONE	NONE	GRAVITY FLOW	134 L.F. ABSORPTION TRENCHES	YES
CHUBBY'S	JOE DiPIETRO	9320	64	COMMERCIAL/RESIDENTIAL	1,035	7,290	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	NO
P.R. SHELL	SHELL OIL CO.	9320	65	COMMERCIAL	1,440	10,140	600	NONE	NONE	SUBMERSIBLE PUMP	TWO LEACHING PITS	NO
REX REALTY	NORMAN	9454	5	COMMERCIAL	1,150	8,100	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	NO
MOONSTRUCK	LOUIS MEDICO	9454	6	COMMERCIAL	820 [4]	3,103	1,200	1,200	1,000	550 GAL. PUMP PIT W/ SUBMERSIBLE PUMP	200 L.F. ABSORPTION TRENCHES	NO
ALBANO ELECTRIC	ALBANO REALTY	9454	7	COMMERCIAL	1,371	9,657	900	1,200	NONE	550 GAL. PUMP PIT W/ SUBMERSIBLE PUMP	200 L.F. ABSORPTION TRENCHES	NO
HOULIHAN'S	BARING-GOLD	9454	8	COMMERCIAL	1,035	7,290	1,000	NONE	NONE	GRAVITY FLOW	132 L.F. ABSORPTION TRENCHES	NO
TEXACO	CAPAZZO	9454	9	COMMERCIAL	1,035	7,290	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	NO
FLEET BANK	ATEM ENTERPRISES	9454	10	COMMERCIAL	750 [4]	6,480	1,200	1,000	NONE	550 GAL. PUMP PIT W/ SUBMERSIBLE PUMP	240 L.F. PRIMARY SYSTEM / 200 L.F. RESERVE SYSTEM	NO
WINE CONNECTION	GATEWAY	9454	11	COMMERCIAL	855 [4]	2,140	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	YES
ONE HR. PHOTO	VAZANNA	9454	12	COMMERCIAL/RESIDENTIAL	1,725	12,150	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	SEE NOTE 5)	YES
COUNTRY SHOPPER		9454	13	COMMERCIAL	605	4,260	CESSPOOL	NONE	NONE	GRAVITY FLOW	SEE NOTE 5)	NO
VACANT LOT		9454	14	COMMERCIAL	284	2,000	CESSPOOL	NONE	NONE	GRAVITY FLOW	SEE NOTE 5)	NO
ANTIQUES AND TOOLS		9454	15	COMMERCIAL/RESIDENTIAL	605	4,260	CESSPOOL	NONE	NONE	GRAVITY FLOW	SEE NOTE 5)	NO
SCOTTS CORNERS MARKET [1]	RPS REALTY TRUST	9456	PB-B/1.9	COMMERCIAL	1800 [4]	58,225	2,700	NONE	NONE	2500 GAL. PUMP PIT W/ SUBMERSIBLE PUMP	1,043 L.F. ABSORPTION TRENCHES	NO
BARNWELL #1	DAVID BERMAN	9455	PB-B/25	COMMERCIAL	800 [4]	10,318	2,000	NONE	NONE	GRAVITY FLOW	LEACHING GALLERY (40'L x 5'W x 6'H)	NO
BARNWELL #2	DAVID BERMAN	9455	PB-B/24	COMMERCIAL	800 [4]	10,070	---	---	---	---	---	---
BLDG. #1 & #2	DAVID BERMAN	9455	PB-B/24	COMMERCIAL/RESIDENTIAL			1,000	1,000	NONE	GRAVITY FLOW	ABSORPTION TRENCHES	NO
BLDG. #3	DAVID BERMAN	9455	PB-B/24	COMMERCIAL/RESIDENTIAL			SEE NOTE 5)	NONE	NONE	GRAVITY FLOW	TWO 50' LONG x 3' WIDE ABSORPTION TRENCHES	NO
BLDG. #4	DAVID BERMAN	9455	PB-B/24	COMMERCIAL			1,000	1,000	NONE	GRAVITY FLOW	ABSORPTION TRENCHES	NO
BEAUTY SPA	CONO ENTERPRISES, LTD	9456	5A	COMMERCIAL	1000 [4]	4,257	1,000	1,000	NONE	550 GAL. PUMP PIT W/ SUBMERSIBLE PUMP	200 L.F. ABSORPTION TRENCHES & 3 - 8' DIA. x 5' DEEP SEEPAGE PITS	NO
				TOTAL FLOW (gpd) =	26,810							

NOTES:

1) SCOTTS CORNERS MARKET INCLUDES THE POST OFFICE NEXT DOOR
2) BARNWELL #2 IS COMPRISED OF THE 4 BLDGS. LISTED BELOW.
3) UNDER CURRENT ZONING REGS. THIS BLDG. IS OVER THE MAXIMUM DEVELOPMENT POTENTIAL.
4) INFORMATION PROVIDED BY ROSALIE ROTH.
5) INFORMATION IS NOT READILY AVAILABLE AT THIS TIME.

TABLE 1

LEGEND

Zone Boundary

Building Area

Note: Parking Areas Consist of all Lands within the Zone but not in a Building Area.

HOFMANN

CLARK

NYE

NEW CANAAN DEVELOPMENT CORP

NORKIN

TRINITY PASS

SCOTTS CORNERS MARKET

REX OIL CO.

ALBANI

CAPASSO

SCOFIELD

ALLEN

PAYNE

WESTCHESTER AVENUE

POUND RIDGE FIRE COMPANY

DIYORE

QUADE

SECCARIA

WATERS

HOFMAN

ROAD

LYMAN

LINDA LANE

BARNWELL #1 & #2 →

STAMFORD WATER COMPANY

BAYLIS

CONANT

PROPOSED "PB-A" PLANNED BUSINESS "A" ZONING DISTRICT, SHOWING BUILDING AREAS AND PARKING AREAS

APRIL 28, 1966

SCOTTS CORNERS POUND RIDGE, N.Y.

FIGURE 1

June 29, 2000
Malcolm Pirnie to Malcom Pirnie
Scotts Cornet Test Pits and Percolation Test
Summary of the test, but no results.
One page description – Lots 58 to 65
Photos

MALCOLM PIRNIE

INTEROFFICE CORRESPONDENCE

To: M. van der Heijden, NNJ
M. Morgante, WHI

Date: June 29, 2000

Copy: Project Files, 3541003

From: John Ifkovits, NNJ

Re: Scotts Corner Test Pits and Percolation Tests

On June 22, 2000, I oversaw the excavation of 3 deep test pits and conducted 4 percolation tests at Scotts Corner, Pound Ridge New York. Present for the test pits were Mike Morgante of MPI WHI, ED Deleney of The Westchester County Department of Health (WCDOH), and Marion Papas, WCDOH. AC&S Excavating of Pound Ridge supplied a Cat 426B backhoe and operator for the test pits.

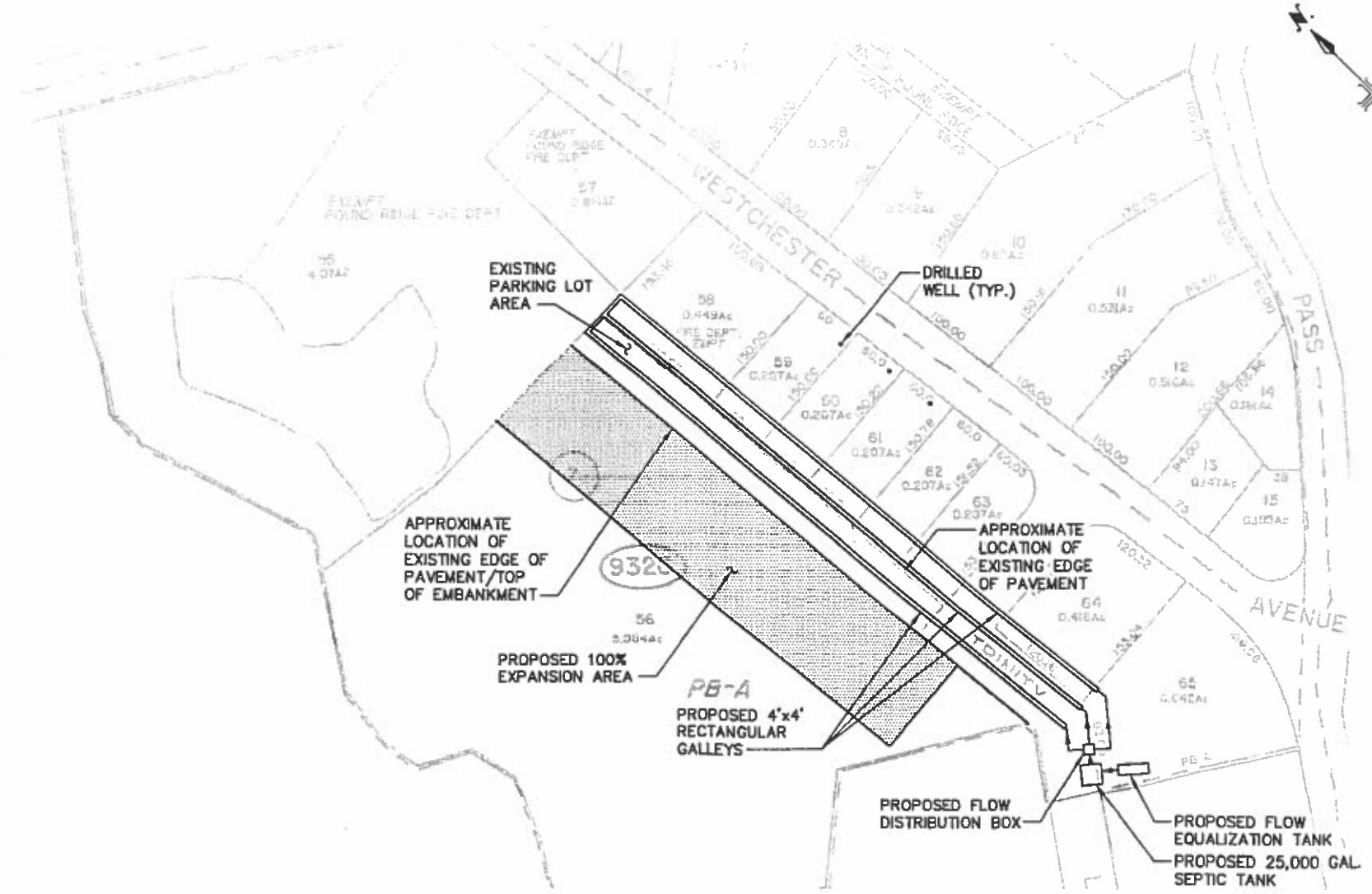
Mike departed the site during the excavation of the second test pit. Ed was content with three test pits. Additional test pits were planned for the area of the parking lot near the firehouse however Ed said they would not be necessary because the WCDOH has extensive records of the soils in this location. Underground utilities and the existing galleys were also located in this area. Ed and Marion departed the site after the third test pit. Test pit details are included on the attached test pit logs.

Four locations were chosen for percolation tests. There was one percolation test associated with each test pit and a fourth percolation test in the wooded lowland south east of the parking lot. The locations of the first three tests are shown on the test pit logs. Holes were dug as per requirements of WCDOH Bulletin SD-22. The percolation tests were not observed by WCDOH.

The holes were filled with water and allowed to pre-soak. The tests were run by filling the hole to a depth of ten inches and observing the time required for the water to drop three inches. The tests were run three times and are shown on their corresponding test pit logs. Percolation test P-4 filled with ground water and failed to drain.

The test pits were backfilled with the backhoe and compacted with the backhoe bucket. It will be necessary to arrange for the locations to be paved over.

jji
Attachments
3541003



MALCOLM PIRNIE

TOWN OF POUND RIDGE
WESTCHESTER COUNTY, N.Y.
SCOTTS CORNERS
WASTEWATER DISPOSAL

SCOTTS CORNERS PB--A BUSINESS DISTRICT
PROPOSED SUBSURFACE SEWAGE TREATMENT SYSTEM
PRELIMINARY SITE PLAN
SCALE: 1"=100'

MALCOLM PIRNIE, INC.
JULY 2000
FIGURE 1

MALCOLM PIRNIE

SCOTT'S CORNER
POUND RIDGE, NEW YORK

TEST PIT NO. 1

MALCOLM PIRNIE, INC.

PROJECT: 3541-003

MALCOLM PIRNIE	SCOTT'S CORNER POUND RIDGE, NEW YORK TEST PIT NO. 3	MALCOLM PIRNIE, INC. PROJECT: 3541-003

MALCOLM PIRNIE	SCOTT'S CORNER POUND RIDGE, NEW YORK PERCULATION TEST P-1 AT TEST PIT NO. 1	MALCOLM PIRNIE, INC. PROJECT: 3541-003

MALCOLM PIRNIE

SCOTT'S CORNER
POUND RIDGE, NEW YORK

PERCULATION TEST P-4

MALCOLM PIRNIE, INC.

PROJECT: 3541-003

MALCOLM PIRNIE

SCOTT'S CORNER
POUND RIDGE, NEW YORK

PERCULATION TEST P-2 AT TEST PIT NO. 2

MALCOLM PIRNIE, INC.

PROJECT: 3541-003

MALCOLM PIRNIE

SCOTT'S CORNER
POUND RIDGE, NEW YORK

PERCULATION TEST P-3 AT TEST PIT NO. 3

MALCOLM PIRNIE, INC.

PROJECT: 3541-003

July 11, 2000
Malcolm Pirnie to Clay Fowler
Scotts Corners Wastewater Treatment System
Results of test pits and percolation tests behind lots 60, 61 and 62, Block 9320
Summary
The report seems to be proposing a new SSTS in this area.
Existing SSTS behind Lots 58 through 65

- The existing leaching pits and adsorption trenches are 190 and 180 feet form public water supply wells
- Assumptions are made in order to support the proposed SSTS in this area.
- Would need a relaxation of the separation to public water supply wells

Proposed SSTS:

- See graphic for solution
- System could treat 24,000 gpd
- Details: 1800 feet of galleys, 24 foot on center, application rate of 0.6 gallons/day/ft2 from a perc rate of 24 minutes/inch (worst case) over 14,400 ft2 = 24,000 gpd

This does not address either the present or future flows of 28,000 from the 1992 Folcetti study
This solution could be used to treat wastewater from only a particular area.
Future study is recommended.
INCLUDES LOGS OF TEST PITS

FILE COPY

MALCOLM PIRNIE

MALCOLM PIRNIE, INC.
INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS & CONSULTANTS

July 11, 2000

DRAFT

Mr. Clay Fowler
Pound Ridge Planning Board
Town House
179 Westchester Avenue
Pound Ridge, New York 1576-1743

Re: Scotts Corners Wastewater Treatment System

Dear Mr. Fowler:

Malcolm Pirnie, Inc. conducted a subsurface investigation in the parking lot area behind lots 60, 61, & 62 of Block 9320 in the PB-A Business District as discussed in the attached interoffice correspondence. The test pits that were excavated and the percolation tests that were performed found the existing soils suitable for subsurface wastewater disposal. The following paragraphs discuss the proposed subsurface sewage treatment system (SSTS) for Scotts Corners.

Preliminary Design of a New SSTS

Existing SSTS Behind Lots 58 through 65

The existing public water supply wells and surface water are located a minimum of 100-feet away from septic tanks. The required separation distance from public water supply wells to absorption fields is 200-feet according to New York State Department of Environmental Conservation (NYSDEC) regulations. The existing leaching pits and absorption trenches are located approximately 190 and 180-feet, respectively, from the public water supply wells. In order to maximize the flow that the proposed subsurface sewage treatment system (SSTS) can accept the following is assumed:

- Existing separation distance of 100-feet between septic tanks and surface water and public water supply wells is maintained.
- Relaxation of the separation distance from the public water supply well and the proposed subsurface disposal fields to 100-feet minimum.

These requirements are subject to the review and acceptance by the Westchester County Department of Health (WCDOH) and the NYSDEC.

Proposed SSTS

The SSTS will incorporate an influent equalization tank, a septic tank for settling and treatment and 4-foot high by 4-foot wide concrete rectangular galleys for subsurface disposal of the wastewater. It should be noted that various subsurface wastewater disposal alternatives such as leaching pits, concrete tri-galleys and rectangular galleys were investigated. There are other proprietary subsurface disposal methods that may provide more flow capacity which can be further investigated during detailed design. However, from this preliminary investigation it was determined that rectangular concrete galleys provided the greatest wastewater discharge capacity for this project.

The SSTS will be located behind lots 58 through 65 of Block 9320 as shown on Figure 1. Flow from the various businesses would be pumped to the influent equalization tank where the wastewater would be dosed to the septic tank and associated disposal fields. The total existing parking area behind lots 58 through 65 was utilized in the design of the SSTS to maximize the flow capacity. The 100% expansion area will be located southwest of the existing parking lot.

Approximately 1,800 linear feet (LF) of galleys spaced 24-feet on center can be installed in the existing parking lot area from lots 58 through 64. Each linear foot of rectangular galley corresponds to 8 square feet (ft^2) of subsurface disposal area. A wastewater application rate of 0.6 gallons/day/ft^2 was determined from a percolation rate of 24 minutes/inch (worst case) based on field tests. Using this application rate and a subsurface disposal area of 14,400 ft^2, the maximum capacity of the subsurface disposal fields based on the assumptions that have been made is approximately 24,000 gallons/day (gpd).

Existing Wastewater Flows in the PB-A District

The total flow from the existing PB-A district is approximately 27,000 as found in Table 1 of the letter dated September 3, 1999 that was sent to you. The projected flow in the year 2012 based on the Feasibility Study prepared by J. Robert Folchetti & Associates in May 1992 is approximately 28,000 gpd.

Conclusions/Recommendations

The 24,000 gpd capacity of the proposed SSTS is based on preliminary information and may increase during the detailed design stage. However, the proposed system may not be capable of current and future treatment of the total flow from the PB-A business district. Furthermore, if the assumptions that have been made are not determined feasible upon review by the regulatory agencies, a similar system with less capacity can still be

constructed in the same location. It would therefore be recommended to treat wastewater from only a particular area and from existing SSTS that experience recurring failures as previously discussed in Scenario No. 2 in the letter dated September 3, 1999. This proposed SSTS could accept flow from the previously identified businesses that have recurring failures of existing SSTS and the businesses from lots 58 through 65 of block 9320.

Upon the review and acceptance of the preliminary design by the regulatory agencies, the next phase of the project would require the following:

- A detailed investigation of existing and projected flows and current and future building use to accurately determine the design flow for the proposed SSTS.
- A site survey to establish the boundaries of the entire area from lots 58 through 65 in order to commence the detailed design of the subsurface disposal system.

If you have any questions or concerns, please do not hesitate to call me at 914-641-2658.

Very truly yours,

MALCOLM PIRNIE, INC.

Michael van der Heijden
Associate

mam
Enclosures

Cc: E. Delaney, WCDOH
D. Berman, Scotts Corners Business Association
R. Roth, Scotts Corners Business Association
M. Morgante, MPI

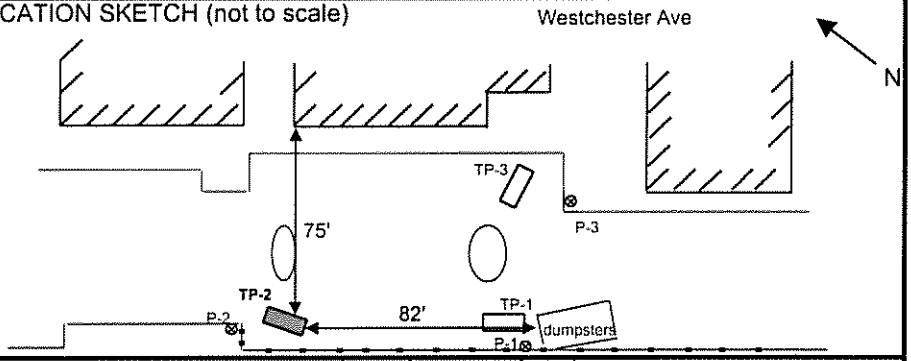
MALCOLM PIRNIE

TEST PIT LOG

TEST PIT #: TP-2	SITE NAME: Scott's Corner	PROJECT #: 3541003

GROUND ELEV.:	DATE: June 22, 2000
COUNTY: Westchester	TWP: Pound Ridge
CONTRACTOR: AC&S Excavating	
OPERATOR:	
EQUIPMENT: Cat 426B Backhoe	
USGS 7.5 QUAD: Pound Ridge	
WATERSHED: NYC	
LOGGED BY: John Ifkovits	
WITNESSES: Ed Deleney (WCDOH) Marion Papas (WCDOH)	
WEATHER: Hazy, Hot, and Humid, 85-90 F	

LOCATION SKETCH (not to scale)



ELEV. FT.	SAMPLE NUMBER	SAMP TYPE	Geo Tech Properties	DEPTH (bgl)	STRATIGRAPHIC DESCRIPTION	USCS	STRAT. SYMBOL	PID	REMARKS
				0					
				1	0-4" Blacktop pavement 4"-10' sand, silt, cobbles, boulders with organics tan brown to dark brown, dry, compact (Miscellaneous Fill)				Debris, corrugated pipe and glass
				2					
				3					
				4					
				5					
				6					
				7					
				8					
				9					
				10					Bottom of test pit #2
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					

Notes: Percolation Test P-2:

Test #	Water Drop (in)	Time (min)	Rate (min/in)
1	3"	48 min	16.0
2	3"	67 min	22.3
3	3"	72 min	24.0

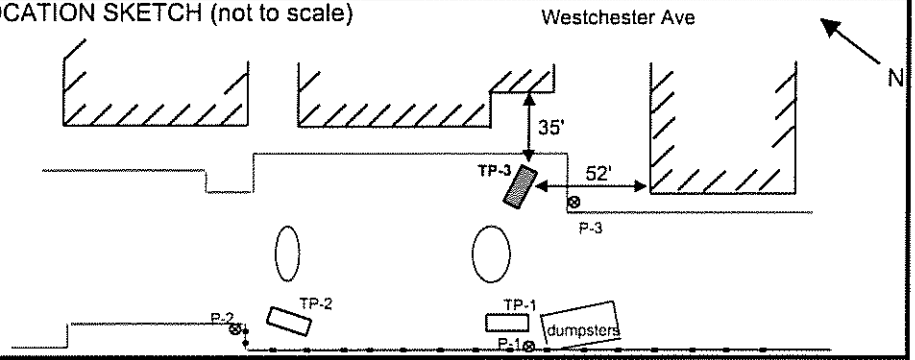
MALCOLM PIRNIE

TEST PIT LOG

TEST PIT #: TP-3	SITE NAME: Scott's Corner	PROJECT #: 3541003

GROUND ELEV.:	DATE: June 22, 2000
COUNTY: Westchester	TWP: Pound Ridge
CONTRACTOR: AC&S Excavating	
OPERATOR:	
EQUIPMENT: Cat 426B Backhoe	
USGS 7.5 QUAD: Pound Ridge	
WATERSHED: NYC	
LOGGED BY: John Ifkovits	
WITNESSES: Ed Deleney (WCDOH) Marion Papas (WCDOH)	
WEATHER: Hazy, Hot, and Humid, 85-90 F	

LOCATION SKETCH (not to scale)



ELEV. FT.	SAMPLE NUMBER	SAMP TYPE	Geo Tech Properties	DEPTH (bgl)	STRATIGRAPHIC DESCRIPTION	USCS	STRAT. SYMBOL	PID	REMARKS
				0					
				1	0-4" Blacktop pavement 4"- 4.5' SAND, med to fine, with gravel				
				2	and cobbles, trace silt tan brown, dry, slightly compact				
				3	(Fill)				Evidence of terracotta pipe at 3' some red brick fragments
				4					
				5	4.5-8.5' SAND, med to fine with silt gravel				
				6	and cobbles grey tan, dry, moderately compact				
				7					
				8					Bottom of test pit #3
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					

Notes: Percolation Test P-3

Test #	Water Drop (in)	Time (min)	Rate (min/in)
1	3"	13 min	4.3
2	3"	18 min	6.0
3	3"	20 min	6.7

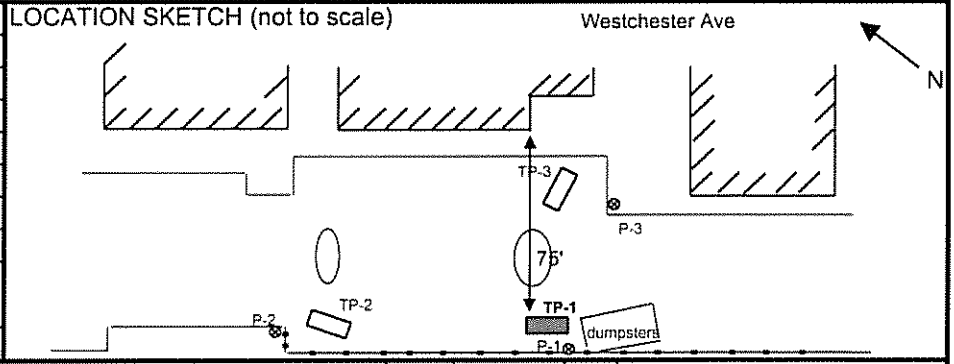
MALCOLM PIRNIE

TEST PIT LOG

TEST PIT #: TP-1	SITE NAME: Scott's Corner	PROJECT #: 3541003

GROUND ELEV.:	DATE: June 22, 2000
COUNTY: Westchester	TWP: Pound Ridge
CONTRACTOR: AC&S Excavating	
OPERATOR:	
EQUIPMENT: Cat 426B Backhoe	
USGS 7.5 QUAD: Pound Ridge	
WATERSHED: NYC	
LOGGED BY: John Ifkovits	
WITNESSES: Ed Deleney (WCDOH) Marion Papas (WCDOH)	
WEATHER: Hazy, Hot, and Humid, 85-90 F	

LOCATION SKETCH (not to scale)



ELEV. FT.	SAMPLE NUMBER	SAMP TYPE	Geo Tech Properties	DEPTH (bgl)	STRATIGRAPHIC DESCRIPTION	USCS	STRAT. SYMBOL	PID	REMARKS
				0					
				1	0-4" Blacktop pavement				
				2	4"- 7' SAND, med to fine, trace silt and gravel tan brown, dry (Sandy Loam)				
				7	7-12' SAND, med Grey tan, dry				
				12					Bottom of Test Pit #1
				20					

Notes: Percolation Test P-1:

Test #	Water Drop (in)	Time (min)	Rate (min/in)
1	3"	27 min	9.0
2	3"	32 min	10.7
3	3"	39 min	13.0

Malcolm Pirnie Sept.26, 2000
Scotts Corner Septic Evaluation – Scope of Work and Cost Estimate
Letter to Clay Fowler PR Planning Board
Summary

- WCDOH will not relax the separation distance from existing water supply wells (200ft)
- Could consolidate the wells with a new one.
- WCDOH said they would not use the worst case percolation rate to determine hydraulic loading, but would allow a "reasonable" rate to be used.
- WCDOH states that the reserve capacity of the individual systems could be used to create an aggregate reserve capacity of multiple locations.
- Propose some kind of hybrid system, a combination of new leach fields (behind lots 59 through 63), maximizing the efficiency of the existing systems, and tying them all together.
- Need to:
    1. Inventory water supply wells
    2. Calculate water uage and wastewater discharge volume
    3. Figure out individual septic system details; tank and field locations and size.
    4. Calculate hydraulic loading
- Create base map
- Determine water usage, purchase and install meters.
- Inspect existing septic sysytems
- Calculate loading of existing systems
- Support creation of a community water supply
- Prepare modified preliminary design
- Total Cost is $30,000.
- Create new leach field behind Lots 60 through 62 is needed.

FILE Copy

MALCOLM PIRNIE

MALCOLM PIRNIE, INC.
ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

September 26, 2000

Mr. Clay Fowler, Chairman
Town of Pound Ridge Planning Board
Town House
179 Westchester Avenue
Pound Ridge, NY 10576-1743

Re: Scotts Corner Septic Evaluation
Scope of Work and Cost Estimate

Dear Mr. Fowler:

As you know, we have been making some progress in developing a solution to the Scotts Corners septic situation. The deep tests and percolation tests conducted beneath the parking lot yielded favorable results. In our draft letter to you dated July 11, 2000, we identified a possible disposal scenario based on some assumptions that would require certain waivers from the Westchester County Department of Health (WCDOH). One such waiver included the reduction in separation distances from the water supply wells to the septic system. The WCDOH required separation distance is 200 linear feet.

On September 6, 2000, we had a conversation with Ed Delaney of the WCDOH. Mr. Delaney stated that they are willing to be flexible, but they will not relax the 200 foot separation distance requirement. As you know, a significant number of the commercial properties have their own water supply well. The wells are located throughout the Scotts Corners commercial area and, therefore, maintaining the 200 foot separation distance reduces the amount of space available for leach fields. One strategy the Town may wish to consider is to consolidate all of the individual wells into one community system comprised of one or two wells. This consolidation would allow for greater flexibility in the placement and sizing of the systems. There may be grants or low interest loans available for the construction of a community well system. We have included a task in this letter to assist the Town in identifying and obtaining such grants or low interest loans. It should be noted that creation of a community well system is not a requirement for us to develop a solution for the existing failing systems. It will, however, impact the amount of excess capacity available for expansion.

During our conversation with Ed Delaney, we discussed two other issues: 1. Utilizing a "reasonable" percolation rate, rather than a worst case; and 2. Use of individual system reserve fields as an overall system reserve.

With respect to the first issue, the WCDOH typically will use the worst percolation test rate to devise the hydraulic loading rate. Upon inquiry, Mr. Delaney stated that the WCDOH would not require Scotts Corner to utilize the worst percolation test, but rather would accept a "reasonable" rate that represents all the percolation tests. This will allow for an increased hydraulic loading rate and decreased overall area.

With respect to the second issue, we asked Mr. Delaney if it would be possible to use the reserve capacity of the existing systems as an aggregate reserve to service all of Scotts Corners. This strategy would allow us to maximize the capacity of overall system by "patching" together the individual systems. Mr. Delaney stated that he would not be adverse to such an approach, and that the overall reserve capacity of the "system" could be comprised of multiple locations.

At this juncture, it appears that some form of hybrid system will ultimately work for Scotts Corners. Specifically, a hybrid system would consist of using a combination of new leach field areas (e.g., the area behind lots 59 through 63), maximizing the efficiency of the existing systems, and tying the system together.

We are at the point where we need to start understanding some of the detailed engineering components of the existing systems so that we can make more definitive decisions on what will or will not work. Specifically, we need to understand the following:

1. How many water supply wells exist and where are they located?

2. What is the actual water usage for each user in Scotts Corners and what is the actual wastewater discharge volume?

3. What is the actual design of each septic system, including septic tank location, septic field locations, and septic field size?

4. Based on items 1 through 3 above, what is the actual capacity (e.g., hydraulic loading capacity) of each septic system?

Without the information mentioned above, it will be difficult for us to make decisions to move the engineering design forward. Therefore, we recommend the following steps to obtain more detailed and specific information.

1. *Create a base map showing all of Scotts Corners, each septic system, and well locations.* As part of a pervious task, we have compiled maps showing the locations of the majority of the septic systems. However, these maps are of

varying scales and only show individual properties. Because the final system may be comprised of a combination of new and existing leach fields, we need one base map that shows all the septic systems on which we can layout the design. To create a base map, we would scan the existing drawings into a computer and compile the pieces together at a uniform scale. The estimated cost to create a base map is $ 4,500.

2. ***Determine actual water usage.*** While the water use at Scotts Corners has been estimated in the past by us and others, it is important to know the actual use to determine the adequacy of the existing septic system and to aid in the sizing of a new system. Such information would also be valuable to justify specific design parameters with the WCDOH, and in the siting of a community water supply well, if necessary. This can be easily accomplished by placing water meters at each of the buildings. Water meters cost around $100.00 each. Water use can be monitored and recorded by each tenant on a weekly basis.

   For this task we would assist Scotts Corners in the purchase and placement of the water meters and the tabulation of the data. The estimated Malcolm Pirnie labor for this task is $ 2,000. The estimated cost for the water meters is $2,500, assuming there are 25 meters required at a cost of $100 each.

3. ***Existing Septic System Inspection.*** As part of a pervious task, we identified the type of septic system for each of the buildings at Scotts Corners. It is now time to do a detailed inspection of each of the septic systems to determine the size of the tanks, linear feet of leach field pipes, leach field size, reserve field size, and overall condition. This information will be important in determining the adequacy of the existing systems to accommodate the existing hydraulic loads, and whether or not each system could accommodate additional loads. The inspection information will also be used to update the base map. The estimated cost for us to inspect each system is $ 4,000.

4. ***Calculate Hydraulic Loading Capacity of Existing Septic Systems.*** Based on the results of the septic system inspection, we will calculate the hydraulic loading capacity of each of the existing septic systems. This will provide us with insight as to whether or not the existing systems are adequate to accommodate the existing loads and whether or not they can accommodate additional loads. We will also identify/recommend modifications (if applicable) that could enhance the capacity of each system. The estimated cost to complete this task is $ 2,500.

5. *Community Water Supply System Grant.* We will assist Scotts Corners to identify possible sources of funding (grants or low interest loans) to install a community water system. We will also provide assistance in preparing application materials if an appropriate source of funding is located. It should be noted that the installation of a community water supply system is not critical to moving forward, however, if a community system could be put in place, there would be increased flexibility and opportunities for leach field placement and design. The estimated cost to complete this task is $ 1,500.

6. *Prepare a Modified Preliminary Design.* Once Tasks 1 through 5 are completed, we will have sufficient information to modify the design for the new leach field area, optimize the capacity of the existing systems, and prepare a preliminary design tying the system together. The design would be shown on the base map and would be the basis for discussions with the WCDOH. We have also budgeted for two meetings as part of this task. The estimated cost to complete this task is $12,500.

   The total cost to complete this next phase of work as discussed in Tasks 1 through 6 above is $ 29,500 (including the cost for the water meters).

We believe that the approach discussed in this letter has the best opportunity to succeed. Based on our pervious work, we are confident that, at a minimum, the new leach field area (behind lost 60 through 62) would be sufficient to alleviate the existing failing system problem. The goal now is to attempt to optimize the existing systems so that additional capacity may be incorporated into an integrated system comprised of new and existing septic system components.

We appreciate the opportunity to provide you with this Scope of Work and Cost Estimate. If you have any questions, please call me at 201-529-4700.

Very truly yours,

MALCOLM PIRNIE, INC.

Michael van der Heijden
Associate

jtc P99-0577-739
P:\URG\Market\town of pound ridge proposal.doc

2002 Summary form List of Reports
April 2002
Scotts Corners Potable Water and Wastewater Conceptual Investigation
Letter from Folchetti & Associates to Joy Simpkins
Waste WaterWastewater System investigation for Scotts Corners northwest parking lot.
WCDOH would not relax separation distances to wells.
• Quad Parcel (9320-56) found unsuitable for SSDS.
• Town Park site may be suitable for SSDS.
• Golf Course option for disposal through irrigation may be feasible.
• Potable Water
• 2 systems provide water to Stamford, CT: Stamford System & Laurel System.
• Laurel System supplies N. Stamford. It is a closed system and providing 60,000 gpd to Scott's Corners would require a system upgrade.
• Stamford System is questionable because it does not have a large margin of safety.
• Water service via Golf Course may be viable alternative. BHC was supportive.

Additional technical notes extracted by TD on the 2002 letter 3/20/2016

Parking Lot SSDS for Lots 56 (Quade)and 58 through 65 (Block 9320) is not feasible

- Need to be able to treat 50,000 gpd
- For 60, 61, and 62, preliminary design indicated a 4X4 galley SSDS could handle 24,000 gpd. But this requires relaxation of separation distance from public water supply well from 200 to 100 feet.
- Also sizing of the above will only handle 8,640 gpd.
- Then need to use Lot 56.
    - But test pits in 1992 determined it was not feasible due to groundwater within 4 feet of the surface, bedrock or boulder within 5 feet of the surface, and proximity to wetlands.

Park Athletic Facilities Lots 8, 86, 152, Block 9820.

- Even with potentially favorable soils, the area needed would require variances from regulatory agencies in terms of application rates and reserve areas.
- Perc testing was not done as a drought condition caused WCDH to suspend soils testing.
- For 86: 5 holes were done for perc tests, 11 to 27 min/inch
- 5.4 acres available with 150' setback from wetlands, and 20 foot offset from wetlands
- For a flow of 50,000gpd, @100% reserve area, need 6.7 acres using a 4X4 galley system on 14 foot centers.
- For a credit for treated effluent, allowing a 25% increase in loading, and a 50% reduction in reserve area, the area required for a 4X4 galley would be 4.02 acres.

- Slopes are OK at 4 to 20%, with 20% allowable by 1988 DEC design standards.
- BUT 4X4 not allowed on 20% slope areas; need tri-gallies
- For a flow of 50,000gpd, @100% reserve area, need 9.2 acres using tri-gallies on 12' centers.
- For a credit for treated effluent, allowing a 25% increase in loading, and a 50% reduction in reserve area, the area required for tri-gallies would be 5.5 acres.

Wastewater treatment through Golf Course Irrigation

- See discussion – seems unlikely though a permit was issued to a golf course in Orange County.
- Not sure here, but as the golf course has at this point been built, it may not be an option

Potable Water

- Trinity Reservoir, part of the Stamford system. The Laurel also provides raw water to the water treatment plant on Interlaken Rd. in Stamford.
- Potable water is distributed via the Stamford system and the Laurel System
- The possibility of providing Scotts Corners with 60,000 gpd would require system upgrades and storage facilities.
- The Stamford System is fully utilized.

Ground Water Resources

- Long story made short is that drilling two test wells on BHC land at a rate of 60,000 is too risky and might ultimately result in the migration of the MTBE plume.

Water Service via the "Proposed" Golf Course.

- The golf course raw water storage tank might be operated by BHC and might have an allocation for Scotts Corners.
- Use of this water for potable purposes would have to involve the CT DEP, Dept of Public Health, and Dept, of Public Utility Control.
- This report precedes the golf course development so an update would be needed.

CLAY

J. ROBERT FOLCHETTI &
ASSOCIATES, L.L.C.

CIVIL / ENVIRONMENTAL ENGINEERS

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40 RAILROAD AVENUE
MONTGOMERY, NY 12549
(845) 457-5318
(845) 457-9392 (FAX)

FAX TRANSMITTAL SHEET

TO: Honorable Joyce Simpkins

FROM: Robert M. Trzepacz, P.E.

FAX #: 914-764-0102

DATE: April 12, 2002

RE: Please find the attached correspondence, as we discussed on April 4, 2002. Originals will follow in the mail. Should you have any questions, please do not hesitate to contact me. Thank you.

NO. OF PAGES (including cover sheet): 7

PLEASE DELIVER THIS DOCUMENT IMMEDIATELY TO ADDRESSEE. PLEASE TELEPHONE US AT (914) 232-2500 IF ANY DOCUMENT IS ILLEGIBLE OR IF ALL PAGES ARE NOT RECEIVED.

J. ROBERT FOLCHETTI & ASSOCIATES, L.L.C.
CIVIL / ENVIRONMENTAL ENGINEERS

April 11, 2002

Honorable Joyce Simpkins
Pound Ridge Town House
179 Westchester Avenue
Pound Ridge, New York 10576

SUBJECT: SCOTT'S CORNERS POTABLE WATER AND WASTEWATER CONCEPTUAL INVESTIGATION

Dear Ms. Simpkins:

We would like to take this opportunity to advise you of the progress of our investigation. Alternatives are presented in two sections: wastewater and potable water.

1. WASTEWATER SYSTEM

1.1 PARKING LOT SSDS FEASIBILITY (LOTS 56 AND 58 THROUGH 65 BLOCK 9320)

Review of previous soil testing data and other data provided indicates that construction of a subsurface disposal system to treat an average daily flow of 50,000 gpd is not feasible given the following considerations:

- Subsurface investigation of lots 60, 61 and 62 of block 9320 and preliminary design of a subsurface disposal system (SSDS), reported July 11, 2000, concluded the maximum capacity of a 4x4 galley SSDS system at this location to be approximately 24,000 gpd.
- System capacity of 24,000 gpd required relaxation of required separation distances from the public water supply well from 200' to 100 feet.
- Telephone conversations with E. Delaney, WCDOH indicate that relaxation of the separation distance will not be permitted at this time.

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- We disagree with the system sizing provided in the July 11, 2000 report. Our calculations indicate the galley system proposed (1,800 lf of 4x4 gallies) is capable of treating approximately 8,640 gpd based on 1988 NYSDEC regulatory standards and the percolation rate information provided.

- Use of lot 56, Block 9320, would be required to provide for flows greater than 8,640 gpd and was proposed for reserve absorption area under the July 11, 2000 layout.

- Test pits excavated January 15,1992 on Lot 56, Section 9320 determined:
  - Bedrock or rocks too large to move with a standard backhoe were found within 5 feet of the surface
  - Groundwater was within 4 feet of the surface
  - Useable area extremely limited due to proximity to wetlands, rock and groundwater

- The "Quade" parcel (TM# 9320-56) was found to be unsuitable for use as a subsurface discharge site in the Wastewater Treatment Feasibility Study, Scotts Corners, Pound Ridge, NY, prepared by J. Robert Folchetti & Associates, May 1992

1.2 PARK ATHLETIC FACILITIES (LOTS 8, 86, 152 BLOCK 9820)

Preliminary investigation of this parcel based on available information indicates soils characteristics and ground slopes are conducive to subsurface disposal. Gross system area requirements necessitate allowances from regulatory agencies for discharge of treated effluent in the form of an application rate credit and reduction of reserve area. Even with the credits use of tri-gallies is marginal and use of a 4x4 galley system would require further discussion with WCDOH. Subsurface disposal credit for treated effluent is not provided by WCDOH or NYSDEC. Discussions with WCDOH suggest that treated effluent credit may be considered by the regulatory agencies if it were requested

To advance this alternative, additional soils tests are required to determine depth of impervious surfaces, soils identification and groundwater depth. Percolation testing will be required for estimation of hydraulic conductivities in accordance with regulatory standards for preliminary system design. Testing is not possible at this time as Westchester County Department of Health has suspended soils testing since December 2001 due to the temporal drought conditions.

This assessment was based on the following factors:

- The "Town" parcel (TM# 9820-86) may be suitable for use as a subsurface discharge site in the Wastewater Treatment Feasibility Study, Scotts Corners, Pound Ridge, NY, prepared by J. Robert Folchetti & Associates, May 1992, based on reconnaissance soils tests.

- Reconnaissance soil tests conducted May 1992 provided the following results:
  - 5 deep holes excavated overall depth 7-9 ft.
  - No groundwater encountered
  - No bedrock encountered
  - Clayey sand soils in upper horizons, 3 holes had lower horizons of gravelly sand
  - Percolation tests were conducted at all 5 locations at a depth of 4 ft. Rates ranged from 11 to 27 min/ inch

- Gross lot area available for SSDS is approximately 5.4 acres which maintains a 150' setback from wetlands designated by Marc Beroz, January 29, 2002 and a 20 offset from lot lines

- Gross area required for 4x4 galley system to treat an average flow of 50,000 gpd (including 100% reserve area) is approximately 6.7 acres. Galley spacing 14 ft. on center as stated by WCDOH

- Should a credit be permitted for treated effluent allowing a 25% increase in loading and 50% reduction in reserve area, the required area for 4x4 gallies would be approximately 4.02 acres (including 50% reserve area)

- Site slopes vary from 4% to 20%. NYSDEC 1988 Design Standards stipulate maximum slopes for SSDS are 20%.

- WCDOH indicated 4x4 gallies may not be permitted for use on slopes approaching 20%, tri-gallies are recommended

- Gross area required for a tri-galley system to treat an average flow of 50,000 gpd (including 100% reserve area) is approximately 9.2 acres. Galley spacing 12 ft. on center as stated by WCDOH

- Should a credit be permitted for treated effluent allowing a 25% increase in loading and 50% reduction in reserve area, the required area for tri- gallies would be approximately 5.5 acres (including 50% reserve area)

1.3 WASTEWATER TREATMENT THROUGH GOLF COURSE IRRIGATION

Representatives from the NYSDEC, WCDOH and the Golf Course Developer were contacted and were presented with the concept of treated effluent disposal through irrigation. The NYSDEC representative indicated that a golf course in Orange County, NY was issued a discharge permit for this type of system. Both regulators felt that this could be a feasible alternative for Scotts Corners though more information would be required for further discussion.

NYSDEC stated they would obtain a copy of the Orange County discharge permit for our use and indicated that tertiary treatment would probably be required, most likely in the form of sand filtration. WCDOH comments focused on application timing, rain events, public exposure and storage requirements. Legal council for the developer stated they would be open to discussion of this matter, however would not want this to adversely affect the status of their application currently before the Town Planning Board.

Development of this alternative would require equalization in addition to a conventional means of discharge since land application will be weather dependent and largely seasonal. Connecticut Department of Environmental Protection prohibits surface water discharge within a water supply basin, relaxation of this requirement may be necessary. CT-DEP stated that they would not be inclined to allow a surface water discharge within a water supply basin.

2. POTABLE WATER

2.1 TRINITY RESERVOIR

According to Bridgeport Hydraulic Company representatives the Trinity Reservoir is one of the contributing reservoirs to the Stamford System which provides potable water treatment plant on Interlaken Road in Stamford, CT. The Laurel reservoir also supplies raw water to this treatment facility. Potable water is distributed from the plant via two systems, the Stamford System and Laurel System.

The Laurel system which supplies North Stamford is a closed system which is a pressurized zone with no hydro-pneumatic or atmospheric storage. Providing 60,000 gpd for the Scott's Corners Area would require equipment upgrades to the existing Laurel System and it is likely that a means of storage would have to be required given the increased service area and usage.

Bridgeport Hydraulic Company indicated that the Stamford System does not have a large margin of safety and it is questionable if sufficient supply exists to provide 60,000 gpd to Pound Ridge. Mandatory usage restrictions are in effect in Stamford at this time. Treated water from the Interlaken Road Plant is supplemented by a small well and purchased water from BHC's Main System for distribution to its Connecticut customers. Given the Town's agreement regarding rights to raw water resources, BHC felt further investigations were required to determine the most appropriate means to provide potable water to this area.

2.2 GROUNDWATER RESOURCES

A Hydrological report prepared for BHC investigating groundwater resources within Pound Ridge was reviewed. 35 commercial/ residential wells were identified as contaminated with varying levels of MTBE. Subsequently, a fracture trace analysis and geological investigation were conducted by the author of the report. The conclusion of the assessments recommended drilling of test wells in two parcels owned by BHC which were identified as stratified drift geologic formations with fracture trace lineaments present in the underlying rock strata. Test wells would be required to determine if the stratified drift formations are thick enough to sustain the average daily water demand or if wells developed in bedrock could sustain the required demand.

The average daily water demand identified in the report was 15,000 gpd (5.5 mgal/year). The desired yield at this time is 60,000 gpd (21.9 mgal/year), which represents an increase of 400%. While the previous investigation stated that the proposed wells would be located far enough away from Scott's Corners and that there would be "no concern of interference or impact from the contaminant plume" it is our opinion that this alternate represents the highest risk solution. Expenditures for drilling, soils analysis, pump testing and water quality analysis are required to determine: if the formations are capable of providing and sustaining the required flows, if the raw water meets required water quality standards and what effect the withdrawal may have on transport of the contaminant plume. There is no assurance that this alternative will meet the Town's needs after completing the tasks required to advance this alternative.

2.3 WATER SERVICE VIA PROPOSED GOLF COURSE

BHC has indicated that the storage tank being contemplated for the Golf Course will be owned and operated by BHC for its Connecticut customers. Peter Galant, BHC, believed that the proposed tank size is adequate to serve the Scott's Corners Area originally contemplated for service, but could not recall the specific allocation for Scott's Corners at that time. Furthermore BHC stated that regulatory approvals from Connecticut would be required, specifically from the Department of Public Health, Department of Environmental Protection and the Department of Public Utility Control. Representatives from the developer of the proposed Golf Course have indicated that they would be open to discussions regarding this issue. Bridgeport hydraulic was supportive of this alternative.

Following your review of this letter we would like to meet and discuss project with respect to:

- Coordinating potable water supplies and wastewater treatment provisions
- Available wastewater options
- Scheduling a meeting with Town representatives, BHC, WCDOH, NYSDEC, CT DEP, CT DOH and representatives from the proposed golf course to advance selected alternatives. This appears to be the most promising of the water supply options, although the quantity of water which BHC is prepared to furnish is unconfirmed at this time.

Given the WCDOH moratorium on soils testing, lengthy response times from regulators and availability of regulators due to vacations, it is not possible to complete the report by the scheduled date of May 3, 2002. We would like to discuss revisions to the project schedule in light of the Town's needs and availability of information. We believe we can conclude the potable water section of the report following a meeting with the Connecticut and New York Regulatory Authorities . Please contact me at your convenience to determine a suitable time to meet.

Very truly yours,

Robert M. Trzepacz, P.E.

cc: C. Fowler
G. Warshauer
K. Taft
J. R. Folchetti
File

POUND RIDGE WASTEWATER TASK FORCE

Appendix B: Historical Potable Water Reports

Appendix for Potable Water

1973 Dec. 21 Pound Ridge and Stamford Water Company contract to relocate Eastwoods road and to construct reservoir, dams and dikes in the vicinity of the present Siscowit Reservoir. Of note it seems that the Town of Pound Ridge has the "right, privilege and priority to draw water from the completed Project" for Town purposes, residential and commercial use. **Page 2**

1997 April 15, Maps associated with BHC providing potable water to Scott's Corners. **Page 12**

1997 May 12, Feasibility Study for providing Scott's Corners potable water from 3 - 500 foot deep wells on BHC property on Westchester Avenue. A conceptual cost estimate is included that totals $1.1 million. **Page 18**

1997 June 5 Four conceptual estimates to provide potable water to Scott's Corners, two interconnect and two groundwater wells. Costs range from $800K to $1.5M. A map of the areas to be served is included. **Page 22**

1998 Dec. 9, Agreement between BHC and Shell to prepare bid ready documents and an estimate for water main to Scotts Corners. The permitting process has not been addressed. It also contains a list of properties to be served. **Page 26**

1999 Nov. 23: Letter indicating the New Canaan would oppose any street openings that are required for the BHC Pound Ridge Water Supply Project. **Page 36**
June 22 1999: Letter from BHC to Keane and Beane regarding an estimate for the work for a pipeline at the cost of $2.1 million and a ground water source for Pound Ridge from wells at $500,000. The proposed well location is in a wetland. Permissions and permitting not addressed.
June 14, 1999 Letter from New Canaan selectman to Joy Simpkins, vague denial (of project?).
May 4, 1999 Meeting Notes from New Canaan and Pound Ridge representatives resulting in denial of project based upon New Canaan not issuing permits. A water line might cause cause "downzoning" of that area of New Canaan. This superseded discussions about repaving costs which were also discussed.
Sept. 8, 1999 Letter from BHC to Joy Simpkins regarding rights of BHC to put pipelines in New Canaan roads and a comment on water rates.

2000 September, Malcom Pirnie study proposal discusses regulatory issues with potable water wells and the possibility of combining them into a Community Water Supply, but wants to start over with a wastewater study. **Wastewater Appendix**

2002 April, Folchetti study also discusses potable water solutions, water from Stamford, drilling wells and getting water from the golf course. **Wastewater Appendix**

1973 Dec. 21 Pound Ridge and Stamford Water Company contract to relocate Eastwoods road and to construct reservoir, dams and dikes in the vicinity of the present Siscowit Reservoir. Of note it seems that the Town of Pound Ridge has the “right, privilege and priority to draw water from the completed Project” for Town purposes, residential and commercial use.

FILE

AGREEMENT made the 21st day of December 1973 by and between

THE TOWN OF POUND RIDGE, a municipal corporation having its office and place of business at Westchester Avenue (no street number), Pound Ridge, New York

hereinafter referred to as the Town, and

STAMFORD WATER COMPANY, a corporation specially chartered by the General Assembly of the State of Connecticut and having offices for the transaction of business in the City of Stamford, County of Fairfield and State of Connecticut,

hereinafter referred to as Water Company:

W I T N E S S E T H:

WHEREAS, Water Company heretofore made application to divert water and to construct a reservoir, dams, dikes and appurtenances in, on or in the vicinity of its present Siscowit Reservoir, also known as Mead's Pond ("the Project") on premises owned by Water Company in the Town, and

WHEREAS, Water Company has heretofore made application to the Town for permission to relocate portions of Eastwoods Road, as part of the Project, as shown on the plans, drawings and specifications filed with the Town, and has requested that the Town approve the proposed relocation of said road in accordance with maps and surveys filed with the Town, and

WHEREAS, the Town did refer the aforesaid application to the Planning Board for consideration, study and recommendations, and did simultaneously refer the aforesaid application to the Water Control Commission for recommendation and report, and the aforesaid reports and recom-

mendations having been received and filed, and the aforesaid Planning Board, Water Control Commission and Town Board having heretofore agreed to the issuance of a single permit for construction and operation of the Project and road relocation subject only to the execution of this agreement, and

WHEREAS, Water Company has obtained approvals from other State and County boards, departments, bureaus and agencies having jurisdiction.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties covenant and agree as follows:

1. Water Company shall at its own expense construct the Project or portions thereof, substantially as shown on the aforementioned maps and operate the Project in accordance with all applicable laws, rules and regulations of the Town of Pound Ridge, the County of Westchester, the States of New York and Connecticut and the United States Government, and all departments, boards, bureaus and agencies thereof.

2. Water Company shall pay all fees of the Town in connection with the Project, including building permit fees and reasonable fees of the Town Engineer or inspectors, and shall obtain any additional permits necessary for the construction and completion of the Project.

3. During the course of construction of the Project Water Company shall comply with such reasonable safety precautions and regulations as the Town or any authorized officer or department thereof, including, but not

limited to, the Town Engineer, Town Police Department, Town Building Inspector and Town Fire Marshal may promulgate for the protection of the residents of the Town and other members of the public using or being in the vicinity of the construction project or the existing or proposed roads in the immediate vicinity of such project.

4. The Project shall be constructed to establish the high-water mark in the reservoir at maximum elevation of no more than 485 feet above sea level as shown on the map annexed hereto as Exhibit A.

5. The dam and dike (and any future enlargements thereof acceptable to the Town) shall be constructed in accordance with drawings and specifications to be finally approved by the State of New York and furnished to the Town and annexed hereto as Exhibit B.

6. The portions of Eastwoods Road to be surrendered by the Town and deeded to the Water Company shall be as shown on the survey annexed hereto as Exhibit C.

7. The relocated portions of Eastwoods Road to be located on premises presently owned by Water Company and as shown on the survey annexed hereto as Exhibit D shall be, except as hereinafter provided, deeded in fee simple absolute, free and clear of all encumbrances, (except those acceptable to counsel for the Town), to the Town for dedication as a portion of the public highway system of the Town.

8. The following requirements shall be applicable during the course of construction unless temporarily waived from time to time by the Town Engineer:

(a) Two-directional vehicular traffic shall be maintained on Eastwoods Road.

(b) Temporary detour routes shall be subject to the approval of the Town Engineer with respect to location and minimum quality of road surface and drainage.

(c) Vehicular right of way shall be maintained by such signs, signal devices or flagmen as may be reasonably required by the Town Engineer, at the expense of the Water Company or its Contractor.

Night lighting and barricading on detour routes and/or roads under construction shall be as reasonably required from time to time by the Town Engineer, at the expense of the Water Company or its Contractor.

(d) The Water Company shall be responsible for road sprinkling and dust control in accordance with reasonable regulations to be issued by the Town Engineer.

(e) A schedule of materials to be hauled away from the reservoir site on Town roads shall be filed with the Town Engineer before any such hauling, such schedules to include the location and approximate quantity of materials to be hauled and the proposed routes to be followed.

(f) Transportation of materials and construction equipment to and from the site shall be via a portion of Eastwoods Road and other roads approved by the Town Engineer but shall not include:

Old Church Lane north of Old Mill Road;
Siscowit Road outside the construction area;
Eastwoods Road west of Old Church Lane;
Hack Green Road;
Conant Valley Road;
Barnegat Road;
Trinity Pass Road.

(g) Excavation and trucking shall be restricted to the hours of 7:00 a.m. to 5:00 p.m. and shall be prohibited on Sundays and legal holidays except for emergencies.

(h) Blasting operations shall be conducted pursuant to permit from the Town Engineer or Building Inspector who shall condition such permit as he may deem necessary for the protection of adjoining structures.

(i) The Town Engineer and Building Inspector shall have the right at all times to enter the premises and inspect conditions to determine possible violations of the provisions of this agreement.

9. Downward slope protection shall be provided along the relocated Eastwoods Road, prior to public use, such protection (except on the dam) to consist of large boulders situate five to six feet apart, with intermediate tree plantings. At the option of the Water Company stone walls may be substituted for boulder and tree protection.

10. Guardrail or barrier protection along the highway on dike or dam or in the immediate vicinity thereof shall be installed as approved by the Town Engineer, and such protection shall meet all Standards of New York State.

11. Minimum flow of 50,000 gallons per day (except during extreme drought conditions) shall be provided via release from dam or dike to stream flowing from western side of Project to Laurel Reservoir via Scotts Corners.

12. The relocated Eastwoods Road shall be constructed in accordance with all applicable road construction regulations as of the date hereof, except as otherwise previously approved and except as modified by width and other limitations in connection with the dam construction.

13. The Town shall, as provided by applicable decisions and permits of the New York State Water Resources Commission, have the right, privilege and priority to draw water from the completed Project (but not before the reservoir is filled) for Town purposes and residential and commercial use and shall pay reasonable charges therefor. In the event that the Town shall exercise its right to draw water after completion of the Project, the Town shall be and hereby is permitted to construct a suitable pump house on Water Company property, and all required appurtenant apparatus, water pipes and electrical lines as may be required all

at the sole expense of the Town and subject to reasonable written approval of the Water Company prior to construction. For that limited purpose the Town shall be deemed to have a perpetual easement over Water Company property within and on which to locate the pump house, pipes and other equipment; provided, however, that Water Company shall concur in the location of any pump house, pumping equipment, pipe or electric lines and related facilities and the required easement area.

14. Upon completion of the Project one standard dry hydrant shall be installed at such elevation and location and of such type and having such fittings as may be directed by the Fire Chief of the Town Fire District at Water Company's expense and shall become the property of the Town Fire District. If such dry hydrant shall be situate on Water Company property, the Town, for fire fighting purposes, shall be deemed to have an easement over a strip of land sufficient in width for access from the nearest highway to the dry hydrant by fire fighting equipment. Maintenance of the hydrant and of the access to it from the nearest public highway shall, after installation of the dry hydrant, be the responsibility of and at the expense of the Town Fire District.

15. Water Company shall save the Town harmless from the claims of any person resulting from damage to person or property in connection with any and all construction work on the Project, and attributable to negligence on the part of the Water Company, and from all expenses resulting therefrom (including reasonable attorneys' fees) incurred by the Town in resisting any claim against the Town. In

furtherance of the foregoing, Water Company or its contractors or agents when construction of the Project starts shall procure and maintain, or cause to be procured and maintained, public liability insurance in the limit set by the Water Company for the liability insurance to be carried by its contractor in connection with the aforementioned construction work, such insurance to name the Town as an additional named insured. Water Company or its contractors or agents shall furnish the Town with a certificate of such insurance, which certificate shall provide that the policy for such insurance shall not, while the Project is under construction, be cancelled without at least ten days prior notice to the Town or amended so as to adversely affect the interest of the Town.

16. When the relocated portions of Eastwoods Road are satisfactorily completed the Town will, upon inspection of the relocated portions of said road by its appropriate officers and inspectors and certification by such officers and inspectors of the condition thereof, accept the same as a public highway (except for that portion on the dam which will be accepted as a perpetual easement for highway purposes) upon the delivery to it of a bargain and sale deed of the same (as a highway in part and an easement in part) with covenants against grantor's acts, in proper statutory form for recording in New York and with any required documentary stamps) affixed thereto at Water Company's expense, together with a policy of title insurance issued by a member company of the New York Board of Title Underwriters insuring to the Town in the sum of ten (10) thousand dollars that title to the same is vested in the Town free and clear of all liens and encumbrances, and free and clear of all mechanic's and

similar liens. Water Company shall pay the charges of recording such deed and the premium on such policy of title insurance.

17. The aforementioned deed shall contain such utility and drainage easements over adjoining property of Water Company in the immediate vicinity of Eastwoods Road as the Planning Board of the Town shall require.

18. Simultaneously with the delivery of the aforementioned deed, the Town shall convey to Water Company by quit claim deed those portions of Eastwoods Road which have been relocated by Water Company and which are no longer needed by the Town as part of its public highway system. Water Company shall pay for all documentary stamps and other charges and taxes, if any, in connection with the delivery of such deed.

19. Water Company agrees that it or its contractors or agents shall, prior to relocation of Eastwoods Road, file a performance bond to assure the satisfactory completion of the relocated road. Said bond shall be approved as to form and surety by the attorney for the Town Board of the Town of Pound Ridge. The said bond shall continue in full force and effect until the road has been satisfactorily completed and accepted by the Town of Pound Ridge. The bond shall be in the amount of $500,000.00.

20. The deed to be delivered to the Town shall include fee title to all relocated portions of Eastwoods Road, except that portion on the dam as to which it shall include a perpetual easement for highway purposes as to the entirety of the width of the same and title to the guardrails. It shall be the obligation of the Town to plow and to maintain, repair and repave the portion of the road

on the dam in the same manner as any other public highway within said town. Upon the installation of guardrails or barriers along the roadway on the dam (as hereinabove provided), the obligation to maintain, repair and replace same shall be that of the Town. Except for the foregoing obligations of maintenance and repair the Town shall have no obligation to undertake any repairs whatsoever to the dam. All necessary repairs, earth replacement, sealing or grading of the dam and all repairs to valves and continuous flow equipment shall be the responsibility of Water Company. Repair of dam by Water Company shall be conducted in such manner that traffic will be permitted to use the road over the dam during repair and maintenance work to the fullest extent possible. The Town agrees that it will, at the request of Water Company, erect signs on or in the vicinity of the dam prohibiting parking or standing of vehicles.

21. The Water Company agrees, within twelve months from the date hereof, and in any event prior to the release of any performance bonds as provided for herein, to eliminate the erosion problem at the spillway of the Mill River dam.

IN WITNESS WHEREOF, the parties hereto have signed this agreement the day and year first above written.

STAMFORD WATER COMPANY

By L. Sanford Faris

Its President

TOWN OF POUND RIDGE

By Fred D. Zwick, Supervisor

Lucille M. Corda

1997 April 15, Maps associated with BHC providing potable water to Scott's Corners.

SOURCE: USGS TOPOGRAPHIC QUADRANGLE POUND RIDGE, NEW YORK (PHOTOREVISED 1971).

PROPERTY BOUNDARY SOURCE: TOWN OF POUND RIDGE LOT AND BLOCK MAP.

N

LEGEND

- PROPERTY BOUNDARY
- TOWN PROPERTY
- STAMFORD WATER COMPANY (BHC) PROPERTY
- PROPERTIES WHERE MTBE WAS DETECTED

0 1000

SCALE IN FEET

13

BRIDGEPORT HYDRAULIC COMPANY
HYDROGEOLOGIC ASSESSMENT
POUND RIDGE, NEW YORK

STUDY AREA AND PROPERTY MAP

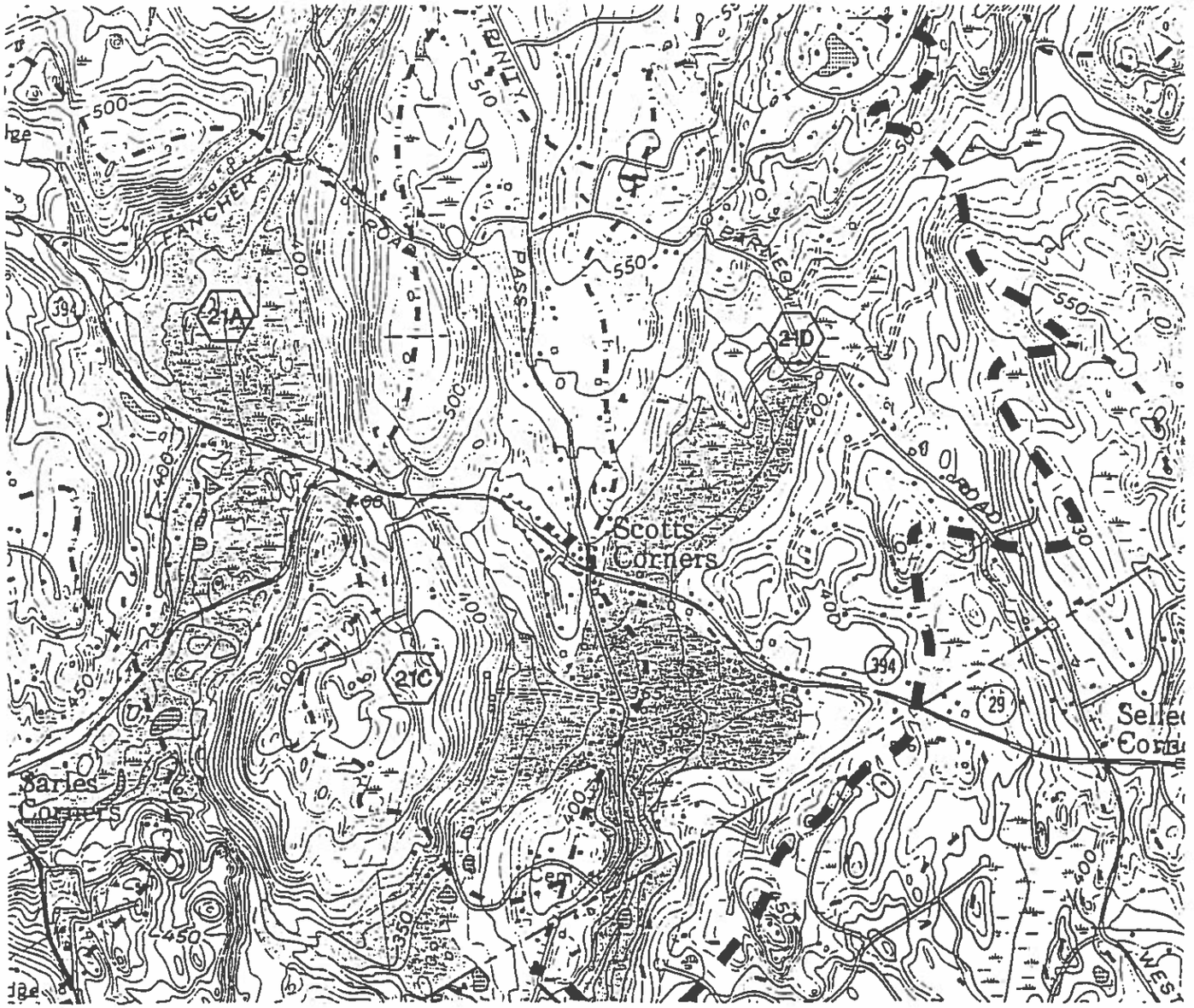
DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
126 Monroe Turnpike
Trumbull CT 06611
(203) 452-3100

DRAWN:	MRV	CHECKED:	JMB	DATE:	4/18/97	FIGURE:	1

P:\DWG\BHC\STAMFORD\FIG1.DWG



SOURCE: USGS TOPOGRAPHIC QUADRANGLE POUND RIDGE, NEW YORK (PHOTOREVISED 1971).

DRAINAGE BASIN SOURCE: COMPUTATION OF BEDROCK-AQUIFER RECHARGE IN NORTHERN WESTCHESTER COUNTY, NEW YORK AND CHEMICAL QUALITY OF WATER FROM SELECTED BEDROCK WELLS; USGS WATER-RESOURCES INVESTIGATIONS REPORT 92-4157, 1995.

STRATIFIED-DRIFT SOURCE: ESTIMATED THICKNESS AND POTENTIAL WELL YIELD OF STRATIFIED-DRIFT DEPOSITS IN SELECTED AREAS OF NORTHERN WESTCHESTER COUNTY, NEW YORK; PLATE 20, USGS WATER-RESOURCES INVESTIGATIONS REPORT 91-4030, 1992.

N

LEGEND

- MAJOR DRAINAGE BASIN DIVIDE
- DRAINAGE SUB-BASIN DIVIDE
- STRATIFIED DRIFT AREA
- 21C — MILL RIVER SUB-BASIN DESIGNATION

SUB-BASIN AREAS 1/

BASIN I.D.	AREA
21A	1.44 mi^2
21C	0.49 mi^2
21D	0.97 mi^2

1/ AREAS FOR SUB-BASINS 21A AND 21D NOT COMPLETELY SHOWN.

0 1000
SCALE IN FEET

BRIDGEPORT HYDRAULIC COMPANY
HYDROGEOLOGIC ASSESSMENT
POUND RIDGE, NEW YORK

STRATIFIED DRIFT AREA AND DRAINAGE BASIN MAP

DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
126 Monroe Turnpike
Trumbull CT 06611
(203) 452-1100

DRAWN:	CHECKED:	DATE:	FIGURE:
MRV	JMB	4/18/97	2

O:\ENG\BHC\STAMFORD\FIG4.DWG

N

LEGEND

- PROPERTY BOUNDARY
- (1) BEDROCK WELL LOCATION 1/
- TOWN PROPERTY
- STAMFORD WATER COMPANY (BHC) PROPERTY

1/ SEE TABLE I FOR WELL INFORMATION

0 1000
SCALE IN FEET

SOURCE: USGS TOPOGRAPHIC QUADRANGLE POUND RIDGE, NEW YORK (PHOTOREVISED 1971).

PROPERTY BOUNDARY SOURCE: TOWN OF POUND RIDGE LOT AND BLOCK MAPS.

BRIDGEPORT HYDRAULIC COMPANY
HYDROGEOLOGIC ASSESSMENT
POUND RIDGE, NEW YORK

BEDROCK WELL LOCATIONS

DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
126 Monroe Turnpike
Trumbull CT 06611
(203) 452-3100

DRAWN:	CHECKED:	DATE:	FIGURE:
MRV	JMB	4/22/97	3

D:\DWG\BHG\STAMFORDVIG8.DWG

N

LEGEND

- PROPERTY BOUNDARY
- TOWN PROPERTY
- STAMFORD WATER COMPANY (BHC) PROPERTY
- FRACTURE TRACE BY LBG
- FRACTURE TRACE FROM WESTCHESTER COUNTY 208 STUDY

0 1000
SCALE IN FEET

SOURCE: USGS TOPOGRAPHIC QUADRANGLE POUND RIDGE, NEW YORK (PHOTOREVISED 1971).

PROPERTY BOUNDARY SOURCE: TOWN OF POUND RIDGE LOT AND BLOCK MAPS.

BRIDGEPORT HYDRAULIC COMPANY
HYDROGEOLOGIC ASSESSMENT
POUND RIDGE, NEW YORK

FRACTURE TRACE MAP

DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
126 Monroe Turnpike
Trumbull CT 06611
(203) 452-3100

DRAWN:	MRV	CHECKED:	JMB	DATE:	4/28/97	FIGURE:	4

D:\LONG\BHC\STAMFORD\FIG4.DWG

SOURCE: USGS TOPOGRAPHIC QUADRANGLE POUND RIDGE, NEW YORK (PHOTOREVISED 1971).

PROPERTY BOUNDARY SOURCE: TOWN OF POUND RIDGE LOT AND BLOCK MAP.

N

LEGEND

- PROPERTY BOUNDARY
- TOWN PROPERTY
- STAMFORD WATER COMPANY (BHC) PROPERTY
- PROPERTIES WHERE MTBE HAS DETECTED
- (A) PROPOSED TEST DRILLLING AREA

0 1000

SCALE IN FEET

BRIDGEPORT HYDRAULIC COMPANY
HYDROGEOLOGIC ASSESSMENT
POUND RIDGE, NEW YORK

PROPOSED TEST DRILLING AREAS MAP

DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
126 Monroe Turnpike
Trumbull CT 06611
(203) 452-3100

DRAWN: MRV | CHECKED: JMB | DATE: 4/18/97 | FIGURE: 5

D:\DWG\BHC\STAMFORD\FIG7.DWG

1997 May 12, Feasibility Study for providing Scott's Corners potable water from 3 500 foot deep wells on BHC property on Westchester Avenue. A conceptual cost estimate is included that totals $1.1 million.

BHC
An Aquarion Company

Bridgeport Hydraulic Company
600 Lindley Street
Bridgeport, CT 06610-5243

Telephone
203.367 6621

Mr. David McNeil
Environmental Engineer
Shell Oil Products Company
30 Jericho Executive Plaza
Suite 500 West
Jericho, NY 11753

May 12, 1997

Re: Feasibility Study for Groundwater Supply - Pound Ridge, NY

Dear Mr. McNeil:

Enclosed is a draft report prepared for BHC by Leggette, Brashears & Graham, Inc. (LBG) entitled "Hydrogeologic Assessment For the Area of Scott's Corners - Town of Pound Ridge, New York". The report presents the results of an analysis of property owned by the Town and BHC for potential development of a ground water supply to serve the area of Pound Ridge affected by MTBE contamination. It concludes that the best site for additional investigation is on property owned by BHC along Westchester Avenue, approximately 3,100 feet from Scott's Corners. Although other parcels with similar yield potential were identified, they were ruled out due to their proximity to lots that have contaminated wells. If it is necessary to pursue these sites further, the feasibility of central treatment could be investigated.

A conceptual cost estimate for providing a central water supply system to the Scott's Corners area from the proposed well site is summarized in the attached Table. This system would provide drinking water to all properties where MTBE has been detected, as identified on Figure 1 of the enclosed draft report. It should be noted that the extent of this system is greater than that previously estimated by BHC for interconnection to the Stamford system. A discussion of the specific properties to be served by the proposed water system would be helpful before finalizing the report. Perhaps this can be done in conjunction with reviewing Shell's comments.

If, after finalizing this report, Shell is interested in pursuing a ground water supply for Scott's Corners the recommended next step would be to finalize the location of, install, and test the water quality and production capacity of the necessary wells. As summarized in the attached table, three wells, with a maximum depth of 500 feet, can be installed, tested and permitted for approximately $75,000. The final cost would vary depending on number and depth of wells, sitework necessary to access wells and unforeseen permitting issues. A report summarizing well production capacities and water quality characteristics could be provided before final permitting.

If you have any questions regarding the report, or would like to discuss next steps, please feel free to call me at (203) 337-5903.

Sincerely,

Peter B. Galant, P.E.
Director of Engineering

cc: J. Suttile
G. Thornhill
R. O'Rourke, Esq.
B. Aurelius, Esq.
B. Conlon, Esq.

FEASIBILITY STUDY FOR GROUND WATER SUPPLY
SCOTT'S CORNERS - POUND RIDGE, NEW YORK
CONCEPTUAL COST ESTIMATE

DESCRIPTION	ESTIMATE
Install Wells (3 wells @ 500 ft. max.)	$15,000
Test, Permit and Complete Wells	$60,000
Well & Treatment Structures and Associated Sitework	$200,000
Pipeline - Westchester Ave. - Well site to Trinity Pass (3,100 ft)	$320,000
Pipeline - Westchester Ave. - East of Trinity Pass (500 ft)	$47,500
Pipeline - Trinity Pass - South of Westchester Ave. (2,000 ft)	$150,000
Pipeline - Trinity Pass - North of Westchester Ave. (1,500 ft)	$142,500
Pipeline - Trinity Lane (950 ft)	$67,000
Service Connections and Lines to House (35)	$130,000
TOTAL:	$1,132,000

Notes:

1. All estimates are considered reconnaissance grade (± 30%)
2. Scope of work based on draft report "Hydrogeologic Assessment For the Area of Scott's Corners - Town of Pound Ridge, NY". May 1997.
3. Service connections exclude interior plumbing and well abandonment.
4. Treatment includes chlorination only.
5. Fire protection not included.
6. Legal fees for establishing a water company pursuant to NY State Transportation Corporation Law and NY Public Service Commission requirements are excluded.

1997 June 5 Four conceptual estimates to provide potable water to Scott's Corners, two interconnect and two groundwater wells. Costs range from $800K to $1.5M. A map of the areas to be served is included.

BHC Company
600 Lindley Street
Bridgeport, CT 06610-5243

Telephone
203.337-5910

BHC
An Aquarion Company

Facsimile

To	David McNeil - Shell Oil	From	Peter Galant PG
	Cesare Manfredi - DEC	Date	June 5, 1997
		Time	
Fax No.		Telephone	(203) 337-5903
Number of pages including this sheet	3	Fax No.	(203) 337-5839

The following is the additional cost information which you requested. Cost estimates are provided for the following four scenarios:

1. Ground water supply with distribution system to serve the 35 properties described on Figure 1 of the draft report "Hydrogeologic Assessment For the Area of Scotts Corners - Town of Pound Ridge, NY" May 1997 as having MTBE detected (properties shown in green).

2. Interconnection to Stamford and distribution system and service lines to 35 homes described above. Note that limited pressure would be available to homes at elevation greater than approximately 450 ft. and that booster pumps may be required.

3. Ground water supply with distribution system to serve the 13 properties designated as moderate and high level MTBE concentrations on the following map (source unknown).

4. Interconnection to Stamford and distribution system and service lines to 13 properties described above.

I hope that this additional information is helpful in making an "apples to apples" comparison of the ground water and interconnection supply alternatives. As requested by Shell, I will prepare an order of magnitude estimate of the time frame to implement these two alternatives.

If you have any additional questions, please feel free to call me.

cc: G. Thornhill
J. Suttile
R. O'Rourke

SCOTT'S CORNERS WATER SUPPLY SYSTEM
CONCEPTUAL COST ESTIMATES

Scenario 1: GROUNDWATER SUPPLY (Detected MTBE Homes)

DESCRIPTION	LENGTH	ESTIMATE
Install 3 New Wells		$15,000
Test, Permit and Install Pumps in Above Wells		$60,000
Well & Treatment Structures,sitework, hydro., etc.		$200,000
Westchester Ave. - Well Site to Trinity Pass	3,100	$320,000
Westchester Ave. - East of Trinity Pass	500	$47,500
Trinity Pass - South of Westchester Ave.	2,000	$150,000
Trinity Pass - North of Westchester Ave.	1,500	$142,500
Trinity Lane	950	$67,000
Service Connections (35)		$130,000
	TOTAL:	$1,132,000

Scenario 2: INTERCONNECTION (Detected MTBE Homes)

DESCRIPTION	LENGTH	ESTIMATE
Laurel Rd. to Ponus St. to Trinity Pass to Westch. Ave.	11,100	$1,050,000
Trinity Lane	950	$67,000
Trinity Pass - North of Westchester Ave.	1,500	$142,500
Westchester Ave. - East of Trinity Pass	500	$47,500
Westchester Ave. - West of Trinity Pass to Fire House	720	$85,000
Services (35)		$130,000
	TOTAL:	$1,522,000

Scenario 3: GROUNDWATER SUPPLY (Moderate/High MTBE Homes)

DESCRIPTION	LENGTH	ESTIMATE
Install 3 New Wells		$15,000
Test, Permit and Install Pumps in Above Wells		$60,000
Well & Treatment Structures,sitework, hydro., etc.		$200,000
Westchester Ave. - Well Site to Trinity Pass	3,100	$320,000
Trinity Pass - South of Westchester Ave.	1,200	$90,000
Trinity Lane	950	$67,000
Service Connections (13)		$50,000
	TOTAL:	$802,000

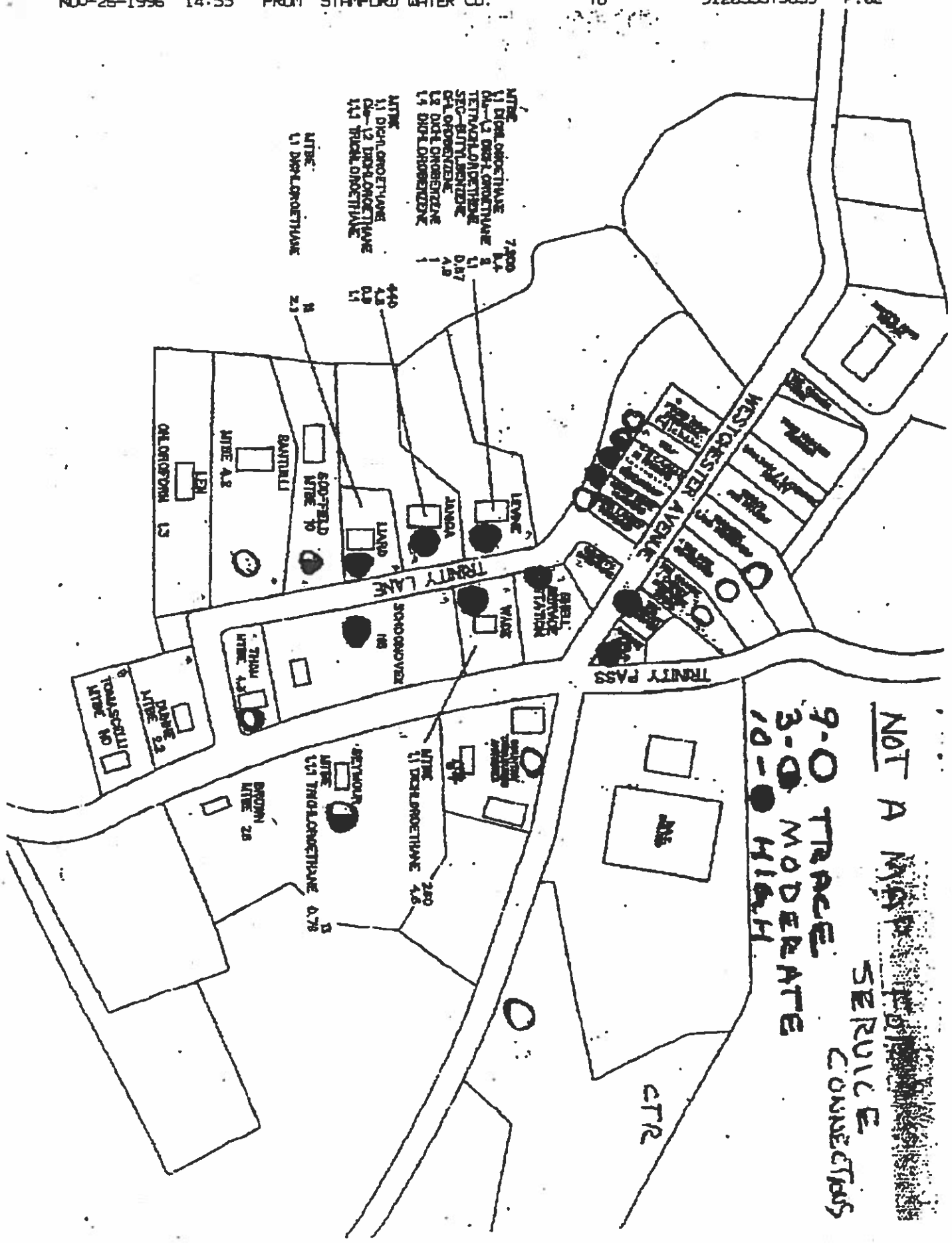
Scenario 4: INTERCONNECTION (Moderate/High MTBE Homes)

DESCRIPTION	LENGTH	ESTIMATE
Laurel Rd. to Ponus St. to Trinity Pass to Westch. Ave.	11,100	$1,050,000
Trinity Lane	950	$67,000
Westchester Ave. - West of Trinity Pass to Fire House	720	$85,000
Services (13)		$50,000
	TOTAL:	$1,252,000

SUMMARY	
DESCRIPTION	Estimate
Scenario 1: GROUNDWATER SUPPLY (Detected MTBE Homes)	$1,132,000
Scenario 2: INTERCONNECTION (Detected MTBE Homes)	$1,522,000
Scenario 3: GROUNDWATER SUPPLY (Moderate/High MTBE Homes)	$802,000
Scenario 4: INTERCONNECTION (Moderate/High MTBE Homes)	$1,252,000

See cost notes from 5/12/97 letter to Shell Oil

Page 1


TRINITY LANE
TRINITY PASS
WESTCHESTER AVENUE
NOT A MAP OF
SERVICE
CONNECTIONS
9.0 TRACE
3.0 MODERATE
10.0 HIGH

1998 Dec. 9, Agreement between BHC and Shell to prepare bid ready documents and an estimate for water main to Scotts Corners. The permitting process has not been addressed. It also contains a list of properties to be served.

KEANE & BEANE, P.C.
ONE NORTH BROADWAY
WHITE PLAINS, NEW YORK 10601
(914) 946-4777
TELEFAX (914) 946-6868

EDWARD F. BEANE
DAVID GLASSER
RONALD A. LONGO
RICHARD L. O'ROURKE
LAWRENCE PRAGA
JOEL H. SACHS*
STEVEN A. SCHURKMAN*
JUDSON K. SIEBERT

*ALSO ADMITTED IN FL
**ALSO ADMITTED IN NJ
◊ALSO ADMITTED IN MA
□ALSO ADMITTED IN CT
†ALSO ADMITTED IN DC & CA

THOMAS F. KEANE, JR.
(1932-1991)

STEPHANIE L. BURNS**
JOSEPH A. DeTRAGLIA◊
FREDERIC B. EISMAN□
DONNA E. FROSCO**†
LANCE H. KLEIN**
PATRICK J. O'SULLIVAN
FRANCES M. PANTALEO
NICHOLAS M. WARD-WILLIS**□

OF COUNSEL
PETER A. BORROK*
JOHN F. BURKHARDT
ERIC F. JENSEN□

December 9, 1998

VIA UPS OVERNIGHT

Mark Weyman, Esq.
Anderson Kill & Olick, P.C.
1251 Avenue of the Americas
New York, New York 10020-1182

Re: BHC Company, Town of Pound Ridge Water Supply

Dear Mark:

I am pleased to enclose an executed copy of the Agreement between BHC and Shell Oil to prepare bid-ready documents and a cost estimate to install a water main to serve the Scots Corners section of Pound Ridge. I also enclose a copy of the transmittal letter from Peter B. Galant, P.E., BHC Company Director of Engineering.

Thank you for your consideration.

Very truly yours,

Richard L. O'Rourke

ROR/mq
Enclosure (s)
cc: Peter B. Galant, P.E.
BHC Company;
Hon. Joy Simpkins (w/o encl.);
Caesar Manfredi, P.E. (w/o encl.);
Timothy Eidle, Esq. (w/o encl.);
James J. Sullivan, Esq.
Town Attorney, Town of Pound Ridge

Addresses for cc's:

Peter Galant, P.E.
Director of Engineering
BHC Company
600 Lindley Street
Bridgeport, Connecticut 06610-5243

Hon. Joy Simpkins
Supervisor
Town of Pound Ridge
Town House
179 Westchester Avenue
Pound Ridge, New York 10576-1743

Ceasar Manfredi, Esq.
Water Quality Unit
NYSDEC, Region 3
200 White Plains Road
Tarrytown, New York 10591-5805

Timothy Eidle, Esq.
NYSDEC
New York State Department of
Environmental Conservation
Division of Legal Affairs
50 Wolf Road, Room 638
Albany, New York 12233-1500

James J. Sullivan, Esq.
Town Attorney
Town of Pound Ridge
Town House
Westchester Avenue
Pound Ridge, New York 10579

BHC Company
600 Lindley Street
Bridgeport, CT 06606-5044

Telephone
203.367 6621

BHC
An Aquarion Company

Mr. Richard L. O'Rourke, Esq.
Keane & Beane, P.C.
One North Broadway, Suite 700
White Plains, NY 10601

December 2, 1998

Re: Scott's Corners Water Supply

Dear Rick:

Enclosed are two executed copies of the agreement between BHC and Shell Oil to prepare bid ready documents and a cost estimate to install water mains to serve the Scott's Corners section of Pound Ridge.

It is my understanding that the bid documents and cost estimate that we are to prepare will be utilized by the parties involved to make a go/no go decision regarding the provision of public water supply to this area. As discussed at our meetings, there is a considerable amount of work to be done after that decision is made before construction of the system can begin, including:

- Creation of a New York subsidiary to Aquarion Company to own and operate the system
- Satisfactory agreement between the New York State Department of Environmental Conservation (DEC) and the Aquarion subsidiary to proceed with construction
- Obtaining all necessary approvals in New York including; DEC, Westchester County Health Dept, NY State Dept. of Health and the New York State Public Services Commission
- Obtaining all necessary approvals in Connecticut including; Department of Public Utility Control, Department of Public Health design approval and sale of excess water approval, potential Department of Environmental Protection diversion and stream crossing permits.

BHC will work to identify these permit requirements during the project design, but will not apply for any permits until the project is authorized. The time period to receive these permits is generally out of BHC's control and is difficult to estimate at this time. However, everyone should realize that the permit timeframe may be significant (greater than 1 year). While there is much to be accomplished, I don't foresee any insurmountable obstacles at this time.

Please forward the enclosed contracts to Shell Oil, as necessary. I am looking forward to successful completion of this challenging project.

Sincerely:

Peter B. Galant, P.E.
Director of Engineering

Enclosures

cc: Hon. Joy Simkins – Town of Pound Ridge (w/o enclosure)
Cesare Manfredi, PE – NYDEC (w/o enclosure)
Timothy Eidle, Esq. – NYDEC (w/o enclosure)
Mark Weyman, Esq. – Anderson Kill & Olick (w/o enclosure)
James Sullivan, Esq. – Town of Pound Ridge (w/o enclosure)

AGREEMENT

This Agreement is made this 23 day of November, 1998 between Shell Oil Company ("Shell") and BHC Company ("BHC").

WHEREAS, the New York State Department of Environmental Conservation ("DEC") is considering the installation of a water system to serve certain properties located in the Town of Pound Ridge, and

WHEREAS, it is desirable to prepare "bid ready documents" in the event that the DEC determines to proceed with the installation of such a water system, and

WHEREAS, the parties hereto are willing to assist the DEC to expedite its considerations by this Agreement to prepare such bid ready documents,

NOW, THEREFORE, it is hereby agreed as follows:

1. BHC shall perform all services necessary to prepare bid ready documents for a construction of the water system including:

a. 1 inch equals 40 foot survey of the pipe line route with 2 foot contours;

b. drilling test holes at approximately 100 foot intervals to determine the depth to bedrock;

c. inspect service locations to determine size, routing and location of meters;

d. determine expected pressures at each service connection;

e. coordinate with local and state authorities regarding permits and pavement requirements for construction;

f. prepare plans, specifications and bid documents necessary to obtain bids to furnish all necessary labor, material and equipment

to construct the proposed water system; and

g. provide two sets of final documents for review and comment.

2. The water system for which the bid ready documents will be prepared will include:

a. approximately 11,100 feet of pipe line along Laurel Road to Ponus Street to Trinity Pass to Westchester Avenue;

b. approximately 950 feet of pipe line in Trinity Lane;

c. approximately 1,500 feet of pipe line in Trinity Pass, north of Westchester Avenue;

d. approximately 500 feet of pipe line in Westchester Avenue east of Trinity Pass;

e. approximately 720 feet of pipe line in Westchester Avenue west of Trinity Pass;

f. a meter pit at the New Canaan/Pound Ridge line to meter water sales from BHC Company to the new water company to be formed in Pound Ridge;

g. installation of the remote reading water meters; and

h. installation of service line from main to curb valve located at property line.

3. The water system is to be connected to certain service connections. The DEC is considering whether connections should be made for the properties lised on Exhibit "A" hereto. It is specifically understood and agreed that the list annexed as Exhibit "A" is non-final and non-binding. The inclusion of any property on Exhibit "A" should not be viewed as an indication that such property will be connected to the water system.

4. The bid ready documents shall be delivered for review and comment as follows:

For New York State Department of Environmental Conservation
Timothy Eidle, Esq.
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

For Shell Oil Company
Mark L. Weyman, Esq.
Anderson Kill & Olick, P.C.
1251 Avenue of the Americas
New York, New York 10020

5. BHC shall arrange for a professional cost estimator to provide a conceptual/preliminary estimate for the cost to construct the water system which is the subject of the bid ready documents.

6. Shell agrees to pay BHC for the work required by this Agreement as follows:

a. BHC shall be paid at its usual and customary rates for its services and expenses, up to a maximum of $32,000.

b. In addition, BHC shall be reimbursed for the costs incurred for a professional cost estimator to provide a cost estimate for the proposed water system, up to a maximum of $5,000.

c. BHC shall furnish to Shell and the DEC reasonable documentation for its services, expenses and costs.

d. BHC shall be paid for its services, expenses and costs within thirty (30) days of the date proper documentation therefor has been delivered, but in no event sooner than thirty (30) days of BHC's delivery of bid ready documents to Shell and the DEC.

7. BHC shall complete the work required by this Agreement (including providing a cost estimate) within 120 days of the execution of this Agreement by Shell which 120 days shall not include the period of review and comment set forth in

paragraph 4 of this Agreement. The cost estimate shall be provided as soon as it is available but in no event later than 120 days from the execution of this Agreement.

BHC Company

By: _____
Name: Charles V. Fiscella
Title: Senior Vice President & COO

Shell Oil Company

By: _____
Stephen R. Shaw
General Manager - Retail
NY/NJ Region

POUND RIDGE SITES UNDER CONSIDERATION FOR CONNECTION TO PUBLIC WATER

Westchester Avenue	Trinity Lane	Lower Trinity Pass	Trinity Pass
54 Westchester Avenue	8 Trinity Lane	6 Lower Trinity Pass	4 Trinity Pass
56 Westchester Avenue	10 Trinity Lane	8 Lower Trinity Pass	7 Trinity Pass
57 Westchester Avenue	14 Trinity Lane	10 Lower Trinity Pass	10-12 Trinity Pass
60 Westchester Avenue	18 Trinity Lane	15 Lower Trinity Pass	15 Trinity Pass
65 Westchester Avenue	22 Trinity Lane	17 Lower Trinity Pass	16 Trinity Pass
66 Westchester Avenue	25 Trinity Lane	22 Lower Trinity Pass	17 Trinity Pass
67 Westchester Avenue	26 Trinity Lane	23 Lower Trinity Pass	21 Trinity Pass
68 Westchester Avenue		24 Lower Trinity Pass	23 Trinity Pass
69 Westchester Avenue		26 Lower Trinity Pass	25 Trinity Pass
70 Westchester Avenue		27 Lower Trinity Pass	26 Trinity Pass
71 Westchester Avenue		35 Lower Trinity Pass	27 Trinity Pass
72 Westchester Avenue		37 Lower Trinity Pass	29 Trinity Pass
73 Westchester Avenue			30 Trinity Pass
74 Westchester Avenue			31 Trinity Pass
76 Westchester Avenue			
77 Westchester Avenue			
78 Westchester Avenue			
79 Westchester Avenue			
80 Westchester Avenue			
81 Westchester Avenue			
83 Westchester Avenue			
85 Westchester Avenue			
87 Westchester Avenue			
89 Westchester Avenue			

1999 Nov. 23: Letter indicating the New Canaan would oppose any street openings that are required for the BHC Pound Ridge Water Supply Project.
June 22 1999: Letter from BHC to Keane and Beane regarding an estimate for the work for a pipeline at the cost of $2.1 million and a ground water source for Pound Ridge from wells at $500,000. The proposed well location is in a wetland. Permissions and permitting not addressed.
June 14, 1999 Letter from New Canaan selectman to Joy Simpkins, vague denial (of project?).
May 4, 1999 Meeting Notes from New Canaan and Pound Ridge representatives resulting in denial of project based upon New Canaan not issuing permits. A water line might cause cause "downzoning" of that area of New Canaan. This superseded discussions about repaving costs which were also discussed.
Sept. 8, 1999 Letter from BHC to Joy Simpkins regarding rights of BHC to put pipelines in New Canaan roads and a comment on water rates.

BHC Company
600 Lindley Street
Bridgeport, CT 06606-5044

Telephone
203.367 8821

BHC
An Aquarion Company

RECEIVED

NOV 30 1999

Richard L. O'Rourke, Esq.
Keane & Beane, P.C.
One North Broadway
White Plains, NY 10601

November 23, 1999

Re: BHC Company – Pound Ridge Water Supply

Dear Rick:

This letter is written in response to Shell Oil's request to proceed with bidding the proposed pipeline project in order to select a contractor and apply for the street opening permit required from the Town of New Canaan. The Town of New Canaan has made clear not only its opposition to the proposed pipeline in Ponus Ridge Road but its intent to deny any permit application for the pipeline construction. BHC does not, therefore, see any reason to spend the time, money and effort necessary to proceed with the proposed project.

Please call me if you have any additional questions regarding this matter.

Sincerely,

Peter B. Galant, P.E.
Director of Engineering

cc: R. Bond – Town of New Canaan
C. Firlotte - BHC

BHC Company
600 Lindley Street
Bridgeport, CT 06606-5044

Telephone
203.367 6621

BHC
An Aquarion Company

Mr. Richard L. O'Rourke
Keane & Beane, P.C.
One North Broadway
White Plains, NY 10601

June 22, 1999

Re: BHC Company – Pound Ridge Water Supply

Dear Rick:

The following information is provided in response to questions asked at the last Pound Ridge Water Supply meeting and Caesar Manfredi's email:

- The current project cost estimate can be reduced by approximately $160,000 if the pavement overlay is removed from the New York portion of the project. BHC would still provide 3" trench paving that could remain as a base course for the final overlay.

- The current project cost estimate can be reduced by approximately $115,000 if Upper Trinity Pass is deleted from the project and the NY pavement overlay remains in the project.

- Based on the above estimates, the current project cost estimate can be reduced by approximately $240,000 if Upper Trinity Pass and the NY overlay are removed from the project.

- Bill Brennan, of J.J. Brennan Construction has indicated that his firm would construct this pipeline under BHC's annual bid contract for a not-to-exceed price of $1,970,000 (total project approximately $2.1 million including BHC costs). This approach assumes that only trench repair will be required in New York and that JJB will take the risk of finding the remaining savings elsewhere on the project. While I understand that NYDEC policy may not allow this type of contracting, I think the offer provides a better sense of what the ultimate project cost may be.

- The attached memorandum from Leggette, Brashears and Graham (LBG) updates the cost estimate for developing a ground water supply source in Pound Ridge to approximately $100,000. Note that this approach does not guarantee a quantity, or quality, of water. In addition to the well costs, a treatment building/pump station would be required at the well site. Based upon recent experience, a conceptual cost estimate for this type of facility (w/o MTBE treatment) is approximately $400,000. Utilizing J.J. Brennan's pipeline estimate of approximately $138/ft including paving, and approximately 8,000 ft. of piping, the piping

Printed on recycled paper

construction cost estimate is $1.1 million plus approximately $85,000 for taps and services to the property line. The total project cost estimate, including BHC costs, is therefore approximately $1.8 million. Please keep in mind that these costs, particularly for the treatment building, are conceptual only and may vary significantly based upon preliminary and final design. In particular, the site identified by LBG for locating the wellfield is shown as wetlands on the USGS map. The feasibility and cost implications of constructing in a wetland have not been investigated, nor have the resulting permitting requirements.

I hope this answers the cost questions raised at and after our last meeting. After your review, please distribute this information prior to our June 22 meeting.

Sincerely,

Peter B. Galant, P.E.
Director of Engineering

cc: B. Brennan – JJB
R. Furano - BHC

TOWN OF NEW CANAAN
TOWN HALL, 77 MAIN STREET
NEW CANAAN, CT 06840

RICHARD P. BOND
FIRST SELECTMAN

TEL: (203) 972-2311
FAX: (203) 966-0309

June 14, 1999

Ms. Joy G. Simpkins, Supervisor
Town of Pound Ridge
Town House
179 Westchester Avenue
Pound Ridge, New York 10576-1743

Dear Ms. Simpkins:

I apologize for responding so late to your note of May 14, 1999. I'm sorry that we could not be of any help. We are continually faced with this type of problem. This coming week, we have Level 3 Communications coming to visit us about running a fiber optic cable from the Stamford end of town to the opposite side of town. Again, they want to tear up the roads to do this.

It would be interesting to know the results of your "contaminate water group's" meeting.

Sincerely,

Richard P. Bond
First Selectman

RPB:dh

TO: JOY

DATE: 5/21/99 TIME: 11:25 AM

WHILE YOU WERE OUT

M Peter Gallant

OF Bridgeport Hydraulic

PHONE #

(X) Telephoned ( ) Please call
( ) Called to see you ( ) Will call
( ) Wants to see you ( ) Rush
( ) Returned your call

MESSAGE: Pipe Line Project involves:

7,095 ft. in New York State

8,279 ft. in Connecticut

New York is: Lower Trinity Pass - 3,260 ft. ✓

Trinity Pass 1,415 ft. ✓

Trinity Lane 945 ft. ✓

Westchester Avenue 1,480 ft. ✓

He will fax us this information on Monday.

MEETING NOTES

May 4,, 1999
New Canaan Town Hall

Re: Bridgeport Hydraulics Contract Documents For The Pound Ridge Interconnection

Present: Richard Bond, First Selectman; Frank DeNicola, Head of Public Works Department; Hiram Peck, Head, Department of Zoning and Planning;

Mort Miller, Superintendent of Highways, Town of Pound Ridge;
Joy Simpkins, Supervisor, Town of Pound Ridge.

Joy Simpkins explained the reasons she had requested this meeting. They are:

1. To review the paving requirements of the Town of New Canaan and to request relief from the need to repave an entire roadway if a method can be used to repave the waterline trench effectively to achieve satisfactory results.

2. To review the requirement for police traffic control at the scene of construction when "flagmen" can do the job of protecting workmen and assisting drivers around the construction.

A two-hour discussion ensued, including the dismay of all present that the price for paving the 8-9 thousand feet of trench in Connecticut was so high, approximatily $811,800. I believe the 1.5 million estimated for pipe and paving is for the entire length of the trench, both in Connecticut and New York and the figure of $990,000. , or 55% of that total is for paving the entire roadway, 11,000 feet.

Evidently New Canaan has been "burned" by partial paving projects before and they all held fast to their requirement that if "you put a hole in our road, you have to replace the road."

On the subject of Police Protection at a construction site, New Canaan's contract with their Police Department requires them to hold fast to this agreement. They did say that very often, in fact, more often than not, police officers are not available for this type of duty and in that case, flagmen are allowed to hold the jobs.

However, all of the above was beside the point which is, New Canaan will not issue permits to Bridgeport Hydraulics to install a waterline through their property under any circumstances! They have zoning concerns which appear to override all other considerations. They believe the possibility of their residents being able to connect to a water line will put enormous pressure on their zoning controls in that area and force

unwelcome downzoning on the Town. (This fear should be familiar to Pound Ridge residents.)

This news was devistating to me and to Mort. Surely there must be something missing here. Is there a requirement somewhere which gives public utilities leeway to operate when public health is involved ? Is there a way to prevent access by New Canaan residents to the piped water except in case of emergency? Surely BHC must have some card to play here. Why would they go to all the trouble and expense of designing the system and engineering the specs if they did not know they had certain rights to proceed.

These are answers we need to determine at the May 19 meeting if not before.

I will call Marc Moran and Tim Eidle as promised!

Joy Simpkins

TOWN OF NEW CANAAN
RICHARD P. BOND
FIRST SELECTMAN

Town Hall
77 Main Street
New Canaan, CT 06840

Tel: 972-2311
Fax: 966-0309

600 Lindley Street
Bridgeport, CT 06606-5044

Telephone
203.367 6621

BHC
An Aquarion Company

Ms. Joy G. Simpkins
Supervisor
Town of Pound Ridge
179 Westchester Ave.
Pound Ridge, NY 10576-1743

September 8, 1999

Re: Water Supply to Scott's Corners

Dear Joy:

This letter is written in response to your August 24 letter regarding permit procedures for constructing a pipeline between BHC's Stamford System and Scott's Corners, NY, particularly the portion of the work to be constructed in Connecticut. Although I am not an attorney, and therefore can't give a legal opinion, the following is my understanding of the approval requirements for construction of a pipeline.

BHC is required to obtain a street opening permit from the Towns in which we operate for any excavation within a Town road. In the case of a State road, the permit would be obtained from the State Department of Transportation. As a public utility, BHC has the right to appeal the denial of a street opening permit to the State Department of Public Utility Control.

In response to your second question, water rates would be based upon the cost of purchasing water from BHC (rate chart enclosed) and any incremental costs for operating the Water District. A "typical" residential customer in BHC's Stamford System currently pays approximately $60 per quarter. The Water District rates would be higher than this by the amount of its expenses for the operating costs and debt service of the New York entity. As a point of reference, a "typical" residential customer in BHC's Eastern Division currently pays approximately $96 per quarter.

If you have any questions on either of these topics, please call me.

Sincerely,

Peter B. Galant, P.E.
Director of Engineering

Enclosure

construction cost estimate is $1.1 million plus approximately $85,000 for taps and services to the property line. The total project cost estimate, including BHC costs, is therefore approximately $1.8 million. Please keep in mind that these costs, particularly for the treatment building, are conceptual only and may vary significantly based upon preliminary and final design. In particular, the site identified by LBG for locating the wellfield is shown as wetlands on the USGS map. The feasibility and cost implications of constructing in a wetland have not been investigated, nor have the resulting permitting requirements.

I hope this answers the cost questions raised at and after our last meeting. After your review, please distribute this information prior to our June 22 meeting.

Sincerely,

Peter B. Galant, P.E.
Director of Engineering

cc: B. Brennan – JJB
R. Furano - BHC

See Wastewater Appendix for these reports.

2000 September, Malcom Pirnie study proposal discusses regulatory issues with potable water wells and the possibility of combining them into a Community Water Supply, but wants to start over with a wastewater study.

2002 April, Folchetti study also discusses potable water solutions, water from Stamford, drilling wells and getting water from the golf course.

Pound Ridge Waste Water Task Force

Appendix C: Westchester County Health Department

9320-58 80 WESTCHESTER AVE - FIRE DEPT

208

P.S.D. Town of Poundridge Date: Permit 8/19/49

Approval _____

Location: Westchester Ave.

Section_____Block:_____Lot: _____

Owner: Poundridge Fire Department, RFD #1, New Canaan

Builder: Louis Beccaria, RFD #1, Box 79, New Canaan, Conn.

House: firehouse

Soil test made: Rate:

Tank capacity: Material:

Absorption:

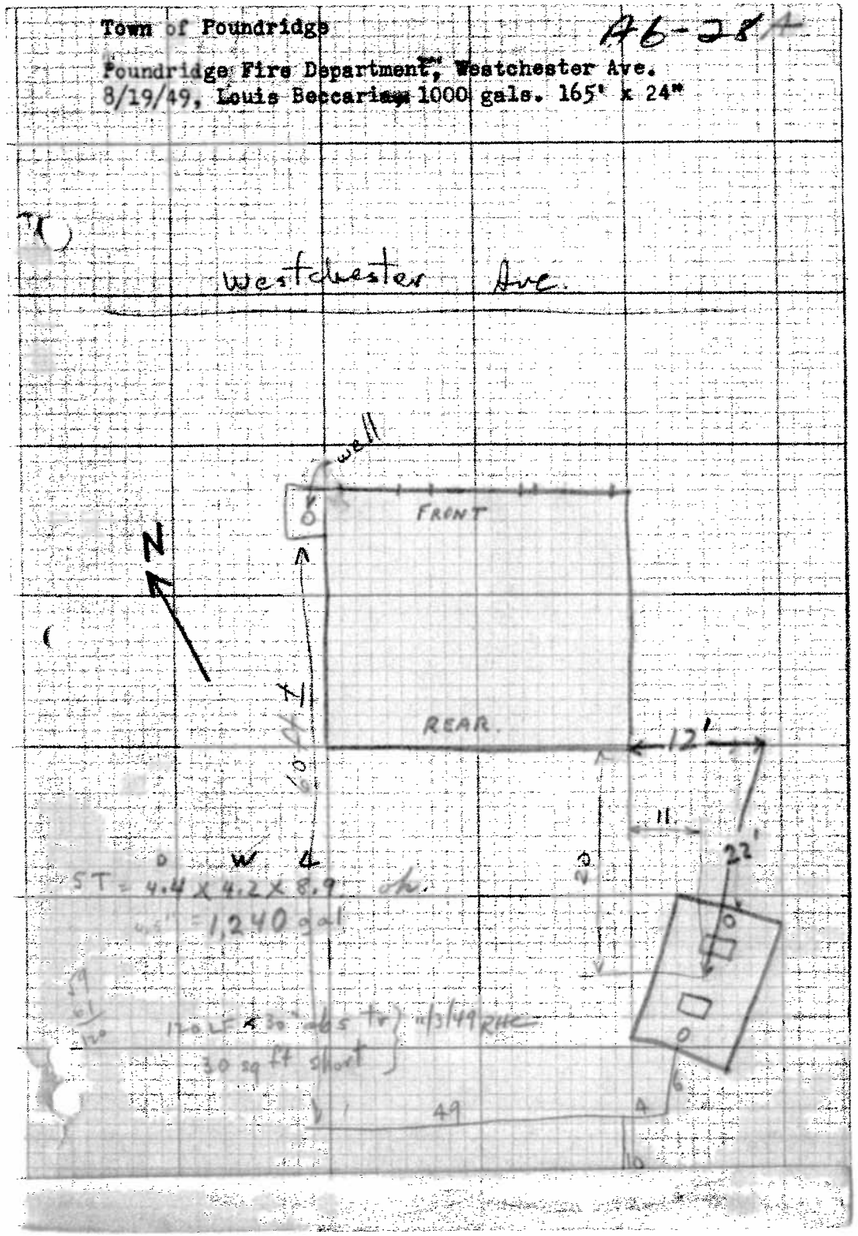
Sketch-Book: 46 28 4

NOT APPROVED

Town of Foundridge

46-28

Foundridge Fire Department, Westchester Ave.
8/19/49, Louis Beccaria 1000 gals. 165' x 24"



✓ Separate Sewerage System Ex Private Water Supply

Pound ridge
Municipality

CERTIFICATE OF CONSTRUCTION COMPLIANCE

WCDH File No. PR 91-07

Located at Westchester Avenue Section 7 Block 9320

Owner Pound Bidge Fire Department Lot 55,57,58 Job

Separate Sewerage System built by Gary Powell Address Greenwich Conn

Consisting of ex 750 Gal. Masonry, ~~Metal~~ Septic Tank 48

Lineal feet X 4x4 width trench tri Galleys

Other requirements

Water Supply Public Supply from

Private Supply Drilled by existing Address

Building Type Fire Dept Offices No. of bedrooms Date Permit Issued 1991

Erosion Control Completed Waived

Other Requirements

I certify that the system(s) as listed serving the above premises were constructed essentially as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans, filed, and the permit issued by the Westchester County Department of Health.

Date 2/9/95 Certified by Joseph D. Sullivan

Any person occupying premises served by the above system(s) shall promptly take such action as may be necessary to secure the correction of any unsanitary conditions resulting from such usage. Approval of the separate sewerage system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgement of the Commissioner of Health, such revocation, modification or change is necessary, said modification or change shall be done under the supervision of a licensed Professional Engineer or Registered Architect.

With proper maintenance these systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date 2/14/95 ~~Mark S. Rapoport, M.D., M.P.H., Commissioner,~~ By
Westchester County Department of Health

WESTCHESTER COUNTY DEPARTMENT OF HEALTH - Division of Environmental Quality

DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM FILE NO. _____

Owner Pound Ridge Fire Dist. Address Westchester Avenue

Located at (Street) Westchester Avenue (Indicate Nearest cross street) Sec. 7 Block 9320 Lot 55, 57, 59

Municipality Poundridge Watershed _____

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Feb 4, 1991

HOLE #	CLOCK TIME			PERCOLATION			
Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water From Ground Surface Start Inches	Depth to Water From Ground Surface Stop Inches	Water Level in Inches Drop in Inches	Soil Rate Min/in. drop
(1)	1	10⁻	10¹²	12	30	33	3	4
	2	10¹²	10²⁴	12	30	33	3	4
	3	10²⁴	10³⁶	12	30	33	3	4
	4							
	5							
	1							
	2							
	3							
	4							
	5							
	1							
	2							
	3							
	4							
	5							

Notes:

1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.

2) Depth measurements to be made from top of hole.

DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLE

	HOLE NO. 1	HOLE NO.	HOLE NO.	HOLE NO.
0"	Blacktop			
6"				
12"				
18"	Sand & Gravel			
24"				
30"				
36"				
42"				
48"				
54"				
60"				
66"				
72"				
78"				

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED None

INDICATE LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED —

TESTS MADE BY J F Sullivan DATE 2-4-91

DESIGN

Soil Rate Used 0-5 Min/1" Drop: S.D. Usable Area Provided —

No. of Bedrooms 4 Septic Tank Capacity 750 Gals. Masonry ✓ Metal ____

Absorption Area Provided by 48 l.f.x 24" 36" width trench. Other 4 tri Galleys 450 gallons/day. CK.

Name J. F Sullivan Signature

Address 2972 Forncrest Dr. Seal

Yorktown Hgts N.Y

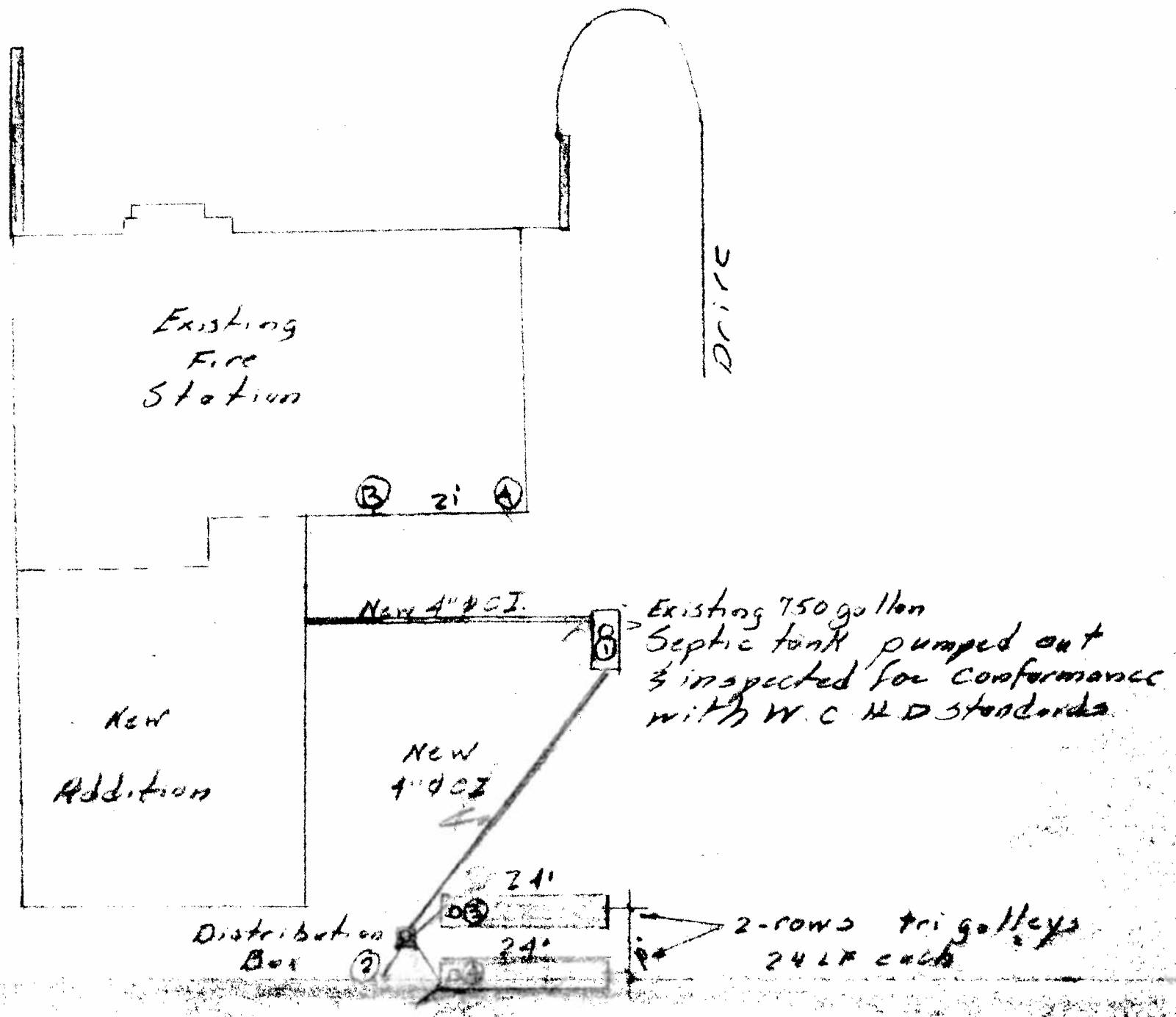
Westchester County Health Department

Soil Rate Approved ____ Sq.Ft./Bdl. Checked by

Date

S.D. 87.6 (Rev. 5/76)

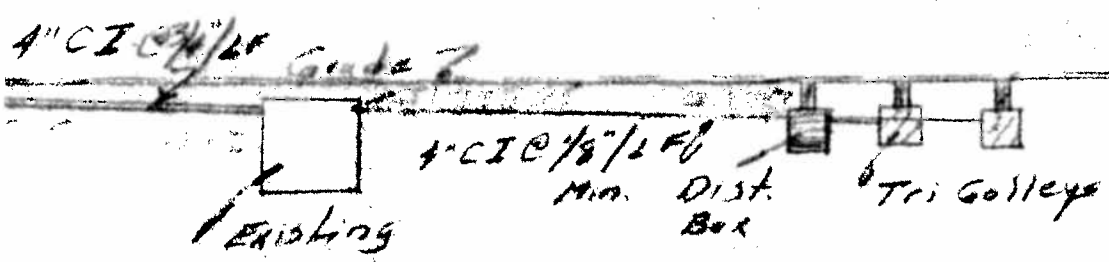
Westchester Avenue



Point	A	B
1	22'	36'
2	62'	60'
3	56'	54'
4	69'	68'

PLAN

Scale 1" = 20'-0"



PROFILE Scale 1" = 20' hor
1" = 10' vert.

ACCEPTED
AS FINAL PLANS
DATE 2/14/95
WEST. CO. DEPT.
OF HEALTH
BY

STATE OF NEW YORK

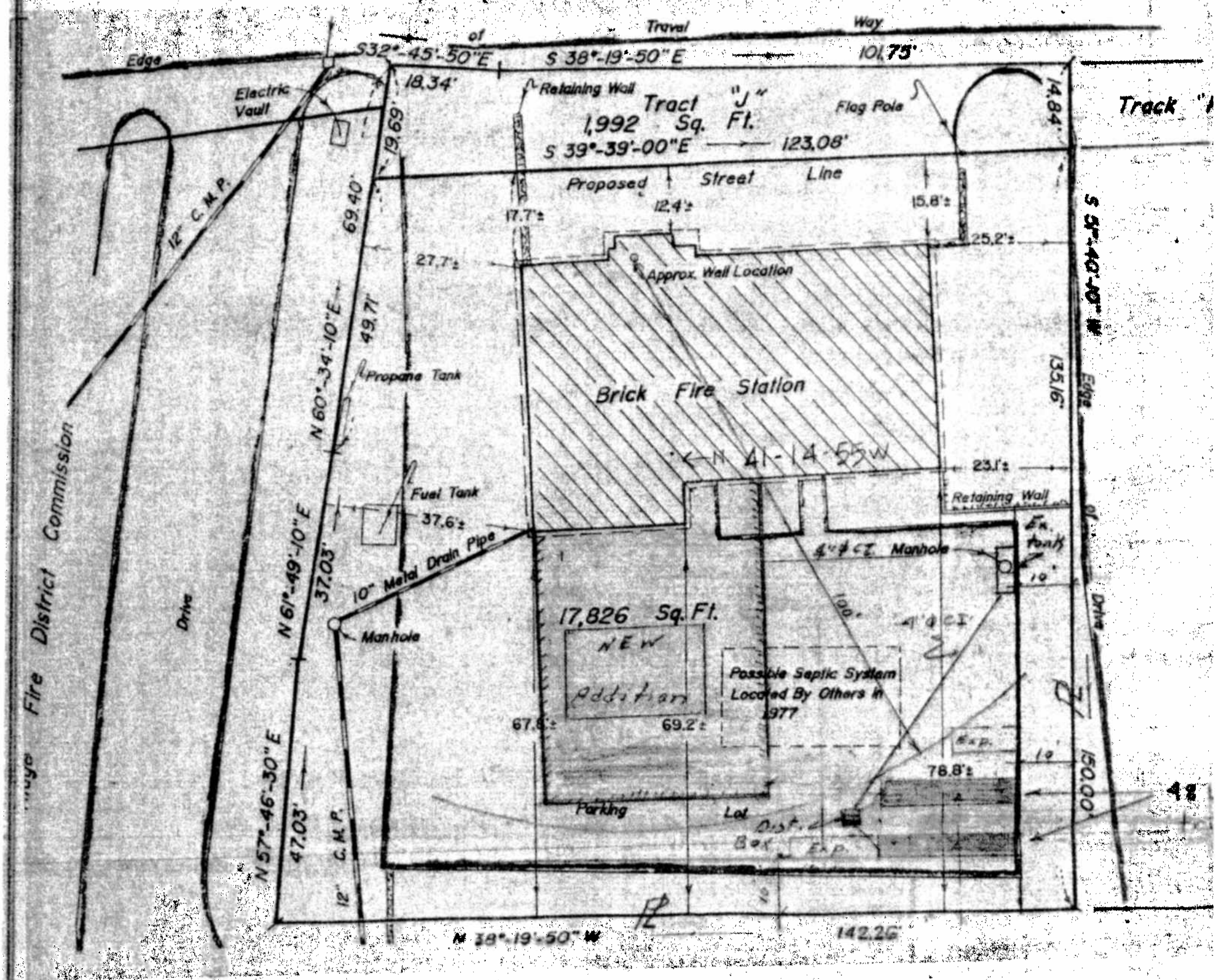
AS-BUILT SEWAGE DISPOSAL SYSTEM

Pound Ridge Fire District

Westchester Avenue
Pound Ridge, N.Y.

SUB-DIV.
T.M. NO. 7-9820-
DATE 7-24-91

JOSEPH F. SULLIVAN P.E.
YORKTOWN HEIGHTS, NEW YORK



PLAN

Scale 1" = 20'-0"

9320-59 78 WESTCHESTER AVE

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
William A. Holla, M. D., Commissioner

ION OF SANITATION
. McLaughlin, P. E., Director
H. M. Gray, P.E., A. R. Secor
R. H. Cummings, P. E., R. W. Germeroth
Sanitary Engineers

Application Rec'd.....
Permit Issued.....
Final Approval.....

APPLICATION FOR RESIDENTIAL SEWAGE DISPOSAL PERMIT
(Please type or print) (See Rules & Reg. Form S.D.22)

To the Commissioner of Health: White distributing Refining & Jarvis
Application is hereby made for a permit to construct a sewage disposal system to serve..1 BUILDING: FOR DAIRY: GARAGE.....
(Number, type, and use of building to be served.)

1. Owner JOHN FRANK DI TORE.....Mail Address R.F.D. 1 - NEW CANAAN - CONN.
Note: (Owner must receive permit and approval. Check here for extra copy)

2. Property at WESTCHESTER AVE.....POUND RIDGE (SCOTTS CORNER)
(Street) (Village, Town, City)

3. Tax Map Location: Section.....Block.....Lot.....Subdivision.....

4. Construction: New, Replacement; Proposed Future Building....NEW
(Expansion attic, etc.)

5. Lot size..60 X 150...No. of rooms.....Bedrooms.....Bathroom..1.....
Extra lavatories.....Special Fixtures.....Maximum Future Occupancy.....

6. Source of water supply...WELL
Watershed on which system is located..Port Chester Water Shed
Distance to nearest watercourse..1000'..Owner's wells..YES..Adjacent wells..NO.

7. Daily Sewage Flow: No. of persons.....4....x 75 gals= ..300..gals.per day.

8. Settling treatment: Septic tank; liquid capacity below flow line..~~1000~~ 500
Material..Masonry...inside dimensions: Length..6...width..4...effective depth..4..
Minimum liquid capcity - 500 gallons; 200 gallons per bedroom.

9. Soil absorption test..4..minutes per inch drop.....absorption rate.
(MUST BE MADE BY APPLICANT AT SITE) (from table)

10. Absorption area..150.....gals.waste(No.7) Absorption rate from table bottom area .....sq.ft.

11. Absorption treatment: Trenches..24..inches wide..75..linear feet.
Gravel..6...cu.yds., to depth of..6...inches below bottom of pipe.
Leaching pits: number.....outside dimensions.....depth below flow line....;
wall area below flow line.....material.....built-up, rock-filled.
Absorption area: trenches.....leaching pits.....total.....sq. ft.

Signature..Frank Di Tore.....Title...OWNER.....
(By owner or person presenting owner's written authorization)
Mail permit to..R.F.D. 1...NEW CANAAN, CONN.....

SKETCH REQUIRED showing all features of property, wells, streams and sewage disposal system. Failure to secure permit before construction is a violation of the County Sanitary Code and is a misdemeanor.
INSPECTION OF COMPLETED SYSTEM BEFORE BACKFILLING IS REQUIRED.

S. D. 7 - 9/50

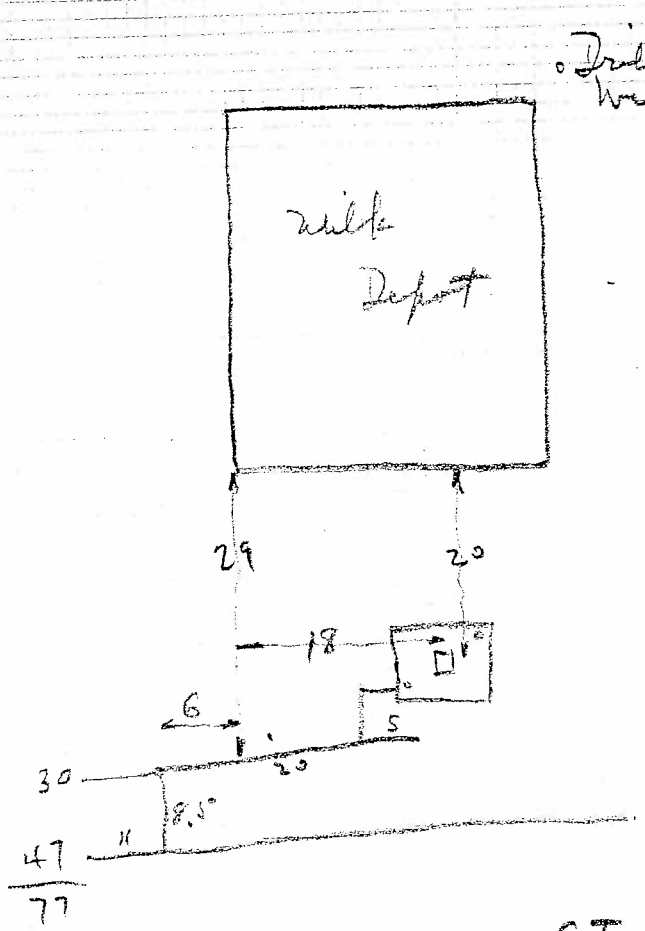
A4-880

Town of Pound Ridge
John & Frank Di Tore, Westchester Avenue
4/19/51 - 500 gal. 75' x 24"

Westchester Ave

N

5.3 x 4.1 x 4.1 = 660



660 gal masonry S.T.
77 LF x 24" stone
5-28-51

P.S.D. Town of Pound Ridge Date: Permit 4/19/51
Approval 5/29/51

Location: Westchester Avenue

Section _____ Block: _____ Lot: _____

Owner: John & Frank Di Tore, R.F.D. #1, New Canaan, Conn

Builder: John Di Tore, (same)

House: 1 building for dairy & garage.

Soil test made: 4 min. per inch Rate:

Tank capacity: 660 gal. Material: Masonry

Absorption: 77 linear feet of 24 inches wide absorption

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

William A. Holla, M. D., *Commissioner*
White Plains, N. Y.

Issued April 19, 1951

Sewer Permit

PERMIT FOR SEWERAGE SYSTEM

APPROVAL is hereby given pursuant to Article VII of the Sanitary Code of the Westchester County Health District to Frank Di Tore, R. F. D. #1, New Canaan, Connecticut.

to construct or provide a sewage disposal system consisting of a 500 gallon masonry septic tank and 75 linear feet of 24 inches wide absorption trench

to serve one building for dairy & garage, owned by John & Frank Di Tore, Westchester Avenue, Town of Pound Ridge, New York.

for an occupancy of persons, provided that

I. *No portion of the system shall be backfilled or covered until inspected.* Inspections are made during regular working hours only. Twenty-four hours' notice is required.

II. The system shall not be used until it has been constructed in an approved manner, inspected and backfilled, and the written final approval thereof shall have been obtained from the Department of Health. (See Item VIII).

III. Additional or more adequate facilities shall be provided whenever it is determined by the Commissioner of Health that such facilities are necessary, for which an additional permit shall be obtained.

IV. This system shall be maintained and operated in complete conformity with rules and regulations for the protection of public water supplies, all applicable laws, local ordinances, and the provisions of the Sanitary Code, existing or hereafter enacted.

V. When sludge and scum shall so accumulate in any tank as to occupy a depth at any point of more than one quarter of the liquid depth of the tank, they shall be removed and disposed of in accordance with the requirements of the Sanitary Code, and so as to create no nuisance.

VI. A connection to a public sanitary sewer shall be made whenever such sewer shall become available.

VII. This permit remains the property of the Department of Health and is revocable at any time or subject to modification or change whenever the Commissioner of Health shall deem necessary.

VIII. It shall be the responsibility of the person obtaining this permit to deliver a true copy thereof together with a copy of the final approval to the owner of the premises served by this system before this system is placed in use.

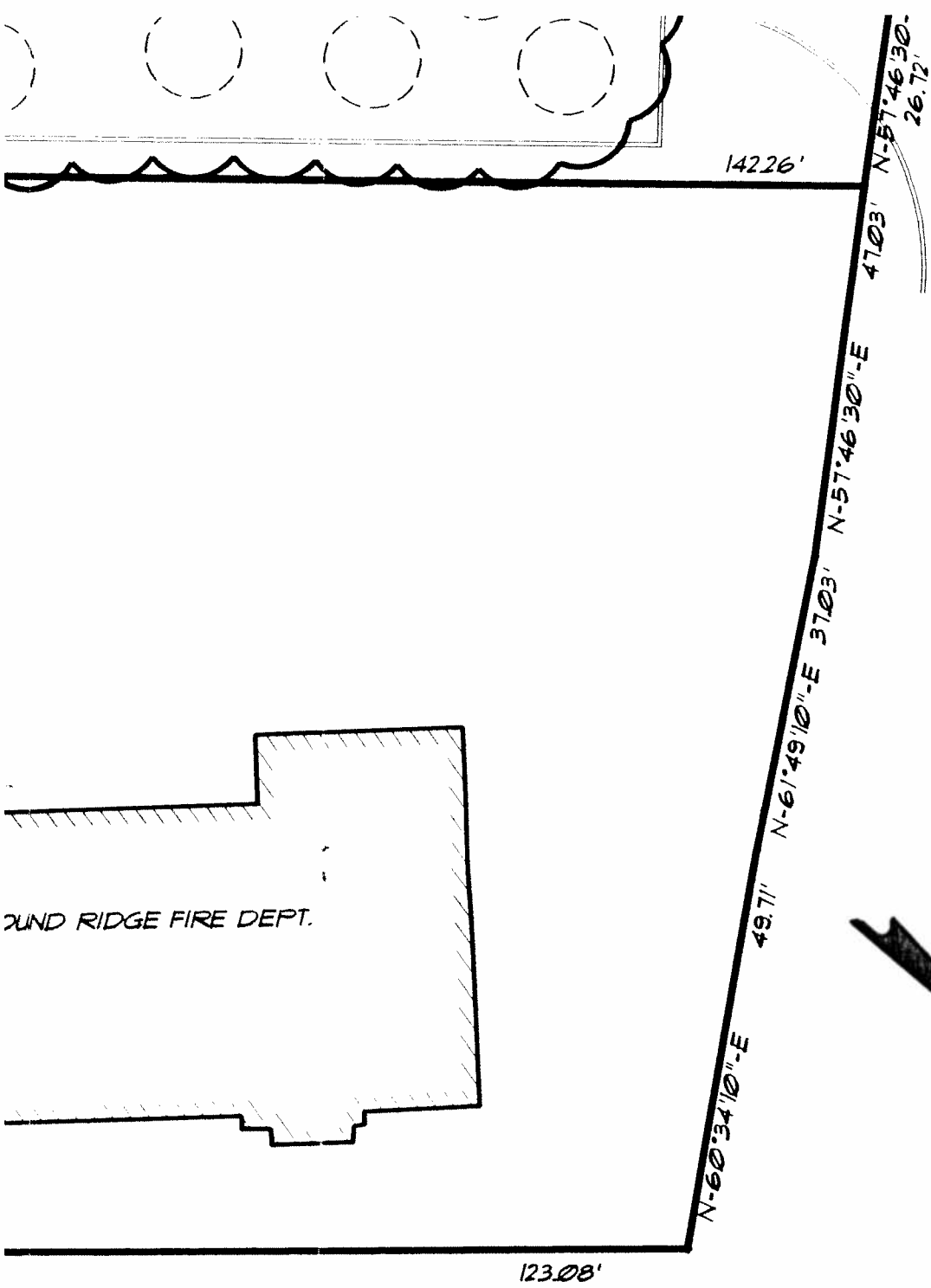
WCHF

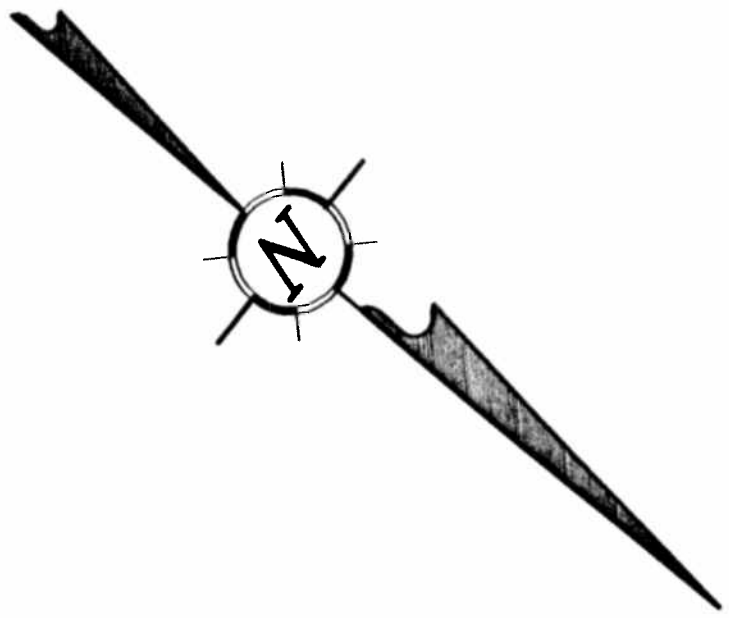
Commissioner of Health

S. D. 5 9-50—21767

cc: Stanford Water Co.

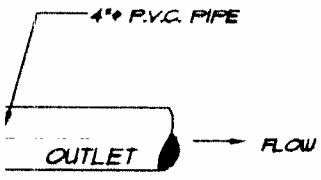
9320-60 76 WESTCHESTER AVE





TED AND FROM "PLANS
FOR PARKING DISTRICT
JUNE 16, 1980.

VANHOLE COVER OVER "D" BOX



TAIL

SCALE

SHEET TITLE :

ASBUILT DRAWING & DETAILS

PROJECT :

SEPTIC SYSTEM ASBUILT

PREPARED FOR :

ROSALIE ROTH

PROJECT LOCATION :

SCOTTS CORNERS
POUND RIDGE
WESTCHESTER COUNTY, NEW YORK

JJV, PE

Consulting Engineering
Site Development

James J. Vanoli, P.E.
752 Old Kensico Road
Thornwood, New York 10594
Telephone 914.769.0902 Fax 914.747.3402

James J. Vanoli, P.E.

STATE OF NEW YORK
JAMES J. VANOLI
NO. 56794
LICENSED PROFESSIONAL ENGINEER

SCALE : 1"=20'

SHEET NO. 1 of 1

DATE	REVISION
04/13/02	ORIGINAL

AND REVISED 5/17/77

L.P. #2
RIM=399.32

L.P. #9
RIM=398.92

L.P. #6
RIM=398.12

L.P. #3
RIM=397.57

L.P. #8
RIM=398.81

L.P. #5
RIM=398.07

L.P. #7
RIM=397.46

L.P. #11
RIM=399.41

L.P. #10
RIM=399.36

L.P. #7
RIM=398.77

L.P. #4
RIM=398.67

L.P. #1
RIM=397.38

EEP PRECAST
ING TANKS

13 L.F. 4"ø P.V.C.
@S=1.12%

11 L.F. 4"ø P.V.C.
@S=2.28%

16 L.F. 4"ø P.V.C.
@S=1.25%

INV.S=395.91

INV.S=396.13

INV.S=396.18

EXISTING LINE REMOVED & REPLACED WITH NEW 4"ø P.V.C. PIPE TO EXISTING FIELDS FOR OVERFLOW SERVICE

EXISTING JUNCTION BOX TO REMAIN

N-38°19'50"-W

14

D.B. #4
RIM=399.52
INV. IN=395.10
INV. OUT=395.58

D.B. #3
RIM=399.49
INV. IN=396.06
INV. OUT=396.84

D.B. #2
RIM=399.25
INV. IN=396.27
INV. OUT=396.09

D.B. #1
RIM=398.88
INV. IN=396.32
INV. OUT=396.07

INV.=397.64

EX. J.B.
RIM=399.42
INV. IN=397.34

INV.=397.11

EX. M.H.
RIM=400.00

SEE "AS BUILT DRAWING, SEPTIC SYSTEM FOR CARL & KATHERINE QUADE AND HERMAN & ROSALIE ROTH" PREPARED BY STANLEY J. LANDER DATED 4/30/77, REVISED 5/17/77 FOR EXISTING GREASE TRAP & SEPTIC TANK

135.16'

A

B

N/F CARL J. QUADE
KATHERINE L. QUADE
BYRON S. CLEMONS
ADELINE Q. CLEMONS

N/F CARL J. QUADE
KATHERINE L. QUADE
HERMAN F. ROTH
ROSALIE C. ROTH

N/F JOHN A.
DITORE

POUND RIDGE FIRE DEPT.

F CARL J. QUADE
THERINE L. QUADE
EPHANIE M. RALL

S-51°40'10"-W

S-51°40'10"-W

S-51°40'10"-W

S-51°40'10"-W

N-60°32'10"

2"-E 60.01' S-39°39'00"-E 60.02' S-39°39'00"-E 60.02' S-39°39'00"-E 60.01' S-39°39'00"-E 123.08'

L.P. #10
RIM=399.32

L.P. #9
RIM=398.92

L.P. #8
RIM=398.81

L.P. #6
RIM=398.12

L.P. #5
RIM=398.02

L.P. #3
RIM=397.57

L.P. #2
RIM=397.46

L.P. #1
RIM=397.38

L.P. #11
RIM=399.41

L.P. #10
RIM=399.36

L.P. #7
RIM=398.77

L.P. #4
RIM=398.67

8'-0" BY 8'-0" DEEP PRECAST CONCRETE LEACHING TANKS (TYPICAL)

13 L.F. 4"ø PVC @ S=1.12%

11 L.F. 4"ø PVC @ S=2.28%

16 L.F. 4"ø PVC @ S=1.25%

INV. S=396.13

INV. S=395.97

INV. S=396.18

D.B. #4
RIM=399.54
INV. IN=395.70
INV. OUT=395.58

D.B. #3
RIM=399.49
INV. IN=396.06
INV. OUT=395.84

D.B. #2
RIM=399.25
INV. IN=396.27
INV. OUT=396.05

D.B. #1
RIM=398.98
INV. IN=396.35
INV. OUT=396.07

EXISTING JUNCTION BOX TO REMAIN

EXISTING LINE REMOVED & REPLACED WITH NEW 4"ø P.V.C. PIPE TO EXISTING FIELDS FOR OVERFLOW SERVICE

INV.=397.64

EX. J.B.
RIM=399.92
INV. IN=397.34

EX. MH
RIM=400.00

SEE "AS BUILT DRAWING SEPTIC SYSTEM FOR CARL & KATHERINE QUADE AND HERMAN & ROSALIE ROTH" PREPARED BY STANLEY J. LANDER DATED 4/30/77, REVISED 5/17/77 FOR EXISTING GREASE TRAP & SEPTIC TANK

INV.=397.11

111.75'

S-51°40'10"-W 50.00'

N-38°19'50"-W

135.16'

143.03'

S-51°40'10"-W

S-51°40'10"-W

S-51°40'10"-W

S-51°40'10"-W

N/F ESTHER PECCARIE

N/F CARL J. QUADE
KATHERINE L. QUADE
STEPHANIE M. RALL

N/F CARL J. QUADE
KATHERINE L. QUADE
BYRON S. CLEMONS
ADELINE Q. CLEMONS

N/F CARL J. QUADE
KATHERINE L. QUADE
HERMAN F. ROTH
ROSALIE C. ROTH

N/F JOHN A. DITORE

A

B

S-88°52'50"-W

S-42°32'00"-E 17.98'

S-38°06'40"-E

111.75'

50.00'

S-51°40'10"-W

L.P. #12 RIM=399.32

L.P. #9 RIM=398.92

L.P. #6 RIM=398.12

L.P. #3 RIM=397.57

L.P. #11 RIM=399.41

L.P. #8 RIM=398.81

L.P. #5 RIM=398.02

L.P. #2 RIM=397.46

L.P. #10 RIM=399.36

L.P. #7 RIM=398.77

L.P. #4 RIM=398.67

8'-0"ø BY 8'-0" DEEP PRECAST CONCRETE LEACHING TANKS (TYPICAL)

INV.S=395.91

INV.S=396.13

INV.S=396.18

13LF 4"ØPVC #S=1.8%

14LF 4"ØPVC #S=2.28%

16LF 4"ØPVC #S=1.25%

D.B. #4 RIM=399.54 INV. IN=395.70 INV. OUT=395.58

D.B. #3 RIM=399.48 INV. IN=396.06 INV. OUT=395.84

D.B. #2 RIM=399.25 INV. IN=396.27 INV. OUT=396.05

D.B. #1 RIM=398.98 INV. IN=396.32 INV. OUT=396.07

INV.=397.18

TIES TO LEACHING PIT & "D" BOX

S.S.D.S. COMPONENT	DISTANCE TO "A"	DISTANCE TO "B"
"D" BOXES		
D.B. #1	63'	106'
D.B. #2	71'	121'
D.B. #3	78'	131'
D.B. #4	87'	143'
LEACHING PITS		
L.P. #1	83'	119'
L.P. #2	96'	134'
L.P. #3	110'	149'
L.P. #4	75'	120'
L.P. #5	94'	137'
L.P. #6	116'	161'
L.P. #7	88'	138'
L.P. #8	110'	159'
L.P. #9	127'	177'
L.P. #10	100'	154'
L.P. #11	117'	172'
L.P. #12	135'	189'

LINDA LANE

143.03'

S-51°40'10"-W

N/F ESTHER PECCARIE

S-51°40'10"-W

N/F CARL J. QUADE
KATHERINE L. QUADE
STEPHANIE M. RALL

S-51°40'10"-W

N/F CARL J. QUADE
KATHERINE L. QUADE
BYRON S. CLEMONS
ADELINE Q. CLEMONS

SEPTIC SYSTEM

SEPTIC SYSTEM

195'

'C

'D

6" CAST IRON

750 GAL. GREASE TRAP PRECAST CONC.

3000 GAL. SEPTIC TANK PRECAST CONC.

6" CAST IRON

SIPHON CHAMBER WITH 4" MILLER SIPHON, PRECAST CO

PROPERTY LINE

6'-6" DIA x 6' DEEP SEEPAGE PIT

6'-6" DIA x 6' DEEP SEEPAGE PIT

6'-6" ⌀ x 9' DEEP SEEPAGE PIT

SUB-DISTRIBUTION BOX

100% EXPANSION AREA

DISTRIBUTION BOX

6'-6" ⌀ x 9' DEEP SEEPAGE PIT

DASHED LINES INDICATE 4" C.I. EQUALIZATION PIPE

ALL PIPES NOT LABELLED ARE 4" CAST IRON
ALL TANKS, PITS, DISTRIBUTION & SUB-DISTR BOXES HAVE MANHOLE COVERS

PROPERTY LINE

SLOPE OF GROUND

AT LOT LOCATION TOP OF BANK

NOTES:

1. GROUND SLOPES AS SHOWN INTO OTHER LAND OF QUADE-ROTH. DISCHARGE IS UNIFORM ACROSS ENTIRE LENGTH.
2. PRESENTLY AREAS SHOWN FOR SANITARY SYSTEM ARE ALL UNPAVED BUT THE AREA WILL BE PAVED IN FUTURE.

WESTCHESTER AVE.

Well

FIREHOUSE

B

A

SEPTIC SYSTEM

Well

F

E

60

DRILLED WELL

4 - 2 BEDROOM APARTMENTS
4 - RETAIL STORES &
1 - LUNCHONETTE

12'

C

D

6" CAST IRON

22

23

3,000 GAL. SEPTIC TANK
PRECAST CONC

750 GAL. GREASE TRAP
PRECAST CONC

24

6" CAST IRON

SIPHON CHAMBER WITH 4"
MILLER SIPHON, PRECAST

21

SEPTIC SYSTEM

10'5"

PROPERTY LINE

6'-6" DIA x 6' DEEP SEEPAGE PIT

6'-6" DIA x 6' DEEP SEEPAGE PIT

6'-6" DIA x 6' DEEP SEEPAGE PIT

SUB-DISTRIBUTION BOX

13

12

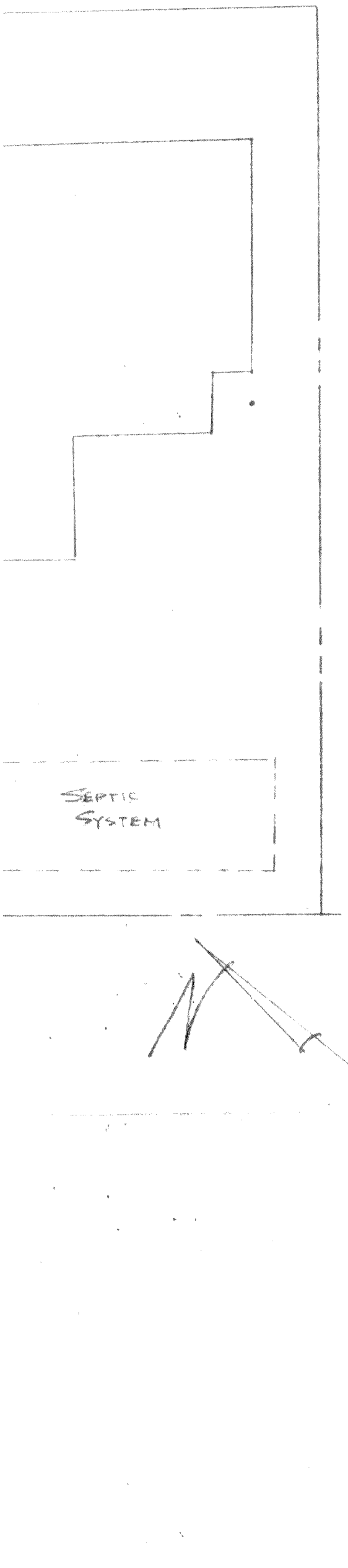
11

10

9

2

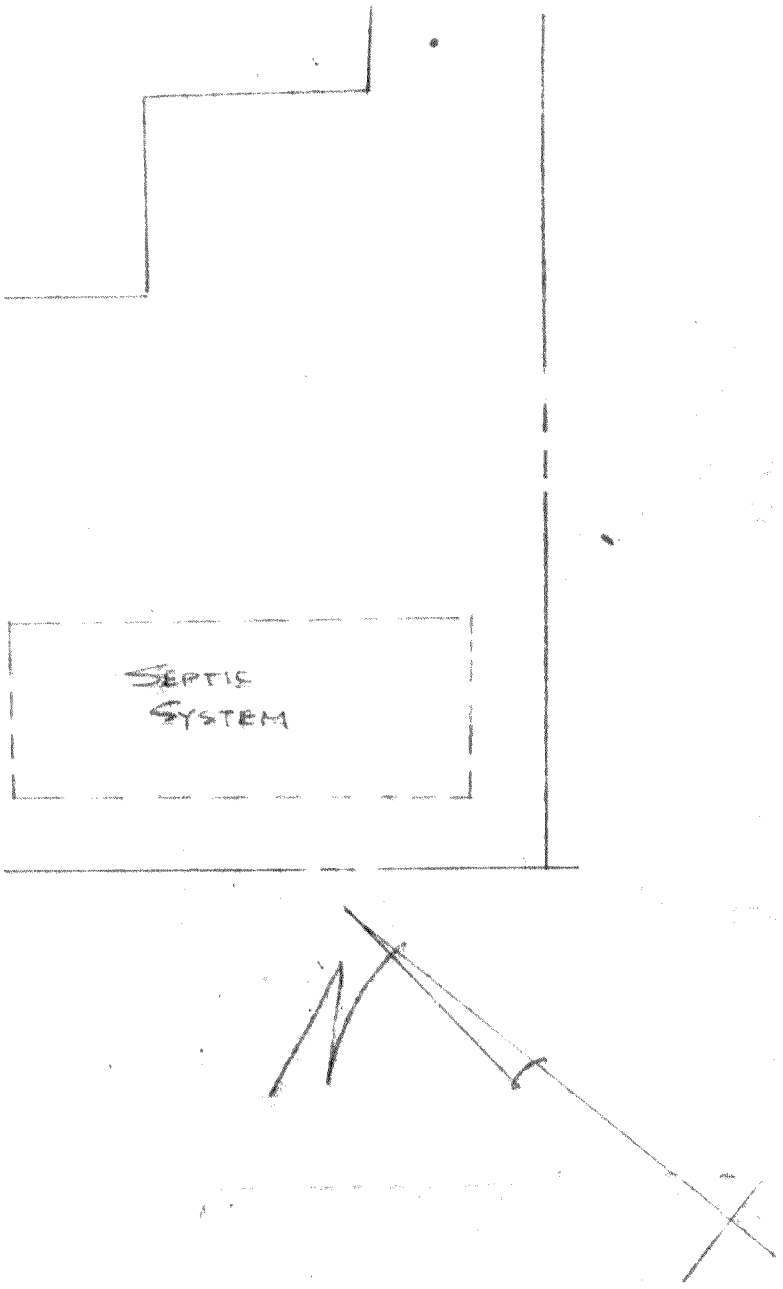
3



POINT	DISTANCE FROM A	B	C	D	E	F
1	120'	147'				
2	107'	122'				
3	116'6"	100'				
4	128'6"	97'				
5	140'	124'				
6	128'	130'				
7	130'	140'				
8	119'	142'				
9	97'11"	121'				
10	96'	105'				
11	102'	93'6"				
12	112'	86'				
13	124'	84'				
14	145'	108'				
15	130'	110'6"				
16	120'	116'				
17	117'	127'				
18	139'	153'				
19	140'	143'				
20	144'	134'				
21	153'6"	130'6"				
22			40'	20'6"		
23			47'2"	15'6"		
24			53'	27'		
25			61'	38'2"		
26					10'6"	52'

ACCEPTED
AS FINAL PLANS
DATE 5/23/77
WEST. CO. DEPT.
OF HEALTH
BY

14	145'	109'				
15	130'	110'6"				
16	120'	116'				
17	117'	127'				
18	139'	153'				
19	140'	143'				
20	144'	134'				
21	152'6"	130'6"				
22			40'	20'6"		
23			47'2"	15'6"		
24			53'	27'		
25			61'	38'2"		
26					10'6"	52'



ACCEPTED
AS FINAL PLANS
DATE 5/23/77
WEST. CO. DEPT.
OF HEALTH
BY

THE LOTS SHOWN HEREON ARE KNOWN AS LOTS 56 & 60
BLOCK 9320 ON TOWN ASSESSMENT MAPS.

STANLEY J. LANDER
PROFESSIONAL ENGINEER
NO. 32720
STATE OF NEW YORK

Stanley J. Lander
STANLEY J. LANDER
BOX 267
[illegible]

AS BUILT DRAWING
SEPTIC SYSTEM
FOR
CARL & KATHERINE QUADE
AND
HERMAN AND ROSALIE ROTH
WESTCHESTER AVE
TOWN OF POUND RIDGE
WESTCHESTER COUNTY, N.Y.
APRIL 20 1977 REV. 5-17-77

9320-61 74 WESTCHESTER AVE

S 50-30 W

A

B

Note:
Septic Tank & Syphon
Covered with 6" Conc.
Planks

1

1820 gal. Septic Tank

4" Miller Syphon in Syphon Chamber
operating at time of inspection

2

EXISTING
N/F

LINDA LANE

N39-03-50W 120.00'

98'

N40-38'E 50.00'

Note: All fields 24" wide

N39-03-50W 111.75'

N43-34-10W
17.98'

13'

N37-53-40E 186.35'

POINT	DISTANCE FROM A	B	C	D
1	44-8"	13'6"		
2	55'-2"	32'		
3			29'3"	24'

61'
65'
62'
62'
63'
64'
54'
55'
59'
55'
59'

Distribution Box with Baffle (brick)

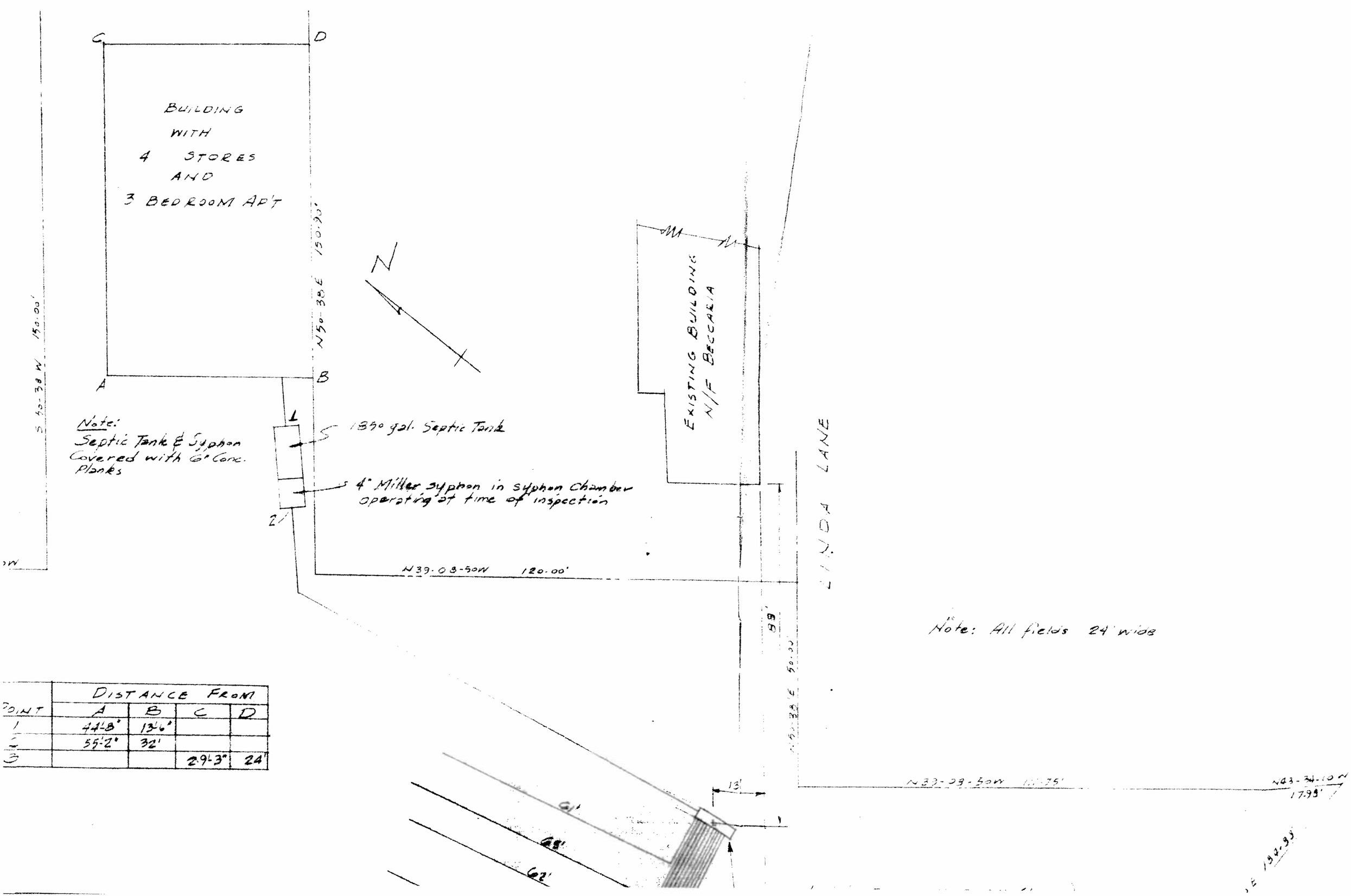
ACCEPTED
AS FINAL PLANS
DATE April 30, 1969
WEST. CO. DEPT.
OF HEALTH
BY V.R. Lenne

PROFESSIONAL ENGINEER

Stanley J. Sarles
Stanley J. Sarles

The Lot shown hereon is known as Lots 5661, Block 9320 Sect. on Town Assessment Maps

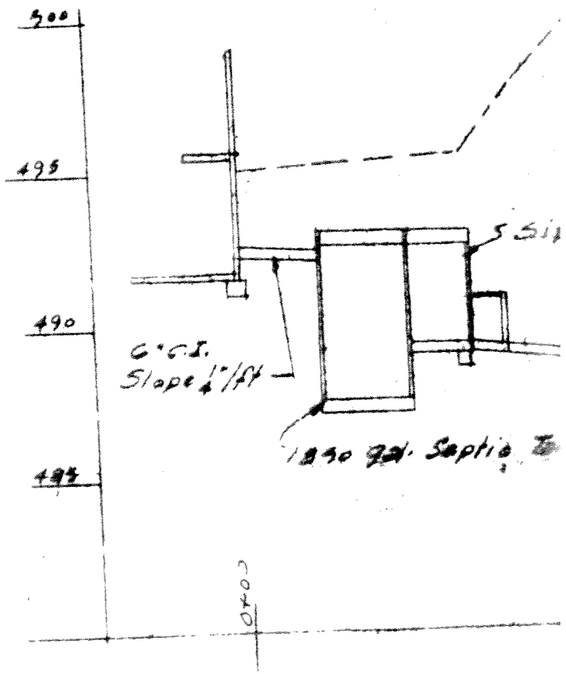
AS BUILT DRAWING
SEPTIC SYSTEM
FOR
CA2L QUADE
WESTCHESTER AVE.
TOWN OF POUND RIDGE

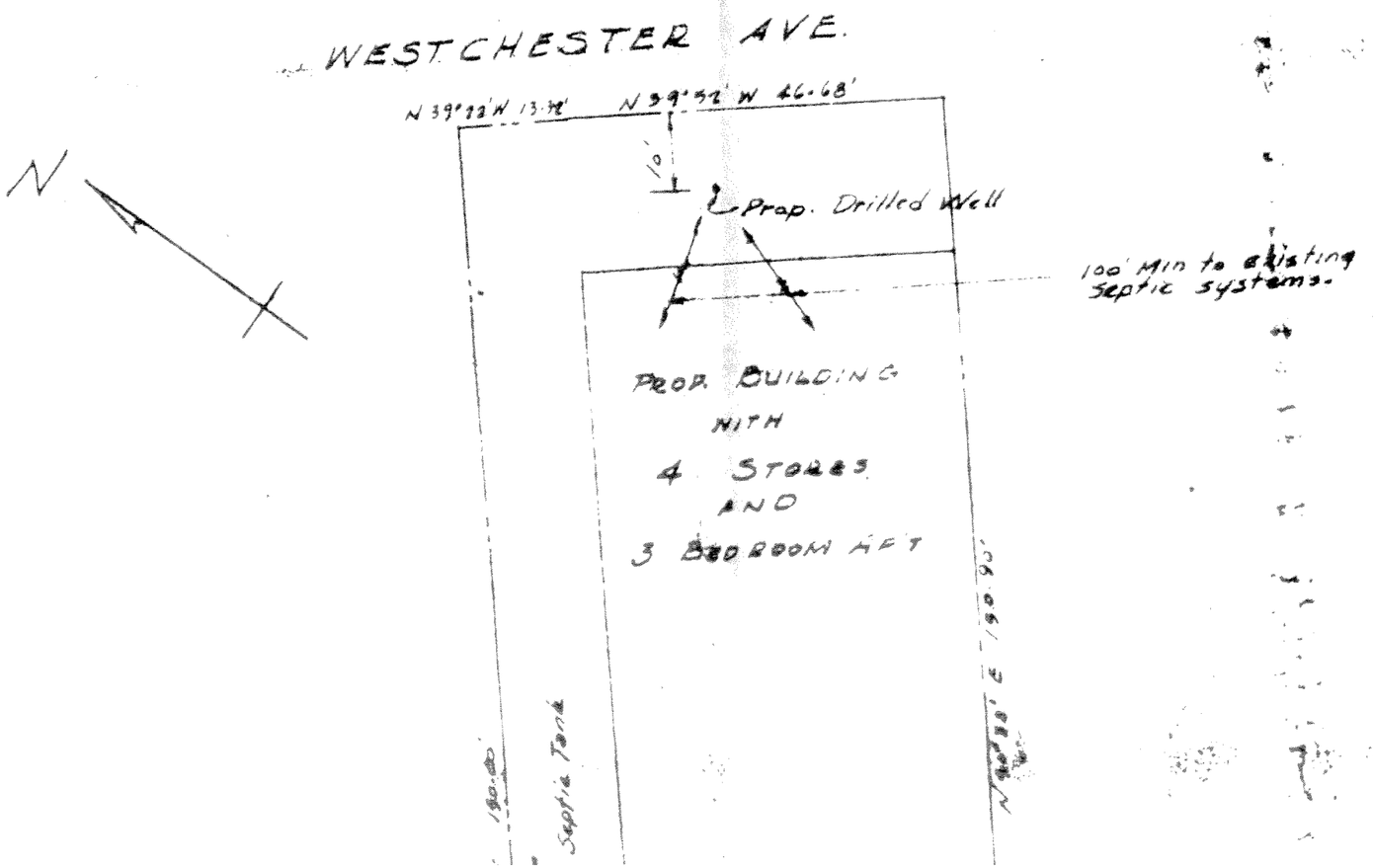


POINT	DISTANCE FROM			
	A	B	C	D
1	44'-8"	13'-6"		
2	55'-2"	32'		
3			29'-3"	24'

ENGINEER'S REPORT

1. Design Flow: 4 stores @ 450 gal./day = 1800 gal/day + three bedroom apartment = 900 gal. per day = 2700 gal./day.
2. Size of septic tank from figure 1, Bulletin 1, Part II, Intermediate Needs Treatment Needs of N.Y.S. Health Dept. = 1850 gals.
3. Tank size to satisfy requirements: 11'-0" Long x 4'-6" wide x 5'-0" deep = 247.5 cu. ft. = 1850 gals. Provide two compartments. For 7'-9" Long inlet compartment would represent $\frac{7.75}{11.00}$ = 70.2% of total capacity
4. Length of fields required: $\frac{2700}{4.10}$ = 660 Lin. ft. of 24" trench
5. Size of Siphon Chamber $\frac{660(0.3)}{7.48}$ = 44.1 cuft. Using 4' Siphon, Drawing depth: 1'-5" width of Chamber = 4'-6" ∴ Length = $\frac{44.1}{4.5(1.32)}$ = 6.9' say 6'-11"





9320-63 70 WESTCHESTER AVE

9320-63 70 WESTCHESTER AVE

P.S.D. Poundridge Date: 9/3/47 9/4/47 271

Location: Westchester Ave.

Section: Block: Lot:

Owner: Frank Beccaria, R.F.D. 5, Ridgefield, Conn.

Builder: -Same-

House: 4 bedrooms and 2 bathrooms (Max.Occ. 7 persons)

Soil tests made: Rate:

Tank capacity: 1000 gallons Material: masonry

Absorption: 134 linear feet of 24 inches wide ~~xxxxxx~~ absorption trench.

Approval issued: Sept. 4, 1947 Sketch-Book: A2-972

Poundridge

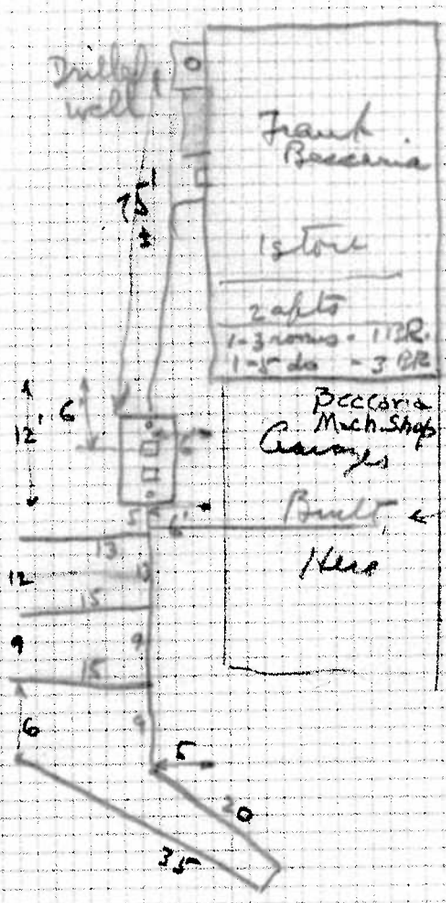
A2-972

Frank Beccaria, Westchester Ave.
9/4/47 -Same- 1000 gals., 130' x 30"

Westchester Ave

1000 gal masonry S.T.
134 LF x 24" obstruct
8-29-47

7.9 x 4.0 x 4.2
1000 gal



30' from any addition before building opening to Beccaria Mach. Shop

36
20
31
91
13
14
13
134
30
164

S. D. 5

Sewers
Poundridge

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

William A. Holla, M. D., Commissioner

White Plains, N. Y.

PERMIT TO PROVIDE A SEWAGE DISPOSAL SYSTEM

Application having been duly made to the County Commissioner of Health as required by Article II of the Sanitary Code of the Westchester County Health District, permission is hereby given to **Frank Beccaria, R.F.D. 5, Ridgefield, Connecticut,** for the construction or provision of a sewage disposal system consisting of **a 1000 gallon masonry septic tank and 130 linear feet of 30 inches wide absorption trench,**

to serve **a house owned by Frank Beccaria, Westchester Avenue, Town of Poundridge, New York (Maximum Occupancy - 7 persons)**

subject to the following conditions:

I. That this department shall receive due notification and be afforded an opportunity to inspect the system before any portion is backfilled or covered.

II. That this system shall not be used until the written final approval thereof shall have been obtained from the Department of Health.

III. That such sewage disposal system shall be constructed in complete conformity with the application data and plans as approved or with approved amendments thereto. Any changes in this system must be approved.

IV. That such system shall receive only the sewage or wastes from the structures or premises covered by this permit.

V. That such system shall be so maintained and operated as not to expose sewage or sludge, or create a condition of nuisance.

VI. That this permit shall not be construed to invalidate any rule or regulation enforceable by any local authority having jurisdiction.

VII. That all duly enacted rules and regulations for the protection of water supplies shall be complied with.

VIII. That a connection to the public sewer shall be made as soon as such is available.

IX. That whenever it is determined by the Commissioner of Health that additional or more adequate sewage disposal facilities are necessary, such facilities shall be provided, plans for which shall first be submitted to and receive the approval of the Department of Health.

X. That whenever the sludge and scum shall so accumulate in any settling tank as to occupy together at any point more than one-fourth of the distance between the bottom and the flow line, they shall be removed.

XI. That whenever sludge and scum is removed from any settling tank or any part of the system, it shall be done in such a manner as to cause no nuisance and the material disposed of by burial in some remote place at least 250 feet from any house, road, well, spring, stream or other body of water, and covered with not less than 6 inches of earth in such a manner that it will not flow or be washed by rain or melted snow or other means over the surface of the ground or into any well, stream, spring or other body of water.

XII. That this permit shall be revocable at any time or subject to modification or change when in the judgment of the Commissioner of Health such revocation modification or change shall become necessary.

A2-972

Date: **September 3, 1947.**
HHG:ME

COMMISSIONER

THE OWNER OR HIS AGENT MUST RECEIVE THIS PERMIT OR A COPY THEREOF

cc: **Mr. Everett B. Knapp, Town Clerk.**

[redacted]TION
[redacted], Director
[redacted]rrett
[redacted]Gray
[redacted]. Secor
[redacted]ary Engineers

COUNTY OF WESTCHESTER
DEPARTMENT OF HEALTH
William A. Holla, M.D., Commissioner
County Office Building
White Plains, New York

File.....
Permit.....
Inspected by.....
Final Approval.....
Sketch File.....

APPLICATION FOR SEWAGE DISPOSAL PERMIT
(See Rules and Regulations - Form S.D. 22.)

To the Commissioner of Health: Date.....

Application is hereby made for a permit to construct a sewage system to serve..A house.....
(Number, type and use of building to be served.)
concerning which the following information is submitted:

1. Owner.Frank Beccaria.....Mail Address.R.F.D. 5 Ridgefield Conn.
Note: Owner must receive permit and approval. Check here for extra copy....

2. Property location.West Chester ave.....Place.Pound Ridge.....
(Street) (Village, Town, City)

3. Tax Map Location: Section..... Block.~~9320~~ 446 Lot..... Subdivision.....

4. Construction: New, Replacement, Proposed Future Building..New.....

5. Lot area.60X150. No. of rooms..8... Bedrooms...4... Bathrooms.2.....
Extra Lavatories..1... Special Fixtures..... Maximum Future Occupancy..7.....

6. Source of water supply.Artesian well.....
Watershed on which system is located.....
Distance to nearest watercourse.500 ft Owner's wells 70 ft Adjacent wells 200 ft

7. Daily Sewage Flow: No. of persons..7... x 75 gals.=525.....gals. per day

8. Settling treatment, Septic tank: liquid capacity below flow line.1000 gl.
Material~~masonry~~ inside dimensions: length.8 ft. width.4 ft. effective depth.4 ft
..... diam.....
Note: Liquid capacity of tank shall be not less than volume of waste per day with a minimum of 500 gals.

9. Type of soil: clay, loam, sand, boulders, rock; surface: flat, sloping, steep; drainage: good, fair, poor.
Absorption test: .....minutes per inch drop..... Absorption rate (from table)
Note: Except in clay soil, a rate of 1 gal. per sq. ft. of bottom area per day shall be used unless a higher rate is established by soil test.

10. Absorption area: ~~325~~ ft -:- 2.0 .....sq.ft
gals. waste (No. 7) Absorption rate from table bottom area.

11. Absorption treatment, Trenches: 30 inches wide; ~~130~~ linear feet of distributing tile;
Gravel.10... Cu. yards, to depth of.7.... inches below bottom of pipe.
Leaching pits: number..... outside dimensions..... depth below flow line.
..... wall area below flow line..... material.....built-up, rock-filled.
Absorption area: trenches..... leaching pits..... total.....sq. ft

Signature: Frank Beccaria. Title: Contractor
(By owner, builder, or officer of sewage disposal firm, or contractor)
Mail Address: R.F.D. 5 Ridgefield Conn.

Sketch required on reverse side or on attached sheet showing plan with general relation of dwelling and property boundaries, wells and streams to system and arrangement of absorption facilities, together with all other pertinent data, including details of grease trap, manholes, diversion gates, siphon, curtain drains, special structures and unusual features. Failure to secure permit before construction or final written approval of the system before using is a violation of the County Sanitary Code and is a misdemeanor.

S.D. 7
2/47

9454-10 73 WESTCHESTER AVE

...ystem.

N-11
6

H-30

ERTIFICATE OF COMPLETION

Pound Ridge
...Municipality

...cated at N. Westchester Ave Scotts Corners Section-Ward

...wner Westchester Development Co Block

...stem built by The Pines Co Lot Job #

...ilding type Ranch - Stores Permit issued 27 Jan 59 W. C. D. H. File # PR3-1

...stem consists of 2700 Gal. masonry, metal septic tank Duplex Pump 5 1/2 Lineal feet X 2 Width trench

FILE COPY

The separate sewage system serving the above premises was constructed essentially in accordance with plans filed with this Department and the terms of a Permit issued on the above date and otherwise as shown on plans of the completed work, copy of which is attached. Any person occupying the premises served by this system shall promptly take such action as may be necessary to secure the correction of any unsanitary condition resulting from such usage. This approval is revocable as soon as a public sanitary sewer shall become available and is subject to modification or change when in the judgement of the Commissioner of Health such revocation, modification or change shall be necessary. TRUE COPIES OF THE PERMIT, PLAN OF THE SYSTEM AND OF THIS CERTIFICATION, AND ANY CHANGES THEREOF SHALL BE MAINTAINED ON THE PREMISES AT ALL TIMES AND SHALL BE SHOWN TO ANY REPRESENTATIVE OF THE COMMISSIONER OF HEALTH UPON DEMAND.

With proper maintenance this system can be expected to function satisfactorily and is not likely to create an unsanitary condition.

Permit to back of Pound Water used in proj.

...ate 2-17-59 William A. Brumfield Jr., M. D., Commissioner By AR. Sarosy
Westchester County Department of Health
San. Eng.

...parate Sewage System

PPLICATION & CONSTRUCTION PERMIT

P.R3-1

Pound Ridge
...Municipality

...cated at WESTCHESTER AVE. POUND RIDGE, N.Y. Section-Ward

...wner WESTCHESTER DEVELOPMENT CO. Address 216 E. 45th St. N.Y.C. Block

...be constructed by Address Lot Job #

Building Type Store Lot Area

...STEM CONSISTING OF 2700 gal. masonry, metal septic tank 50' lineal feet x 24" width trench

...her requirements PUMP INSTALLATION Under Title 5 of Sanitary Code

Not for Restaurant, Hairdresser or Store using more than 600 gal. min. Amt. of water

...UARANTY: I represent that I am wholly and completely responsible for the location, material, construction and drainage of the proposed system and hereby guaranty to the owner, his successors, heirs, or ...signs, that the system above described will be constructed as shown on the approved plan, or approved amendment thereto, and in accordance with the standards, rules and regulations of the Westchester ...unty Department of Health, and that on completion thereof I will furnish a written guaranty to the owner, his successors, heirs, or assigns, satisfactory to the Commissioner of Health to place in good operating ...ndition any part of said system constructed by me during the period of two years immediately following the date of construction of the original system or any repairs thereto.

...te Jan 22-59 Signed Stanley B. Gartner Sanit. Engr.

...PROVED FOR CONSTRUCTION: This approval expires one year from the date issued unless construction of building or sewer system shall have been undertaken, and is revokable for cause or may be amended or ...odified when considered necessary by the Commissioner of Health. Any change or alteration of construction requires a new permit. Approved for disposal of domestic sanitary sewage only.

...te 27 Jan 59 William A. Brumfield Jr., M. D., Commissioner By
Westchester County Department of Health

FILE COPY

~~County of Westchester~~ DEPARTMENT OF HEALTH — Division of Environmental Sanitation

DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM FILE NO. PR 3-1.

Located At (Street). WESTCHESTER AVE. POUND RIDGE. . Job #. . . . . .

Owner NEW CANAAN DEVELOPMENT CO. Sec. . .Blk . . . .Lot. . . . . .

Present Mail Address % VICTOR CHRIST-JANER, ARCH'T. NEW CANAAN CONN

Watershed Stamford . . . . . Lot Area. 3/4 AC + S. D. Usable Area 15,000 SQ FT +

Water Supply: Drilled. ✓., Driven . . ., Dug Well . . ., depth . . .Public . . . . .

No. of Rooms . . . . .Bedrooms . . . . .Future: Yes. . . .No. . .Other . . . . .

Septic Tank Capacity (From Table, Item 5.1). 2700 .Gals, Masonry. ✓ .Metal. . . . .

Soil Rate Used . . . . 7. . . .Min/1" Drop: Soil perc. test data....;test pit data...

Soil Rate Approved . . . . . .sq.ft/gal. Checked by . . . . . .Date. . . . . .

Absorption Area Required (Table Item 10.5). . . 1008. . . . . Sq.Ft.

Absorption Provided By 16 .Lines of. 32 .ft. x 24" trench; other . . . . . .

TRIPLICATE PLANS AND PROFILES OF SEWERAGE SYSTEM REQUIRED DRAWN TO SCALE OF NOT MORE THAN 1" TO 20' HORIZONTAL AND 1" TO 10' VERTICAL FLOOR PLAN OF BUILDING (REQUIRED)

PLOT PLAN (Check Items)

✓ 1. Identification
✓ 2. Scale, north point, date
✓ 3. SEWAGE DISPOSAL SYSTEM:
  ✓ dimensions; ✓ sewer line;
  ✓ septic tank; ✓ distr.box;
  ✓ trenches; ✓ spacing;
  ___ other.

DISTANCES (Nearest Foot) TO;

✓ 4. Street lines, name street
✓ 5. Property lines (within 250')
✓ 6. Buildings and structures
___ 7. Driveways, paved areas
___ 8. Watercourses, ponds, etc.
___ 9. Storm and ground water disposal
  ___ street; ___ area; ___ roof;
  ___ footing; ___ cellar; ___ other.
___ 10. Drilled wells within 250 ft.
___ 11. Dug wells or springs within 250 ft.
___ 12. Curtain drains to discharge pt.
___ 13. Water, oil, gas, electric services and tanks (underground)
___ 14. Trees, over 6" diameter, when grown
✓ 15. Contours, before and after grading in or above sewage disposal area.

SEPARATE SEWERAGE DISPOSAL SYSTEM PROFILE

✓ 1. Identification
✓ 2. Scales, date
✓ 3. Section - main system
✓ 4. Pipe Invert Elevations
  ✓ building; ✓ tank;
  ✓ distr.box; ✓ trenches;
  ___ curtain drain.
✓ 5. Ground Level Elevations (before and after grading)
  ___ building; ___ tank;
  ___ distr.box; ___ trenches;
  ___ curtain drain.
___ 6. Ground Water Elevation
___ 7. Ledge Rock Elevation
___ 8. Flow Line Elevations
  ___ Watercourses
  ___ Adj. ponds, etc.
___ 9. Well Water Elevation
___ 10. Curtain drain discharge elevation

Reviewed by . . . . . .

Date: . . . . . .

DATA SUBMITTED BY. T.H.E. PEASE CO. . . . . .
OWNER (. . . . .); BUILDER (. . . . .); CONTRACTOR (SAME)
IF CORPORATION, GIVE NAME AND TITLE THE PEASE CO. - R. DOUGLAS MACKEY ENG. DEPT.
MAIL ADDRESS 488 GLENBROOK RD. STAMFORD TELEPHONE NUMBER FI-8-6244

S.D. 7.1 - 1957

Job Location PR3-1

Westchester County Department of Health
SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

HOLE NO.	CLOCK TIME	ELAPSED t	DEPTH TO WATER	DEPTH TO WATER	DROP d	RATE t/d	TYPE OF SOIL
1	11:40	30'	8"	18"	10"	1"-5' CORR.	SANDY-LOAM GRAVEL
2	11:50	30'	9"	18"	9"	1"-5' CORR.	SANDY-LOAM-GRAVEL

Tests made by THE PEASE CO Date DEC. 30, 1958

S.D. 27.5 3/18/57

Job Location . . . . . .

Westchester County Department of Health PR3-1

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

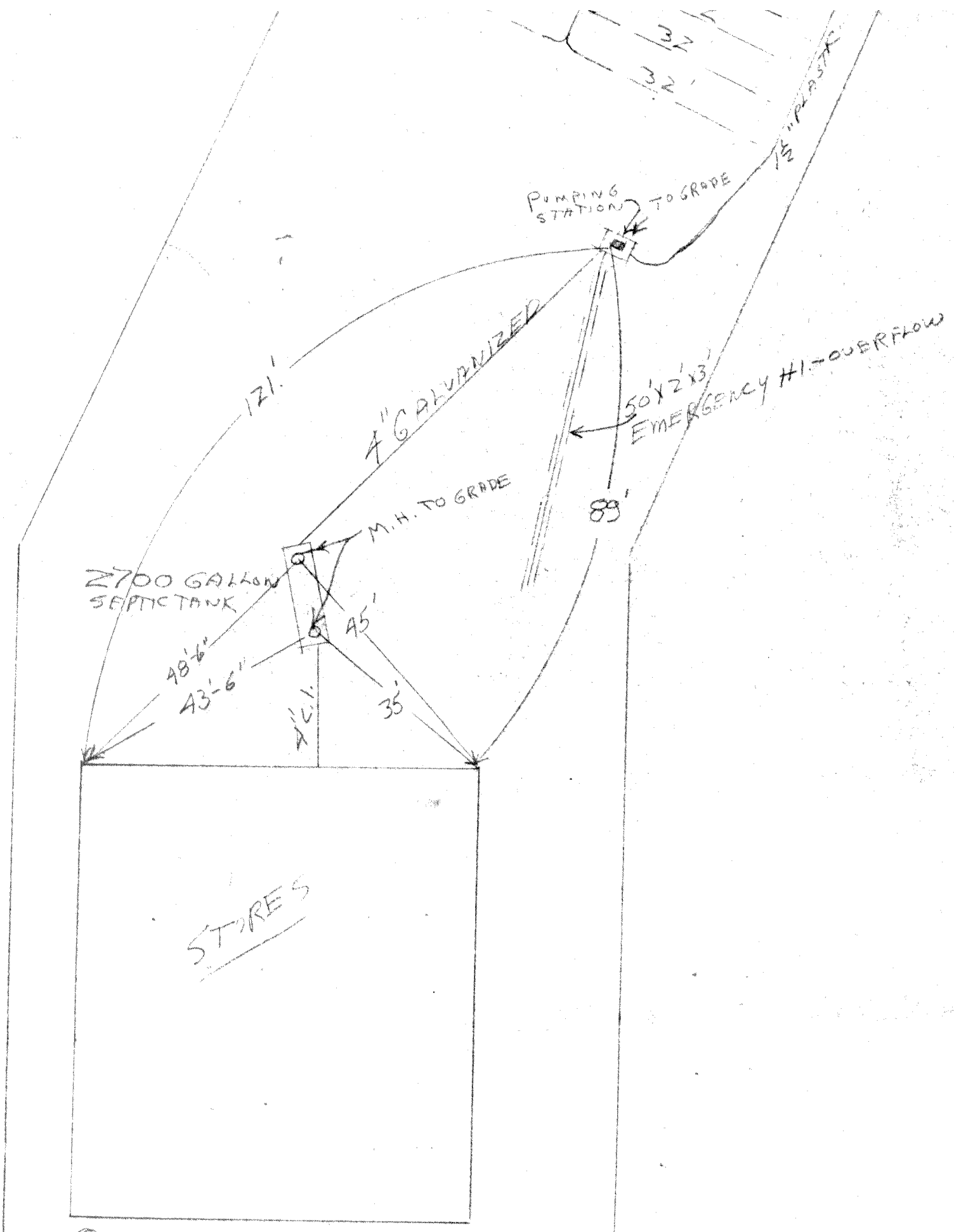
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO. 1	HOLE NO. _____	HOLE NO. _____	HOLE NO. _____
G.L.	TOP SOIL		TOP SOIL	
6"	TOPSOIL		TOPSOIL	
12"	SANDY LOAM		SANDY LOAM	
18"	SANDY LOAM		SANDY LOAM	
24"	SAND LOAM GRAVEL		SANDY LOAM GRAVEL	
30"	SAND [redacted] GRAVEL		SAND & GRAVEL	
36"				
42"				
48"				
54"				
60"				
66"				
72"				
78"				
84"				

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED
INDICATE LEVEL TO WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED

Tests made by T.H.E. PEASE CO. . . . . Date DEC. 30, 1958

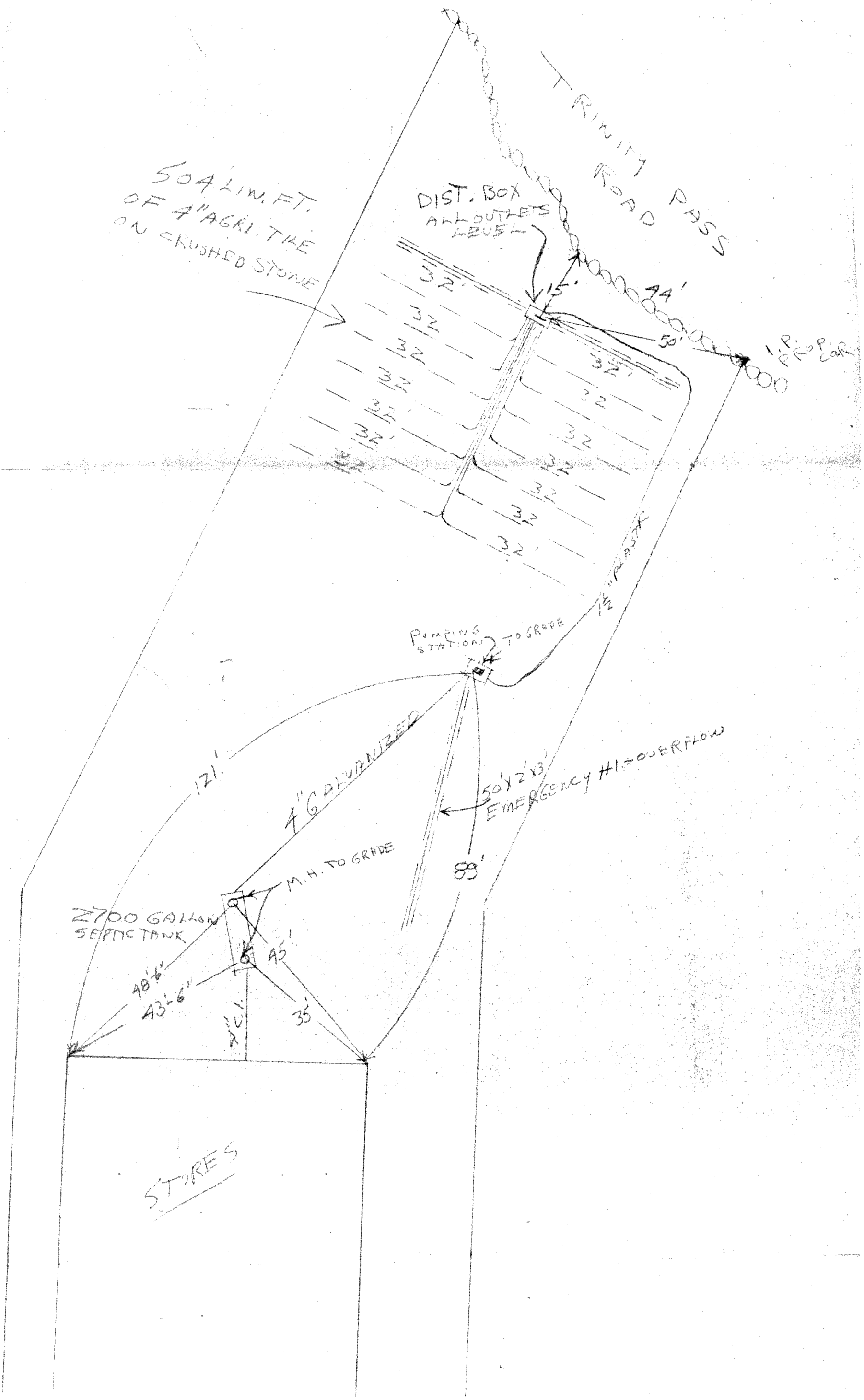
S.D.27.6 3/18/57



WESTCHESTER AVE.

APPROVED
SEP 17 1959
West. Co. Dept. of Health
By

SEWAGE DISPOSAL SYSTEM
FOR
NEW CANAAN DEVELOPMENT CO.
SCOTTS CORNERS - POUND RIDGE
BY
THE PEASE COMPANY
STAMFORD CONN.
SCALE 1"=20' AUG. 1959


TRINITY PASS ROAD
504 LIN. FT. OF 4" AGRI. TILE ON CRUSHED STONE
DIST. BOX ALL OUTLETS LEVEL
32'
32'
32'
32'
32'
32'
32'
15'
74'
50'
32'
32'
32'
32'
32'
32'
32'
1 P. P. & P. CAR
1½" PLASTIC
PUMPING STATION
TO GRADE
121'
4" GALVANIZED
50'X2'X3' EMERGENCY HI-TOWER FLOW
89'
M.H. TO GRADE
2700 GALLON SEPTIC TANK
48'-6"
43'-6"
45'
35'
STORES

9454-12 and 9454-11 69-71
WESTCHESTER AVE

DESIGN

MARKET - 30 EMPLOYEES @
POST OFFICE - 5 " "
LIQUOR STORE - 2 " "
ONE BEDROOM APT. " "
TOTAL DAILY FLOW

LENGTH OF 36" T
ALL TANKS, PUM
EXISTED PRIOR

24" OAD

A

40'

40'

40'

40'

40

LARGE JUNCTION BOX

1

4d

3d

10'

2

B

C4" BIRCH

2" PLASTIC

TRINITY PASS

43'

130.00'

N74°-17-20E

ALL FIELDS 36" WIDE.

EXISTING PUMP PIT WITH PUMP

EXISTING SEPTIC TANK

N49°-25-40E 150.91'

EXISTING SEPTIC TANK

POST OFFICE, LIQUOR STORE AND 1 BEDROOM APARTMENT

SCOTT'S

CORNER

MARKET

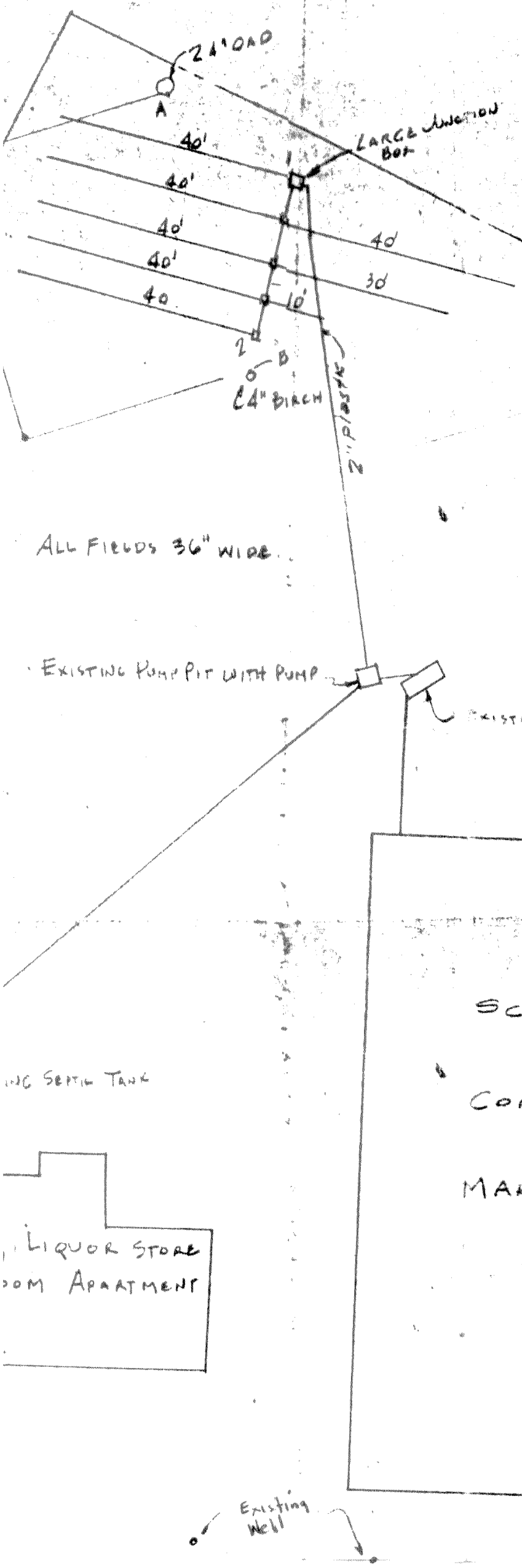
Existing Well

T
25
0

DESIGN FLOW

MARKET - 30 EMPLOYEES @ 15 GPD =		450
Post Office - 5 " " " =		75
LIQUOR STORE - 2 " " " =		30
ONE BEDROOM APT. " " =		300
TOTAL DAILY FLOW =		855

LENGTH OF 36" TRENCH BASED ON 20 MIN SOIL
ALL TANKS, PUMP PIT, PUMP & ALARM SYSTEM
EXISTED PRIOR TO THIS WORK.



POINT	DISTANCE FROM A	DISTANCE FROM B
1	26'-1"	32'-10"
2	42'-3"	6'-1"

The lot shown hereon is known as Lots 11 & 12 Block 9454, Map 15 on Town Assessment Maps.

Westchester County Department of Health
Bureau of Environmental Quality

CERTIFICATE OF CONSTRUCTION COMPLIANCE APPLICATION

WCDH File #: PR2012-12 Municipality: Pound Ridge

☐ Residential ☑ Commercial Watershed Basin Name: Mianus River Aquaria

NYCDEP Watershed: Y ☐ N ☐ Joint Review ☐ NYCDEP Log # _____ Delegated Review ☐

Property Information:

Property Name Pound Ridge Plaza LLC.

Property Address 69 Westchester Ave Pound Ridge NY Zip Code 10576

TMD: Section 15 Block 9457 Lot _____ R.S. Lot 12 Lot Area _____ Acres _____

Realty Subdivision: Existing Commercial Building

Owner Last Name: Pound Ridge Plaza LLC Owner First Name: _____

St. #: 114 St. Address: Glendale Rd Scarsdale State: NY Zip Code: 10583

Owner Phone #: 917-447-9830

Building Type: Commercial # of Bedrooms: _____ Date Construction Approval Issued 2000 ±

On-site Wastewater Treatment System (OWTS) Information:

Design Flow: 450 gpd Soil Percolation Rate: _____ min./in

Slope of OWTS Area: _____% Septic Tank Size: _____ Gallons (Gal.)

Absorption Trench(es): Length: _____ Lin. Ft. ____ Trench Width: _____ Ft. Area: _____ Sq. Ft.

Absorption Pit(s): # Pits _____ Diameter: _____ Ft. Depth: _____ Ft. Area: _____ Sq. Ft.

Other (circle or specify): Tri-Galleys 4X4 Galleys Flow Diffusers Name: _____

Trenches _____ Length _____ Lin.Ft. Trench Width: _____ Ft. Sidewall Area: _____ Sq.Ft./Lin Ft.

Other Requirements:

Pump System: Pump Chamber: Size: _____ Gal. Dose _____ Gal. Overflow Tank: Size: _____ Gal.

Curtain Drain: Depth: _____ Ft. Width: _____ Ft. R.O.B. Sand and Gravel Fill Section: Depth: _____ Ft.

Erosion Control (EC) Completed ✓

Separate Sewage Contractor (SSC): Name: R Ribeiro (United) WCDH SSC License # 00109

Water Supply System Information:

☐ Private Water Supply ☐ Public Water Supply Name: _____

Well Driller Name: _____ NYSDEC Reg # _____

Address: _____ Phone: ( ) _____

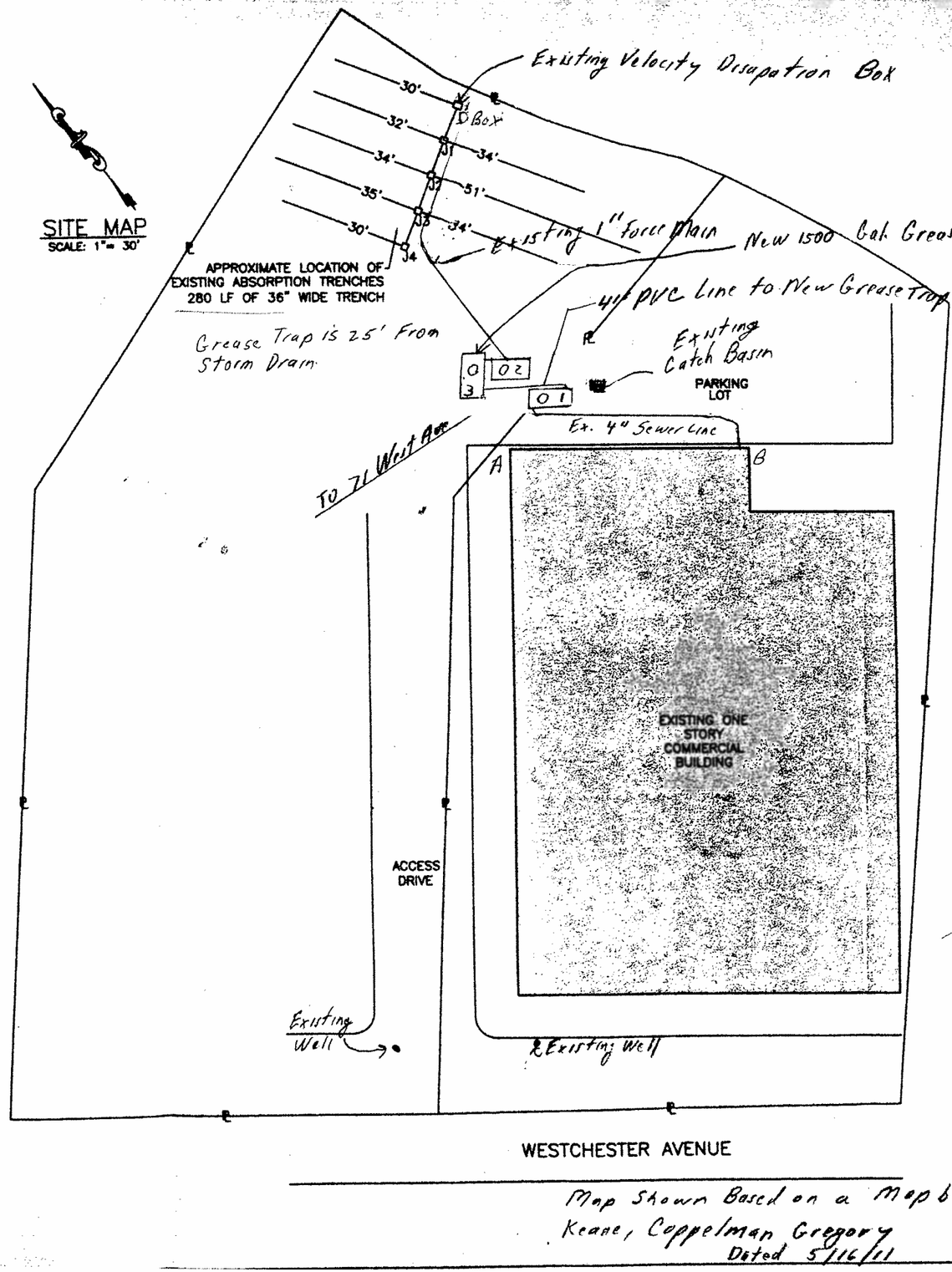
Other Requirements/Conditions: 1500 Gal Grease Trap

I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), in accordance with the standards, rules and regulations, plans filed and the approval issued by the Westchester County Department of Health.

Date: 11/17/12 Signed: _____ P.E./R.A. Seal 40230

Any person occupying premises served by the above system(s) shall promptly take such action as may be necessary to secure the correction of any unsanitary conditions resulting form such usage. Approval of the on-site wastewater treatment system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgment of the Commissioner of Health, such revocation, modification or change is necessary, said modification or change shall be done under the supervision of a licensed Professional Engineer or Registered Architect. With proper maintenance the systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date: 12/3/12 Approved By: _____



1) Flow Date - Pound Ridge Plaza - 69 Westchester Ave - 450 gpd incl. Pizza Rest. 105 gpd
Liquor Store - 71 Westchester Ave - 405 gpd
Total Flow to Infiltrators 855 gpd

2) New Grease Trap 1500 gal - 25' From Existing Catch Basin - Grease Trap shall Be GT 5 x 10 - 15 (Precast) 1500 Gallons - Heavy Duty by Rotondo & Sons Inc.

3) Water Shed - Mianus River Acquarian Water Co.

4) Owner - Pound Ridge Plaza LLC
114 Glendale Rd.
Scarsdale NY. 10583

5) Grease Trap in Pizzeria To Be Cleaned @ least once per 3 days

As Built - 11/17/12
W.C.H.D. Comments 11/14/12 ; 11/15/12

Map Shown Based on a Map by
Keane, Coppelman Gregory
Dated 5/16/11

STATE OF NEW YORK
JOHN PETER ANNICELLI
040230-1
LICENSED PROFESSIONAL ENGINEER

Pound Ridge Plaza
69 Westchester Ave.
Pound Ridge, NY. 10576
"As Built" 1500 gal Grease Trap - PR 2012-12
Nov. 12, 2012 15-9452-12
Scale 1" = 30'

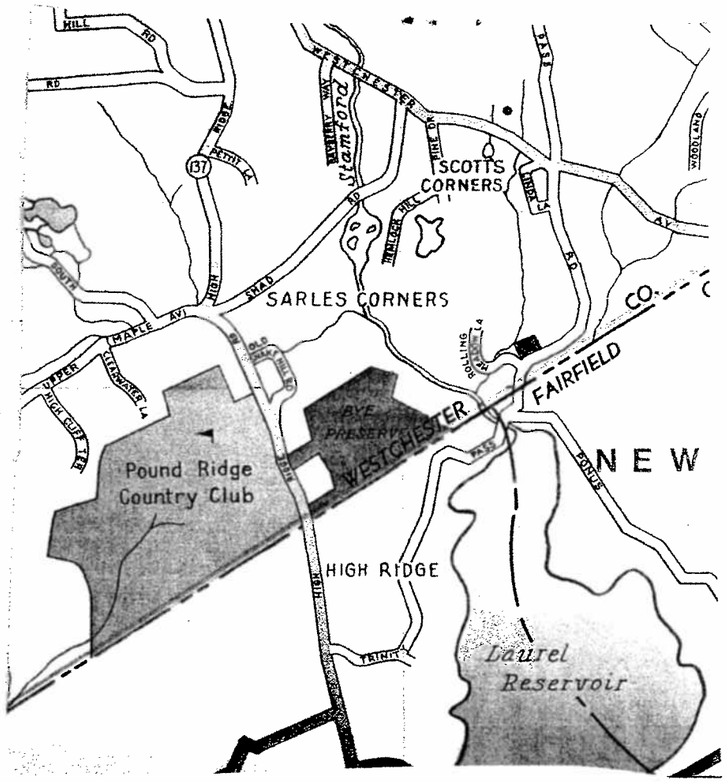
John P. Annicelli, P.E.
Troy La. Bedford, N. Y. 10506
914-273-3682.

NOTE

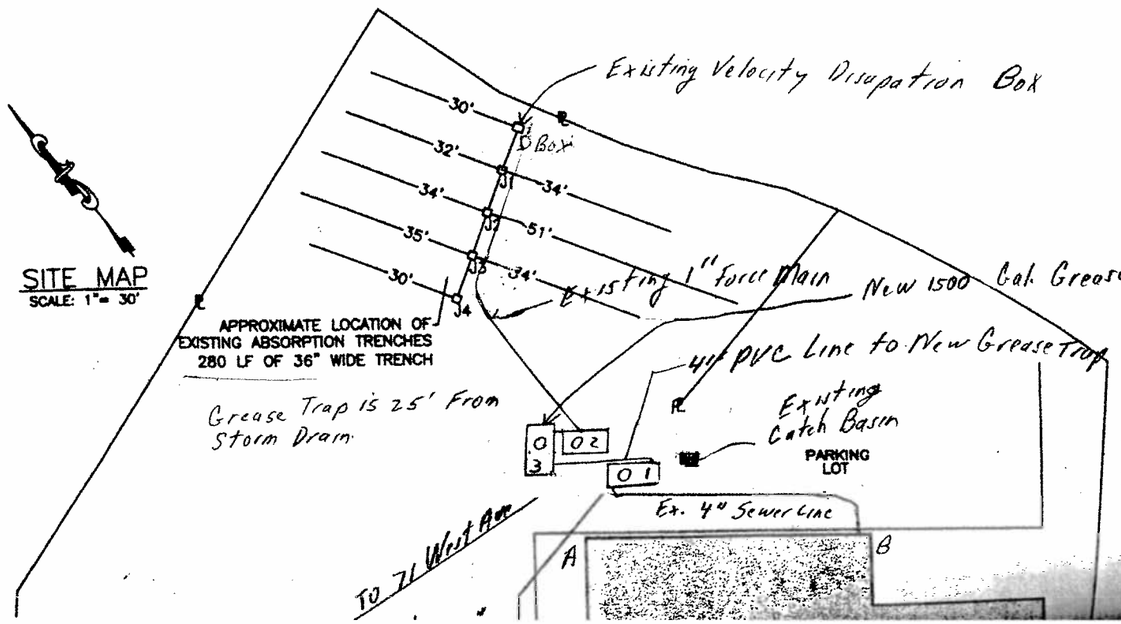
All Water Usuage Meter Readings in Both 69 & 71 Westchester Ave Buildings To Be Submitted to the Westchester County Hea lth Dept

Bureau of Envir. Quality
25 Moore Ave. 1st Fl.
Mt Kisco N.Y.
Attn. F Beck Jr.

Item	A	B
1500 Gal Precast Grease Trap	23'	67'



Vicinity Map N.T.S.



1/ Flow Date - Pound Ridge Plaza - 69 Westchester Ave - 450 gpd incl. Pizza Rest. 105 gpd
Liquor Store - 71 Westchester Ave - 405 gpd
Total Flow to Infiltrators 855 gpd

2/ New Grease Trap 1500 gal - 25' From Existing Catch Basin - Grease Trap shall Be GT 5 x 10 - 15 (Precast) 1500 Gallons - Heavy Duty by Rotondo & Sons Inc.

3/ Water Shed - Mianus River Acquarion Water Co.

4/ Quan

The OWTS has been constructed in accordance with the Rules and Regulations for the Design and Construction of Residential Subsurface Sewage Treatment Systems and Drilled wells in Westchester County, NY.

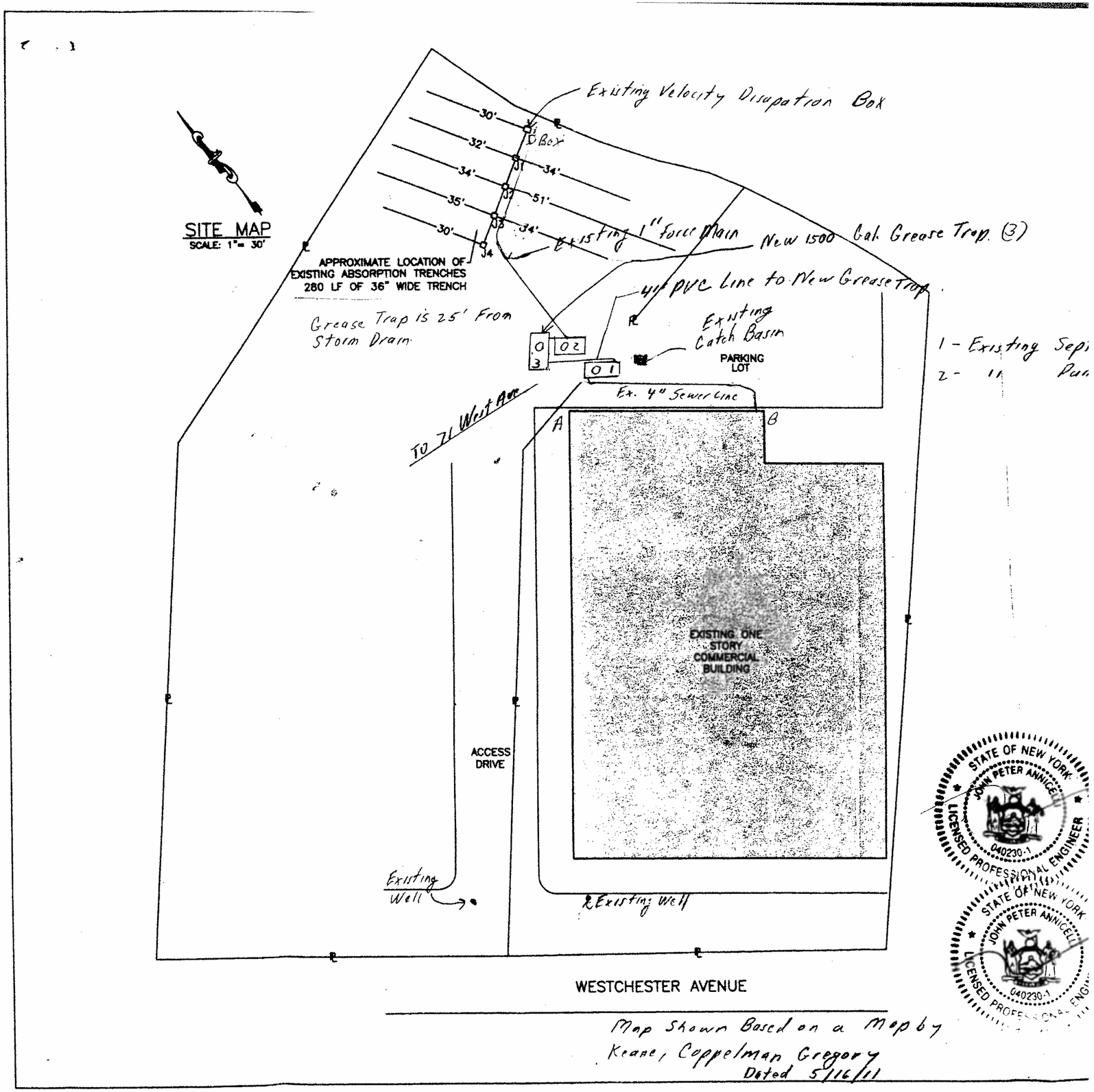
The design professional has supervised the construction of the OWTS and certifies to its installation is in accordance with the approved plans.

ALTERATION OF THIS DRAWING except by a licensed P.E. or Architect or licensed Land Surveyor is illegal. Any alteration by a P.E., Architect or Surveyor must be indicated and bear his seal, signature and date of alteration.

Woodh Fle # PR2012-12

ACCEPTED
AS FINAL PLANS
DEC 03 2012
WEST. CO. DEPT. OF HEALTH
BY

* GREASE TRAP ONLY *



9454-6 85 WESTCHESTER AVE

Westchester gov.com

Westchester County Department of Health
Bureau of Environmental Quality

CERTIFICATE OF CONSTRUCTION COMPLIANCE APPLICATION – OWTS REMEDIATION

WCDH File #: PR 2009-06R Municipality: Pound Ridge

☐ Residential ☑ Commercial Watershed Basin Name: Miaous River (Acquarion Water C

NYCDEP Watershed: Y ☐ N ☐ Joint Review ☐ NYCDEP Log # _____ Delegated Review ☐

Property Information:

Property Name Westchester Ave L.P - North Star Restaurant

Property Address 85 Westchester Ave Pound Ridge, NY Zip Code 10576

TMD: Section 15 Block 94.4 Lot 6 R.S. Lot _____ Lot Area 1/2 Acres

Realty Subdivision: Existing Restaurant Building

Owner Last Name: Westchester Ave Owner First Name: L.P.

St. #: 100 St. Address: So. Bedford Rd Mt Kisco State: NY Zip Code: 10549

Owner Phone #: (914) 760-5858

Building Type: Restaurant # of Bedrooms: _____ Date Construction Approval Issued _____

On-site Wastewater Treatment System (OWTS) Information:

Design Soil Percolation Rate: 10 min./in. Slope of OWTS Area: 12 % Design Flow: 695 gpd

Components:	Existing	New			
Septic Tank:	1200	_____	Gal.		
Pump Chamber: Dose: _____	550	_____	Gal.		
Overflow Tank:	1250	_____	Gal		
Absorption Trench(es):	_____	_____	LF	_____	Ft. Width
Gravelless Trench(es): Infiltrators (Quick 4 High Capacity)	_____	224	LF		
Absorption Pit(s): # of pits _____	_____	_____	Ft Dia.	_____	Sq. Ft.
Galleys:	_____	_____	LF	_____	Sq. Ft.
Flow Diffusers:	_____	_____	LF	_____	Sq. Ft.
75A Alternative: _____	_____	_____			
Junction/Distribution Box(es):	_____	8	Number	7 Box's, 1 D Box	Size
Curtain Drain:	_____	_____	Ft Depth	_____	Ft. Width
ROB Sand/Gravel Fill:	_____	_____	Ft. Depth	_____	Sq. Ft Area
Other: _____	_____	_____	_____	_____	_____

Erosion Control (EC) Completed _____

Separate Sewage Contractor (SSC): Name: (R. Riberio) United Septic Systems, Inc WCDH SSC License # 109

Other Requirements/Conditions: 3' Rof B Fill; Pump Timer (Run 1/2 hrs) Overflow Tank w. High Water Alarm

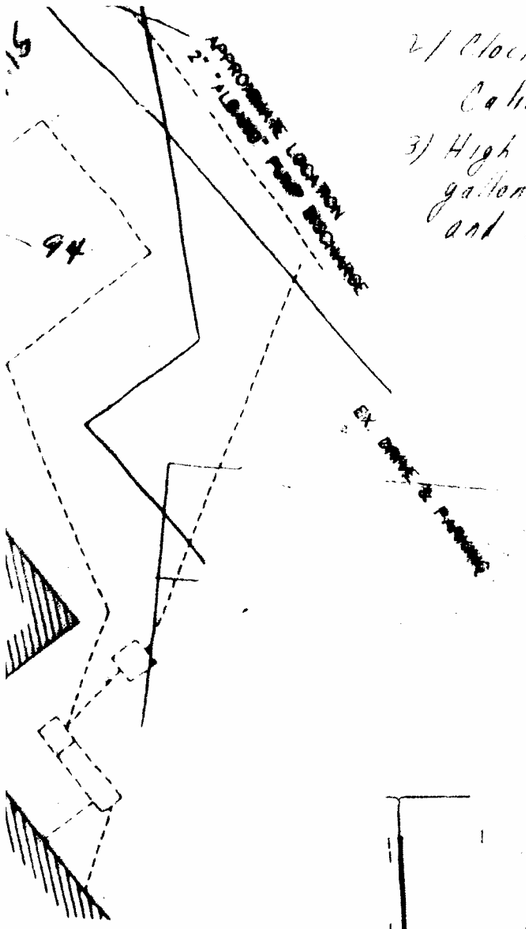
* Daily Water + Sewage Flow Readings must be Submitted to WCDH

I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), in accordance with the rules and regulations, plans filed and the approval issued by the Westchester County Department of Health.

Date: 11/21/09 Signed: _____ P.E./R.A./SSC License # 40230

Any person occupying premises served by the above system(s) shall promptly take such action as may be necessary to secure the correction of any unsanitary conditions resulting form such usage. Approval of the on-site wastewater treatment system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgment of the Commissioner of Health, such revocation, modification or change is necessary, said modification or change shall be done under the supervision of a licensed Professional Engineer or Registered Architect. With proper maintenance the systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date: 12/17/09 Approved By: _____



2/ Clock Timer to pump installed in No Star Electric Room.
Calibrated 4 Pumps each 12 hours 310 gal/ pumping. Centpro Pump Control Panel with Time Clock.
3) High Water Alarm in overflow Tank set to 600 gallons. Alarm light & audible in North Star Restaurant and Overflow Tank to be pumped when Alarm activated
Sonic Corp Level Sensor HL 1000 & Could High Water Alarm

Owner of Property
F. Accoccella
Westchester Properties L.P
North Star Restaurant
85 Westchester Ave.
Pound Ridge, NY. 10576

Mianus River Drainage Basin (Aquarion Water Co)

WCDOH File # PR09-068

ACCEPTED
AS FINAL PLANS
DEC 17 2009
WEST. CO. DEPT. OF HEALTH
BY

MAX DAILY FLOW 695 gpd

JOHN ANNICELLI, P.E.
TROY LANE 914-273-3582
BEDFORD, NEW YORK, 10506

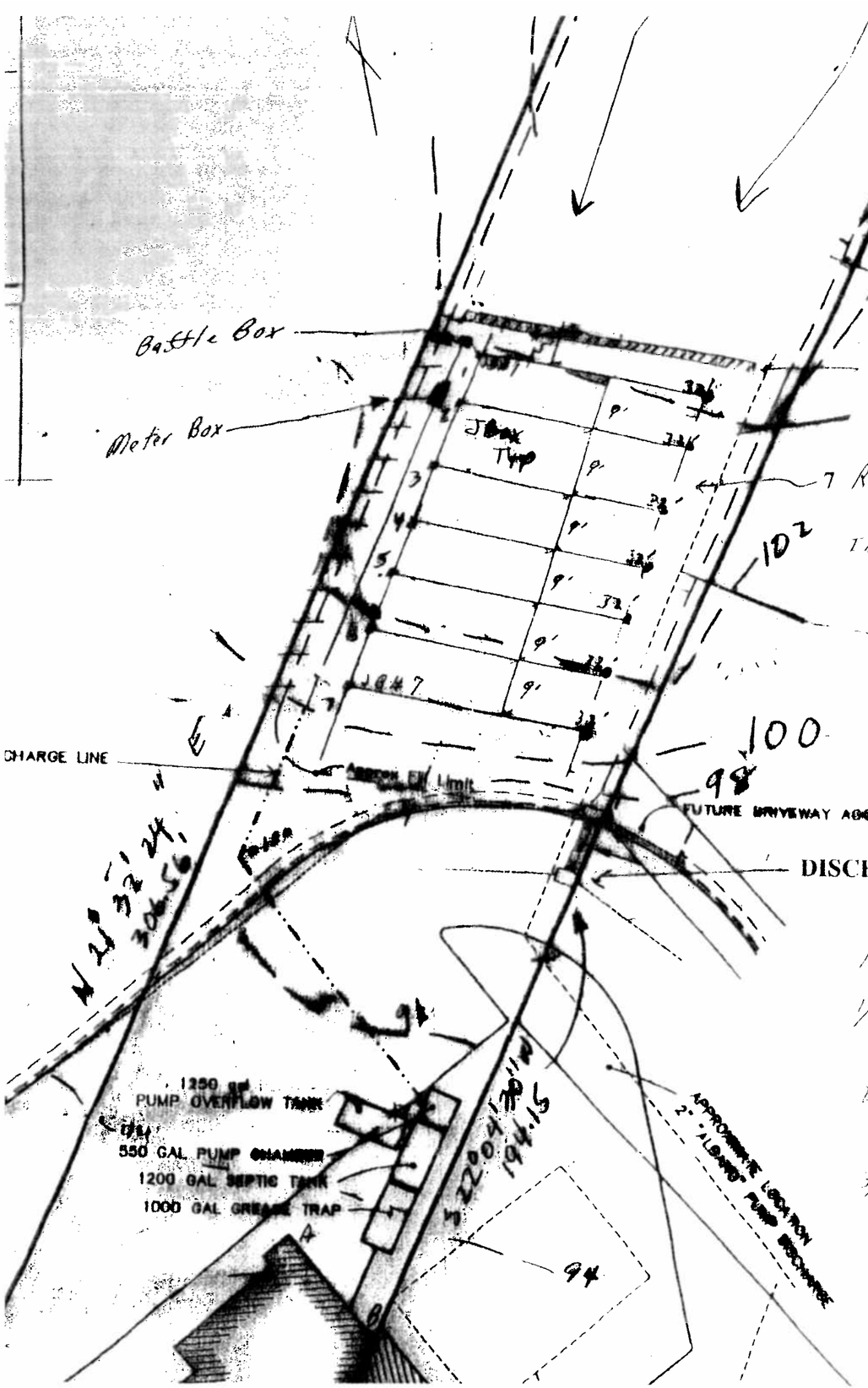
JOHN P. ANNICELLI LICENSED PROFESSIONAL ENGINEER No. 40230 STATE OF NEW YORK

NORTH STAR RESTAURANT **85 WESTCHESTER AVENUE** **POUNDRIDGE (T)** 10576 Sect. 15, Blk. 9454, Lot 6	SCALE: **SHOWN**	LATEST REVISION:
"As Built" **REMEDIAL SSTS PLAN**	DATED: 11/21/09 CHECKED	SHEET NO. **1 OF 1**

SSTS; OWTS-SEPARATE SEWAGE TREATMENT SYSTEM

12/10 W.C.H.D. Comments 12/02

1.5



Notes

1) Pot Scrubbing Sink Connected to Grease Trap
2) Pump Readings to be Faxed to W.C.H.D. Monthly
   1) Water Use - Meter in Bathroom - Daily Readings
   2) Flow To OWTS - Daily Readings
3) The Design Professional Engineer certifies the
   supply line to North Star Grill was inspected and
   not to have any other connections

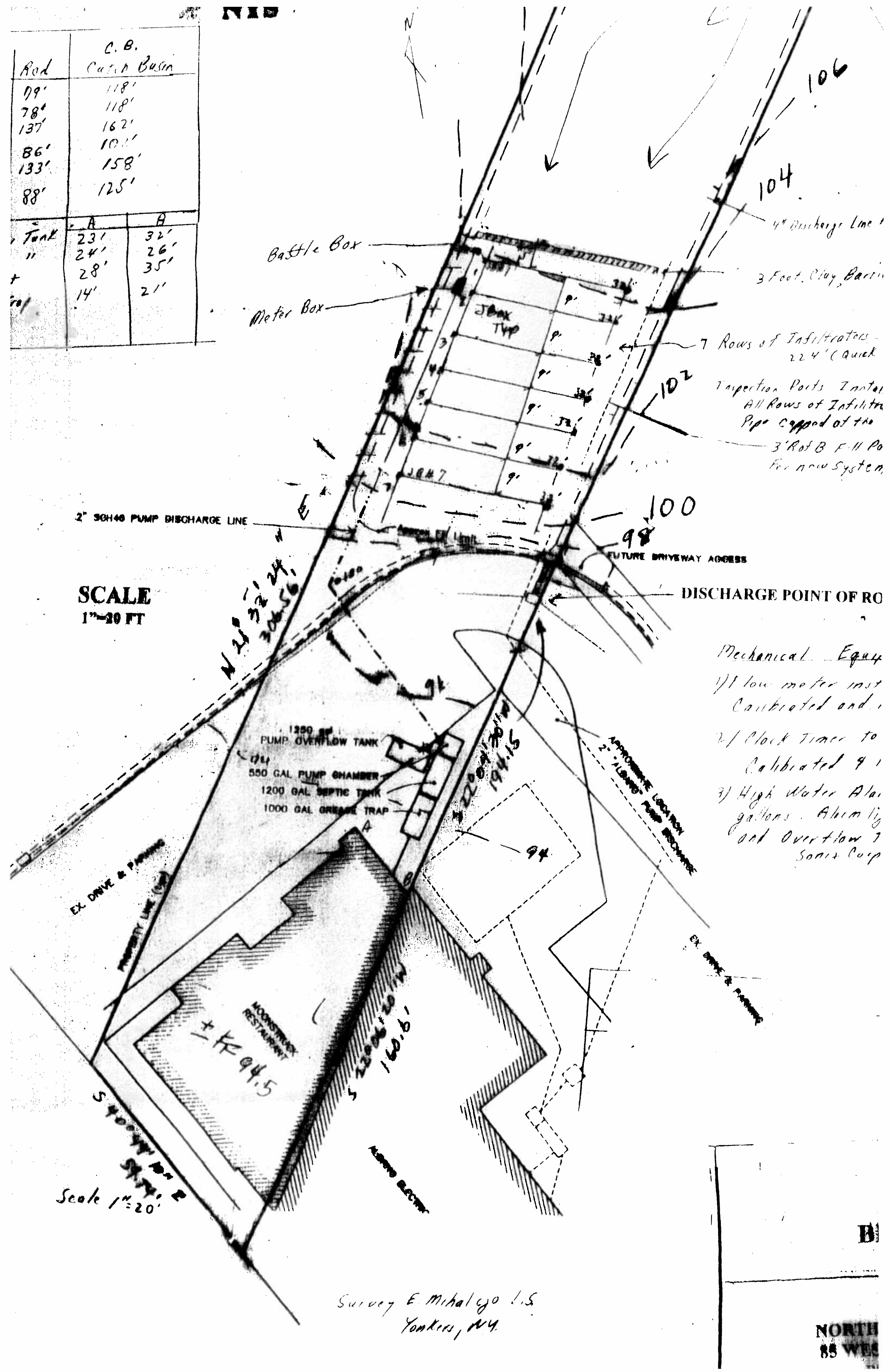
Vol 3472 gal
Capacity 695 gal.

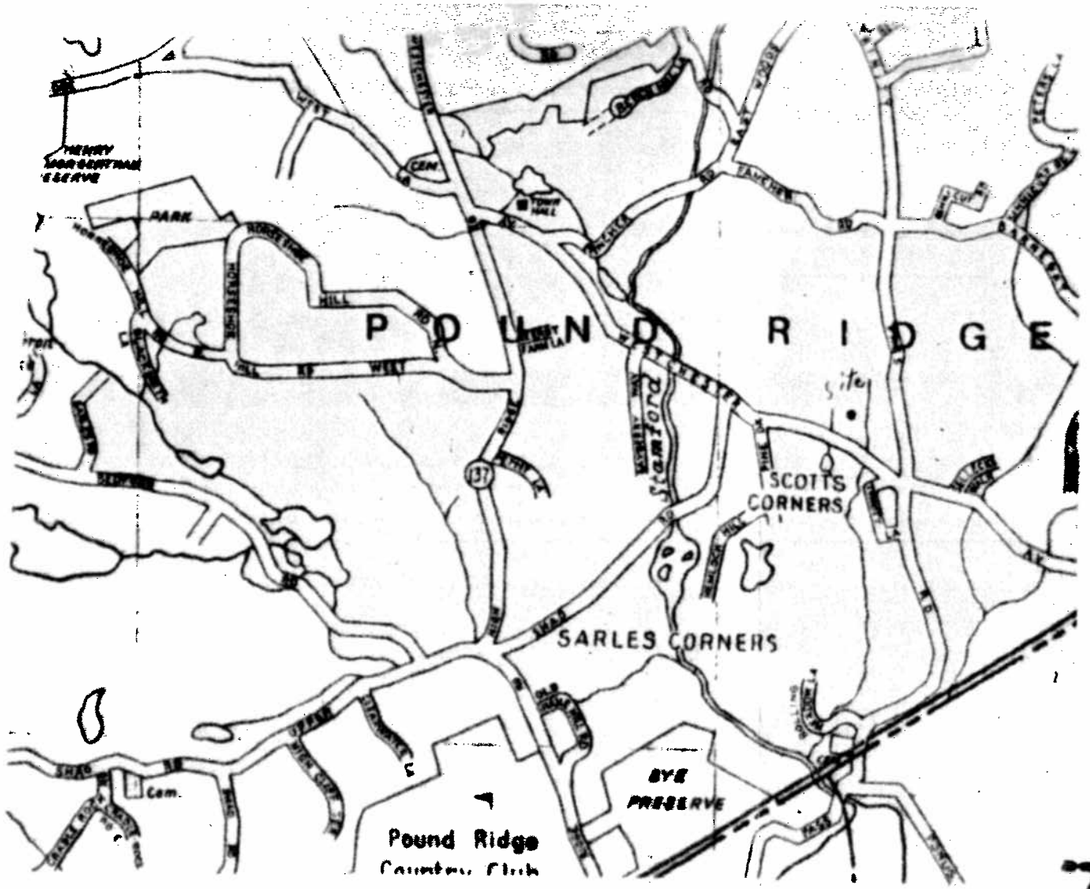
Mechanical Equipment

1) Flow meter installed Mc Crometer Ultra Mag UMO6 (reads 100 gal)
   Calibrated and read in office of North Star Transmitter EA401 (1A-12)
2) Clock Timer to pump installed in No Star Electric Room
   Calibrated 4 Pumps each 12 hours 310 gal / pumping Centripro Pump Control
   Panel with Time Clock
3) High Water Alarm in overflow Tank set to 600
   gallons. Alarm light & audible in North Star Restaurant
   and Overflow Tank to be pumped when Alarm activated
   Sonic Corp Level Sensor HL1000 & Could High Water Alarm

Rod	C.B. Catch Basin
119'	118'
78'	118'
137'	162'
86'	102'
133'	158'
88'	125'

	A	B
Tank	23'	32'
"	24'	26'
	28'	35'
	14'	21'

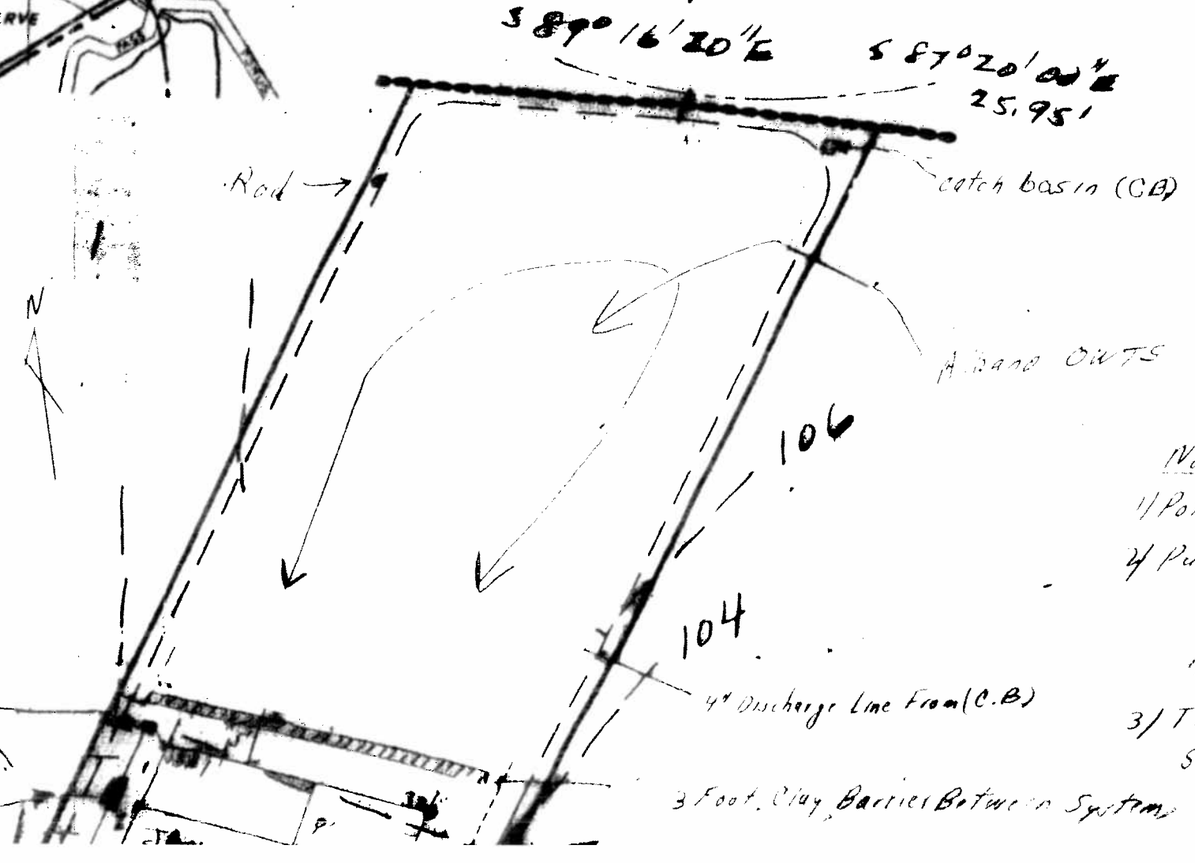




LOCATION MAP
NTS

Item	Rod	C.B. Catch Basin
D Box	99'	118'
J Box #1	78'	118'
" #7	137'	162'
J Box #1 (End)	86'	10 '
#7 (End)	133'	158'
Meter Box	88'	125'

	A	B
1250 Gal Overflow Tank	23'	32'
1200 " Septic "	24'	26'
550 " Pump Pit	28'	35'
1000 " Grease Trap	14'	21'



Note

The Des
the OW
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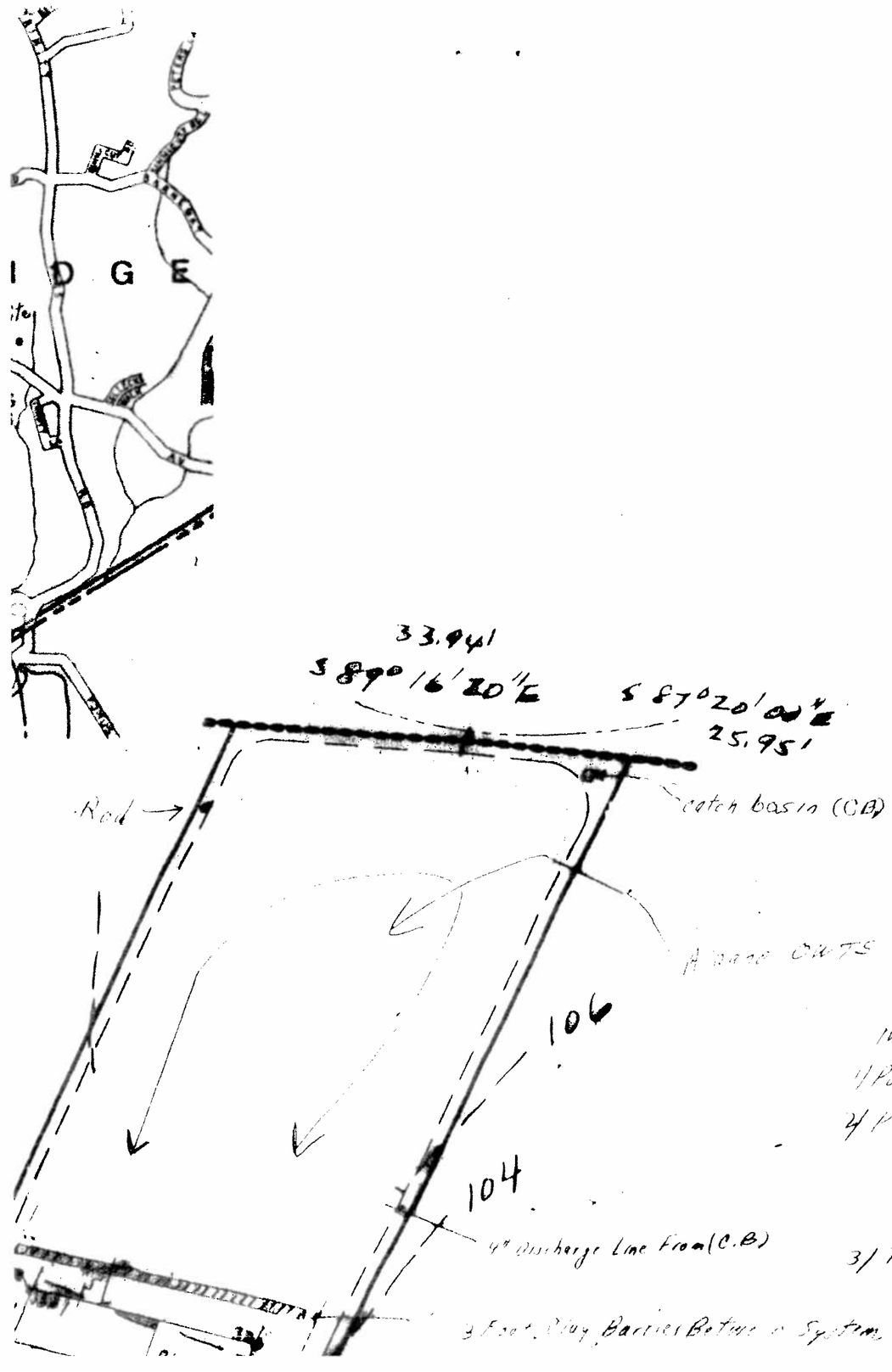
Design
Restora
a) Capa
B) Pum
Pu

C) Slo
Soi
New

Notes

1) Pot Scrubbing Sink
2) Pump Readings to
3) Water use Me
4) Flow To OWTS
3) The Design Profe
Supply Line to Ho
not to hav



Note

The Design Professional has supervised the construction of the OWTS and certifies to its installation and it is in accordance with the approved plans

Design Data

Restaurant Capacity 46 seats @ 35 gal/seat = 1610 gal/day

a) Capacity of infiltrators 695 gal/Day

b) Pump Dose Verified in field 22½" Draw = 302 Gal/Dose
Pump set to pump every 12 hrs therefore max.
Dose to Fields 640 gpd.

c) Slope of OWTS - 12%
Soil Percolation Rate - 10 min/in.
New Infiltrators 224' Volume 3472 Gal

Notes

1) Pot Scrubbing Sink Connected to Grease Trap

2) Pump Readings to be faxed to W.C.H.D. Monthly
a) Water Use - Meter in Bathroom - Daily Readings
b) Flow To OWTS - Daily Readings

3) The Design Professional Engineer certifies the water supply line to North Star Grill was inspected and determined not to have any other connections

9454-7 83 WESTCHESTER AVE - ALBANOS

P.S.D. Town of Pound Ridge Date: Permit 8/ 1/51

Approval 4-25-52

Location: Westchester Avenue

Section_____ Block:_____ Lot: _____

Owner: Alfred Albano, Hickory Lane, Bedford, New York

Builder: Herman Coutermash, R.F.D. #5, Ridgefield, Conn.

House: three stores

Soil test made: 3 minutes

Rate:

Tank capacity: 810 gallons

Material: Masonry

Absorption: 87 linear ft. of 24 in. absorp. trench

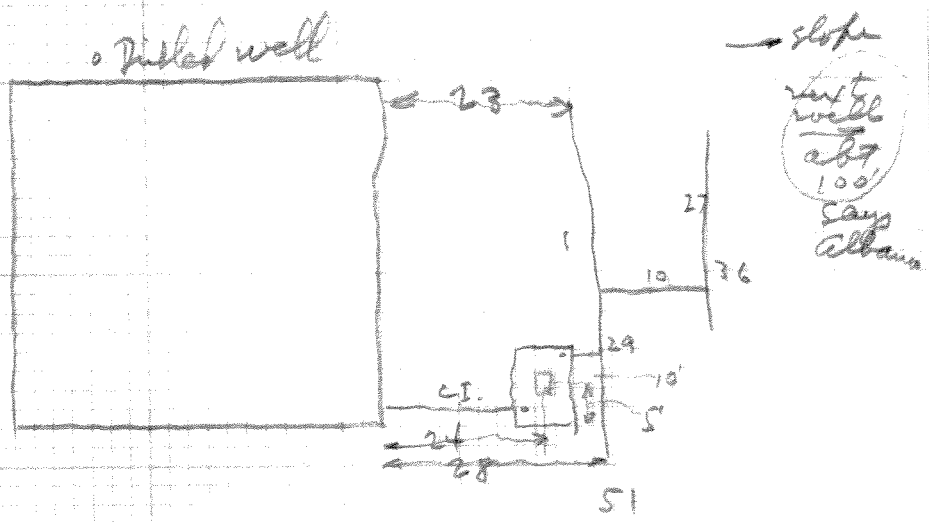
Sketch-Book: A5-422

No.A5-422

Town of Pound Ridge
Alfred Albano, Westchester Avenue
8/ 1/51 - Herman Coutermash - 800 gal. 80' x 24"

Westchester Ave

6.8 × 40 × 4.0 = 810 gal



810 gal masonry S.T.
87 LF × 24" abs
8-23-52

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

William A. Holla, M. D., *Commissioner*
White Plains, N. Y.

Issued August 1, 1951

Sewer
Poundridge

PERMIT FOR SEWERAGE SYSTEM

APPROVAL is hereby given pursuant to Article VII of the Sanitary Code of the Westchester County Health District to Herman Coutermash, Ridgefield, Connecticut (R.F.D. #5)

to construct or provide a sewage disposal system consisting of an 800 gallon masonry septic tank and 80 linear feet of 24 inches wide absorption trench

to serve three commercial stores owned by Alfred Albano, Westchester Avenue, Pound Ridge, New York.

4/25/52

for an occupancy of persons, provided that

I. *No portion of the system shall be backfilled or covered until inspected.* Inspections are made during regular working hours only. Twenty-four hours' notice is required.

II. The system shall not be used until it has been constructed in an approved manner, inspected and backfilled, and the written final approval thereof shall have been obtained from the Department of Health. (See Item VIII).

III. Additional or more adequate facilities shall be provided whenever it is determined by the Commissioner of Health that such facilities are necessary, for which an additional permit shall be obtained.

IV. This system shall be maintained and operated in complete conformity with rules and regulations for the protection of public water supplies, all applicable laws, local ordinances, and the provisions of the Sanitary Code, existing or hereafter enacted.

V. When sludge and scum shall so accumulate in any tank as to occupy a depth at any point of more than one quarter of the liquid depth of the tank, they shall be removed and disposed of in accordance with the requirements of the Sanitary Code, and so as to create no nuisance.

VI. A connection to a public sanitary sewer shall be made whenever such sewer shall become available.

VII. This permit remains the property of the Department of Health and is revocable at any time or subject to modification or change whenever the Commissioner of Health shall deem necessary.

VIII. It shall be the responsibility of the person obtaining this permit to deliver a true copy thereof together with a copy of the final approval to the owner of the premises served by this system before this system is placed in use.

[illegible]:tf

Commissioner of Health

S. D. 5 9-50—21767

cc: Stamford Water Co.
Everett B. Knapp, Town Clerk

File 7-31-51 OTC

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
William A. Holla, M. D., Commissioner

DIVISION OF SANITATION
R. M. McLaughlin, P. E., Director
H. M. Gray, P.E., A. R. Secor
R. H. Cummings, P. E., R. W. Germeroth
Sanitary Engineers

Application Rec'd.....
Permit Issued.....
Final Approval.....

APPLICATION FOR RESIDENTIAL SEWAGE DISPOSAL PERMIT
(Please type or print)(See Rules & Reg.Form S.D.22)

To the Commissioner of Health:

Application is hereby made for a permit to construct a sewage disposal system to serve....3..COMMERCIAL STORES.....
(Number, type, and use of building to be served.)

1. Owner..ALFRED ALBANO.....Mail Address HICKORY LANE, BEDFORD, N.Y.
Note: (Owner must receive permit and approval. Check here for extra copy)

2. Property at WESTCHESTER AVE., POUND RIDGE, NEW YORK
(Street) (Village, Town, City)

3. Tax Map Location: Section.....Block.....Lot.....Subdivision.....

4. Construction: New, Replacement; Proposed Future Building.....NEW.....
(Expansion attic, etc.)

5. Lot size..100 X 150...No. of rooms 3 STORES.....Bedrooms.....Bathroom.....3..LAVATORIES
~~Extra lavatories~~.....Special Fixtures.....Maximum Future Occupancy.....

6. Source of water supply..ARTESIAN WELL.....
Watershed on which system is located.....
Distance to nearest watercourse.....Owner's wells.....Adjacent wells 150 feet

7. Daily Sewage Flow: No. of persons.....6...x 75 gals= ..450...gals.per day. 2 PER STORE

8. Settling treatment: Septic tank; liquid capacity below flow line...900..gals.
Material..CONC.....inside dimensions: Length..7'-0"..width..3'-6"..effective depth..4'-0"
Minimum liquid capcity - 500 gallons; 200 gallons per bedroom.

9. Soil absorption test..2..minutes per inch drop.....absorption rate. ...
(MUST BE MADE BY APPLICANT AT SITE) (from table)

10. Absorption area..200...=.....sq.ft.
gals.waste(No.7) Absorption rate from table bottom area

11. Absorption treatment: Trenches 24..inches wide.....100..linear feet.
Gravel..10..cu.yds., to depth of.....inches below bottom of pipe.
Leaching pits: number.....outside dimensions.....depth below flow line....;
wall area below flow line.....material.....built-up, rock-filled.
Absorption area: trenches.....leaching pits.....total..200...sq. ft.

Signature Herman Contumas.....Title Contractor.....
(By owner or person presenting owner's written authorization)

Mail permit to..Ridgefield Conn. R.F.D. #5.....

SKETCH REQUIRED showing all features of property, wells, streams and sewage disposal system. Failure to secure permit before construction of the County Sanitary Code and is a misdemeanor.
INSPECTION OF COMPLETED SYSTEM BEFORE BACKFILLING IS REQU

S. D. 7 - 9/50

Westchester gov.com

ONSITE WASTEWATER TREATMENT SYSTEM (OWTS)
REPAIR AND REMEDIATION DATA FORM

Municipality: _____

Property Mailing Address (No. & Street): 83 WESTCHESTER AVE.

Town/ Village: POUND RIDGE State: NY Zip: 10576

Owner: ALBANO REALTY

Owner Mailing Address (No. & Street) (if different): _____

Town/ Village: _____ State: _____ Zip: _____

Property Use: [] Single Family [] Multi-Family [] Industrial [✓] Commercial

[] Other - Describe: _____

OWTS Remediation ☐ **WCDH File #:** _____

Remediation shall mean installation, replacement, or expansion of onsite wastewater treatment system components to correct an OWTS failure, or impending failure, resulting in, or that may result in, the discharge of sewage or domestic wastes or trade wastes or offensive material on to the surface of the ground, into a storm sewer, or into a watercourse or water body. Remediation shall not include repairs, as defined above, to correct an OWTS failure.

OR

OWTS Repair ☑ **Complete the following information.**

Repair shall mean the repair, maintenance, and replacement in kind and in situ; of broken, damaged, or worn onsite wastewater treatment system components.

Number of Bedrooms_____ Number of Bathrooms:_____ Water Supply Type: Public ☐ Well ☐

Please note below only components that have been repaired or replaced.

Repaired	Replaced	
☐	☐	House Sewer or other Solid Pipe(s)
☐	☐	Septic Tank#1 Size(gallons): _____
☐	☐	Septic Tank#2: Size (gallons): _____
☐	☑	Junction/Distribution Box(es)
☐	☐	Sewage Pump(s) or other Dosing Equipment
☐	☐	Absorption Trench Length 320 ft. X Trench Width _____ ft
☐	☐	Seepage Pit(s)
☐	☐	Galley(s)
☐	☑	Gravelless Trench(es)
☐	☐	75-A Alternative System
☐	☐	Other Advanced Alternative System
☐	☐	Other System Component(s) - Describe: _____

DRAW BUILDING AND LOCATION OF WORK PERFORMED ON BACK OF THIS FORM

☐ **Entire System Replaced**

Contractor's Name (print): UNITED SEPTIC & EXCAVATION Date Repair/Remediation Completed: 6-18-14

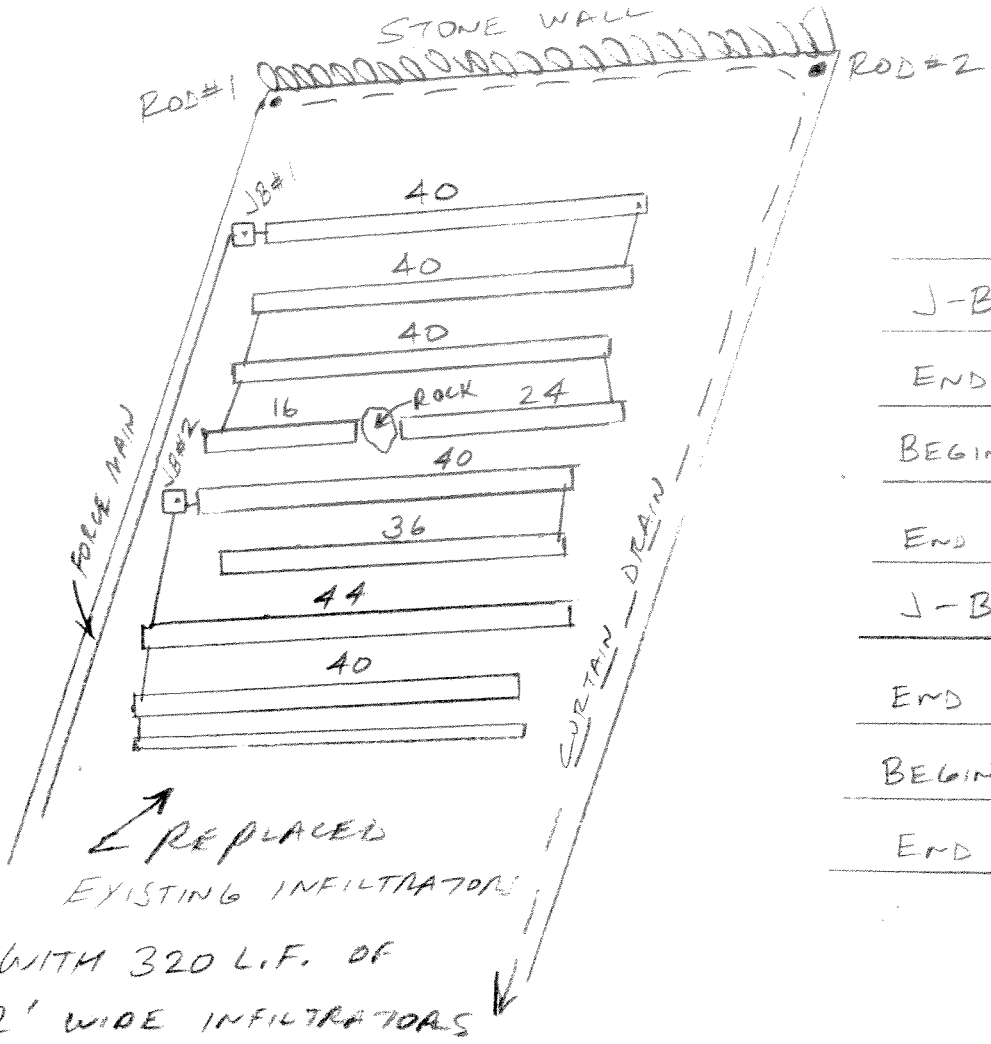
Contractor's Signature: _____ License No.: 109

Upon completion please remit to:

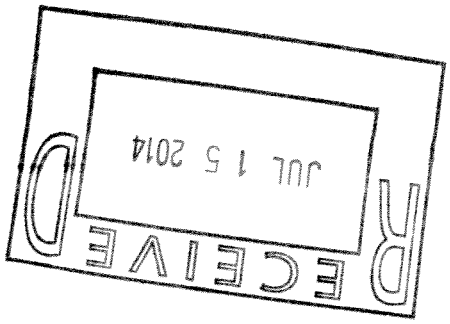
Westchester County Department of Health- BEQ
25 Moore Ave., 1st Floor
Mt. Kisco, NY 10549
Attn: Patricia Tornello-Adams

(1/12)

Repair File #:REP 1106
(WCDH Staff only)



	ROD #1	ROD #2
J-BOX #1	13½	63½
END #1	39½	23
BEGIN #4	35	76
END #4	49	42
J-BOX #2	42½	81½
END #5	48½	49
BEGIN #8	65	99
END #8	64	71



SEPTIC REPAIRS

ALBANO APPLIANCE

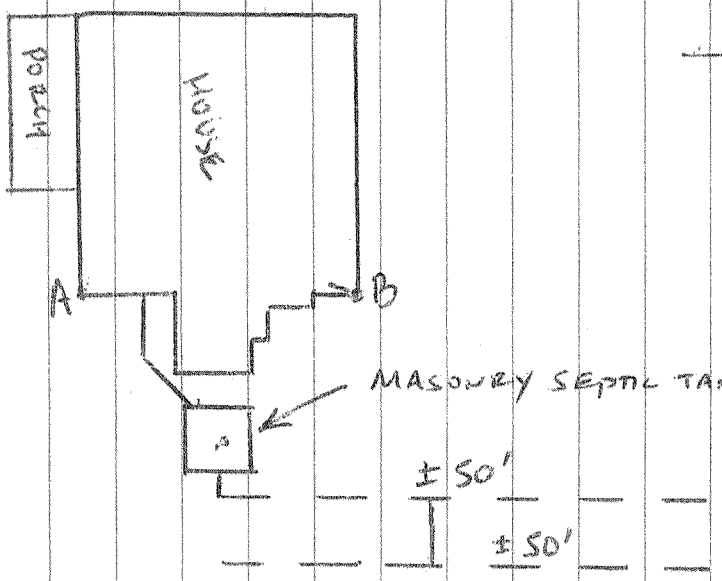
83 WESTCHESTER AVE.

POUND RIDGE, NY

6-18-14

9454-8 79 WESTCHESTER AVE

	A	B
SEPTIC TANK	20½	20
BEGIN OF FIELD#1	24	22½



AS BUILT INFORMATION PROVIDED BY
UNITED SEPTIC OF BEDFORD HILLS NY.

SEPTIC LOCATION

DYNAX CORP

79 WESTCHESTER AVE.

POUND RIDGE, NY

11-13-2015

9455-10 22 WESTCHESTER AVE

99-34-28 | 5 E-77/5 H1-32

eparate Sewage System Aux.

Round Ridge
Municipality

PR 65-5
W. C. D. H. File #

ERTIFICATE OF COMPLETION

xated at S/W/ Westchester Ave E of Scotts Cor Section-Ward 2

wner Mildred B Kaufman Block 10

ystem built by Harry Kaiser Jr. Lot 9455 Job #

uilding type Residence Permit issued 13 Jan 65 Guarantee

ystem consists of 500 Gal. masonry, metal septic tank 75 Lineal feet X 3 Width trench

rea drainage

inal grading & seeding: Completed Waiver Escrow

he separate sewage system serving the above premises was constructed essentially in accordance with plans filed with this Department and the terms of a Permit issued on the above date and otherwise as hown on plans of the completed work, copy of which is attached. Any person occupying the premises served by this system shall promptly take such action as may be necessary to secure the correction of any insanitary condition resulting from such usage. This approval is revocable as soon as a public sanitary sewer shall become available and is subject to modification or change when in the judgement of the Commissioner of Health such revocation, modification or change shall be necessary. TRUE COPIES OF THE PERMIT, PLAN OF THE SYSTEM AND OF THIS CERTIFICATION, AND ANY CHANGES THEREOF SHALL BE MAINTAINED ON THE PREMISES AT ALL TIMES AND SHALL BE SHOWN TO ANY REPRESENTATIVE OF THE COMMISSIONER OF HEALTH UPON DEMAND.

With proper maintenance this system can be expected to function satisfactorily and is not likely to create an unsanitary condition.

FILE COPY

Date 13 July 65 William A. Brumfield Jr., M. D., Commissioner By J E Hauld

D 47.60 Westchester County Department of Health

Stamped

X Aux Separate Sewerage System X Private Water Supply

ADDITION TO EXISTING HOUSE

POUND RIDGE N.Y.
Municipality

CONSTRUCTION PERMIT

WCDH File No. PR 65-5

Located at WESTCHESTER AVE - 1/4 MI E. OF SCOTTS COR. Section 2 Block 10

Subdivision ~~KAUFMANN, MILDRED B.~~ Lot 9455 Job

Owner KAUFMANN, MILDRED B. Address WESTCHESTER AVE P.R. Lot Area 6 ACRES

Building Type FRAME DWELLING No. of Bedrooms 4 Total Habitable Space 1985 Square Feet

Separate Sewerage System to consist of 500 Gal. Masonry, ~~Metal~~ Septic Tank 75 lineal feet X 3X15 width trench

To be constructed by HARRY C. KAISER JR INC. Address 878 VALLEY ROAD NEW CANAAN, CONN

Water Supply EXISTING DRILLED WELL Public Supply from

Private Supply to be drilled by Address

Other Requirements

Stamped

FILE COPY

I represent that I am wholly and completely responsible for the design and location of the proposed system(s); 1) that the separate sewage disposal system above described will be constructed as shown on the approved plan or approved amendment thereto and in accordance with the standards, rules and regulations of the Westchester County Department of Health, and that on completion thereof a "Certificate of Construction Compliance" satisfactory to the Commissioner of Health will be submitted to the Department, and a written guarantee will be furnished the owner, his successors, heirs or assigns by the builder, that said builder will place in good operating condition any part of said sewage disposal system during the period of two (2) years immediately following the date of the issuance of the approval of the Certificate of Construction Compliance of the original system or any repairs thereto; 2) that the drilled well described above will be located as shown on the approved plan and that said well will be installed in accordance with the standards, rules and regulations of the Westchester County Department of Health.

Date 15 JAN. 65 Signed Mildred B. Kaufmann

APPROVED FOR CONSTRUCTION: This approval expires one year from the date issued unless construction of the building has been undertaken and is revocable for cause or may be amended or modified when considered necessary by the Commissioner of Health. Any change or alteration of construction requires a new permit. Approved for disposal of domestic sanitary sewage, and/or private water supply only.

Date 15 Jan 65 William A. Brumfield, Jr., M. D., Commissioner By J E Hauld

SD 46.64 Westchester County Department of Health

Tel. WOodward 6-2828

PR65-5

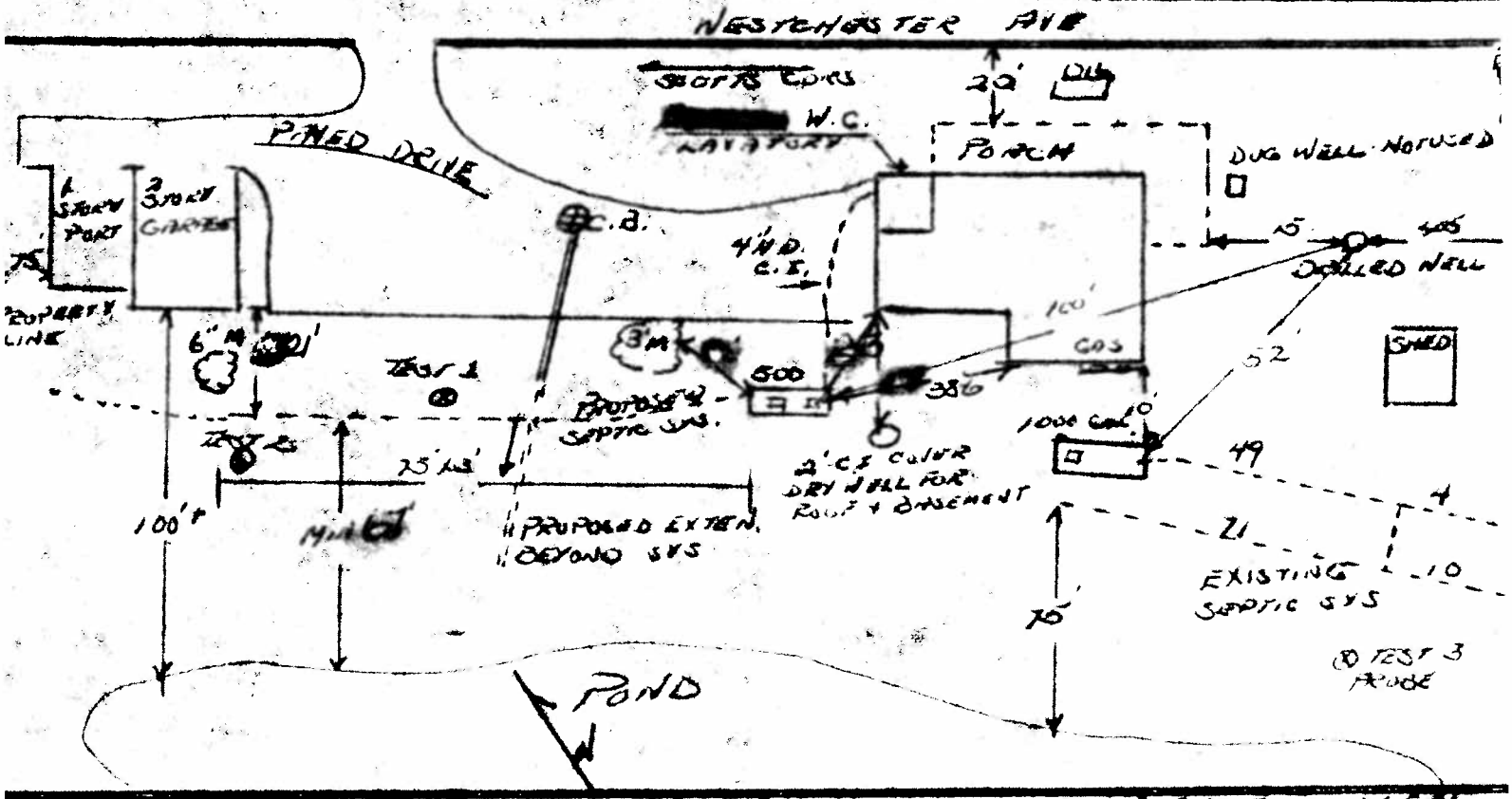
APPROVED
JUL 13 '65
West. Co. Dept.
of Health
By [signature]

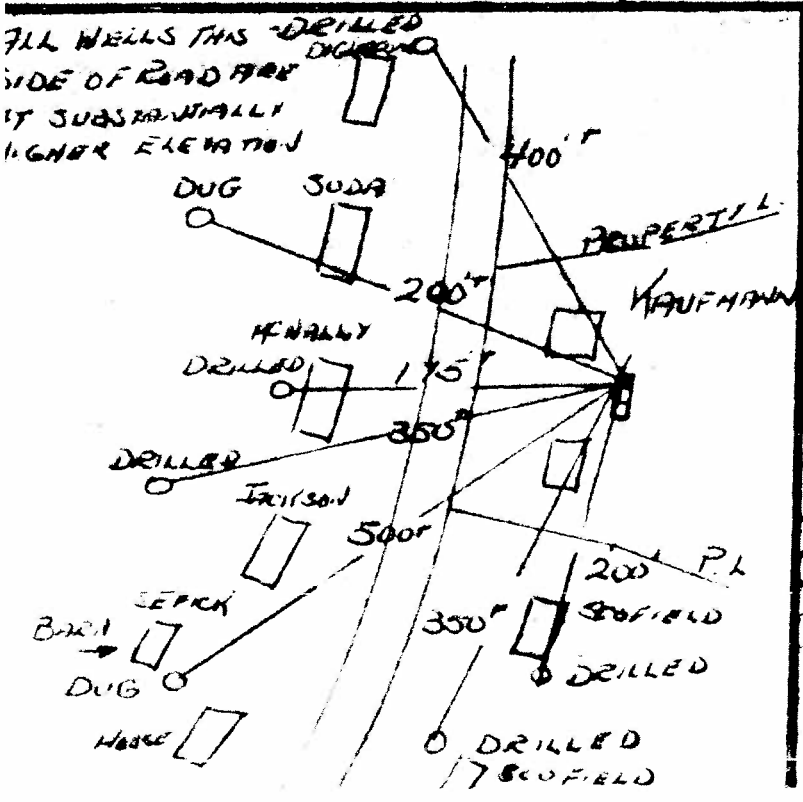
Designs
Maintenance
Installation
Cleaning
Septic Tanks

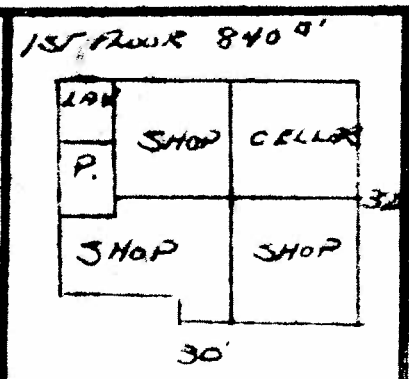
Harry C. Kaiser, Jr.

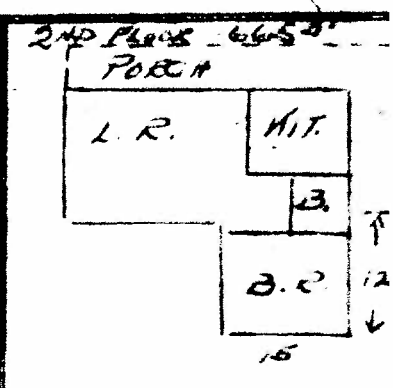
DRAINAGE & SEWAGE CONTRACTOR
VALLEY ROAD — NEW CANAAN, CONN.

KAUFMANN MILDRED D WESTCHESTER AVE POUNDRIDGE + SEC 2 - BLOCK 10 - LOT 9-52
EXISTING SEPTIC SYS + PROPOSAL FOR W.C. + LAV. - ELEC. OVERHEAD - 2 GAS TANKS SURFACE -
5-ACRE AREA

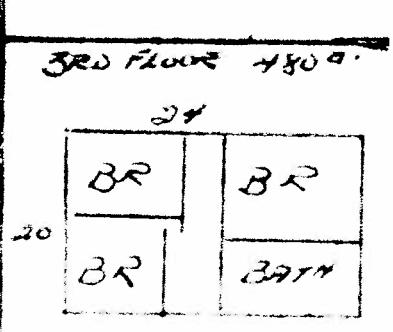








ELEC OVERHEAD
ROOF - DRIVE DRAINS TO GRADE + DRYWELLS
GAS 2 SURFACE TANKS
WELL WATER ELE (HAND)
NO CURTAIN DRAINS
NO CONTOUR CHANGE
PAVED AREA AS SHOWN



COUNTY OF WESTCHESTER DEPARTMENT OF HEALTH - Division of Environmental Sanitation

DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM FILE NO. PR65-5

Located At (Street) 1/4 MI EAST SCOTTS CORS WESTCHESTER AVE Municipality POUND RIDGE N.Y.
(Indicate nearest cross street)

Owner KAUFMANN, MILDRED B. Sec. 2 Block 10 Lot 9455

Present Mail Address WESTCHESTER AVE POUND RIDGE N.Y.

Watershed STAMFORD CONN. Lot Area 6 A S.D.Usable Area 5000 o+

Water Supply: Drilled X Driven ____ Dug Well ____ : Depth ? Public ____

No. of Rooms 10 Bedrooms 4 Future: Yes ____ No X Other ____

Septic Tank Capacity (From Table, Item 5.1) 500 Gals. Masonry X Metal ____

Soil Rate Used ____ Min/1" Drop: Soil Perc. Test Data ✓ Test Pit Data ✓

Soil Rate Approved ____ Sq.Ft./Gal. Checked By ____ Date ____

Absorption Area Provided By ____ L.F. x 24" ____ 36" ____ width trench

TRIPLICATE PLANS AND PROFILES OF SEWERAGE SYSTEM REQUIRED DRAWN TO SCALE OF NOT MORE THAN 1" TO 20' HORIZONTAL AND 1" to 10' VERTICAL FLOOR PLAN OF BUILDING (REQUIRED)

PLOT PLAN

Check off items required to be shown on plans

✓ 1. Identification (Name-Title)
✓ 2. Scale, north point, date
✓ 3. SEWAGE DISPOSAL SYSTEM:
____Dimensions; ____Sewer Line
____Septic Tank; ____Distr.Box
✓ ____Trenches; ____Spacing
____Other.
DISTANCES (Nearest Foot) TO:
✓ 4. Street lines, name street
✓ 5. Property Lines
✓ 6. Buildings and Structures
✓ 7. Driveways, paved areas
✓ 8. Watercourses, ponds, etc.
✓ 9. Storm and Ground Water Disposal
____Street; ____Area; ____Roof;
✓ ____Footing; ____Cellar; ____Other
✓ 10. Drilled wells within 500 ft.
✓ 11. Dug wells or springs within 500'
✓ 12. Curtain Drains to discharge pt.
✓ 13. Water, oil, gas, electric services and tanks (underground)
✓ 14. Trees, over 6" diameter, when grown
✓ 15. Contours, before & after grading in or above sewage disposal area.

SEPARATE SEWERAGE DISPOSAL SYSTEM PROFILE

✓ 1. Identification
✓ 2. Scales, date
✓ 3. Section - main system
✓ 4. Pipe Invert Elevations
____Building; ____ Tank;
____Distr.Box; ____ Trenches;
✓ ____Curtain Drain.
✓ 5. Ground Level Elevations (Before and After Grading)
____ Building; ____ Tank;
____ Distr. Box; ____ Trenches;
____ Curtain Drain.
✓ 6. Ground Water Elevation
✓ 7. Ledge Rock Elevation
✓ 8. Flow Line Elevations
____ Watercourses
✓ ____ Adj. ponds, etc.
✓ 9. Well Water Elevation
✓ 10. Curtain Drain Discharge Elevation

Reviewed By ____

Date ____

DATA SUBMITTED BY (Sign) Harry C. Kaufmann Jr. for Harry C. Kaufmann Jr. Pres.
OWNER ____ BUILDER ____ CONTRACTOR X
IF CORPORATION, GIVE NAME AND TITLE (Form SD28 Required) ____
MAIL ADDRESS 878 Valley Road New Canaan, Conn. TELEPHONE NUMBER 966 2828

S.D.7.1 - 1962

- Location M. B. KAUFMANN - WESTCHESTER AVE POUND RIDGE

PR65-5

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Column		1	2	3	4	5	6	Col 3 ÷ Col 6
Hole No.	Run No.	Clock Time Start	Clock Time Stop	Elapsed Time Min	Depth to Water Start	Depth to Water Stop	Water Level Drop-in	Soil Rate Min/in drop
1	1	2:10	3:PM	50	26"	16	7	7
	2	3:05	3:55	50	26	16¼	5	10
	3	4:05	4:25	20	26	15¼	3¼	6
	4							
	5							
2	1	PROBED TO 54" - GROUND WATER AT 48"						
	2							
	3							
	4							
	5							
3	1	PROBED TO 27" - HARD PACKED CLAY						
	2							
	3							
	4							
	5							

Notes:
1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.

2) Depth measurements to be made from top of hole.

Tests made by Harry C Hausen Jr (Signature) Date 14 Jan 65

S-46-A (9-18-62)

Hole #1 Saturated - Water absorbed 35 MIN.

Job Location . . . . . .

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Division of Environmental Sanitation

PR65-5

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO. 1	HOLE NO. 2	HOLE NO. 3	HOLE NO.
G. L.	SOD	PROBED TO 4'-6" SOD	PROBED TO 27"	
6"	TOP SOIL			
12"				
18"	LOAM			
24"	LOAM TO CLAY MIX.			
30"			HARD PACKED CLAY	
36"				
42"				
48"		GROUND WATER		
54"		GROUND WATER		
60"				
66"				
72"				
78"				
84"				

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED

INDICATE LEVEL TO WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED

TESTS MADE BY Harry C. Kaiser Jr. . . . . DATE 14 Jan 65 . . . . . .

S.D. 27.6 8.14.63

9455-21 34 WESTCHESTER AVE

1 Separate Sewerage System ____ Private Water Supply

Municipality

WCDH File No. PR 73-30 403 Ht. 7

CERTIFICATE OF CONSTRUCTION COMPLIANCE

Located at ____ Section ____ Block ____

Owner ____ Lot ____ Job ____

Separate Sewerage System built by ____ Address ____

Consisting of ____ Gal. Masonry, Metal Septic Tank ____ lineal feet X ____ width trench

Other requirements ____

Water Supply: ____ Public Supply From ____

____ Private Supply Drilled By ____ Address ____

Building Type ____ Number of Bedrooms ____ Date Permit Issued ____

Erosion Control Completed ____ Waived ____

Other Requirements ____

I certify that the system(s) as listed serving the above premises were constructed essentially as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans filed, and the permit issued by the Westchester County Department of Health.

Date ____ Certified By ____

Any person occupying premises served by the above system(s) shall promptly take such action as may be necessary to secure the correction of any unsanitary conditions resulting from such usage. Approval of the separate sewerage system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgment of the Commissioner of Health, such revocation, modification or change is necessary.

With proper maintenance these systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date ____ William A. Brumfield, Jr., M. D., Commissioner By ____

SD 47.64 Westchester County Department of Health

1 Separate Sewerage System 1 Private Water Supply

Municipality

CONSTRUCTION PERMIT

WCDH File No. PR 73-30

Located at ____ Section ____ Block ____

Subdivision ____ Lot ____ Job ____

Owner ____ Address ____ Lot Area ____

Building Type ____ No. of Bedrooms ____ Total Habitable Space ____ Square Feet

Separate Sewerage System to consist of ____ Gal. Masonry, ~~Metal~~ Septic Tank ____ lineal feet X ____ width trench

To be constructed by ____ Address ____

Water Supply: ____ Public Supply from ____

____ Private Supply to be drilled by ____ Address ____

Other Requirements ____

I represent that I am wholly and completely responsible for the design and location of the proposed system(s); 1) that the separate sewage disposal system above described will be constructed as shown on the approved plan or approved amendment thereto and in accordance with the standards, rules and regulations of the Westchester County Department of Health, and that on completion thereof a "Certificate of Construction Compliance" satisfactory to the Commissioner of Health will be submitted to the Department, and a written guarantee will be furnished the owner, his successors, heirs or assigns by the builder, that said builder will place in good operating condition any part of said sewage disposal system during the period of two (2) years immediately following the date of the issuance of the approval of the Certificate of Construction Compliance of the original system or any repairs thereto; 2) that the drilled well described above will be located as shown on the approved plan and that said well will be installed in accordance with the standards, rules and regulations of the Westchester County Department of Health.

Date ____ Signed ____

APPROVED FOR CONSTRUCTION: This approval expires one year from the date issued unless construction of the building has been undertaken and is revocable for cause or may be amended or modified when considered necessary by the Commissioner of Health. Any change or alteration of construction requires a new permit. Approved for disposal of domestic sanitary sewage and/or private water supply only.

Date ____ Jack J. Goldman, M. D., Commissioner By ____

SD 47.66 Westchester County Department of Health

FILE COPY

COUNTY OF WESTCHESTER DEPARTMENT OF HEALTH - Division of Environmental Sanitation

DESIGN DATA SHEET - SEPARATE SEWAGE SYSTEM FILE NO. _____

Owner E. Columbo & J. Montemauro Address Westchester Ave

Located At (Street) Westchester Ave @ Scott Corners Sec 24 Block 2411 Lot 21
(Indicate nearest cross street)

Municipality Pound Ridge (T) Watershed _____

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Hole Number	Run No.	CLOCK TIME Start	Stop	Elapse Time Min.	PERCOLATION Depth to Water From Ground Surface Start Inches	Stop Inches	Water Level in Inches Drop in Inches	PERCOLATION Soil Rate Min/in.drop
1	1	0	5	5	12"	15"	2 1/2"/min	4
	2	0	4	4	12"	15"	2 1/2"/min	4
	3	0	4	4	12"	15"	2 1/2"/min	4
	4							
	5							
2	1							
	2	0	4	4	12"	15"	2 1/2"/min	4
	3	0	4	4	12"	15"	2 1/2"/min	4
	4							
	5							
	1							
	2							
	3							
	4							
	5							

Notes:
1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.
2) Depth measurements to be made from top of hole.

TEST PIT DATA TO BE SUBMITTED WITH APPLICATION
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO.	HOLE NO.	HOLE NO.	HOLE NO.
G.L.	Topsoil			
6"	Beach Run Gravel			
12"	"			
18"	"			
24"	"			
30"	"			
36"	"			
42"	"			
48"	"			
54"	"			
60"	"			
66"	"			
72"	"			
78"				
84"				

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED 0
INDICATE LEVEL TO WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED 0
TESTS MADE BY John P Bonnicelli DATE 3/28/73.

DESIGN

Soil Rate Used 4 Min/1" Drop: S.D. Usable Area Provided Double the System
Maximum 8 persons/day @ 15 gallons/day = 120 gallons/day
No. of Bedrooms ____ Septic Tank Capacity 500 Gals. Masonry ✓ Metal ____

Absorption Area Provided By 75 L.F. x 24" ✓ 36" ____ width trench. Other ____

Name John P Bonnicelli Signature John P Bonnicelli

Address Troy Lane SEAL
Bedford N.Y.

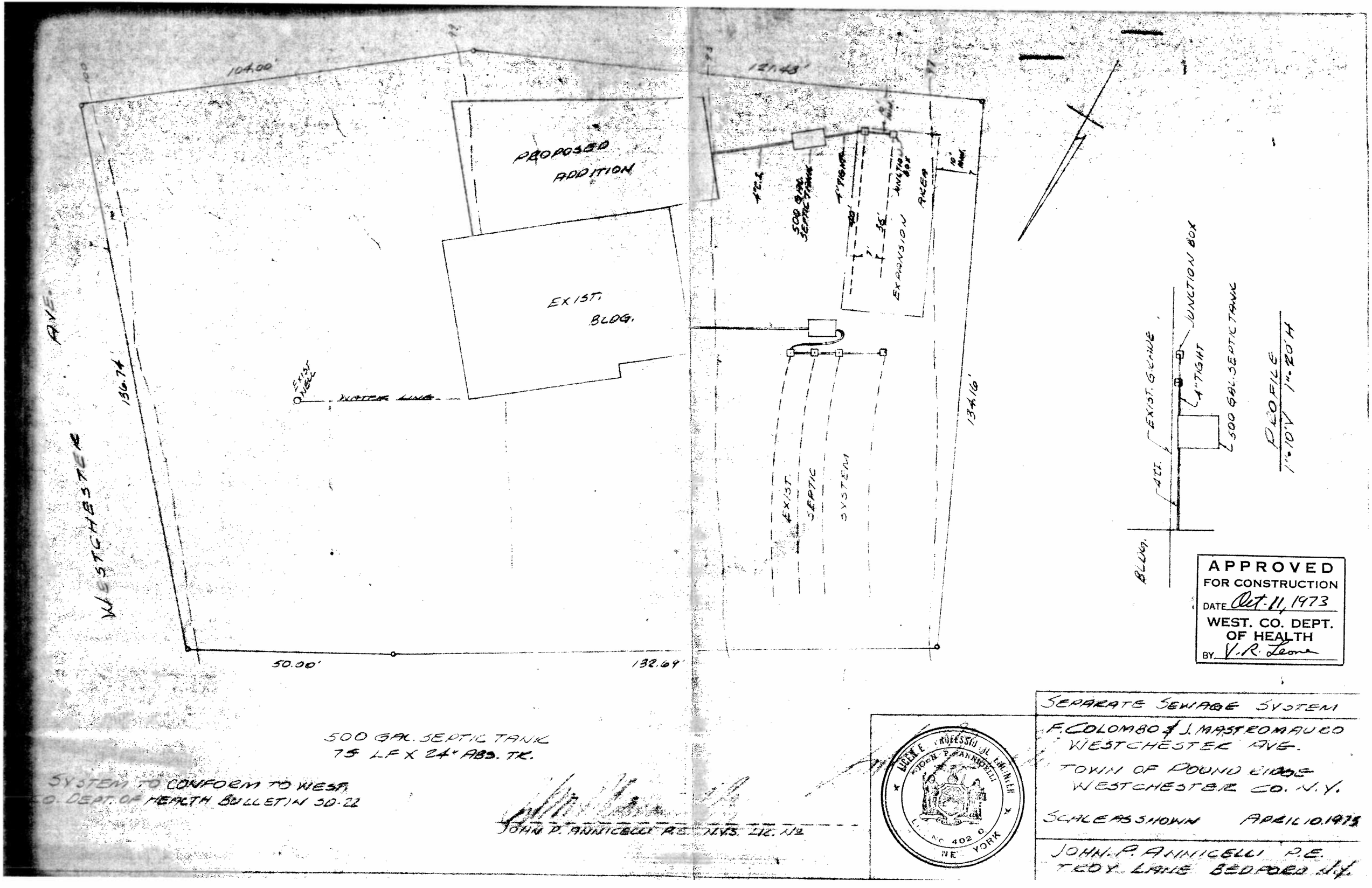
SOMERS OFFICE
OF HEALTH
WEST. CO. DEPT.

Westchester County Health Department OCT - 0 1973

Soil Rate Approved ____ Sq.Ft./Gal. Checked by ____ Date ____

RECEIVED

S.D. 27.6 (Rev. 5-24-66)



APPROVED
FOR CONSTRUCTION
DATE Oct. 11, 1973
WEST. CO. DEPT. OF HEALTH
BY V. R. Leone

500 GAL. SEPTIC TANK
75 LF X 24" ABS. TR.

SYSTEM TO CONFORM TO WEST. CO. DEPT. OF HEALTH BULLETIN 30-22

JOHN P. ANNICELLI P.E. N.Y.S. LIC. N.J.

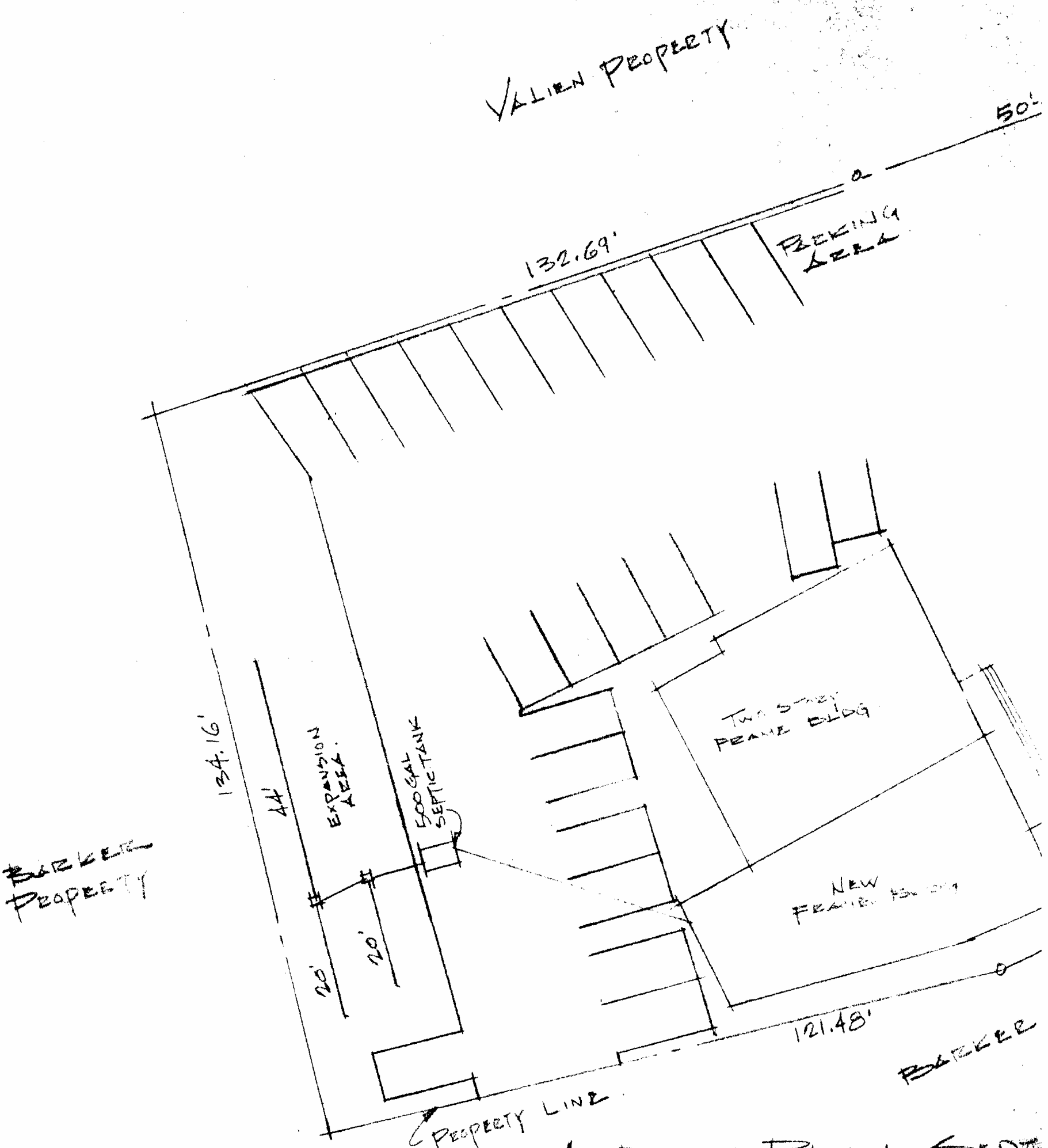
EUGENE P. ANNICELLI PROFESSIONAL ENGINEER JOHN P. ANNICELLI LIC. NO. 40209 NEW YORK

SEPARATE SEWAGE SYSTEM

F. COLOMBO & J. MASTROMAURO CO
WESTCHESTER AVE.
TOWN OF POUND RIDGE
WESTCHESTER CO. N.Y.

SCALE AS SHOWN APRIL 10, 1973

JOHN P. ANNICELLI P.E.
TROY LANE BEDFORD N.Y.



As Built Plan Sept

Scale 1" = 2

No Trucks Machinery Building Materials nor Excavated Earth allowed in Sewage Disposal Area. Construction of the System is to be in accordance with these plans any revisions thereto and the rules and regulations of the permit issuing Governmental Agency.

VALIEN PROPERTY

50'-0"

132.69'

PARKING AREA

PARKING AREA

TWO STORY FRAME BLDG.

NEW FRAME BLDG

500 GAL SEPTIC TANK

120

104.00'

121.48'

BARKER PROPERTY

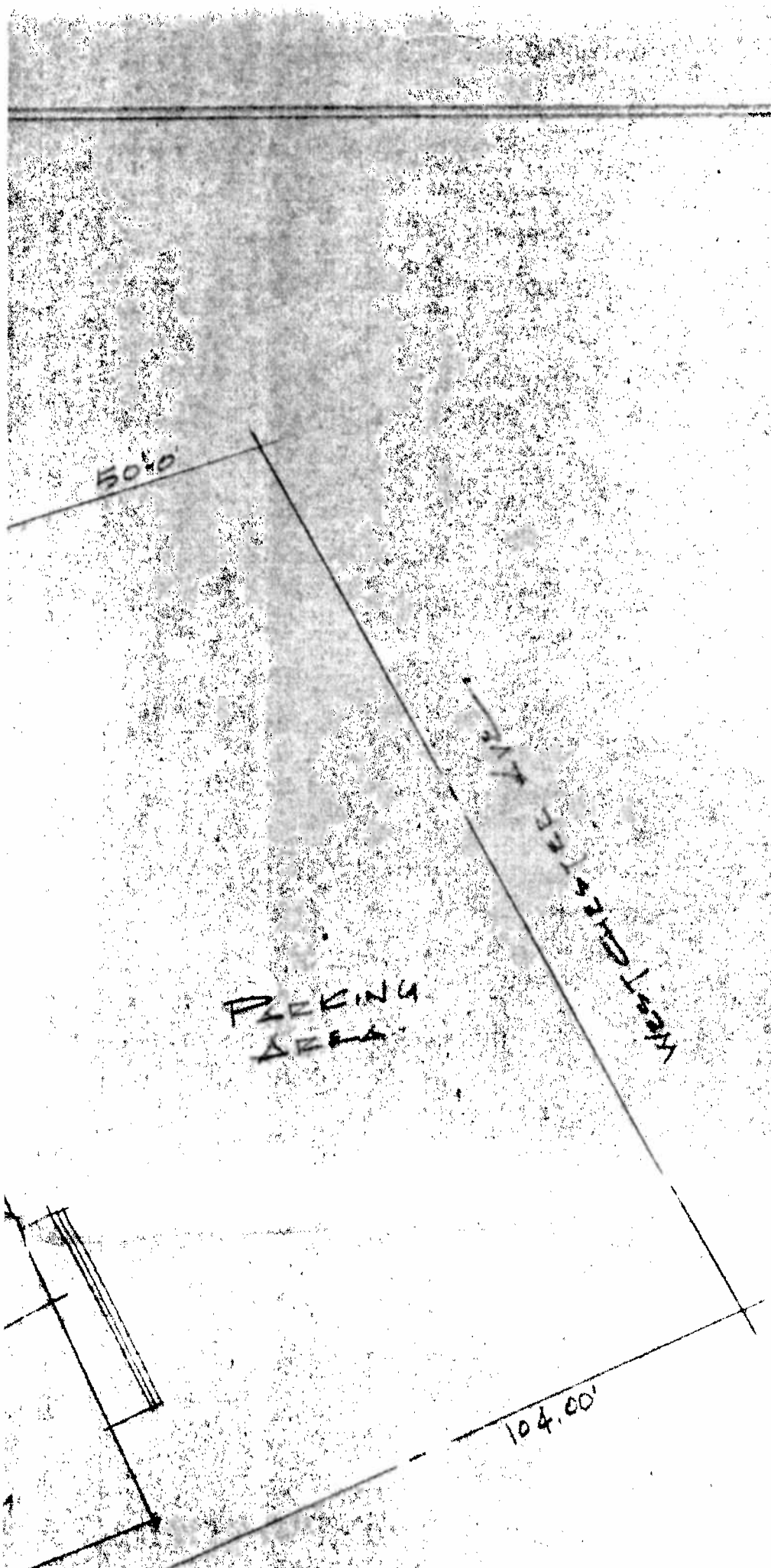
PROPERTY LINE

NOTE:
64' x 2' T
NEW SYS
EXPANSIO

AS BUILT PLAN SEPTIC FIELD

SCALE 1"=20'-0"

ALL NON EXCAVATED EARTH
CONSTRUCTION OF THE SYSTEM
ALL ANY REVISIONS THERETO AND
WITH LOCAL GOVERNMENTAL AGENCY



NORTH

NOTE:
84' x 2' TILE FIELD.
NEW SYSTEM FOR
EXPANSION.

ACCEPTED
AS FINAL PLANS
DATE May 6, 1975
WEST. CO. DEPT.
OF HEALTH
BY V. R. Leone

SEPTIC FIELD
1" = 20'-0"

PROPERTY OF: F COLUMBO
& V. MASTROMAURO
LOCATION: WESTCHESTER AVE
POUND RIDGE NEW YORK
DATE APR 15, 1975 SCALE 1" = 20'

JOHN F ANNICELLI P.E.
TROY LANE BEDFORD N.Y.

9455-25 54 WESTCHESTER AVE

H1404
E.68

✓ Separate Sewerage System _____ Private Water Supply

H1404
99-35-1 & 7

Pound Ridge
Municipality

CERTIFICATE OF CONSTRUCTION COMPLIANCE

WCDH File No. PR 75-25-1

Located at _____ Section 4 Block 99

Owner _____ Lot 21 Job _____

Separate Sewerage System built by _____ Address _____

Consisting of 1000 Gal. Masonry, Metal Septic Tank 121 lineal feet X 36 width trench

Other requirements _____

Water Supply: _____ Public Supply From _____

_____ Private Supply Drilled By Existing Address _____

Building Type Commercial Number of Bedrooms 0 Date Permit Issued Oct. 8, 1975

Erosion Control Completed Yes Waived _____

Other Requirements _____

I certify that the system(s) as listed serving the above premises were constructed essentially as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans filed, and the permit issued by the Westchester County Department of Health.

Date 7/26/76 Certified By _____

Any person occupying premises served by the above system(s) shall promptly take such action as may be necessary to secure the correction of any unsanitary conditions resulting from such usage. Approval of the separate sewerage system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgment of the Commissioner of Health, such revocation, modification or change is necessary, said modification or change shall be done under the supervision of a licensed Professional Engineer or Registered Architect.

With proper maintenance these systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date July 26, 1976 William A. Brumfield, Jr., M. D., Commissioner By Vincent R. Lowe, San. E

S. D. 47 66

Westchester County Department of Health

FILE COPY

TY OF WESTCHESTER DEPARTMENT OF HEALTH - Division of Environmental Health Services

DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM FILE NO. _____

Owner Barnwell Associates Address Westchester Ave

Located At (Street) Westchester Ave Sec. 8 Block 9415 Lot 24
(Indicate nearest cross street)

Municipality Pound Ridge NY. Watershed _____

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Hole Number	Run No.	CLOCK TIME Start	Stop	Elapse Time Min.	PERCOLATION Depth to Water From Ground Surface Start Inches	Stop Inches	Water Level in Inches Drop in Inches	PERCOLATION Soil Rate Min/in.drop
	1	11:00	11:35	36	27	24	3	12
	2	11:36	12:09	33	27	24	3	11
	3	12:10	12.44	34	27	24	3	12
	4							
	5							
1								
	2	11:02	11:40	38	27	24	3	13
	3	11:40	12:16	36	27	24	3	12
	4	12:16	12:52	36	27	24	3	12
	5							
1								
	2							
	3							
	4							
	5							

Notes:
1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.
2) Depth measurements to be made from top of hole.

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO. 1	HOLE NO.	HOLE NO.	HOLE NO.
G.L.	Top Soil			
6"	"			
12"	Sandy Loam			
18"	"			
24"	"			
30"	"			
36"	"			
42"	"			
48"	"			
54"	"	w. Clay		
60"	"	"		
66"	"	"		
72"	"	"		
78"	"	"		
84"	"	"		

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED 9'

INDICATE LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED 3'

TESTS MADE BY John Annicelli DATE 9/11/75

DESIGN

Soil Rate Used 11 - 15 Min/1" Drop: S.D. Usable Area Provided Double Area.

No. of Bedrooms 600 gallons/day Septic Tank Capacity 500 Gals. Masonry ✓ Metal ____

Absorption Area Provided By 155 L.F.x24" ___ 36" ✓ ___ wide trench. Other ____

Name ____ Signature John Annicelli

Address John P. Annicelli Troy La. Bedford, N.Y. 10506 SEAL

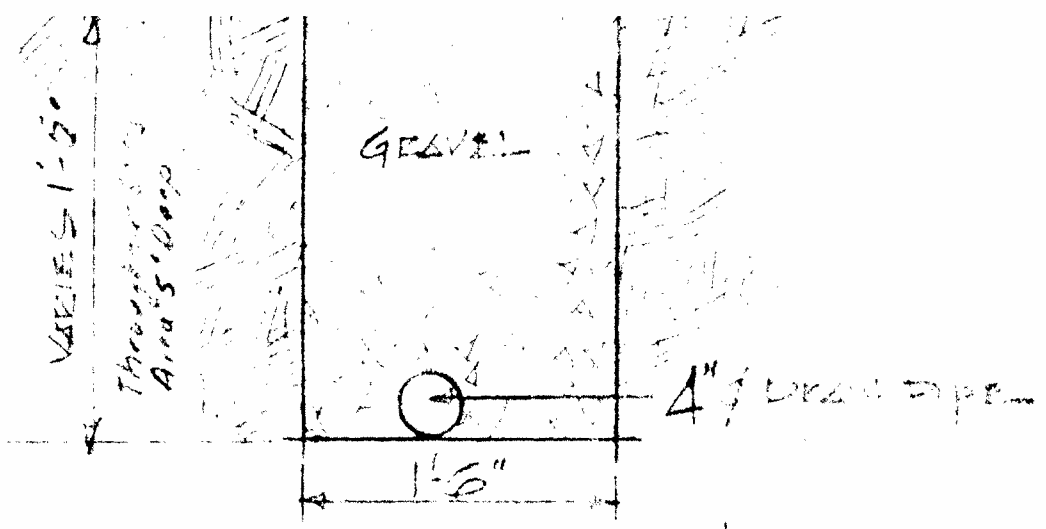
Westchester County Health Department

Soil Rate Approved ____ Sq.Ft./Gal. Checked by ____ Date ____

S.D.27.6 (Rev. 5-22-73)

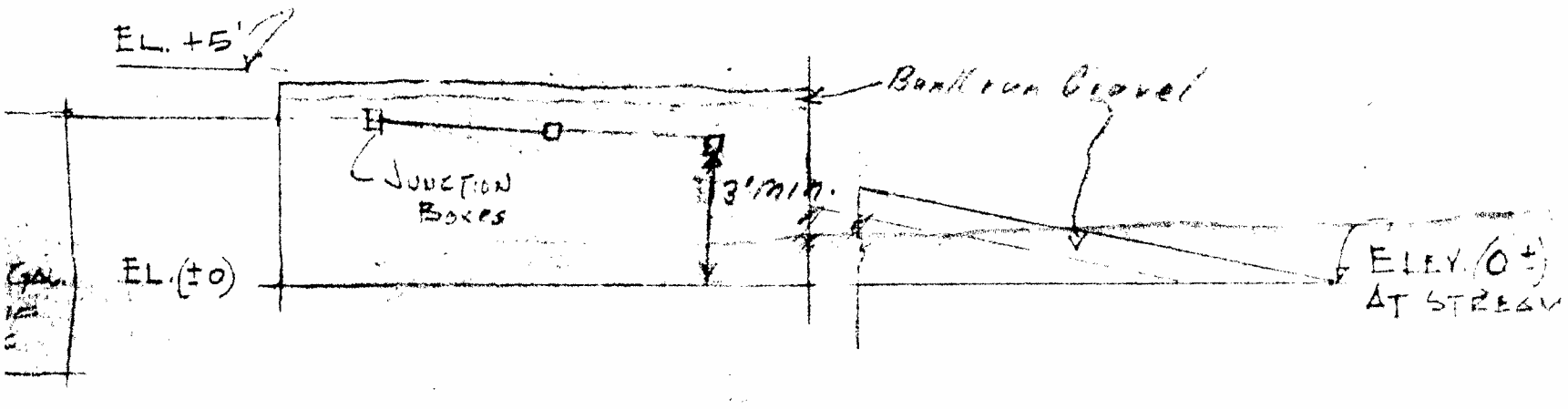
RECEIVED SEP 24 1975 WEST. CO. DEPT. OF HEALTH SANITARY DIVISION OFFICE

LICENSED PROFESSIONAL ENGINEER JOHN P. ANNICELLI No. 40230 STATE OF NEW YORK



CURTAIN DRAIN
DETAIL

Scale 1" = 1'-0"



PROFILE

SCALE 1" = 10'-0"

NOTE:
1,000 GAL. SEPTIC TANK.
189' L.F. X 36" ABS. T2.
⊗ TEST HOLE.
+ Perc. Hole
309' of CURTAIN DRAIN 5' DEEP

	"A"	"B"
TIC TANK	42'	54'
TION BOX #1	152'	145'-6"
TION BOX #4	167'	154'-6"

ACCEPTED
AS FINAL PLANS
DATE July 26, 1976
WEST. CO. DEPT.
OF HEALTH
BY V. R. Lewis

REVISION AS BUILT JULY 13, 1976.

BAER WELL & SONS.
SEPERATE SEWAGE SYSTEM
LOCATION: W'CHESTER RD & TRINITY PASS RD
POUND RIDGE NEW YORK
SECTION: 8 BLOCK: 9A55 LOT: 24
DATE SEPT 18, 1975 SCALE AS NOTED

John P. Annicelli, P.E.
Troy La. Bedford, N. Y. 10506

339'

211.32'

1000 GAL. SEPTIC TANK.

71'

12'

31'

16'

9'

29'

18'

9'

27'

20'

9'

25'

23'

117'

SSDS EXPANSION AREA

Surrounding SSDS CURTAIN DRAIN SEE DETAIL.

EXIST. CATCH BASIN

60'

61'

N 17°04'47" W

293.34'

STREAM ELEV. (±0')

GRADE

VARIES 1'-5'

THROUGHOUT S.D. AREA 5'-0"

TO BLDG

6" C.I.

EL. +5'

500 GAL. SEPTIC TANK

EL. (±0)

NOTE:
1,000 GAL.
189' L.F.
⊗ TEST H
+ PERC. HO
309' OF CO

	"A"	"B
SEPTIC TANK	42'	5
JUNCTION BOX #1	152'	14
JUNCTION BOX #4	167'	15

SITE PLAN

SCALE 1" = 20'-0"

------ Existing Contours

_____ New Contours

WESTCHESTER AVE.

339'

100' MIN.

"A"

1000 GAL. SEPTIC TANK.

PROPOSED BLDG.

"B"

Surrounding SSDS CURTAIN DRAIN SEE DETAIL.

SSDS EXPANSION AREA

EXISTING BLDG.

N82°12'20"E

293.34'

SITE PLAN

SCALE 1" = 20'-0"

Existing Contours

Proposed Contours

WESTCHESTER AVE.

S 63° 40' E

100' MIN.

Well

80.00'

N 49° 59' E

EXISTING BLD'G.

LEACHING PIT.

"A"

PROPOSED BLD'G

"B"

EXISTING BLD'G

SEPTIC TANK

LEACHING FIELD

LEACHING PIT.

EXISTING BLD'G.

TWENTY ROAD

N 40° 10' W

N 82° 12' 20" E

NORTH.

9455-25 54 WESTCHESTER AVE

Existing

✓ Separate Sewerage System ____ Private Water Supply

Pound Ridge, N.Y.
Municipality

CERTIFICATE OF CONSTRUCTION COMPLIANCE

WCDH File No. PR 67-51

Owner Pluto Properties — Section 2 — Block 9455

Lot 25 — Job ____

Separate Sewerage System built by Pluto Properties — Address 32 Mt. Donegal Dr. No. White Plains

Consisting of 2000 Gal. Masonry, Metal Septic Tank Leaching Gallery 40x5x5 lineal feet X ____ width trench

Other requirements None

Water Supply: ____ Public Supply From ____

✓ Private Supply Drilled By Existing — Address ____

Building Type Stores — Number of Bedrooms None — Date Permit Issued OCT '67

Erosion Control Completed ____ — Waived ____

Other Requirements Business using minimal water only

I certify that the system(s) as listed serving the above premises were constructed essentially as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans filed, and the permit issued by the Westchester County Department of Health.

Date May 20 1968 — Certified By C. Stanley Matteson PE

STATE OF NEW YORK — EDWARD STANLEY PATTESON — No. 049 — REGISTERED PROFESSIONAL ENGINEER

Any person occupying premises served by the above system(s) shall promptly take such action as may be necessary to secure the correction of any unsanitary conditions resulting from such usage. Approval of the separate sewerage system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgment of the Commissioner of Health, such revocation, modification or change is necessary.

With proper maintenance these systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date 20 May 68 — William A. Brumfield, Jr., M. D., Commissioner By J. Hanly

SD 47.64

Westchester County Department of Health

FILE COPY

E. Douglas Mackey
President

MEMBER

KAISER - BATTISTONE, INC.

Sewage Systems Specialists

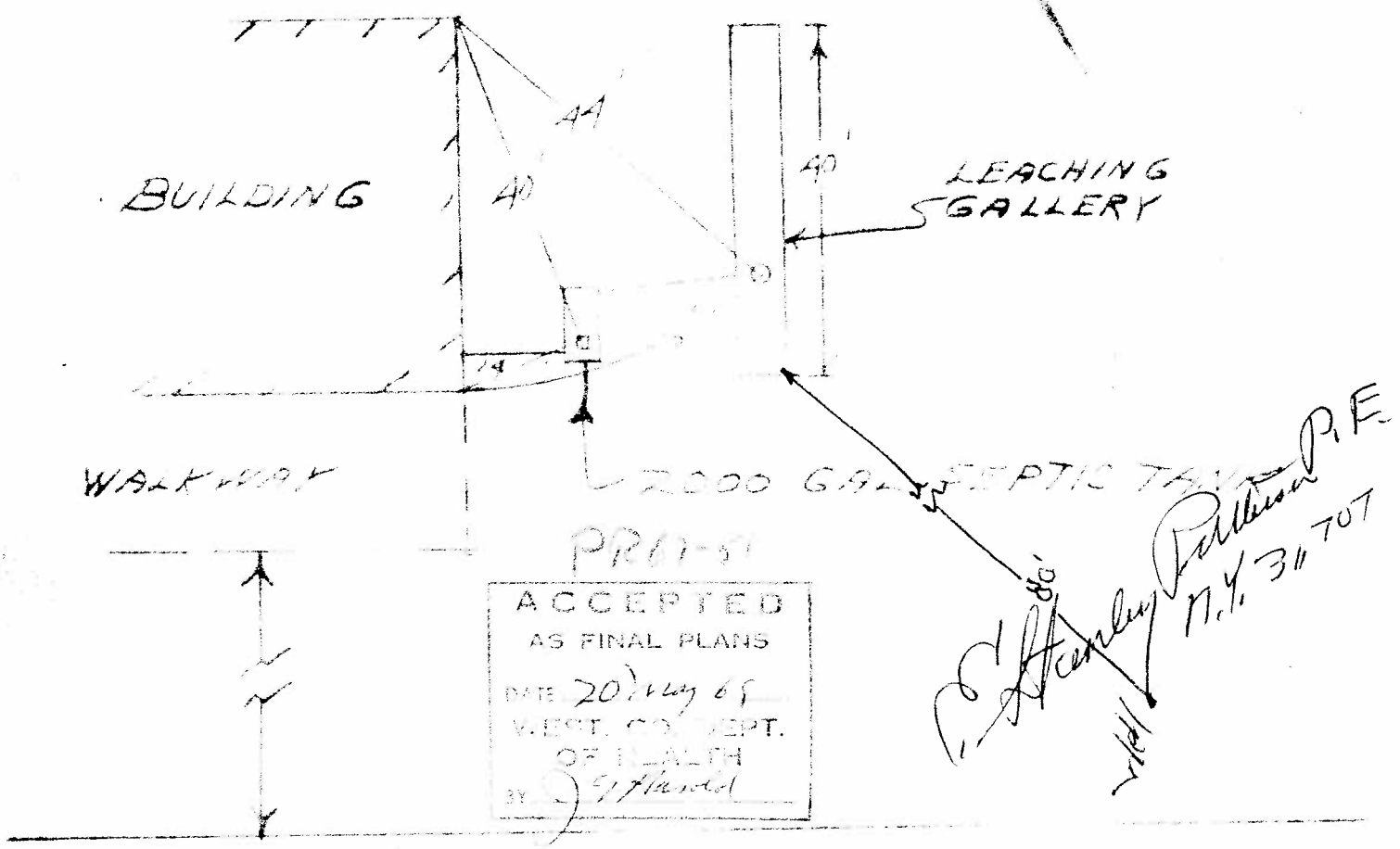
CLEANING
REPAIRS
INSTALLATIONS
ELECTRIC POWER DRAIN CLEANING
SEWAGE TREATMENT PLANTS
CHLORINATION EQUIPMENT

MAIN OFFICE: 18 GROVE STREET NEW CANAAN, CONN.

TELEPHONE 966-5656
NORWALK 866-5904
RIDGEFIELD 438-5500

PLUTO PROPERTIES
WESTCHESTER AVE
POUND RIDGE, N.Y.

APRIL 1968



WESTCHESTER AVE

SCALE 1"=20'

COUNTY OF WESTCHESTER DEPARTMENT OF HEALTH - Division of Environmental Sanitation

DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM FILE NO. PR67-51

Owner Pluto Properties Inc Address 32 McDougal Drive White Plains N.Y.

Located At (Street) Westchester Co. (Trinity Pass Rd) Sec. 2 Block 995 Lot 25
(Indicate nearest cross street)

Municipality Pound Ridge N.Y. Watershed Stamford, Conn.

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Hole Number	Run No.	CLOCK TIME Start	Stop	Elapse Time Min.	PERCOLATION Depth to Water From Ground Surface Start Inches	Stop Inches	Water Level in Inches Drop in Inches	PERCOLATION Soil Rate Min/in.drop
	1	12:27	12:37	10	19½"	20¼"	¾"	13 Min
	2	12:37	12:47	10	20¼"	20¾"	½"	20 Min
	3	12:47	12:57	10	20¾	21¼"	½"	20 Min
	4	12:57	1:07	10	21¼	21¾"	½"	20 Min
	5							
	1							
	2							
	3							
	4							
	5							
	1							
	2							
	3							
	4							
	5							

Notes:
1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.
2) Depth measurements to be made from top of hole.

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO. 1	HOLE NO.	HOLE NO.	HOLE NO.
G. L.	6" Top Soil			
6"	" "			
12"	Yellow Sub Soil			
18"	" " "			
24"	"			
30"	Compact			
36"				
42"	Sand			
48"				
54"	"			
60"	Sand			
66"				
72"	"			
78"	No Water			
84"	or Rock @ 6'			

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED
INDICATE LEVEL TO WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED
TESTS MADE BY _____ DATE _____

DESIGN

Soil Rate Used 20 Min/1" Drop: S.D. Usable Area Provided 5000 Sq Ft

No. of Bedrooms — Septic Tank Capacity 2000 Gals. Masonry ✓ Metal _____

Absorption Area Provided By Leaching Gallery 40'x5'x5' L.F.x24" 36" width trench. Other _____

Name E. Stanley Patterson Signature E. Stanley Patterson P.E.

Address 510 Scofieldtown Road
Stamford Conn

SEAL

STATE OF NEW YORK
EDWARD STANLEY PATTERSON
No. 31707
LICENSED PROFESSIONAL ENGINEER

Westchester County Health Department

Soil Rate Approved ___ Sq.Ft./Gal. Checked by _____ Date _____

Plans showing 4 stories + one dental suite returned with permit

S.D. 27.6 (Rev. 5-24-66)

Westchester gov.com

ONSITE WASTEWATER TREATMENT SYSTEM (OWTS)
REPAIR AND REMEDIATION DATA FORM

Municipality: Pound Ridge

Property Mailing Address (No. & Street): 54 Westchester Ave.

Town/ Village: Pound Ridge State: N.Y. Zip: 10576

Owner: PMNG Management, LLC

Owner Mailing Address (No. & Street) (if different): P.O. Box 107

Town/ Village: Pound Ridge State: N.Y. Zip: 10576

Property Use: [] Single Family [] Multi-Family [] Industrial [X] Commercial

[] Other - Describe: _____

OWTS Remediation ☐ CASE # WCDH File #: BEQ-2665-14 MK-VAST-55

Remediation shall mean installation, replacement, or expansion of onsite wastewater treatment system components to correct an OWTS failure, or impending failure, resulting in, or that may result in the discharge of sewage or domestic wastes or trade wastes or offensive material on to the surface of the ground, into a storm sewer, or into a watercourse or water body. Remediation shall not include repairs, as defined above, to correct an OWTS failure.

OR

OWTS Repair ☒ **Complete the following information**

Repair shall mean the repair, maintenance, and replacement in kind and in situ; of broken, damaged, or worn onsite wastewater treatment system components.

Number of Bedrooms_____ Number of Bathrooms:_____ Water Supply Type: Public ☐ Well ☒

Please note below only components that have been repaired or replaced.

Repaired	Replaced	
☐	☐	House Sewer or other Solid Pipe(s)
☐	☐	Septic Tank#1 Size(gallons): _____
☐	☐	Septic Tank#2: Size (gallons): _____
☐	☐	Junction/Distribution Box(es)
☐	☐	Sewage Pump(s) or other Dosing Equipment
☐	☐	Absorption Trench Length _____ ft. X Trench Width _____ ft
☐	☐	Seepage Pit(s)
☐	☐	Galley(s)
☐	☐	Gravelless Trench(es)
☐	☐	75-A Alternative System
☐	☐	Other Advanced Alternative System
☐	☒	Other System Component(s) - Describe: covers of septic tank/Grease trap/DBx with seal tight lids installed new Baffle at Inlet of grease trap

DRAW BUILDING AND LOCATION OF WORK PERFORMED ON BACK OF THIS FORM

☐ **Entire System Replaced**

Contractor's Name (print): UNITED SEPTIC & EXCAVATING Date Repair/Remediation Completed: 11-19-14

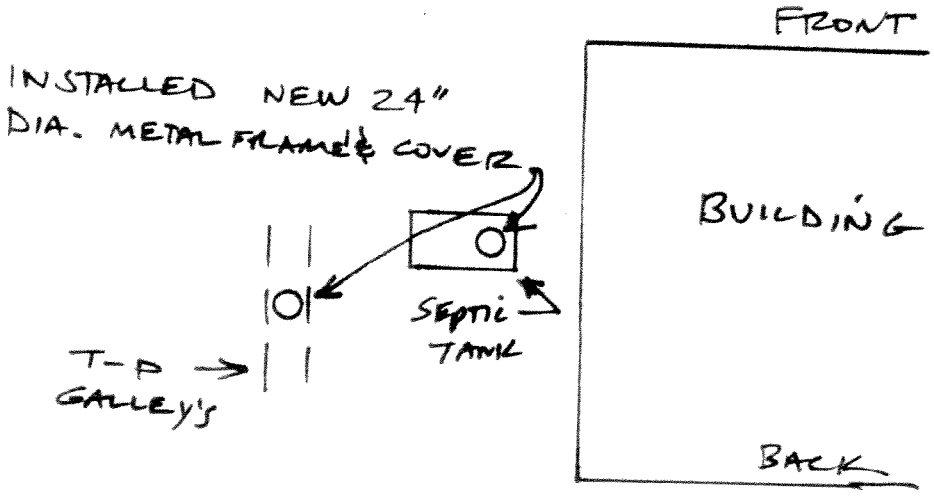
Contractor's Signature: _____ License No.: 109

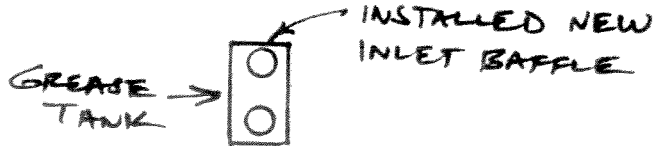
Upon completion please remit to:

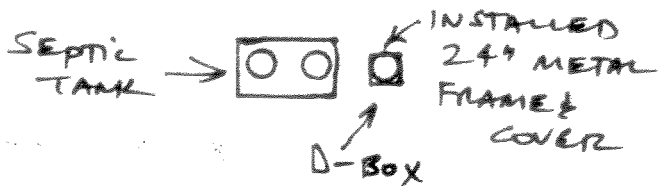
Westchester County Department of Health- BEQ
25 Moore Ave., 1st Floor
Mt. Kisco, NY 10549
Attn: Patricia Tornello-Adams

(1/12)

Repair File #: REP_____
(WCDH Staff only)


FRONT
INSTALLED NEW 24"
DIA. METAL FRAME & COVER
BUILDING
SEPTIC
TANK
T-D
GALLEY'S
BACK


INSTALLED NEW
INLET BAFFLE
GREASE
TANK


SEPTIC
TANK
INSTALLED
24" METAL
FRAME &
COVER
D-BOX

[redacted]

Attention Vincent Silva

Westchester gov.com

ONSITE WASTEWATER TREATMENT SYSTEM (OWTS)
REPAIR AND REMEDIATION DATA FORM

Municipality: Pound Ridge

Property Mailing Address (No. & Street): ~~365 Route 304~~ 54 Westchester Av.

Town/ Village: Pound Ridge State: N.Y. Zip: 10576

Owner: PMNG Management LLC

Owner Mailing Address (No. & Street) (if different): 365 Route 304 Suite 204

Town/ Village: Bardonia State: N.Y. Zip: 10954

Property Use: [] Single Family [] Multi-Family [] Industrial [✓] Commercial

[] Other - Describe: _____

OWTS Remediation ☐ **WCDH File #:** _____

Remediation shall mean installation, replacement, or expansion of onsite wastewater treatment system components to correct an OWTS failure, or impending failure, resulting in, or that may result in, the discharge of sewage or domestic wastes or trade wastes or offensive material on to the surface of the ground, into a storm sewer, or into a watercourse or water body. Remediation shall not include repairs, as defined above, to correct an OWTS failure.

OR

OWTS Repair ☑ **Complete the following information.**

Repair shall mean the repair, maintenance, and replacement in kind and in situ; of broken, damaged, or worn onsite wastewater treatment system components.

Number of Bedrooms_____ Number of Bathrooms:_____ Water Supply Type: Public ☐ Well ☑

Please note below only components that have been repaired or replaced.

Repaired	Replaced	
☐	☐	House Sewer or other Solid Pipe(s)
☐	☐	Septic Tank#1 Size(gallons): _____
☐	☐	Septic Tank#2: Size (gallons): _____
☐	☐	Junction/Distribution Box(es)
☐	☐	Sewage Pump(s) or other Dosing Equipment
☐	☐	Absorption Trench Length _____ ft. X Trench Width _____ ft
☐	☐	Seepage Pit(s)
☐	☐	Galley(s)
☐	☐	Gravelless Trench(es)
☐	☐	75-A Alternative System
☐	☐	Other Advanced Alternative System
☑ also	☑	Other System Component(s) - Describe: ~~ENTRATORS~~ Remove and Replace w/ new grade the chambers in good condition. Replace all broken chambers w/ same

☐ **Entire System Replaced (Sketch attached)**

Contractor's Name (print): ~~William J Pochintesta~~ Date Repair/Remediation Completed: 03/03/09

Contractor's Signature: _____ License No.: 104

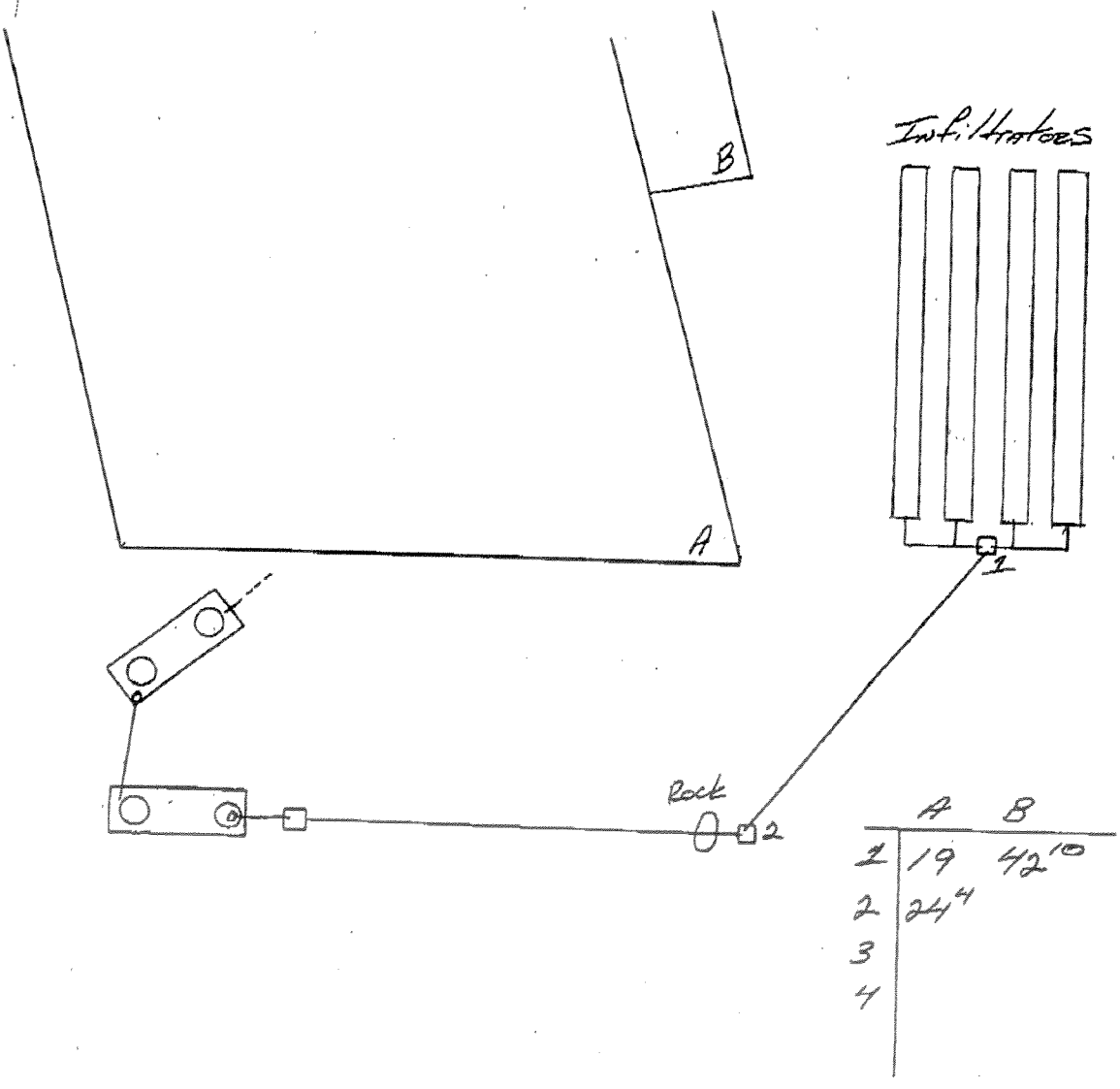
Upon completion please remit to:

Westchester County Department of Health- BEQ
145 Huguenot Street-7th Floor
New Rochelle, NY 10801
Attn: Patricia Tornello-Adams

(10/08) Repair File #: REP

KATONAH SEPTIC, L.L.C.
WILLIAM J. POCHINTESTA
12 ANDERSON RD.
KATONAH, NY 10536
(914) 232-6010

54 Westchester Av.
Pound Ridge N.Y.
A3/L# 03/17 09



	A	B
1	19	4/2'0
2	24'4	
3		
4		

9455-27 38 WESTCHESTER AVE

Westchester gov.com

Westchester County Department of Health
Bureau of Environmental Quality

WCDH File No. PR2007-18 Municipality: Tn Pound Ridge X ■ Separate Sewage System
X ■ Private Water Supply

CERTIFICATE OF CONSTRUCTION COMPLIANCE:

Watershed Basin : L.I. Sound

Located at: 38 Westchester Avenue Section: 8 Block: 9455

Owner Last Name: Ferrara Becker Owner First Name: Thomas Sarah Lot: 27 R.S. Lot:

Separate Sewage System to Consist of:

Septic Tank Size: 1,000 Gallons Trench Length: 84 Lin.Ft. X Trench Width: 24 Inches

Other Requirements:

Building Type: Office Building # of Bedrooms 0 Date Permit Issued: 10/19/07

Erosion Control (EC) Completed Yes ■ EC Waived

Other Requirements:

Separate Sewage Contractor (SSC): Fancher INC #159

Water Supply:

■ Public Water Supply Public Water Source:

Well Driller (WD) Company Name: TORLISH + SONS

WATER METER INSTALLED AS REQUIRED.

I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans filed, and the permit issued by the Westchester County Department of Health.

Date: 5/9/08 Certified by: Theodore L. Straus PE/RA License # : 8129

Any person occupying premises served by the above system(s) shall promptly take such actions as may be necessary to secure the correction of any unsanitary conditions resulting from such usage. Approval of the separate sewage system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgement of the Commissioner of Health, such revocation, modification or change is necessary, said modificaiton or change shall be done under the supervision of a licensed Professional Engineer or Registered Architect. With proper maintenance the systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date: Recommended By:

Date: 5/9/08 Approved By:

Joshua Lipsman, M.D., M.P.H., Commissioner, Westchester County Department of Health

Westchester gov.com

Westchester County Department of Health
Bureau of Environmental Quality

WELL COMPLETION REPORT:

WCDH File No. PR2007-18

This report is to be completed by well driller and submitted to Health Department, together with laboratory report of analysis of water sample indicating water is of satisfactory bacterial quality, before certificate of construction compliance is issued.

Well construction to be in accordance with Bulletin SD-62,
"RULES AND REGULATIONS RELATING TO INDIVIDUAL WATER SUPPLIES"

Located at: 38 Westchester Avenue Section: 8 Block: 9455

Well Location Municipality: Tn of Pound Ridge Lot: 27

Owner Last Name: Ferrara Owner First Name: Thomas

St. #: 38 St. Name: West Municipality: Tn Pound Ridge State: NY Zip Code: 10576

Becker Sarah

Well Driller (WD) Company Name: TORLISH + SONS

Well Pit and Pump Equipment Details: Pitless Adapter: ~~Y~~ Other - Describe:

Pump Make: Grundfos Pump Type: Submersible Pump Capacity: 1 1/2 Pump GPM: 5

Storage Tank Type: WellxTrol Storage Tank Capacity: WX102

Well Details:

Casing Length : 35 Ft. Yield Test Type : Air

Casing Diameter 6 In. Yield Test Duration : 6 Hrs.

Casing Material : Steel Well Yield : 5 G.P.M.

Measured from Land Surface:

Water Level, Static : 0 Ft.

Water Level, Pumped : 400 Ft.

Screen Make : Screen Diameter : In.

Screen Length : Ft. Screen Slot Size :

TOTAL WELL DEPTH 525 Ft.

WELL LOG :

Depth From Ground Surface	Give description of formation penetrated, such as: peat, silt, sand, gravel, clay, hardpan, shale, sandstone, granite, etc. Include size of gravel (diameter) and sand (fine, medium, coarse), color of material, structure (loose, packed, cemented, soft, hard). For example: 0 ft. to 27 ft. fine, packed, yellow sand; 27 ft. to 134 ft. gray granite.
0 Ft. to 2 Ft.	Well Geology, 1st Strata : Topsoil
2 Ft. to 18 Ft.	Well Geology, 2nd Strata Bank Run Gravel
18 Ft. to 525 Ft.	Well Geology, 3rd Strata : Gray Granite
Ft. to Ft.	Well Geology, 4th Strata :
Ft. to Ft.	Well Geology, 5th Strata :

I Certify that the individual water supply indicated above was installed as per the rules and regulations of Bulletin SD.62 of the Westchester County Department of Health.

Date Well Was Completed : 4/8/08 Date of Signature : 6/16/08 DEC # 10318

Sworn to before me this ____ day of _____, 20____.

Well Driller Signature :

Notary Public, Westchester County.

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality
118 North Bedford Road
Mount Kisco, NY 10549

DESIGN DATA SHEET – SEPARATE SEWAGE SYSTEM FILE NO._____

Owner Thomas Ferrara/Sarah Becker Address 38 Westchester Avenue, Scotts Corners

Located at (Street)_____ Sec. 8 Block 9455 Lot 27
(Indicate nearest cross street)

Municipality Town of Poundridge Watershed_____

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH PPLICATION

Presoak Date: 3/27/07 Run Date: 3/28/07

Hole #	CLOCK TIME				PERCOLATION			
					Depth to Water From Ground Surface		Water Level Drop	Soil Rate
Hole Number	Run No.	Start	Stop	Elapse Time Min.	Start Inches	Stop Inches	In Inches	Min/in Drop
1	1	11:59	12:16	17	20	23	3	17/3=5.67
	2	12:18	12:37	19	20	23	3	19/3=6.33
	3	12:39	1 :03	24	20	23	3	24/3=8.00
	4	1:05	1::30	25	20	23	3	25/3=8.33
	5	1:32	1::57	25	20	23	3	25/3=8.33
2	1	12:02	12:21	19	20	23	3	19/3=6.33
	2	12:24	12:48	24	20	23	3	24/3=8.00
	3	12:50	1:16	26	20	23	3	26/3=8.67
	4	1:20	1:46	26	20	23	3	26/3=8.67
	5							
3	1	12:04	12:25	21	20	23	3	21/3=7.00
	2	12:29	12:51	24	20	23	3	24/3=8.00
	3	12:54	1:20	26	20	23	3	26/3=8.67
	4	1:22	1:48	26	20	23	3	26/3=8.67
	5							

Perc test done by: Theodore L. Strauss

Notes:

1. Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.

2. Depth measurements to be made from top of hole. DO NOT REPORT INCREMENTS OF LESS THAN ONE INCH

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH G.L.	HOLE NO. 1	HOLE NO. 2	HOLE NO. 3	HOLE NO. ____
	Topsoil	Topsoil	Topsoil	
6"	Topsoil	Topsoil	Topsoil	
12"	Sandy Loam	Sandy Loam	Sandy Loam	
18"	"	"	"	
24"	"	"	"	
30"	Fine graded sand with small to medium stones			
36"	"	"	"	
42"	"	"	"	
48"	"	"	"	
54"	"	"	"	
60"	"	"	"	
66"	"	"	"	
72"	Water	Water	Water	
78"				
84"				

DEPARTMENT OF HEALTH
JUL - 2
MT. KISCO, N.Y.

WAS GROUNDWATER ENCOUNTERED Yes

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED 72"

INDICATED LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTRED 66"

DEEPTEST MADE BY T. L. Strauss DATE OF DEEP TESTS 3/20/07

DESIGN

Soil Rate Used 8-10 Min/1" Drop: S.D. Usable Area Provided 4,500 s.f.

No. of Bedrooms 0 Septic Tank Capacity 1,000 Gals. Masonry X Metal ____

Absorption Area Prov. by 150 L.F. x 24" ____ width trench. Other ____

Name Grace Lynch Signature

Address 63 Moore Avenue
Mt. Kisco, NY, 10549 Seal

REGISTERED ARCHITECT
GRACE LYNCH
031180
STATE OF NEW YORK

Westchester County Health Department

Soil Rate Approved ____ Sq. Ft./Gal Checked by ____

S.D. 27.6
4/98

THEODORE LAURENCE STRAUSS
ASSOCIATES
architects • planning consultants
63 moore avenue · mount kisco · new york · 10549 · 914-241-3354

27 August 2008

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
118 North Bedford Road, Mt. Kisco, NY, 10549

RE: Permit No. PR 2007-18 - 38 Westchester Avenue, Poundridge, NY.

Dear Fred,

Pursuant to your request, and the condition of the above referenced permit for the installation of the well and septic system, specifically the installation of a water and water use meter, I have inspected the building and found same to be properly installed on the lower level.

Trusting that the above provides the certification and verification of this item requested.

Very Truly Yours,

THEODORE L. STRAUSS

REGISTERED ARCHITECT
THEODORE LAURENCE STRAUSS
LIC. No 5129
UNIVERSITY OF THE STATE OF NEW YORK

Westchester gov.com

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality

PERMIT NUMBER: PRZ007-19

Name: Ferrara + Becker **Municipality:** Pound Ridge
Description: 150 GPD max - office use only SSTS + well (w/ meter)
# of Sheets: one (1)

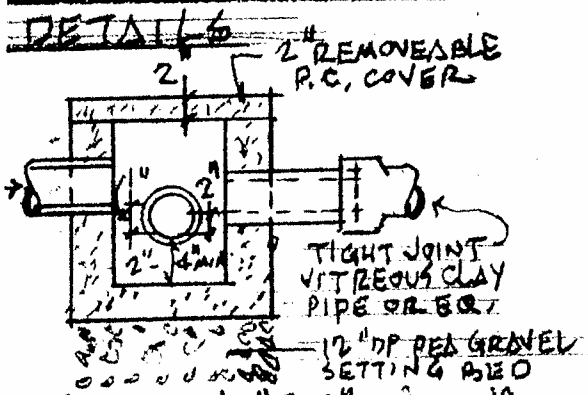
Are hereby accepted as provisions of Chapter 873, Article VIII, Section VII, Section 873.708.1 of the Westchester County Sanitary Code, subject to the provisions of the Certificate of Construction Compliance issued this date.

Reviewed by: _____ Date

Recommended by: _____ Date

Accepted by: _____ 3/28/08 Date

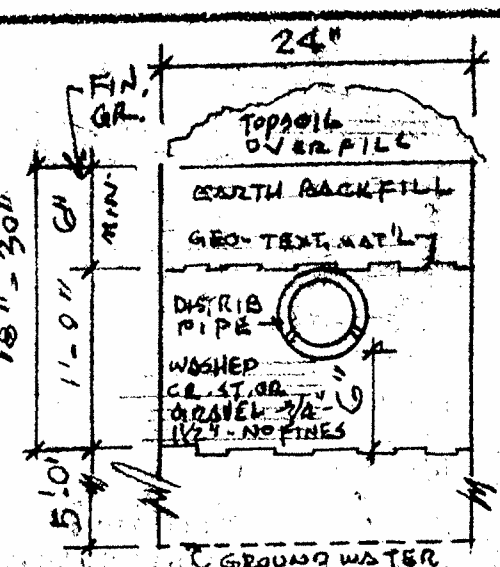
DETAIL "B"



SECTION - "C-C"

JUNCTION BOX NOTES

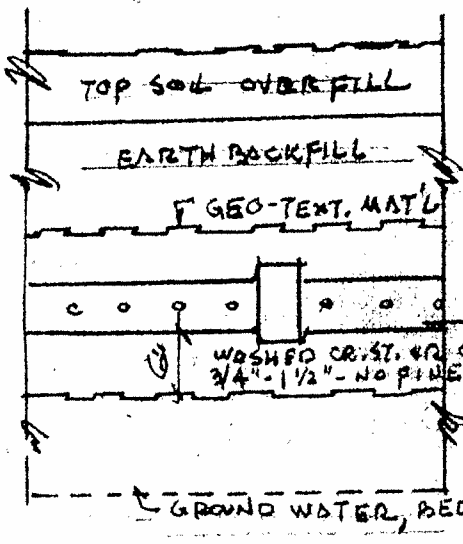
1. BOTTOM OF JUNCTION BOX MUST BE LEVEL AND FIRMLY SUPPORTED TO BELOW FROST LINE. FOOTING TO EXTEND TO 3'-6" BELOW GROUND LEVEL.
2. PLACED ON SINGLE BRANCH DISTRIBUTORS.
3. WATERPROOFED MASONRY CONSTRUCTION.
4. TIGHT JOINT PIPE FROM SEPTIC TANK TO BOX & BETWEEN ALL BOXES.



SPACING OF ABSORPTN TR=7'-0"

HORIZONTAL SECTION

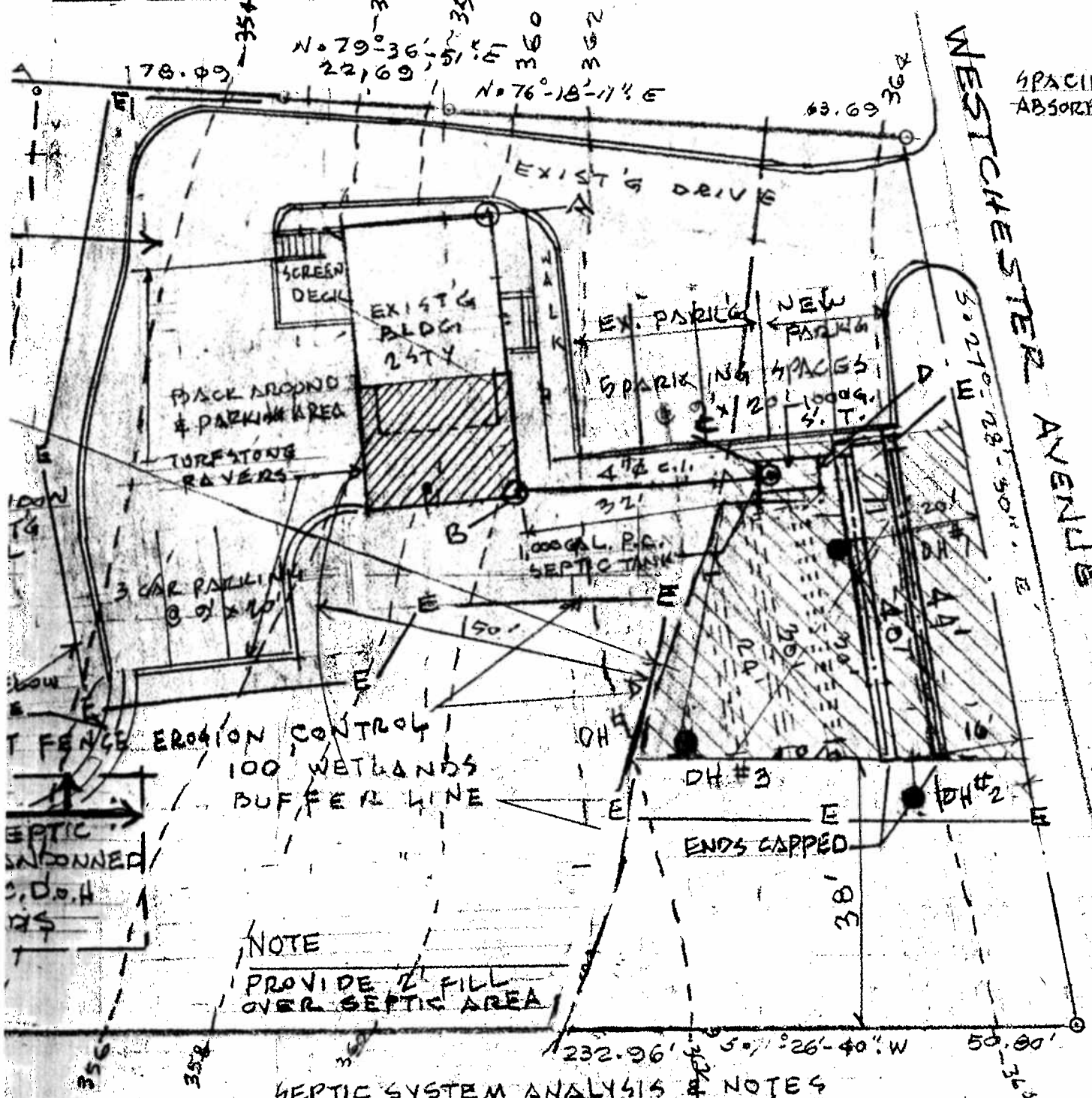
N.T.S.



LONGITUDINAL SECTION

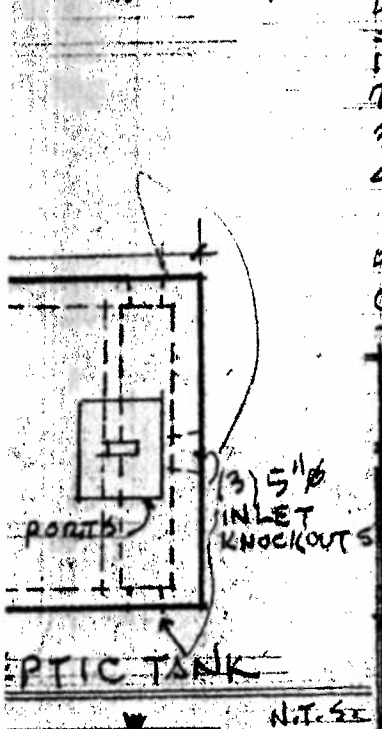
LEACHING TRENCH DETAILS

1. DO NOT INSTALL TRENCHES IN WET SOIL
2. RAKE SIDES & BOTTOM OF TRENCH BEFORE PLACING GRAVEL.
3. ENDS OF ALL DISTRIB. PIPES MUST BE PLUGGED
4. TRENCH STONE TO BE 3/4"-1½" WASHED GRAVEL FREE OF FINES OR SILT
5. TRENCH COURSE TO BE COVERED WITH GEO-TEXTILE MATERIAL OR APPROVED EQUAL.



SEPTIC SYSTEM ANALYSIS & NOTES

1. NO KNOWN WELLS WITHIN 100' OF PROPOSED S.S.D.A. OR WITHIN 200' IN LINE WITH DRAINAGE TO PROPOSED
2. 100 YEAR FLOOD PLAIN 100'± FROM S.S.D.A.
3. NO WATERCOURSES, WETLAND OR STREAMS WITHIN 100' OF S.S.D.A.
4. ALTERED EXISTING RESIDENCE INTO OFFICE BUILDING FOR 5 OFFICES + RECEP. + CONF
   5 PERSONS (1/OFF.) + 1 RECEP. + 2 IN CONF. RM = 8 PERSONS @ 15 G.P.D. = 120 G.P.D
5. SEPTIC TANK REQUIRED = 1,000 GAL. PRECAST CONC
6. LEACHING FIELDS = 8-10 SOIL RATE - APP. RATE = 0.9 G/SF - (120 GPD × 0.90/SF)/2 SF/FT = 67 L.F.
   (150 GPD × 0.90/SF)/2 = 83.3 L.F.
7. 100% EXPANSION AREA PROVIDED



CLIMATIC & GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND SPEED (M.P.H.)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM: WEATHER'G	FROST LING DEPTH	TERMITE	DECAY	WINTER DESIGN TEMP	ICE SHIELD UNDERLAYMT REQ'REMT	FLOOD HAZARD
90 P.S.F.	100-110	D-1	SEVERE	42"	MODERATE	SLIGHT	7°F	YES	MINIMA

WATER SHED: UPPER LONG ISLAND SOUND. SECTION-8 • BLOCK-9455 • LOT-4

project: ALTERATIONS TO OFFICES OF:
THOMAS FERRARA & SARAH BECKER
38 WESTCHESTER AVENUE
SCOTTS CORNERS • TN OF POUNDRIDGE-NY

drawing title: AS-BUILT • PLOT & SEPTIC PLAN

date 6/24/07 | drawn by TLS | checked by G.L. | scale AS SHOWN | job no. 2500

revisions 8/16, 9/19, 10/10, 10/12, 5/09, 8/11,

drawing no. S-1

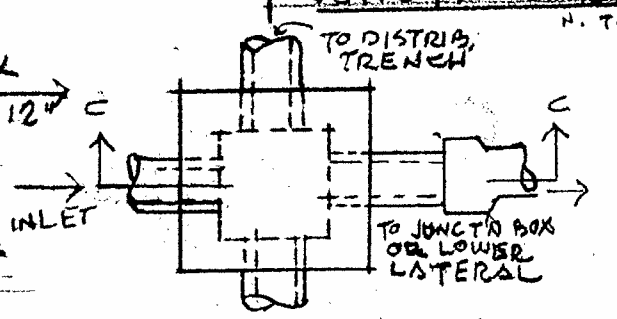
THEODORE LAURENCE STRAUSS and ASSOCIATES
architects • planning consultants

NOTES FOR JUNCT'N BOX

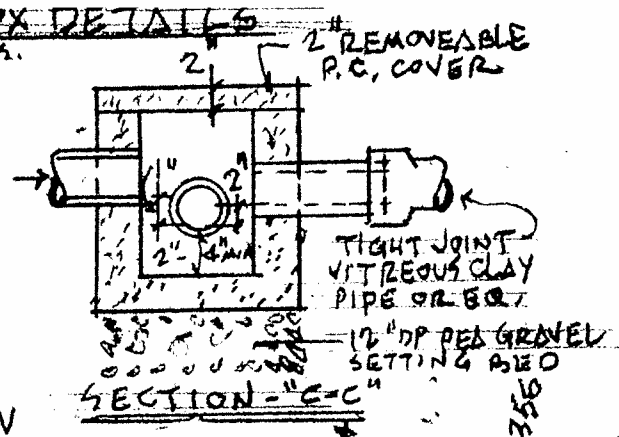
- JUNCTION BOX TO BE MIN. 12"x12"
- MIN. 12" SOLID PIPE FROM JUNCT'N BOX TO LEACH'G FIELD
- MAX. 12" COVER FROM FIN. GRADE TO TOP OF JUNCTION BOX.

JUNCTION BOX DETAILS

N. T. S.



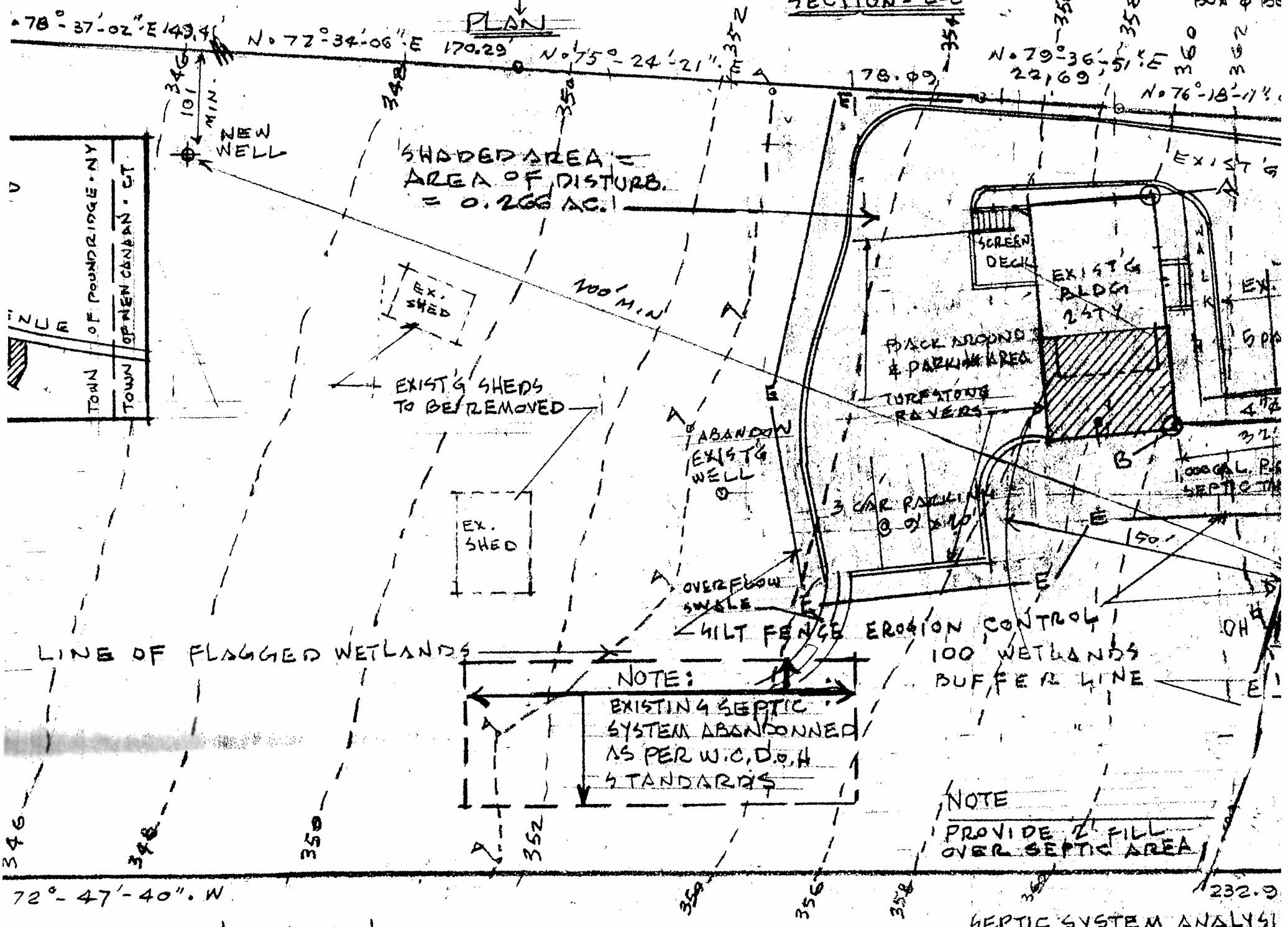
PLAN



SECTION - "C-C"

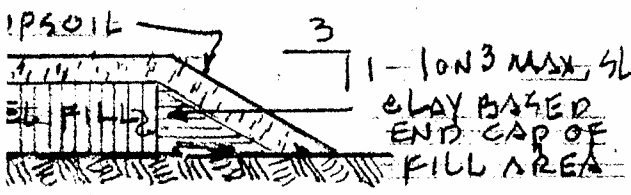
JUNCTIO

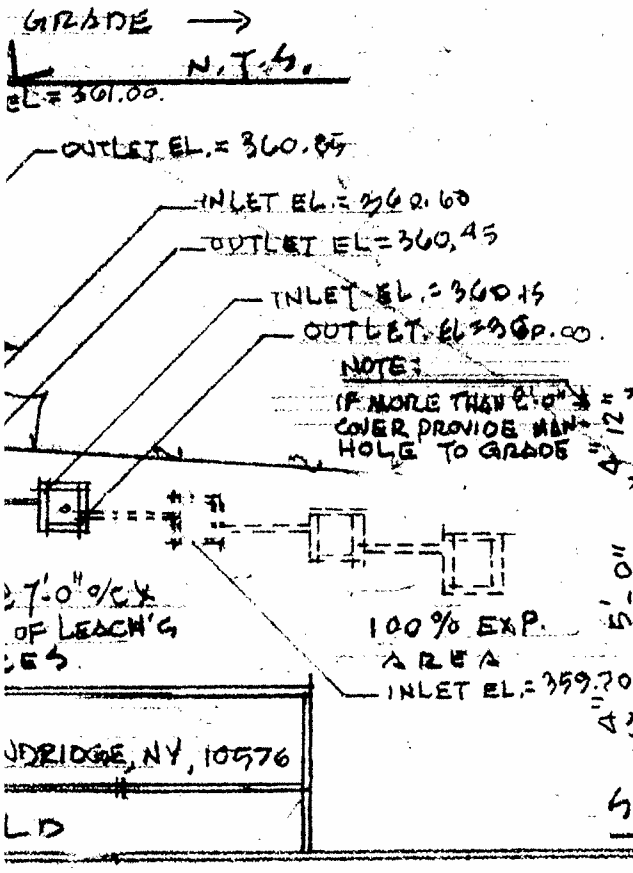
1. BOTTOM O AND FIRM LINE. FO GROUND
2. PLACED O
3. WATERPR
4. TIGHT JO BOX & BE

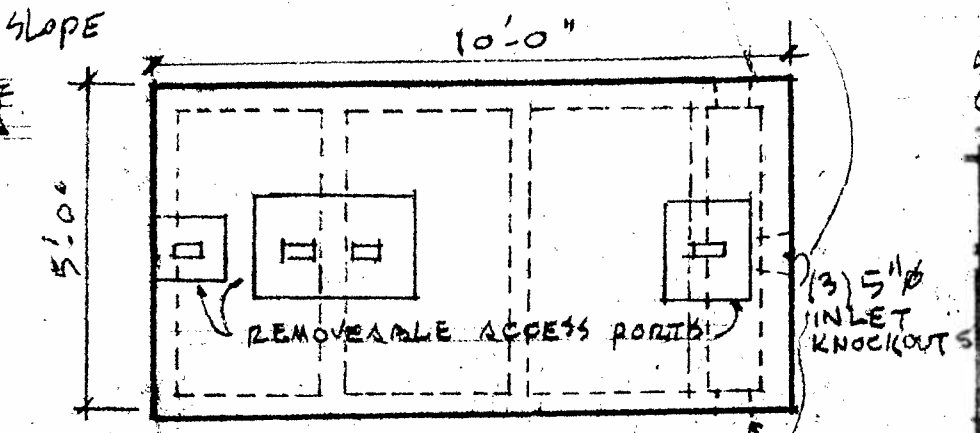


SEPTIC PLAN 1"=20'

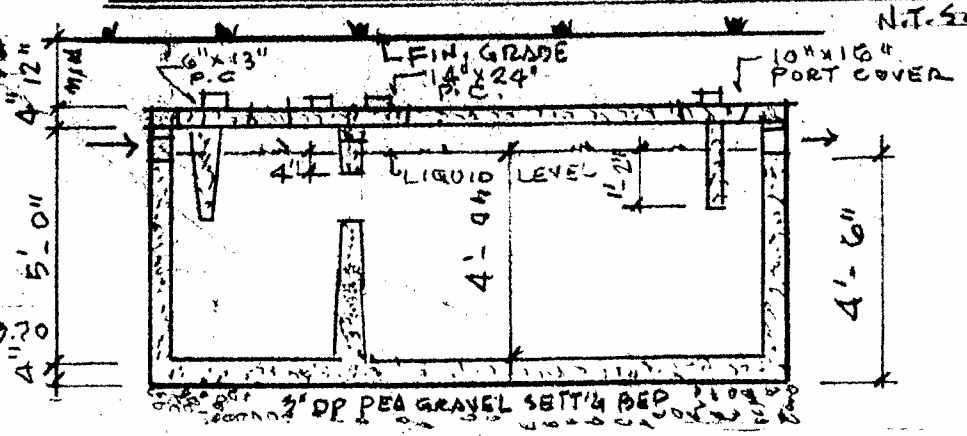
LINEATION PREPARED BY DENNIS B. WALDEN, L.S.
D, NOV. 9, 2006. WETLANDS FLAGGING BY STEPHEN COLEMAN







PLAN OF 1,000 GAL. PC SEPTIC TANK



SECTION THRU SEPTIC TANK. N.T.S.

SEPTIC SYSTEM ANALYSI

1. NO KNOWN WELLS WITHIN 100'
2. 100 YEAR FLOOD PLAIN
3. NO WATERCOURSES, WETLAN
4. ALTERED EXISTING RE
   5 PERSONS (1/0 P.) + 1
5. SEPTIC TANK REQUIR
6. LEACHING FIELDS
7. 100% EXPANSION AR

CLIMATIC & GE

GROUND SNOW LOAD	WIND SPEED (M.P.H.)	SEI DE CAT
30 P.S.F.	100-110	D.

WATER SHED: UPPER LONG

REGISTERED ARCHITECT THEODORE LAURENCE STRAUSS No. 8129 STATE OF NEW YORK

ESTIMATED COMPLETION DATE: 12/30/07

SED ARCHITECT. SAME SHALL NOT BE ALTERED BY ANYONE, AS PER N.Y.S. LAW, EXCEPT PREPARER

SILT FENCE DETAIL

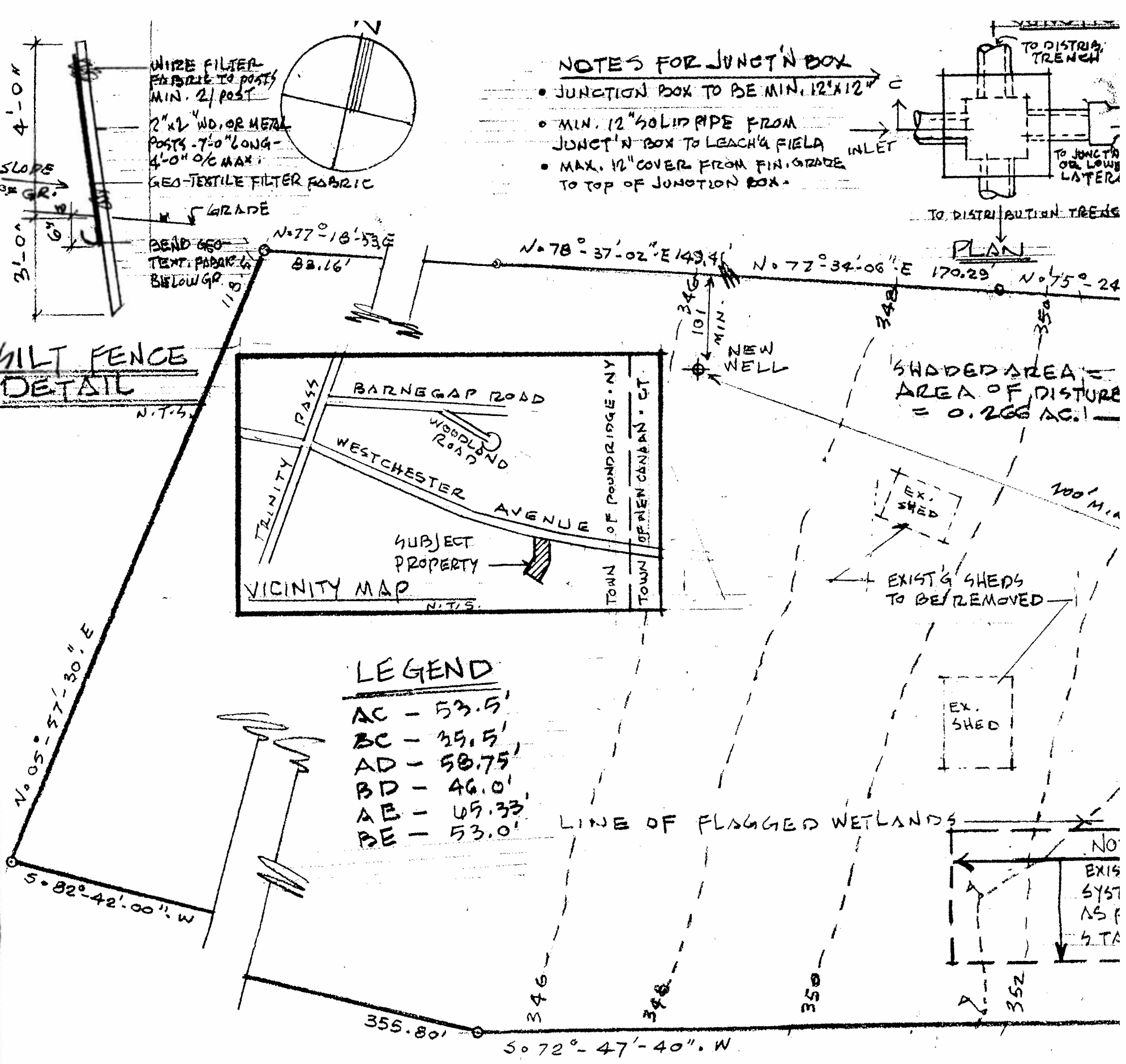
N.T.S.

NOTES FOR JUNCT'N BOX

- JUNCTION BOX TO BE MIN. 12"x12"
- MIN. 12" SOLID PIPE FROM JUNCT'N BOX TO LEACH'G FIELD
- MAX. 12" COVER FROM FIN. GRADE TO TOP OF JUNCTION BOX.

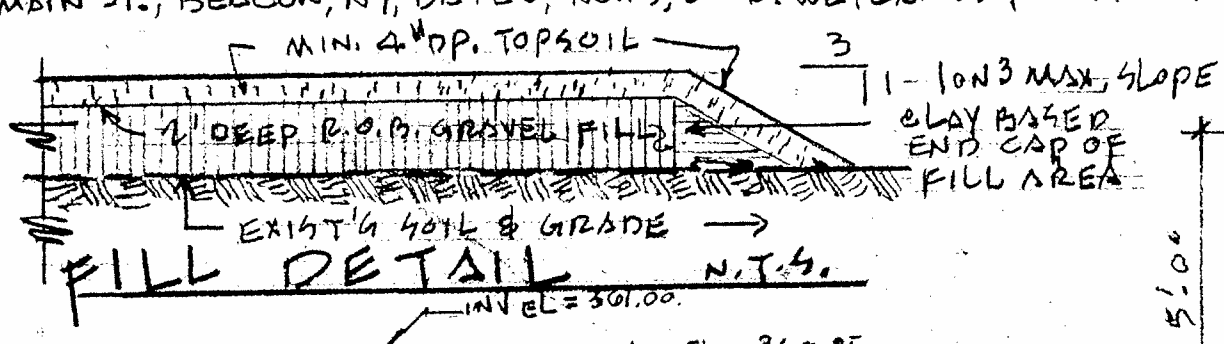
PLAN

VICINITY MAP N.T.S.

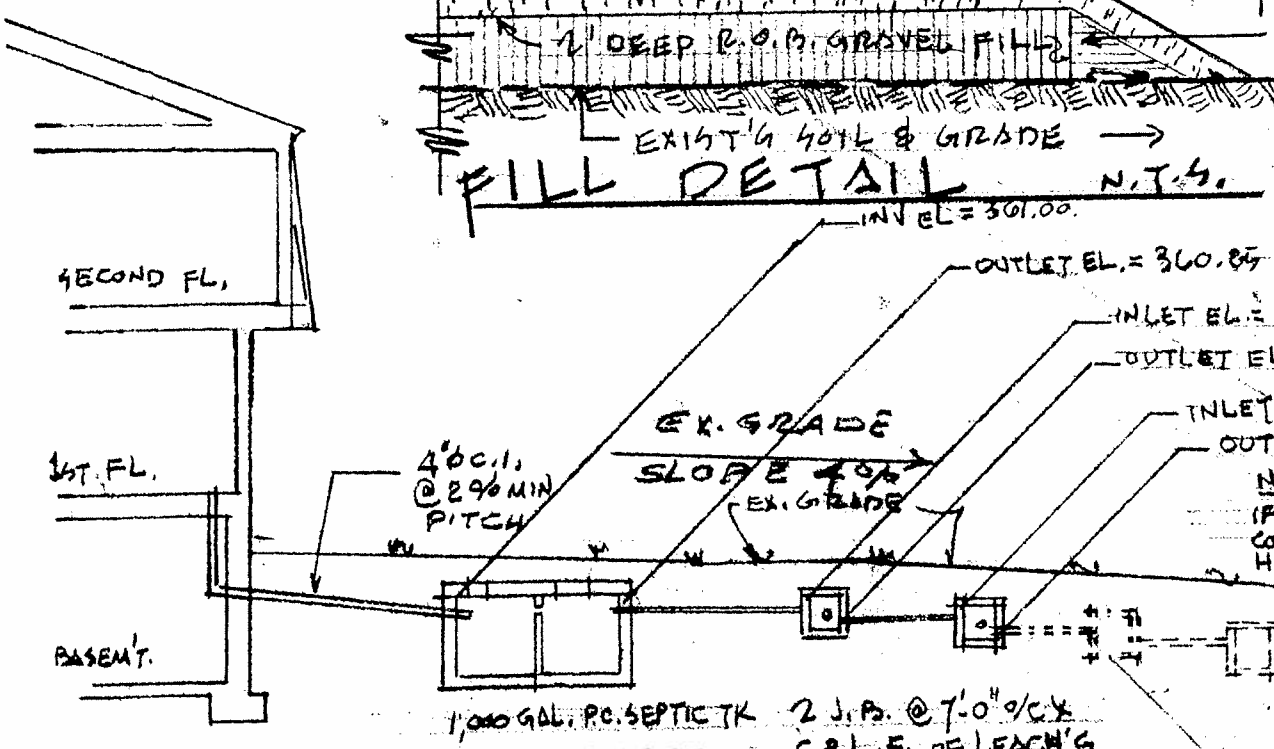


PLOT & SEPTIC PLAN 1"=20'

SURVEY DATA & WETLANDS DELINEATION PREPARED BY DENNIS B. WALDEN, L.S.; 380 MAIN ST., BEACON, NY, DATED, NOV. 9, 2006. WETLANDS FLAGGING BY STEPHEN COVEY

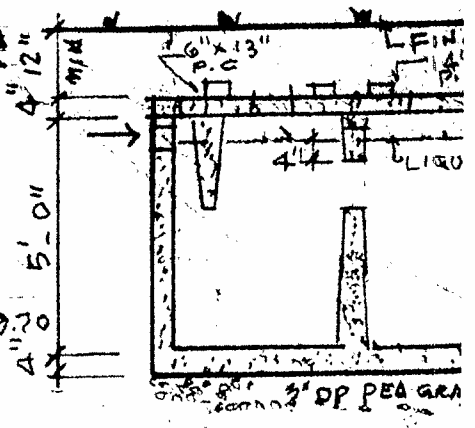


FILL DETAIL N.T.S.



SECTION THRU SEPTIC SYSTEM

PLAN OF 1,000 GAL.



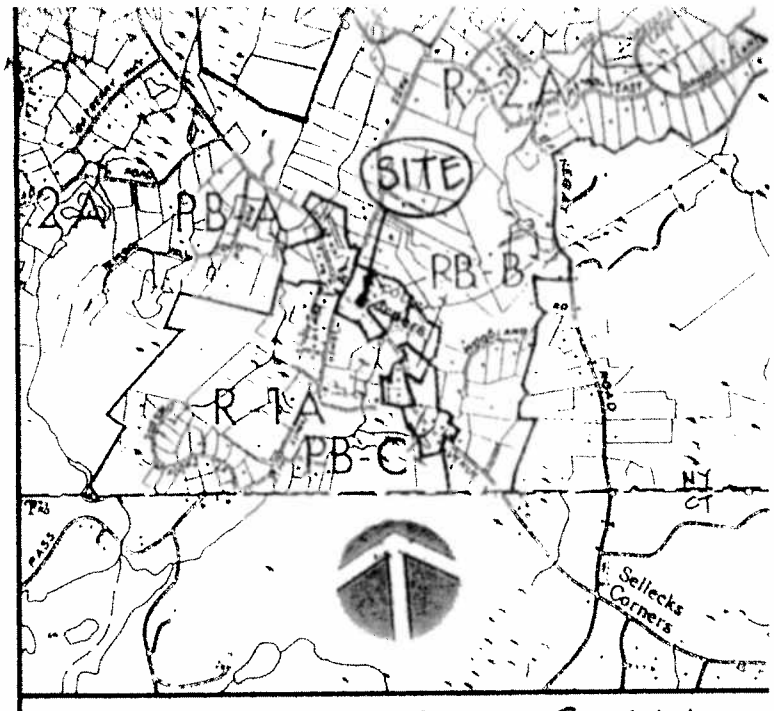
SECTION THRU SEPT

OWNER'S NAME & ADDRESS:
THOMAS FERRARA & SUSAN BECKER - P.O. BOX 336 POUNDRIDGE, NY, 10576

SOIL TYPE: CHARLTON - CHATFIELD

ESTIMATED START DATE: 10/15/07 ESTIMATED COMPLETION DATE: 12/30/07

9456-1.9 55 WESTCHESTER AVE



SITE LOCATION PLAN

SCALE: 1" = 2400' ±

(401)
(402) EXISTING GRADE

ITEM #2

TOP		INVERT	
ND	@ DIST. PIPE END	IN	OUT
	–	416.64	416.54
	–	416.49	416.39
	–	416.00	415.73
	416.33	415.66	–
	416.13	415.46	–
	415.57	414.90	–
	411.89	411.23	–
	408.93	408.26	–
	405.98	405.31	–

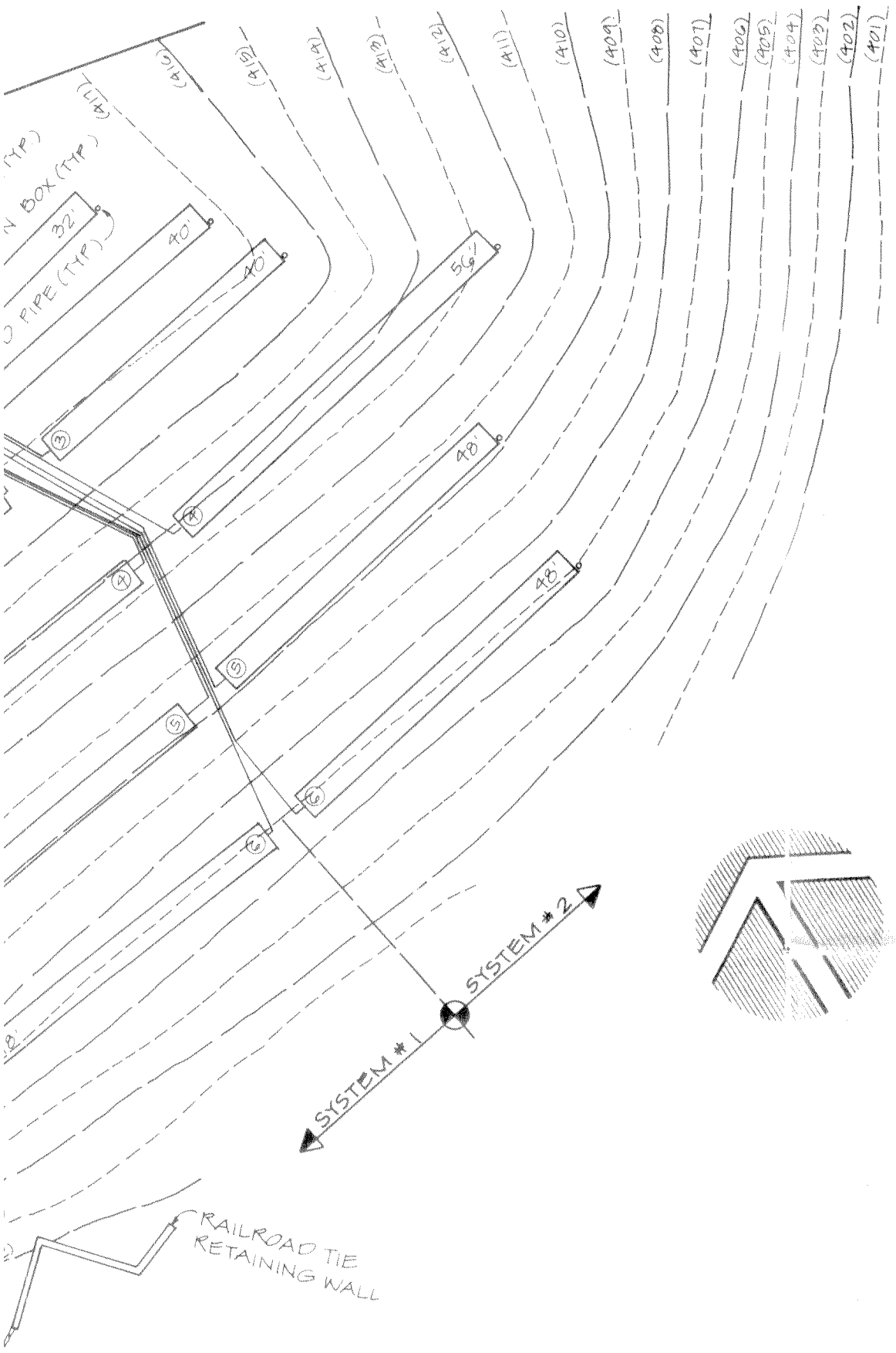
PROJECT:
TRINITY CORNERS SHOPPING CENTER
WESTCHESTER AVENUE
POUND RIDGE, NEW YORK

CLIENT:
RPS REALTY TRUST
733 THIRD AVENUE
NEW YORK, NY 10017

LAURENT ENGINEERING ASSOCIATES, P.C.
MILLBROOKE OFFICE CENTRE
Route 22 & Milltown Road
Brewster, New York 10509
(914)278-6108 - (FAX) 278-2658
CONSULTING SITE ENGINEERS

DRAWING TITLE:
AS-BUILT PLAN
(SSOS REPAIR)

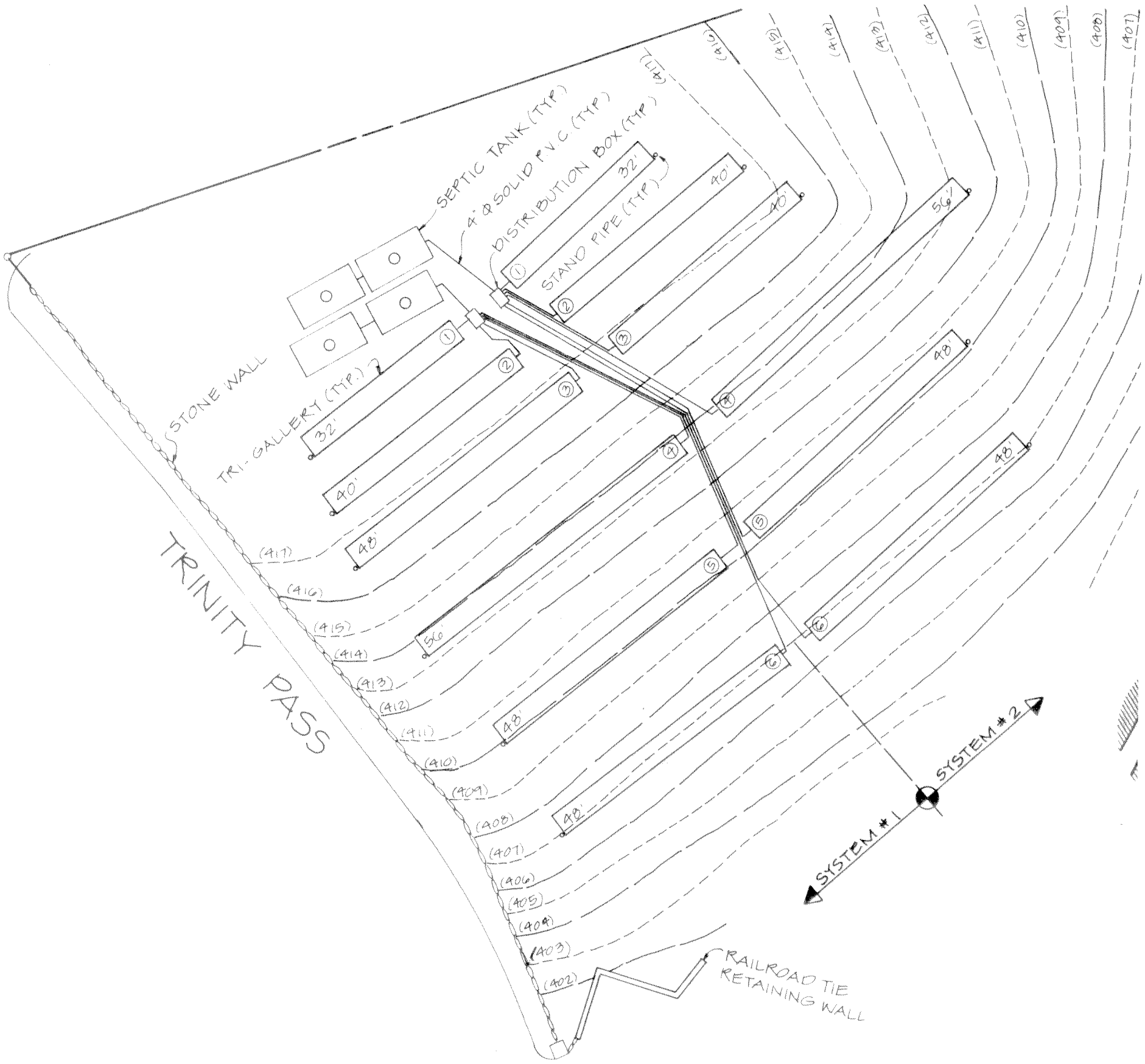
SCALE: 1" = 20'
DATE: 11 29 93
DRAWN BY: TR
CHECKED BY: RWL
JOB No.: 92089
DRAWING No.: S-1



INVERT	
IN	OUT
416.45	416.27
416.24	416.15
416.00	415.73
415.65	–
415.40	–
414.96	–
411.37	–
408.29	–
405.33	–

SYSTEM #2

	TOP		INVERT	
	@ STAND PIPE END	@ DIST. PIPE END	IN	OUT
1st SEPTIC TANK	–	–	416.64	416.54
2nd SEPTIC TANK	–	–	416.49	416.39
DISTRIBUTION BOX	–	–	416.00	415.73
TRI-GALLERY #1	416.27	416.33	415.66	–
TRI-GALLERY #2	416.11	416.13	415.46	–
TRI-GALLERY #3	415.55	415.57	414.90	–
TRI-GALLERY #4	411.86	411.89	411.23	–
TRI-GALLERY #5	408.96	408.93	408.26	–
TRI-GALLERY #6	405.92	405.98	405.31	–



SYSTEM #1

	TOP		INVERT	
	@ STAND PIPE END	@ DIST. PIPE END	IN	OUT
1st SEPTIC TANK	-	-	416.45	416.27
2nd SEPTIC TANK	-	-	416.24	416.15
DISTRIBUTION BOX	-	-	416.00	415.73
TRI-GALLERY #1	416.26	416.32	415.65	-
TRI-GALLERY #2	416.15	416.07	415.40	-
TRI-GALLERY #3	415.59	415.63	414.96	-
TRI-GALLERY #4	411.90	412.04	411.37	-
TRI-GALLERY #5	408.94	408.96	408.29	-
TRI-GALLERY #6	405.91	406.00	405.33	-

1st SEPTIC TANK
2nd SEPTIC TANK
DISTRIBUTION BOX
TRI-GALLERY #1
TRI-GALLERY #2
TRI-GALLERY #3
TRI-GALLERY #4
TRI-GALLERY #5
TRI-GALLERY #6

9456-5 29 WESTCHESTER AVE

Westchester gov.com

Westchester County Department of Health
Bureau of Environmental Quality

WCDH File : PR 2007-13 Municipality: POUND RIDGE

New System "A"-Serving Bldg. 1
Former Permit # PR2006-01

☑ Separate Sewage System ☑ Private Water Supply ☑ Residential ☐ Commercial

CERTIFICATE OF CONSTRUCTION COMPLIANCE:

Watershed Basin : STAMFORD

Property Address: 29 WESTCHESTER AVENUE Section: 9 Block: 9456

Owner Last Name: AHOME First Name: Lot: 5A R.S. Lot: –

Owner's Address: 185 KISCO AVENUE, MT. KISCO, NY 10549

Separate Sewage System to Consist of:

48" x 18" Flow Diffusors

Septic Tank Size: 1500 Gallons Trench Length: 216 Lin. Ft. X Trench Width: 72 Inches

Max Flow 600gpd

Other Requirements: 1250 gal holding tank, recirculation & pump chamber w/ 1/2 hp Pump - pump dose 210 gals/cycle

& 18" - 24" ROB Fill Within Primary Area

Building Type: Senior Housing # of Bedrooms ** Date Permit Issued: 8-23-2007

** 6 Suites w/ Max. 8 Occupants

Erosion Control (EC) Completed Yes ☐EC Waived

Other Requirements: Advantex AX-20 filter have not been required or approved by the WCHD.

Separate Sewage Contractor (SSC): Giovanni Battista Apollonio WCDH Septic License # 392

Water Supply:

☑Private Water Supply ☐Public Water Source: Existing Well

Well Driller (WD) Company Name: NYDEC Reg. #

I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans filed, and the permit issued by the Westchester County Department of Health.

Date: 11/7/08 Certified by: P.E. License # : 076296

Any person occupying premises served by the above system(s) shall promptly take such action as may be necessary to secure the correction of any unsanitary conditions resulting from such usage. Approval of the separate sewerage system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgment of the Commissioner of Health, such revocation, modification or change is necessary, said modification or change shall be done under the supervision of a licensed Professional Engineer or Registered Architect. With proper maintenance the systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date: Recommended By:

Date: 11/24/08 Approved By:

PUMP VOLUME: 9.77 gal/in x 21.5 in = 210 gal/cycle

SYSTEM TESTED ON 10/30/08 WITH WCHD.

~~*A 'B' - BUILDING 2 - WCHD Permit # PR2007-14*~~
~~*EXISTING SSDS UNDER WCHD 8-13-79 APPROVAL*~~

~~0 GAL. PRECAST CONCRETE SEPTIC TANK~~
~~EA. CIRCULATION & PUMP CHAMBER/W PUMP - PUMP DOSE 215 GAL.~~
~~EA. DISTRIBUTION BOX~~
~~0 GAL. PRECAST CONCRETE HOLDING TANK~~
~~IONAL IMPROVEMENTS:~~
~~*NTEX AX-20 SECONDARY FILTER SYSTEM (Not Required or Approved by WCHD)*~~

~~*SYSTEM "B"*~~
~~*PUMP CHAMBER - VOLUME 215 GALLONS/CYCLE*~~

~~*PUMP CHAMBER SIZE: 43" x 70"*~~

~~*CAPACITY: 20.9 cf/ft*~~
~~*1.74 cf/in*~~
~~*13.02 gal/in*~~

~~*PUMP CYCLE DEPTH: 16.5"*~~

~~***PUMP VOLUME: 13.02 gal/in x 16.5 in = 215 gal/cycle***~~

~~***SYSTEM TESTED ON 10/30/08 WITH WCHD.***~~

No.	Revision/Issue	Date
1	REV. EXIST. WELL	11/17/08

BARRY GEORGE NADERMAN
LAND PLANNING AND ENGINEERING, P.C.
tel: 914.245.5403
fax: 914.962.5963
e: bgn@naderman.com
3799 nelson ave.
box 7
jefferson valley, ny 10535

A - HOME
SCOTTS RIDGE DEVELOPMENT

29 WESTCHESTER AVENUE
TOWN OF POUND RIDGE WESTCHESTER CO., NY

"AS-BUILT"
RECORD PLAN SUBSURFACE SEWAGE DISPOSAL SYSTEM

STATE OF NEW YORK
BARRY GEORGE NADERMAN
076296
LICENSED PROFESSIONAL ENGINEER

Project 5349	Sheet RP-1A
Date 11-07-08	
Scale 1"= 30'	

A" WCHD PERMIT # PR2007-13
~~B" WCHD PERMIT # PR2007-14~~

location based upon a survey

e upon field inspection and

' of the new SSTS nor to remain
the new SSTS.

' of the proposed will nor within 200'
the general line of drainage from

with the Rules and Regulations for
rface Sewage Treatment Systems

uction of the OWTS and certifies its
plans.

l Basin.

)0 feet of the new SDS.

NOTES

1.) APPLICANT/ OWNER: ***A - HOME***
ADDRESS: ***185 KISCO AVE., SUITE 4, MOUNT KISCO, NY 10549***
PROPERTY LOCATION: ***29 WESTCHESTER AVE., POUND RIDGE, NY 10576***

TAX MAP DESIGNATION: SHEET: SEC. ***9*** BLK. ***9456*** LOT ***5A***

4.) THE DESIGN OF THE PROPOSED SUBSURFACE SEWAGE DISPOSAL AREA 'A' IS BASED ON A SOIL PERCOLATION RATE OF ***15-20*** MIN./INCH. AND A PROP. ***6*** SENIOR RESIDENT SUITES/ BUILDING.
MAX. ***8*** OCCUPANTS X 75 GPD/ OCCUPANT = ***600*** GPD DESIGN FLOW/ BLDG.

5.) THE SUBSURFACE SEWAGE DISPOSAL SYSTEM SHALL CONSIST OF THE FOLLOWING IMPROVEMENTS:

SYSTEM 'A' - BUILDING 1 - WCHD Permit # PR2007-13

216 L.F. 48" WIDE FLOW DIFFUSOR LEACHING CHAMBER
1500 GAL. PRECAST CONCRETE SEPTIC TANK
1 EA. CIRCULATION & PUMP CHAMBER/W PUMP - PUMP DOSE 210 GAL.
1 EA. DISTRIBUTION BOX
1000 GAL. PRECAST CONCRETE HOLDING TANK

ADDITIONAL IMPROVEMENTS:

ADVANTEX AX-20 SECONDARY FILTER SYSTEM (Not Required or Approved by WCHD)
18" - 24" ROB FILL WITHIN PRIMARY AREA 'A'

SYSTEM "A"
PUMP CHAMBER - VOLUME 210 GALLONS/CYCLE

PUMP CHAMBER SIZE: 37" x 61"

CAPACITY: 15.67 cf/ft
1.3 cf/in
9.77 gal/in

PUMP CYCLE DEPTH: 21.5"

PUMP VOLUME: 9.77 gal/in x 21.5 in = 210 gal/cycle

SYSTEM TESTED ON 10/30/08 WITH WCHD.

SYSTEM 'B' - BUILDING 2 - WCHD Permit # PR2007-14
EXISTING SSDS UNDER WCHD 8-13-79 APPROVAL

1500 GAL. PRECAST CONCRETE SEPTIC TANK
1 EA. CIRCULATION & PUMP CHAMBER/W PUMP - PUMP DOSE 215 GAL.
-- EA. DISTRIBUTION BOX
1000 GAL. PRECAST CONCRETE HOLDING TANK

ADDITIONAL IMPROVEMENTS:

ADVANTEX AX-20 SECONDARY FILTER SYSTEM (Not Required or Approved by WCHD)

SYSTEM "B"
PUMP CHAMBER - VOLUME 215 GALLONS/CYCLE

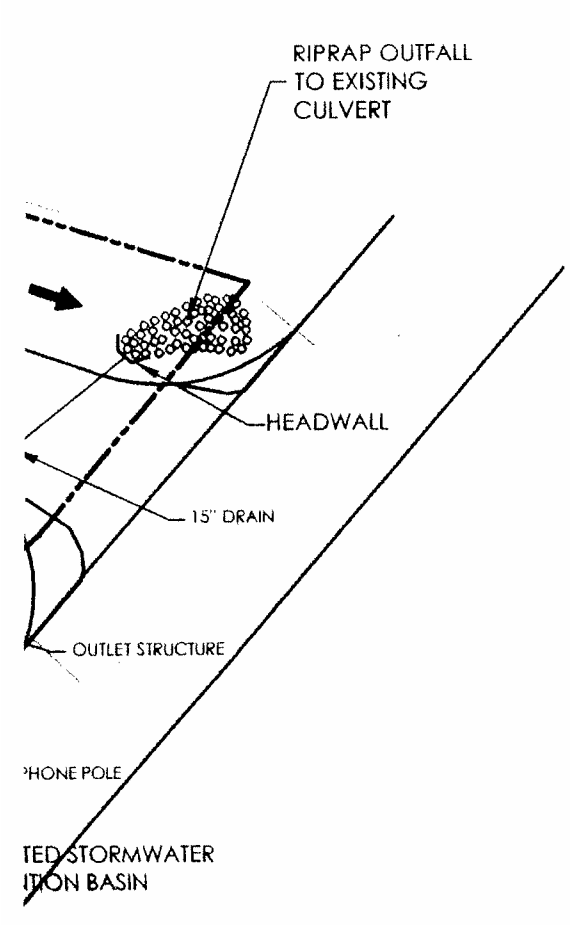
PUMP CHAMBER SIZE: 43" x 70"

CAPACITY: 20.9 cf/ft
1.74 cf/in
13.02 gal/in

PUMP CYCLE DEPTH: 16.5"

PUMP VOLUME: 13.02 gal/in x 16.5 in = 215 gal/cycle

SYSTEM TESTED ON 10/30/08 WITH WCHD.



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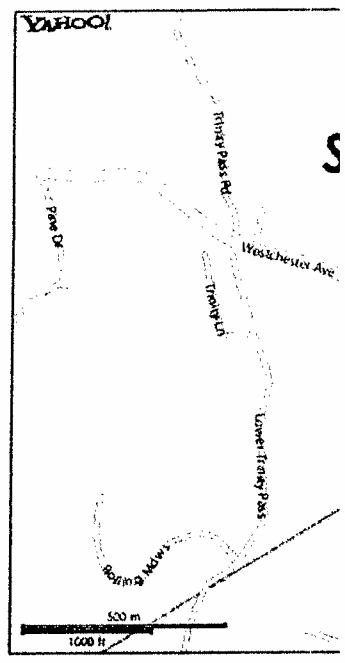
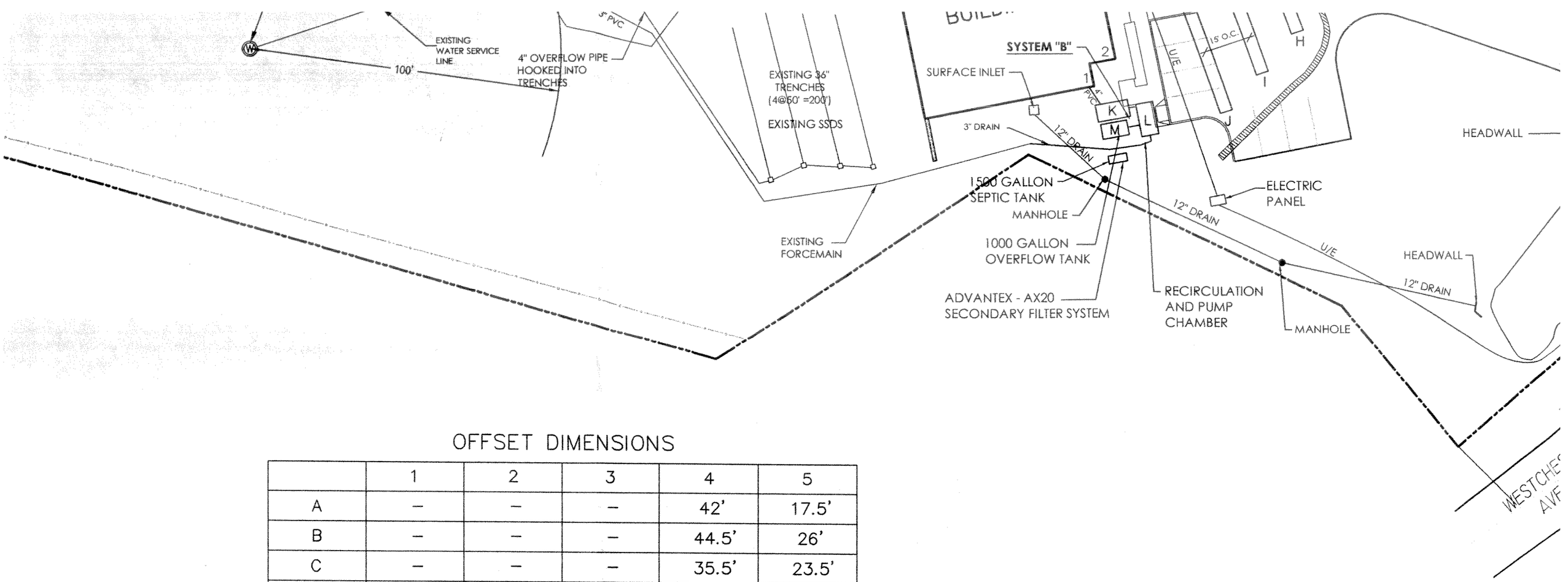


No.	Revis
1	REV. EXIST.

NADERM

A - H
SCOTT



OFFSET DIMENSIONS

	1	2	3	4	5
A	–	–	–	42'	17.5'
B	–	–	–	44.5'	26'
C	–	–	–	35.5'	23.5'
D	–	–	24'	27.5	–
E	–	53.5'	24.5'	–	–
F	–	68'	40.5'	–	–
G	–	81.5'	56'	–	–
H	–	61.5'	74'	–	–
I	–	49'	68'	–	–
J	–	40'	67.5'	–	–
K	10'	17'	–	–	–
L	20'	22'	–	–	–
M	15.5'	23'	–	–	–

PLAN

SCALE: 1" = 30'

AREA 'A'
216 LF FLOW DIFFUSORS
(EXIST. SLOPE 8-15%)

36'

ADVANTEX - AX20
SECONDARY FILTER SYSTEM

RECIRCULATION
AND PUMP
CHAMBER

1000 GAL.
OVERFLOW
TANK

1500 GAL.
SEPTIC TANK

DRAIN INLET

SYSTEM "A"

4" PVC

A

B

C

12" DRAIN

MANHOLE

BUILDING 1

5

4

F/D

2" PVC
FORCE MAIN

4" PVC

D BOX

12" DRAIN

U/E

W/S

F/D

D

E

F

G

12" DRAIN

PRIMA
FLOW
3 ROW
SPACE
216 LF

HE

A

EXISTING
8'Ø X 3' DEEP
SEEPAGE PIT
(typ.)

EXISTING
EXPANSION
AREA 'B'

EXISTING SSDS

B

4

4" EQUALIZATION
PIPE

3

1

EXISTING
DISTRIBUTION
BOX

SURFACE
INLET

W/S

WATER SERVICE
CONNECTION

SURFACE
INLET

BUILDING 2

3

2" WIDE CLAY BARRIER

EXISTING WELL
TO REMAIN

EXISTING
WATER SERVICE
LINE

100'

2

3" PVC

4" OVERFLOW PIPE
HOOKED INTO
TRENCHES

EXISTING 36"
TRENCHES
(4@50' =200')

EXISTING SSDS

SYSTEM "B"

2

SURFACE INLET

1

4"
PVC

K

M

L

3" DRAIN

12" DRAIN

15' O.C.

U/E

H

I

J

HEADWALL

1500 GALLON
SEPTIC TANK

MANHOLE

1000 GALLON
OVERFLOW TANK

ADVANTEX - AX20
SECONDARY FILTER SYSTEM

EXISTING
FORCEMAIN

12" DRAIN

ELECTRIC
PANEL

U/E

HEADWALL

12" DRAIN

RECIRCULATION
AND PUMP
CHAMBER

MANHOLE

OFFSET DIMENSIONS

Westchester gov.com

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality

PERMIT NUMBER: PR 2007-13

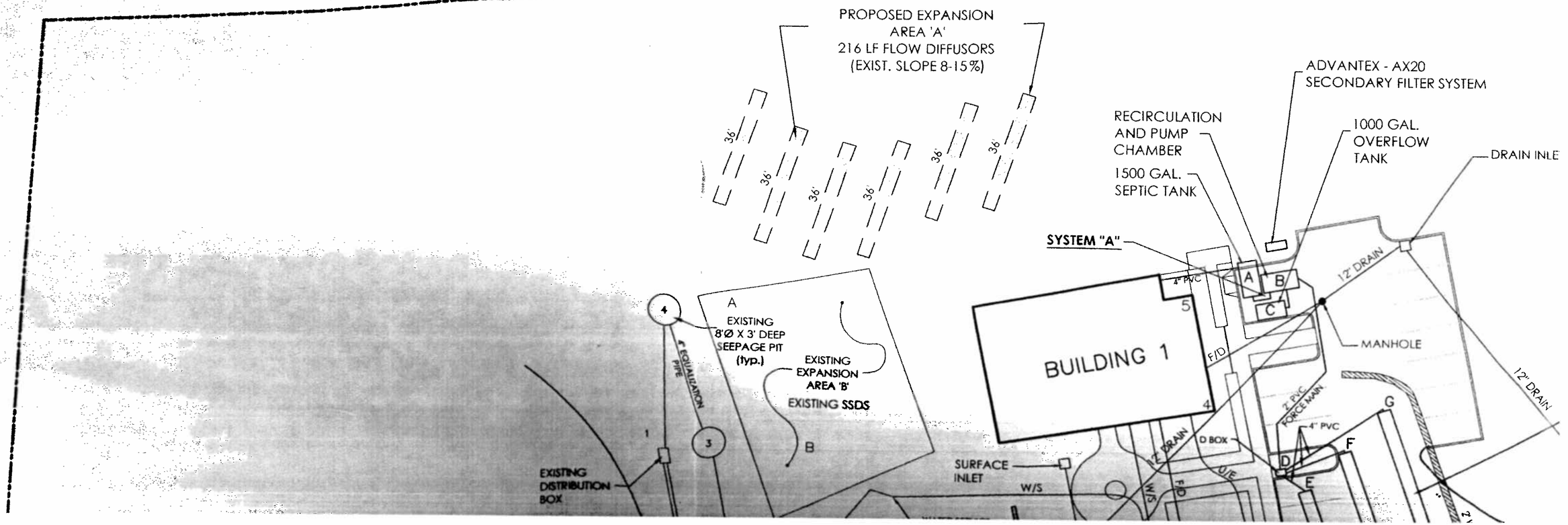
Name: Joan Arnold, A Home Municipality: Pound Ridge
Description: NEW SSTS TO SERVE Bldg #1
MAX FLOW 600gpd
# of Sheets: ONE (1)

Are hereby accepted as provisions of Chapter 873, Article VIII, Section 873.708.1 of the Westchester County Sanitary Code, subject to the provisions of the Certificate of Construction Compliance issued this date.

Reviewed by: _____ Date _____

Recommended by: _____ Date _____

Accepted by: _____ Date 11/24/08



Westchester gov.com

Westchester County Department of Health
Bureau of Environmental Quality

WCDH File : PR 2007-14 Municipality: POUND RIDGE

System "B" Existing - Serving Bldg. 2
See PR73-2 & PR2006-02

☑ Separate Sewage System ☑ Private Water Supply ☑ Residential ☐ Commercial

CERTIFICATE OF CONSTRUCTION COMPLIANCE:

Watershed Basin : STAMFORD

Property Address: 29 WESTCHESTER AVENUE Section: 9 Block: 9456

Owner Last Name: AHOME First Name: Lot: 5A R.S. Lot: --

Owner's Address: 185 KISCO AVENUE, MT. KISCO, NY, 10549

Separate Sewage System to Consist of:

max Flow Guess

Septic Tank Size: 1500 Gallons Trench Length: *** Lin. Ft. X Trench Width: *** Inches

***Exist. Pits & trenches/Ref/WCHD Permit PR73-2

Other Requirements: New 1250 gal holding tank, recirculation & pump chamber w/ 1/3 hp pump-pump dose 215 gal/cycl

Building Type: Senior Housing # of Bedrooms ** Date Permit Issued: 8-23-2007

**6 Suites w/ Max.8 occupants

Erosion Control (EC) Completed Yes ☐EC Waived

Other Requirements: Advantax AX-20 filters have not been required or approved by the WCHD.

Separate Sewage Contractor (SSC): Giovanni Battista Apollonio WCDH Septic License # 392

Water Supply:

☑Private Water Supply ☐Public Water Source: Existing Well

Well Driller (WD) Company Name: NYDEC Reg. #

I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans filed, and the permit issued by the Westchester County Department of Health.

Date: 11/7/08 Certified by: P.E. License #: 076296

Any person occupying premises served by the above system(s) shall promptly take such action as may be necessary to secure the correction of any unsanitary conditions resulting from such usage. Approval of the separate sewerage system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgment of the Commissioner of Health, such revocation, modification or change is necessary, said modification or change shall be done under the supervision of a licensed Professional Engineer or Registered Architect. With proper maintenance the systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date: Recommended By:

Date: 11/24/08 Approved By:

Joshua Lipsman, M.D., J.D., M.P.H, Commissioner, Westchester County Department of Health Rev. 1/18/08

UMP CYCLE DEPTH: 21.5"

UMP VOLUME: 9.77 gal/In x 21.5 in = 210 gal/cycle

YSTEM TESTED ON 10/30/08 WITH WCHD.

3' - BUILDING 2 - WCHD Permit # PR2007-14
STING SSDS UNDER WCHD 8-13-79 APPROVAL

_____GAL. PRECAST CONCRETE SEPTIC TANK
_____EA. CIRCULATION & PUMP CHAMBER/W PUMP - PUMP DOSE 215 GAL.
_____EA, DISTRIBUTION BOX
_____GAL. PRECAST CONCRETE HOLDING TANK

NAL IMPROVEMENTS:
EX AX-20 SECONDARY FILTER SYSTEM (Not Required or Approved by WCHD)

YSTEM "B"
UMP CHAMBER - VOLUME 215 GALLONS/CYCLE

UMP CHAMBER SIZE: 43" x 70"

CAPACITY: 20.9 cf/ft
1.74 cf/in
13.02 gal/in

UMP CYCLE DEPTH: 16.5"

UMP VOLUME: 13.02 gal/in x 16.5 in = 215 gal/cycle

YSTEM TESTED ON 10/30/08 WITH WCHD.

No.	Revision/Issue	Date
1	REV. EXIST. WELL	11/17/08

BARRY GEORGE NADERMAN
LAND PLANNING AND ENGINEERING, P.C.
tel: 914.245.5403
fax: 914.962.5963
e: bgn@naderman.com
3799 nelson ave.
box 7
jefferson valley, ny 10535

A - HOME
SCOTTS RIDGE DEVELOPMENT

29 WESTCHESTER AVENUE
TOWN OF POUND RIDGE WESTCHESTER CO., NY

"AS-BUILT"
RECORD PLAN SUBSURFACE SEWAGE DISPOSAL SYSTEM

STATE OF NEW YORK
BARRY GEORGE NADERMAN
076296
LICENSED PROFESSIONAL ENGINEER

Project 5349	Sheet RP-1B
Date 11-07-08	
Scale 1"= 30'	

~~" WCHD PERMIT # PR2007-13~~
" WCHD PERMIT # PR2007-14

ısed upon a survey

inspection and

/ SSTS nor to remain
ś.

ɔosed will nor within 200'
l line of drainage from

les and Regulations for
ige Treatment Systems

e OWTS and certifies its

e new SDS.

NOTES

1.) APPLICANT/ OWNER: ***A - HOME***
ADDRESS: ***185 KISCO AVE., SUITE 4, MOUNT KISCO, NY 10549***
PROPERTY LOCATION: ***29 WESTCHESTER AVE., POUND RIDGE, NY 10576***

TAX MAP DESIGNATION: SHEET: SEC. ***9*** BLK. ***9456*** LOT ***5A***

4.) THE DESIGN OF THE PROPOSED SUBSURFACE SEWAGE DISPOSAL AREA 'A' IS BASED ON A SOIL PERCOLATION RATE OF ***15-20*** MIN./INCH. AND A PROP. ***6*** SENIOR RESIDENT SUITES/ BUILDING.
MAX. ***8*** OCCUPANTS X 75 GPD/ OCCUPANT = ***600*** GPD DESIGN FLOW/ BLDG.

5.) THE SUBSURFACE SEWAGE DISPOSAL SYSTEM SHALL CONSIST OF THE FOLLOWING IMPROVEMENTS:

SYSTEM 'A' - BUILDING 1 - WCHD Permit # PR2007-13

216 L.F. 48" WIDE FLOW DIFFUSOR LEACHING CHAMBER
1500 GAL. PRECAST CONCRETE SEPTIC TANK
1 EA. CIRCULATION & PUMP CHAMBER/W PUMP - PUMP DOSE 210 GAL.
1 EA. DISTRIBUTION BOX
1000 GAL. PRECAST CONCRETE HOLDING TANK

ADDITIONAL IMPROVEMENTS:

ADVANTEX AX-20 SECONDARY FILTER SYSTEM (Not Required or Approved by WCHD)
18" - 24" ROB FILL WITHIN PRIMARY AREA 'A'

SYSTEM "A"
PUMP CHAMBER - VOLUME 210 GALLONS/CYCLE

PUMP CHAMBER SIZE: 37" x 61"

CAPACITY: 15.67 cf/ft
1.3 cf/in
9.77 gal/in

PUMP CYCLE DEPTH: 21.5"

PUMP VOLUME: 9.77 gal/in x 21.5 in = 210 gal/cycle

SYSTEM TESTED ON 10/30/08 WITH WCHD.

SYSTEM 'B' - BUILDING 2 - WCHD Permit # PR2007-14
EXISTING SSDS UNDER WCHD 8-13-79 APPROVAL

1500 GAL. PRECAST CONCRETE SEPTIC TANK
1 EA. CIRCULATION & PUMP CHAMBER/W PUMP - PUMP DOSE 215 GAL.
-- EA. DISTRIBUTION BOX
1000 GAL. PRECAST CONCRETE HOLDING TANK

ADDITIONAL IMPROVEMENTS:

ADVANTEX AX-20 SECONDARY FILTER SYSTEM (Not Required or Approved by WCHD)

SYSTEM "B"
PUMP CHAMBER - VOLUME 215 GALLONS/CYCLE

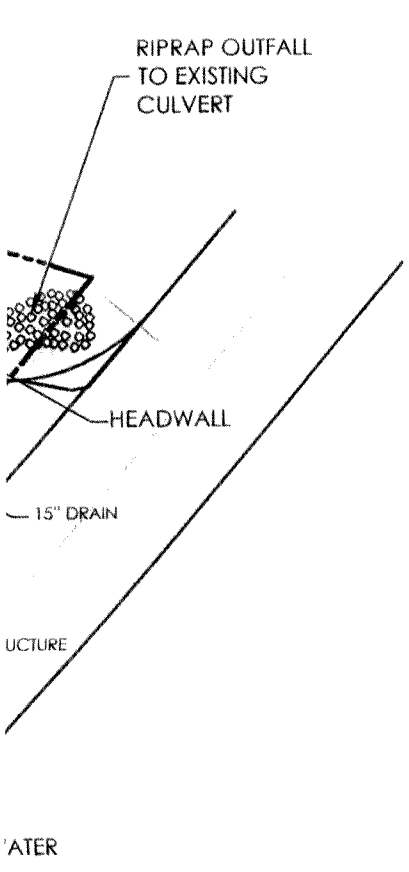
PUMP CHAMBER SIZE: 43" x 70"

CAPACITY: 20.9 cf/ft
1.74 cf/in
13.02 gal/in

PUMP CYCLE DEPTH: 16.5"

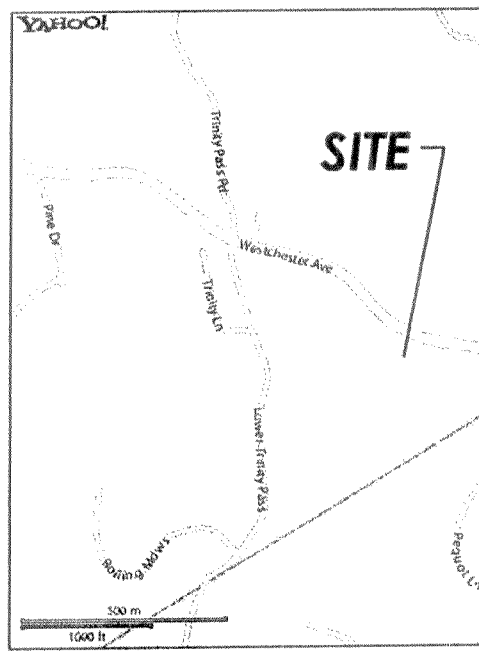
PUMP VOLUME: 13.02 gal/in x 16.5 in = 215 gal/cycle

SYSTEM TESTED ON 10/30/08 WITH WCHD.



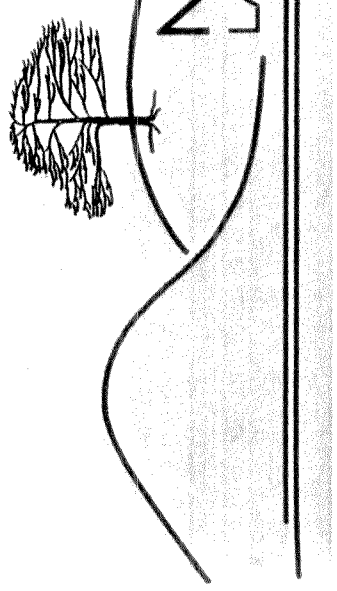
RIPRAP OUTFALL
UCTURE
'ATER

UNAUTHORIZED ALTERATIONS A
THIS DRAWING IS A VIOLATION
OF THE NEW YORK STATE EDUC



No.	Revision/Iss
1	REV. EXIST. WELL

NADERMAN
LAND PLANNING AND ENGINEERING, P.C.



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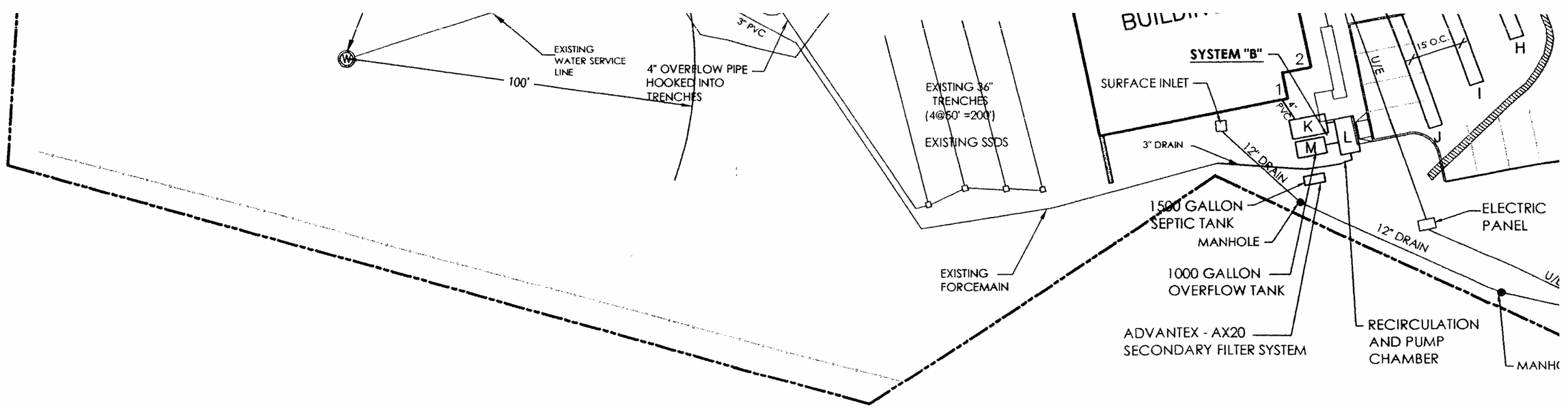
SCOTTS R



OFFSET DIMENSIONS

	1	2	3	4	5
A	–	–	–	42'	17.5'
B	–	–	–	44.5'	26'
C	–	–	–	35.5'	23.5'
D	–	–	24'	27.5	–
E	–	53.5'	24.5'	–	–
F	–	68'	40.5'	–	–
G	–	81.5'	56'	–	–
H	–	61.5'	74'	–	–
I	–	49'	68'	–	–
J	–	40'	67.5'	–	–
K	10'	17'	–	–	–
L	20'	22'	–	–	–
M	15.5'	23'	–	–	–

PLAN

SCALE: 1" = 30'

Reviewed by: _____ Date _____

Recommended by: _____ Date _____

Accepted by: Ed Bly Date 11/29/07

The subject property

There are no reservo

PROPOSED EXPANSION
AREA 'A'
216 LF FLOW DIFFUSORS
(EXIST. SLOPE 8-15%)

36' 36' 36' 36' 36' 36'

ADVANTEX - AX20
SECONDARY FILTER SYSTEM

RECIRCULATION
AND PUMP
CHAMBER

1000 GAL.
OVERFLOW
TANK

DRAIN INLET

1500 GAL.
SEPTIC TANK

SYSTEM "A"

4" PVC

A B C

12" DRAIN

5

BUILDING 1

F/D

MANHOLE

4

2" PVC
FORCE MAIN

G

4" PVC

F

D

E

D BOX

U/E

DRAIN

F/D

W/S

SURFACE
INLET

W/S

WATER SERVICE
CONNECTION

SURFACE
INLET

3

BUILDING 2

SYSTEM "B"

2

SURFACE INLET

1

4" PVC

K

M

L

J

I

H

15' O.C.

U/E

2' WIDE CLAY BARRIER

3" DRAIN

12" DRAIN

HEADWALL

1500 GALLON
SEPTIC TANK

MANHOLE

1000 GALLON
OVERFLOW TANK

ELECTRIC
PANEL

12" DRAIN

U/E

HEADWALL

12" DRAIN

ADVANTEX - AX20

RECIRCULATION
AND PUMP

PRIMARY AREA 'A'
FLOW DIFFUSORS
3 ROWS @ 72 LF
SPACED 15' OC
216 LF TOTAL

HEAD WALL

GRA

A

4

EXISTING
8'Ø X 3' DEEP
SEEPAGE PIT
(typ.)

4" EQUALIZATION
PIPE

EXISTING
EXPANSION
AREA 'B'

EXISTING SSDS

B

3

1

EXISTING
DISTRIBUTION
BOX

2

3" PVC

EXISTING WELL
TO REMAIN

EXISTING
WATER SERVICE
LINE

100'

4" OVERFLOW PIPE
HOOKED INTO
TRENCHES

EXISTING 36"
TRENCHES
(4@50' =200')

EXISTING SSDS

EXISTING
FORCEMAIN

Westchester gov.com

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality

PERMIT NUMBER: PR2007-14

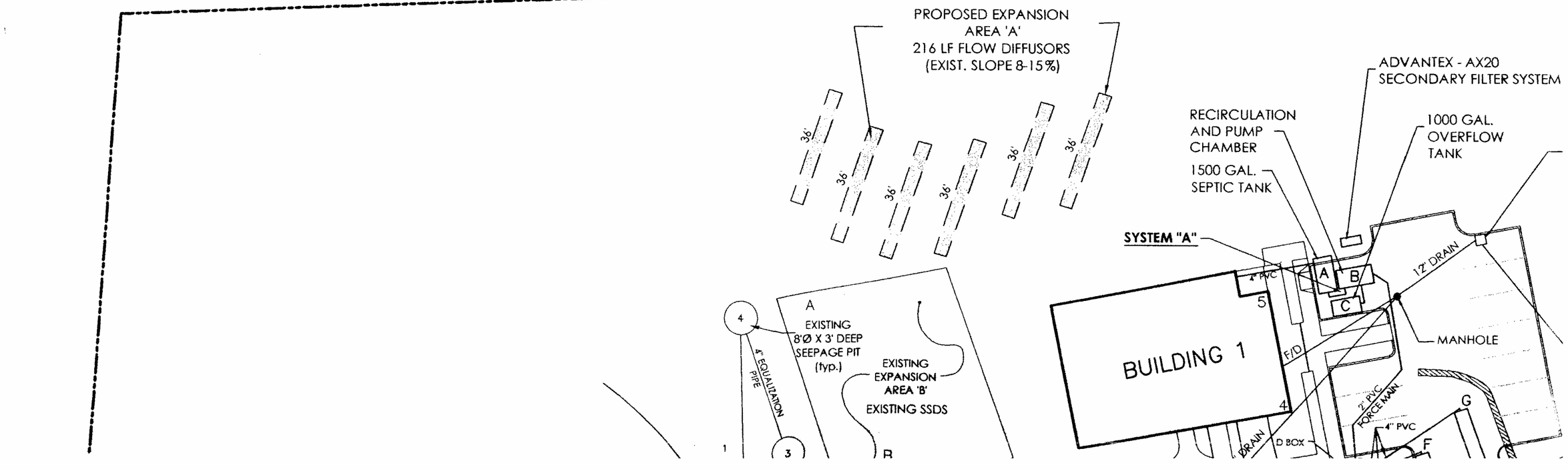
Name: Jun Acik, A Home Municipality: Pound Ridge
Description: SSTS Improvement To Serve Building #2
(new septic tank + pump chamber) Max flow 600 gpd
# of Sheets: one (1)

Are hereby accepted [illegible] provisions of Chapter 873, Article VIII, Sec[illegible] VII, Section 873.708.1 of the Westchester C[illegible] subject to the provisions of the Certificate of Construction Compliance issued this date.

Reviewed by: _____ Date _____

Recommended by: _____ Date _____

Accepted by: Ed Rx Date 11/24/07



WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality
110 So. Bedford Road
Mt. Kisco, NY 10549

DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM FILE NO. _____

Owner HCE DRYWALL, INC. Address 10 DUNWOODIE ST. SCARSDALE N.Y. 10583

Located at (Street) WESTCHESTER AVE Sec. 9 Block 9456 Lot 5A
(Indicate nearest cross St.)

Municipality POUND RIDGE Watershed STAMFORD

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Presoak Date: 11/3/00 Run Date: 11/4/00

PRIMARY AREA "A"

HOLE #		CLOCK TIME		PERCOLATION				
Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water From Grd Surface Start Inches	Depth to Water From Grd Surface Stop Inches	Water Level Drop In Inches	Soil Rate Min/In Drop
1	1	3:23	3:53	30	27	29	2	15
	2	3:55	4:25	30	27	28 3/4	1 3/4	17.1
	3	4:26	4:56	30	27	28 3/4	1 3/4	17.1
	4							
	5							
2	1	3:25	3:56	30	26	28 1/4	2 1/4	13.3
	2	3:57	4:27	30	26	28	2	15.0
	3	4:28	4:58	30	26	28	2	15.0
	4							
	5							
3	1	3:30	3:47	17	27 1/2	30 1/2	3	5.7
	2	3:50	4:13	23	27 1/4	30 1/2	3 1/4	7.1
	3	4:14	4:36	22	27 1/2	30 1/2	3	7.3
	4							
	5							

36" DEEP

36" DEEP

36" DEEP

Notes:

Perc test done by: BARRY G. NIKOPENSIUS, P.E.

1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.

2) Depth measurements to be made from top of hole. DO NOT REPORT INCREMENTS OF LESS THAN ONE INCH.

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES PRIMARY AREA

DEPTH	HOLE NO. 1	HOLE NO. 2	HOLE NO. 3	HOLE NO. 4
G.L.	OLD PKG LOT	OLD PKG	OLD PKG	OLD PKG
6"	SUBBASE GRAVEL	SUBBASE GRAVEL	SUBBASE GRAVEL	SUBBASE GRAVEL
12"	GRAVELLY LOAM FILL	GRAVELLY LOAM FILL	GRAVELLY SAND	SANDY LOAM
18"	↓	↓	↓	↓
24"	VERY ROCKY	↓	LARGE BOULDERS	↓
30"	↓	↓	↓	FINE SANDS
36"	↓	↓	↓	↓
42"	↓	↓	↓	LARGE STONES
48"	↓	↓	↓	↓
54"	↓	↓	↓	↓
60"	↓	MOTTLING	↓	↓
66"	ROCK	↓	↓	↓
72"	ROCK	↓	FINE DENSE SAND	↓
78"		GROUNDWATER SEEPAGE	MOTTLING	↓
84"		↓	↓	↓

WAS GROUNDWATER ENCOUNTERED YES

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED 78"

INDICATE LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED 78"

DEEPTESTS MADE BY BARRY G. NAIERMAN, P.E. DATE OF DEEP TESTS 11/19/02
W/ ED OSTAMEY - WCHO

DESIGN

Soil Rate Used 16-30 Min/1" Drop: S.D. Usable Area Provided 9,600 S.F.

No. of Bedrooms 6 (3-2 BDRM UNITS) Septic Tank Capacity 1,500 Gals. Masonry ☒ Metal ____

Absorption Area Prov. by 320 L.F. x ~~24" width trench~~ 48"X18" FLOW DIFFUSORS. Other 18"-24" ROB WITHIN PRIMARY AREA, 1,500 GAL HOLDING TANK, PUMP CHAMBER W/ 3/4 HP PUMP - PUMP DOSE - 314 GALS.

Name BARRY G. NAIERMAN, P.E. Signature [signature]

Address 3799 NELSON AVE-BOX 7 SEAL

JEFFERSON VALLEY, N.Y. 10535

Westchester County Health Department

Soil Rate Approved _____ Sq.Ft./Gal. Checked by _____

Date _____

S.D. 27.6
4/98

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality
110 So. Bedford Road
Mt. Kisco, NY 10549

DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM FILE NO. _____

Owner HCG DRYWALL, INC. Address 10 DUNWOODIE ST. SCARSDALE N.Y. 10583

Located at (Street) WESTCHESTER AVE Sec. 9 Block 9456 Lot 5A
(Indicate nearest cross St.)

Municipality POUND RIDGE Watershed STAMFORD

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Presoak Date: 12/20/02 Run Date: 12/21/02

EXPANSION AREA "A"

HOLE #		CLOCK TIME		PERCOLATION				
Hole Number	Run No.	Start	Stop	Elapse Time Min.	Depth to Water From Grd Surface Start Inches	Depth to Water From Grd Surface Stop Inches	Water Level Drop In Inches	Soil Rate Min/In Drop
4	1	10:36	11:34	58	26	29¼	3¼	8.6
	2	11:35	11:52	17	26	29	3	9.0
	3	11:53	12:22	29	26	29	3	9.6
	4							
	5							
	1							
	2							
	3							
	4							
	5							
	1							
	2							
	3							
	4							
	5							

36" DEEP

Notes:

Perc test done by: BARRY E. NADELMAN, P.E.

1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.

2) Depth measurements to be made from top of hole. DO NOT REPORT INCREMENTS OF LESS THAN ONE INCH.

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

EXPANSION AREA.

DEPTH	HOLE NO. 5	HOLE NO. 6	HOLE NO. 7	HOLE NO. 8
G.L.	LIGHT WOODS	LIGHT WOODS	LIGHT WOODS	LIGHT WOODS
6"	TOPSOIL	TOPSOIL	TOPSOIL	TOPSOIL
12"	SANDY LOAM SOME SILTS	SANDY LOAM SOME SILTS	SANDY LOAM SOME SILTS	SANDY LOAM SOME SILTS
18"	↓	↓	↓	↓
24"	SANDS/GRAVEL	SANDS/GRAVEL	↓	SANDS/GRAVELS
30"	↓	↓	MEDIUM SANDS GRAVELLY	↓
36"	↓	VERY ROCKY GRAVELLY	↓	↓
42"	VERY ROCKY	↓	↓	↓
48"	GRAVELLY	↓	↓	↓
54"	↓	↓	↓	↓
60"	↓	↓	VERY ROCKY	↓
66"	↓	↓	↓	↓
72"	↓	↓	↓	↓
78"	↓	↓	↓	↓
84"	↓	↓	↓	↓

WAS GROUNDWATER ENCOUNTERED NO

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED N/A

INDICATE LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED

DEEPTESTS MADE BY BARRY G. WADERMAN, P.E. DATE OF DEEP TESTS 11/19/02
W/ ED OZLIMEY - WCHD

DESIGN

Soil Rate Used 16-30 Min/1" Drop: S.D. Usable Area Provided 9,600 S.F.

No. of Bedrooms 6 (3-2 BDRM UNITS) Septic Tank Capacity 1,500 Gals. Masonry X Metal ____

Absorption Area Prov. by 320 L.F. x ~~[illegible] width trench~~ 48"X18" FLOW DIFFUSORS. Other 18"-24" ROCK WITHIN PRIMARY AREA, 1,500 GAL HOLDING TANK, PUMP CHAMBER W/ 1/3 HP PUMP - PUMP DOSE 314 GALS.

Name BARRY G. WADERMAN, P.E. Signature [signature]

Address 3799 NELSON AVE-BOX 7 SEAL

JEFFERSON VALLEY, N.Y. 10535

Westchester County Health Department

Soil Rate Approved _____ Sq.Ft./Gal. Checked by _____

Date _____

S.D. 27.6
4/98

9456-55 35 WESTCHESTER AVE

✓ Separate Sewerage System ✓ Private Water Supply 99-35-10/3 H1 403

Municipality TOWN OF POUND RIDGE

CERTIFICATE OF CONSTRUCTION COMPLIANCE

WCDH File No. P.R. 73-12

Located at WESTCHESTER AVE Section 9 Block 9956

Owner EMIL DOLENSEK Lot Plo 5 Job

Separate Sewerage System built by SAF SEPTIC SYSTEMS INC. Address NEW ROCHELLE N.Y.

Consisting of 750 Gal. Masonry, Wood Septic Tank 4-5'ϕ x 5' DEEP SEEPAGE PITS lineal feet X width trench

Other requirements 1 HP PUMP IN PUMP PIT, ALARM IN BUILDING

Water Supply: Public Supply From

✓ Private Supply Drilled By BORISCHUK Address STAMFORD, CONN.

Building Type RESIDENTIAL Number of Bedrooms FLOW 600 GPD Date Permit Issued

Erosion Control Completed Waived

Other Requirements

I certify that the system(s) as listed serving the above premises was constructed essentially as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans filed, and the permit issued by the Westchester County Department of Health.

Date 7-18-74 Certified By Tonley Landa

Any person occupying premises served by the above system(s) shall promptly take such action as may be necessary to secure the correction of any unsanitary conditions resulting from such usage. Approval of the separate sewerage system shall become null and void as soon as a public sanitary sewer becomes available and the approval of the private water supply shall become null and void when a public water supply becomes available. Such approvals are subject to modification or change when, in the judgment of the Commissioner of Health, such revocation, modification or change is necessary, said modification or change shall be done under the supervision of a licensed Professional Engineer or Registered Architect.

With proper maintenance these systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date Aug. 16, 1974 William R. Bumfield, Jr., M. D., Commissioner By Vincent P. Leone San. Eng.

S. D. 47.66 Westchester County Department of Health

Westchester County Department of Health
Division of Environmental Sanitation

WELL COMPLETION REPORT

his report is to be completed by well driller and submitted to Health Department, together with laboratory report of analysis of water sample indicating water is of satisfactory bacterial uality, before certificate of construction compliance is issued.

Well construction to be in accordance with Bulletin SD-62
"RULES & REGULATIONS RELATING TO INDIVIDUAL WATER SUPPLIES"

OCATION: MUNICIPALITY Pound Ridge NY SECTION 9 BLOCK 9456 PART OF LOT 5

ELL OWNER: MR Emil Dolensek Westchester Ave Pound Ridge NY
Name Street Address City and Town

ELL DRILLER: Boris Churyk 20 Cobbo Terr Stamford, Conn
Name Street Address City and Town

CASING DETAILS	YIELD TEST	WATER LEVEL	SCREEN DETAILS
ngth: 33 Feet	Bailed or X Pumped 6 Hours	(measure from land surface) Static: 5 Feet	Make:
ameter: 6 Inches	Yield: 15 G.P.M.	When Bailed or Pumped 290 Feet	Length Ft. Slot Size
nd: Heavy Duty Steel			Diameter In.

TAL DEPTH OF WELL 290 FEET

WELL LOG

Depth From round Surface	Give description of formations penetrated, such as: peat, silt, sand, gravel, clay, hardpan, shale, sandstone, granite, etc. Include size of gravel (diamet and sand (fine, medium, coarse), color of material, structure (Loose, packed, cemented, soft, hard). For example: 0 ft. to 27 ft. fine, packed, yellow sanc 27 ft. to 134 ft. gray granite.
1 Ft. to 15 Ft.	Clay + boulders
5 Ft. to 290 Ft.	granite
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	

te Well Was Completed June 3 1974 Date of Report

Well Driller Boris Churyk
Signature

WELL PIT AND PUMP EQUIPMENT DETAILS

Finished Well: Check

____ Pit with 4-inch Gravity Drain to Grade

____ Pit with 4-inch Gravity Drain to Basement

__X__ Pitless Adapter - Casing Min. 12 inches above grade

____ Other: Describe

Pump: Make Berkeley Type submersible Capacity ½ H.P. G.P.M. 10

Storage Tank: Type galv. Capacity 82 Gal. (42 Gal. Min.)

DIAGRAM SHOWING LOCATION OF WELL ON PREMISES

Indicate location of house, well and sewage disposal system with distances. Also indicate direction of slopes, and direction with distances to all wells and sewage disposal systems within 250 feet.

I certify that the individual water supply indicated above was installed as per the rules and regulations of Bulletin SD.62 of the Westchester County Department of Health.

PROFESSIONAL ENGINEER
NO. 32720
STATE OF NEW YORK

Stanley J. Sander

COUNTY OF WESTCHESTER DEPARTMENT OF HEALTH - Division of Environmental Sanitation

DESIGN DATA SHEET - SEPARATE SEWAGE SYSTEM FILE NO. _____

Ower EMIL DOLENSEK Address TRINITY PASS POUND RIDGE N.Y.

Located At (Street) WESTCHESTER AVE Sec. 9 Block 9456 Lot P/O 5
(Indicate nearest cross street)

Municipality POUND RIDGE Watershed STAMFORD RES.

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Hole Number	Run No.	CLOCK TIME Start	Stop	Elapse Time Min.	PERCOLATION Depth to Water From Ground Surface Start Inches	Stop Inches	Water Level in Inches Drop in Inches	PERCOLATION Soil Rate Min/in.drop
P_1	1	9:50	10:10	20	4'-0"	4'-3½"	3½"	5.7
	2	10:11	10:32	21	4'-0"	4'-3⅜"	3⅜	6.2
	3							
	4							
	5							
P_2	1	10:00	10:12	12	4'-0"	4'-3¼"	3¼	3.7
	2	10:13	10:26	13	4'-0"	4'-3⅛	3⅛	4.1
	3							
	4							
	5							
P_3	1	10:03	10:22	19	4'-0"	4'-3"	3	6.3
	2	10:23	10:43	20	4'-0"	4'-3"	3	6.6
	3							
	4							
	5							

Notes:

1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.
2) Depth measurements to be made from top of hole .

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO. P1	HOLE NO. P2	HOLE NO. P3	HOLE NO. DEEP HOLE
G.L.	TOPSOIL	TOPSOIL	TOPSOIL	TOPSOIL
6"	"	"	"	"
12"	SAND CLAY MIX	SAND CLAY MIX	SAND CLAY MIX	SAND CLAY MIX
18"	"	"	"	"
24"	"	"	"	"
30"	"	"	"	"
36"	SAND SOME STONE	SAND SOME STONE	SAND SOME STONE	SAND SOME STONE
42"	"	"	"	"
48"	"	"	"	"
54"	"	"	"	"
60"				"
66"				"
72"				"
78"				"
84"				"

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED No WATER
INDICATE LEVEL TO WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED
TESTS MADE BY S. J. LANDER DATE 5-3-73

DESIGN

Soil Rate Used 10 Min/1" Drop: S.D. Usable Area Provided 5000 ☐'
FLOW 600GPD
No. of Bedrooms ____ Septic Tank Capacity 750 Gals. Masonry ✓ Metal ____

Absorption Area Provided By ____ L.F.x24" ____ 36" ____ width trench. Other ✓
9 - 5'Ø x 5' DEEP SEEPAGE PITS

Name STANLEY J. LANDER Signature Stanley J. Lander

Address BOX 267
AMAWALK, N. Y. 10501
245-2645

Westchester County Health Department

Soil Rate Approved ____ Sq. Ft./Gal. Checked by ____ Date ____

S.D. 27.6 (Rev. 5-24-66) (February 18, 1969)

LICENSED PROFESSIONAL ENGINEER SEAL STATE OF NEW YORK LIC. No. 32725

WEST. CO. DEPT. OF HEALTH SOMERS OFFICE MAY 1 4 1973

RECEIVED

Point	Distance From				
	A	B	C	D	E
1	47	22			
2	36	32			
3	27	43			
4	-		46	72	
5			60	90	
6			54	84	
7	110				115

340-29-15E 120.94'

4 - 5'ø x 5' Deep Seepage Pits

N8-59E 20.00

S 19-55-30W 110.00

195'

S 36-37E 39.51'

S 40-13E

S 71-31E

Distribution Box

100% Expansion Area

N

D C

E

Veterinary Clinic
Design Flow 600 GAD
Alarm in Building

2" Plastic Line

S 02-41-00W 57.00

B

A

N 84-20E 7.93

N 63-39E 8.14

S 29-18E 69.57

N 78-16E 34.19

Paved Area

132'

3 2 1

Drilled Well

5'ø x 4.6' Deep
Overflow Seepage Pit

750 Gal Septic Tank

550 Gal Pump P
with 1 HP Pump

N 78-10E
N 84

S 29-50-45E

218.10'

S 41-19-45E

112.80'

N 27°W

Westchester Ave

PLAN

Scale 1" = 20'

ACCEPTED
AS FINAL PLANS
DATE Aug. 16, 1974
WEST. CO. DEPT.
OF HEALTH
BY V.R. Leone

100' to Expansion Area

N

S 41-19-45 E 112.80'

S 48-41-40 W 90.00'

N 41-19-45 W 110.00'

D C E

VETERINARY CLINIC
DESIGN FLOW 600 GAD
ALARM IN BUILDING

2" Plastic Line

A B

195'

S 32-33 E 46.14'

S 77.31 E

N 84-20 E 7.93
N 63-39 E 8.14
S 29-19 E 69.57

N 84-16 E 34.19'

N 79-10 E 11.99

7.00
N 27-01 W

S 29-50-45 E 218.10'

Paved Area

130'

Drilled Well

3 2 1

750 Gal Septic Tank

5'Ø x 4.6' Deep
Overflow Seepage Pit

550 Gal Pump Pit
with 1 HP Pump

Westchester Ave

PLAN
Scale: 1" = 20'

ACCEPTED
AS FINAL PLANS
DATE Aug. 16, 1974
WEST. CO. DEPT.
OF HEALTH
BY V.R. Lenza

Distribution Box
(5'Ø x 3' Deep
Capacity
1100 G.P.D.)

Existing Ground

Bottom of Walk

750 Gal Septic Tank

12" Fall

2" Plastic Line

Pump Pit with 1 HP Pump

PROFILE
Scales: Horiz. 1" = 20'
Vert. 1" = 10'

The lot shown hereon is known as Lot E Block 3456 Section 9 on Town Assessment Maps

As Built Drawing
Septic System
For
Emil Dolensek
Westchester Avenue
Town of Pound Ridge
Westchester County N.Y.
July 18, 1974

Licensed Professional Engineer
Stanley & Lander
Lic. No. 32720
State of New York

Stanley J. Lander
Consulting Engineer
Armonk N.Y.

9456-6 27 WESTCHESTER AVE

Westchestergov.com

ONSITE WASTEWATER TREATMENT SYSTEM (OWTS)
REPAIR AND REMEDIATION DATA FORM

Municipality: _____

Property Mailing Address (No. & Street): 27 Westchester Ave

Town/ Village: Pound Ridge State: NY Zip: _____

Owner: Coleridge Spyder, LLC

Owner Mailing Address (No. & Street) (if different): c/o Steven Weis 767 3rd Ave 24th Floor → Schlesinger + Davis

Town/ Village: New York State: NY Zip: 10017

Property Use: [] Single Family [] Multi-Family [] Industrial [X] Commercial

[X] Other - Describe: Apt Attached Apt/Art Gallery.

OWTS Remediation ☐ **WCDH File #:** _____

Remediation shall mean installation, replacement, or expansion of onsite wastewater treatment system components to correct an OWTS failure, or impending failure, resulting in, or that may result in, the discharge of sewage or domestic wastes or trade wastes or offensive material on to the surface of the ground, into a storm sewer, or into a watercourse or water body. Remediation shall not include repairs, as defined above, to correct an OWTS failure.

OR

OWTS Repair ☑ **Complete the following information.**

Repair shall mean the repair, maintenance, and replacement in kind and in situ; of broken, damaged, or worn onsite wastewater treatment system components.

Number of Bedrooms 1 Number of Bathrooms: 2 Water Supply Type: Public ☐ Well ☒

Please note below only components that have been repaired or replaced.

Repaired	Replaced	
☐	☑	House Sewer or other Solid Pipe(s)
☐	☑	Septic Tank#1 Size(gallons): 1250
☐	☐	Septic Tank#2: Size (gallons): _____
☐	☑	Junction/Distribution Box(es)
☐	☐	Sewage Pump(s) or other Dosing Equipment
☐	☑	Absorption Trench Length 108' ft. X Trench Width 4' ft
☐	☐	Seepage Pit(s)
☐	☐	Galley(s)
☐	☐	Gravelless Trench(es)
☐	☐	75-A Alternative System
☐	☐	Other Advanced Alternative System
☐	☐	Other System Component(s) - Describe: _____

DRAW BUILDING AND LOCATION OF WORK PERFORMED ON BACK OF THIS FORM

☑ **Entire System Replaced**

Contractor's Name (print): PAUL SKIADAS Date Repair/Remediation Completed: 3/9/12.

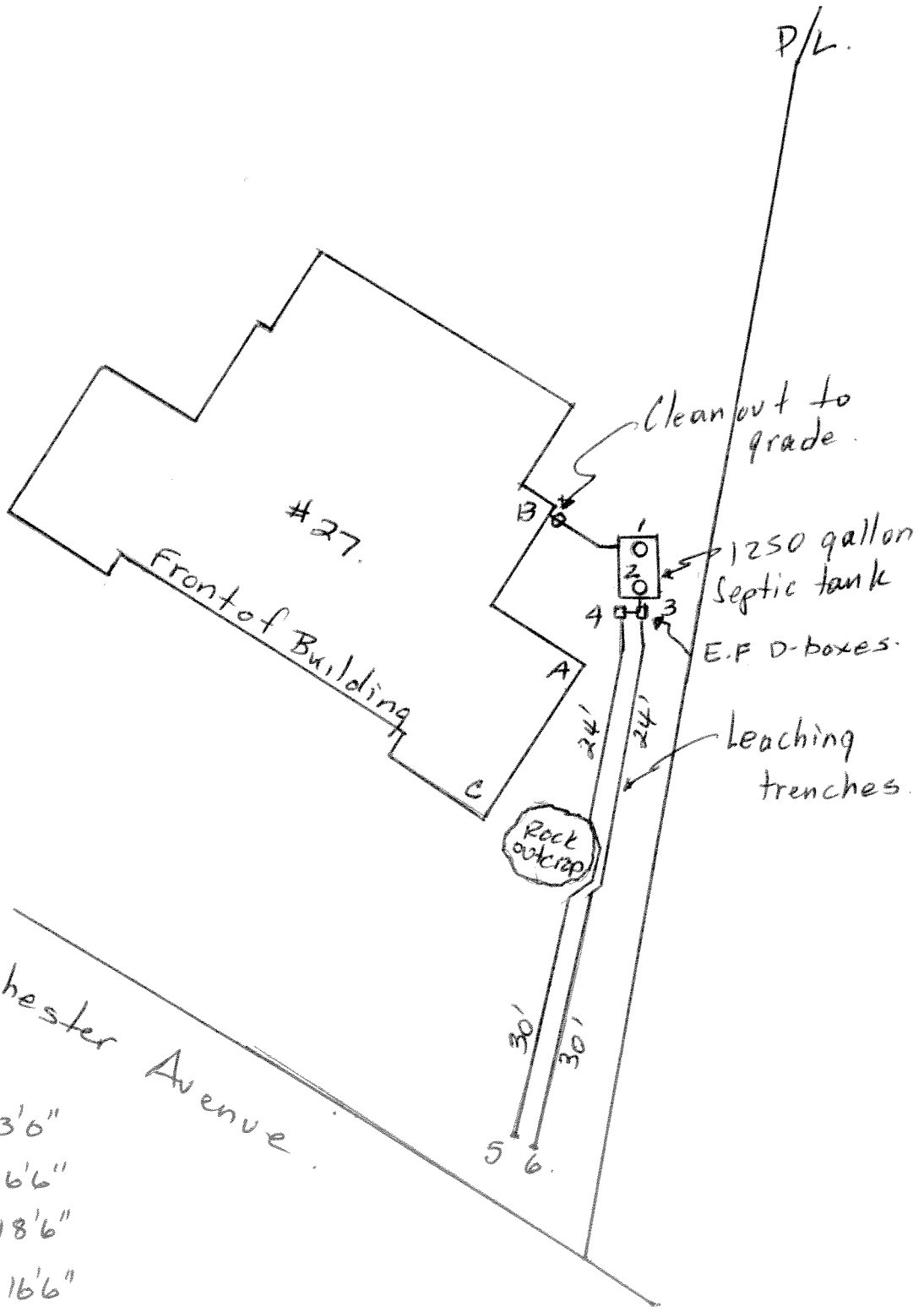
Contractor's Signature: Paul Skiadas License No.: 363.

Upon completion please remit to:

Westchester County Department of Health- BEQ
118 North Bedford Road, Rm# 100
Mt. Kisco, NY 10549
Attn: Patricia Tornello-Adams

Rev. 10/11

Repair File #: REP 2012-81
(WCDH Staff only)



A-1 = 17'6"
A-2 = 12'0"
A-3 = 10'6"
A-4 = 8'6"
A-5 = 55'
A-6 = 55'

B-1 = 13'0"
B-2 = 16'6"
B-3 = 18'6"
B-4 = 16'6"

C-5 = 35'0"
C-6 = 35'0"

P.S.D. Poundridge **Date:** 2-16-42 3/27/42

Location: Westchester Avenue

Section: **Block:** **Lot:**

Owner: J. Augustine Mc Nally

Builder: same

House: 1 bedroom 1 bathroom

Soil test made: no **Rate:**

Tank capacity: 300 gal. **Material:** masonry

Absorption:

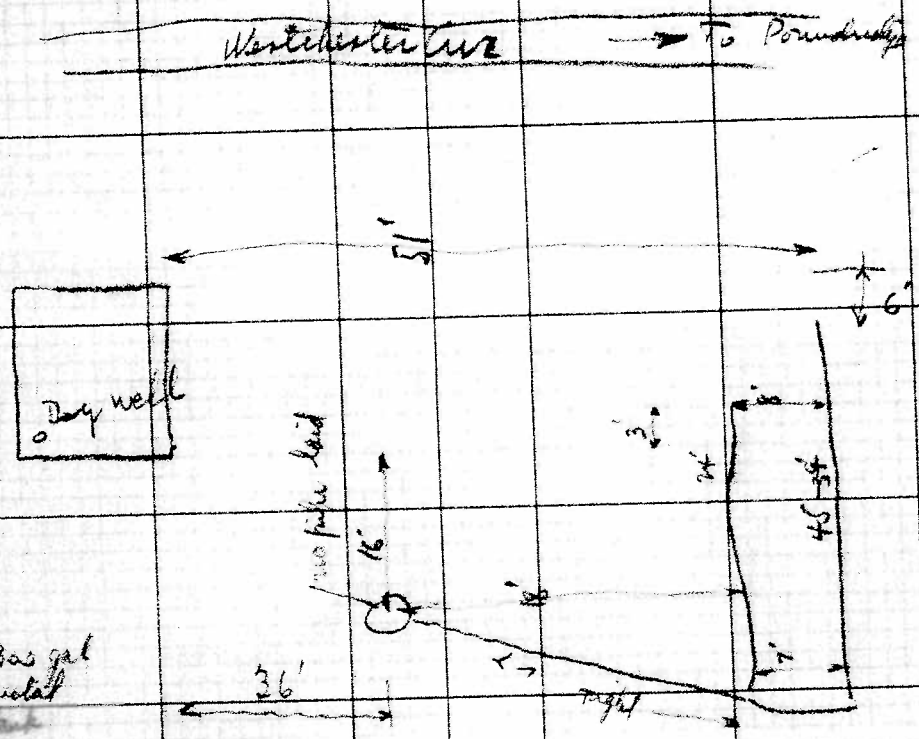
80' x 24"

Approval issued: 3-27-42 Sketch-Book~~7~~ 2-25 3 4

Poundridge COUNTY PET. NO. ROUTE NO. COUNTY NO. SECTION NO. PAGE 42-25 A

J. Augustine McNally, Westchester Avenue

2-16-42 - J. Augustine McNally - 300 gal. 80' x 24" A



24
3/4
63 LF x 21" wide = 111 □'

min. 120 □' required

3-6-42

24
45
69 x 24" wide = 120 □'

3-26-42

County of Westchester

DEPARTMENT OF HEALTH
County Office Building
White Plains, N. Y.

March 27, 1942

Sewer
Poundridge

Mr. J. Augustine McNally
Box 244
New Canaan, Connecticut

FINAL APPROVAL OF SEWAGE DISPOSAL SYSTEM

Dear Sir:

You are hereby notified that the sewage disposal system consisting of a 300 gallon masonry septic tank and 69 linear feet of 21 inches wide absorption trench to serve the bungalow of J. Augustine McNally, Westchester Avenue, Town of Poundridge, New York (maximum occupancy 4 persons) has been completed in general accordance with the requirements of this department and the permit issued February 16, 1942.

Very truly yours,

R. M. McLaughlin
Director
Division of Sanitation

RMG:I
c/c Stamford Water Company

THE OWNER OR HIS AGENT MUST RECEIVE THIS NOTICE OF APPROVAL OR A COPY THEREOF.

42-253A

P. S 3M 10-41-8596

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

GEORGE H. RAMSEY, M. D., Commissioner

White Plains, N. Y.

PERMIT TO PROVIDE A SEWAGE DISPOSAL SYSTEM

Application having been duly made to the County Commissioner of Health as required by Article II of the Sanitary Code of the Westchester County Health District, permission is hereby given to J. Augustine McNally, Box 244, New Canaan, Connecticut

for the construction or provision of a sewage disposal system consisting of a 500 gallon masonry septic tank and 60 linear feet of 24 inches wide absorption trench

SUBJECT TO SOIL TEST

to serve the bungalow of J. Augustine McNally, Westchester Avenue, Town of Poundridge, New York (maximum occupancy 4 persons)

NOTE: Well should be 100' distant minimum from septic tank and tile field

subject to the following conditions:

I. That this department shall receive due notification and be afforded an opportunity to inspect the system before any portion is backfilled or covered.

II. That this system shall not be used until the written final approval thereof shall have been obtained from the Department of Health.

III. That such sewage disposal system shall be constructed in complete conformity with the application data and plans as approved or with approved amendments thereto. Any changes in this system must be approved.

IV. That such system shall receive only the sewage or wastes from the structures or premises covered by this permit.

V. That such system shall be so maintained and operated as not to expose sewage or sludge, or create a condition of nuisance.

VI. That this permit shall not be construed to invalidate any rule or regulation enforceable by any local authority having jurisdiction.

VII. That all duly enacted rules and regulations for the protection of water supplies shall be complied with.

VIII. That a connection to the public sewer shall be made as soon as such is available.

IX. That whenever it is determined by the Commissioner of Health that additional or more adequate sewage disposal facilities are necessary, such facilities shall be provided, plans for which shall first be submitted to and receive the approval of the Department of Health.

X. That whenever the sludge and scum shall so accumulate in any settling tank as to occupy together at any point more than one-fourth of the distance between the bottom and the flow line, they shall be removed.

XI. That whenever sludge or scum is removed from any settling tank or any part of the system, it shall be done in such a manner as to cause no nuisance and the material disposed of by burial in some remote place at least 250 feet from any house, road, well, spring, stream or other body of water, and covered with not less than 6 inches of earth in such a manner that it will not flow or be washed by rain or melted snow or other means over the surface of the ground or into any well, stream, spring or other body of water.

XII. That this permit shall be revocable at any time or subject to modification or change when in the judgment of the Commissioner of Health such revocation, modification or change shall become necessary.

Feb. 16, 1942

HMO:I

Date: Copy to: Stamford Water Co.

COMMISSIONER

THE OWNER OR HIS AGENT MUST RECEIVE THIS PERMIT OR A COPY THEREOF.

VISION OF SANITATION
R. M. McLaughlin, Director
W. M. Scott
J. D. Barrett
H. M. Gray
Sanitary Engineers

County of Westchester
DEPARTMENT OF HEALTH
GEORGE H. RAMSEY, M.D., COMMISSIONER
County Office Building
White Plains, N. Y.

File Pondridge
Permit
Inspected by

APPLICATION FOR SEWAGE DISPOSAL PERMIT

To the Commissioner of Health: Date

Application is hereby made for a permit to construct a sewage system to serve

Number, type and use of buildings to be served

concerning which the following information is submitted:

1. Owner Mail Address
   Note: Owner must receive permit and approval. Check here if extra copies are requested
2. Property location (Street) Place (Village, Town, City)
3. Tax Map Location: Section Block Lot Subdivision
4. Construction: New, Replacement. Proposed Future Building
5. Lot area No. of rooms Bedrooms Bathrooms
   Extra Lavatories Special Fixtures Maximum Future Occupancy
6. Source of water supply
   Watershed on which system is located
   Distance to nearest watercourse Owner's wells Adjacent wells
7. Daily Sewage Flow: No. of persons x 75 gals. = gals. per day
8. Settling treatment, Septic tank: liquid capacity material
   inside dimensions: length width effective depth diam.
   Note: Liquid capacity of tank shall be not less than volume of waste per day, with a minimum of 300 gals.
9. Soil: clay, loam, sand, boulders, rock; surface: flat, sloping, steep; ground water and surface drainage: good, fair, poor. (Check terms that apply)
   Absorption test: minutes per inch drop = Absorption rate (from table)
   Note: Except in clay soil, a rate of 1 gal. per sq. ft. of bottom area per day shall be used unless a higher rate is established by soil test.
10. Absorption area: ÷ = sq. ft. bottom area.
    gals. waste (No. 7) Absorption rate from table
11. Absorption treatment, Trenches: inches wide; linear feet of distributing tile;
    gravel cu. yards, to depth of inches below bottom of pipe.
    Leaching pits: number outside dimensions depth below flow line
    wall area below flow line material built-up, rock-filled
    Absorption area: trenches leaching pits total sq. ft.

Signature: Title:
(By owner, builder, or officer of sewage disposal firm, or contractor)

Mail Address:

Sketch required on reverse side or on attached sheet showing plan with general relation of dwelling and property boundaries, wells and streams to system and arrangement of absorption facilities, together with all other pertinent data, including details of grease trap, manholes, diversion gates, siphon, curtain drains, special structures and unusual features. Failure to secure permit before construction or final written approval of the system before using is a violation of the County Sanitary Code and is a misdemeanor.

S.D. 7—3000—8-40—10470

Pound Ridge Waste Water Task Force

Appendix D: Flow Estimate Details

Based upon data from June 10, 2016

Appendix D Scotts Corner Full Occupancy Wastewater Generation Estimate (PB-A)

Block	Lot	Zone	Property Address	Use	Acreage	Building Square Footage	Usage Number	Usage Measure	Usage Rate (gallons/day/ unit)	Wastewater Generation (gallons per day)	Allowable Flow (DOH)
9454	36	R-2A	89 Westchester Ave	community facility	0.530	1,296	1,296	sq. ft.	0.10	130	
9454	5	PB-A	87 Westchesterchester Ave	retail	1.131	1,444	1,444	sq. ft.	0.24	347	
9454	6	PB-A	85 Westchester Ave	restaurant	0.415	4,122	50	seats	35.00	1,750	
9454	6	PB-A	85 Westchester Ave	office	0.473		1,360	sq. ft.	0.10	2	
9454	7	PB-A	83 Westchester Ave	retail	0.473	9,161	6,138	sq. ft.	0.24	737	
9454	7	PB-A	83, A, & B Westchester Ave	apartments			2	apts.	300.00	600	
9454	7	PB-A	83 C & D Westchester Ave	office			2,290	sq. ft.	0.10	57	
9454	8	PB-A	79 Westchester Ave	office	0.345	1,872	1,872	sq. ft.	0.10	187	
9454	9	PB-A	77 Westchester Ave	auto repair	0.342	4,864	2	bays	750.00	1,500	
9454	9	PB-A	77A Westchester Ave	apartments			1	apts.	300.00	300	
9454	35	PB-A	NA	Vacant	0.356	0	0	NA	NA	0	
9454	10	PB-A	73 Westchester Ave	office	0.670	5,600	5,600	sq. ft.	0.24	1,344	
9454	11	PB-A	71 Westchester Ave	resaurant	0.631	3,878	25	seats	35.00	875	
9454	11	PB-A	71 Westchester Ave	retail			3,878	sq. ft.	0.24	931	
9454	11	PB-A	71 Westchester Ave	office			3,878	sq. ft.	0.10	388	
9454	12	PB-A	69 Westchester Ave	resaurant	0.493	12,285	40	seats	35.00	1,400	
9454	12	PB-A	69 Westchester Ave	retail			12,285	sq. ft.	0.24	2,211	
9454	13	PB-A	67 Westchester Ave	apartments	0.147	3,368	2	apts.	300.00	600	
9454	13	PB-A	67 Westchester Ave	retail			1,684	sq. ft.	0.24	404	
9454	14	PB-A	4 Trinity Pass Rd.	office	0.181	1,012	1,012	sq. ft.	0.10	101	
9454	15	PB-A	65 Westchester Ave	retail	0.185	65	1,174	sq. ft.	0.24	282	
9454	15	PB-A	65A,B Westchester Ave	apartments	0.185		2	apts.	300.00	600	
9320	56	PB-A	Westchester Ave	parking w/2 shed	5.084	0	0	NA	NA	0	
9320	58	PB-A	80 Westchester Ave	community facility	0.449	7,076	7,076	sq. ft.	0.10	708	
9320	59	PB-A	78 Westchester Ave	retail	0.207	2,979	2,234	sq. ft.	0.24	536	
9320	59	PB-A	78 Westchester Ave	office			745	sq. ft.	0.10	74	
9320	60	PB-A	76 Westchester Ave	restaurant	0.207	8,910	60	seats	35.00	2,100	
9320	60	PB-A	76 Westchester Ave	office			1,782	sq. ft.	0.10	178	
9320	60	PB-A	76 Westchester Ave	apartments			4	apts.	300.00	1,200	
9320	61	PB-A	74 Westchester Ave	restaurant	0.207	7,970	50	seats	35.00	1,750	
9320	61	PB-A	74 Westchester Ave	retail			1,993	sq. ft.	0.24	478	
9320	61	PB-A	74 A, B, C, & D Westchester Ave	apartments			4	apts.	300.00	1,200	
9320	62	PB-A	72 Westchester Ave	retail	0.207	4,750	2,375	sq. ft.	0.24	570	
9320	62	PB-A	72 A & B Westchester Ave	apartments			2	apts.	300.00	600	
9320	63	PB-A	70 Westchester Ave	apartments	0.207	3,120	2	apts.	300.00	600	
9320	63	PB-A	70 Westchester Ave	retail			1,560	sq. ft.	0.24	374	
9320	64	PB-A	68 Westchester Ave	retail	0.418	6,923	3,462	sq. ft.	0.24	831	
9320	64	PB-A	68 A, B, C, & D Westchester Ave	apartments			4	apts.	300.00	1,200	
9320	65	PB-A	66 Westchester Ave	auto repair	0.642	2,130	2	bays	750.00	1,500	
				PB-A Subtotal	**14.185**	**92,825**	**NA**	NA	NA	**28,645**	

Appendix D Scotts Corner Full Occupancy Wastewater Generation Estimate (PB-B and PB-C) and Total											2/2
Block	**Lot**	**Zone**	**Property Address**	**Use**	**Acreage**	**Building Square Footage**	**Usage Number**	**Usage Measure**	**Usage Rate (gallons/day/ unit)**	**Wastewater Generation (gallons per day)**	**Allowable Flow (DOH)**
9455	20	PB-B	32 Westchester Ave	retail	0.656	3,800	4,441	sq. ft.	0.24	1,066	
9455	20	PB_B	32 Westchester Ave	apartment		641	1	apts.	300.00	300	
9455	21	PB-B	34 Westchester Ave	apartment	0.652	3,929	1	apts.	300.00	300	
9455	21	PB-B	34 Westchester Ave	retail			1,965	sq. ft.	0.24	471	
9455	27	PB-B, R-1A	38 Westchester Ave	office	0.717	1,760	1,760	sq. ft.	0.10	176	
9455	28	PB-B	40, 40A Westchester Ave	retail	0.495	3,870	3,870	sq. ft.	0.24	929	
9455	25	PB-B	54 Westchester Ave	restaurant	1.632	5,355	25	seats	35.00	875	
9455	25	PB-B	54 Westchester Ave	retail			1,607	sq. ft.	0.24	386	
9455	25	PB-B	54 Westchester Ave	apartment			1	apts.	300.00	300	
9455	24	PB-B	56, 60 Westchester Ave	apartment	1.698	10,388	5	apts.	300.00	1,500	
9455	24	PB-B	56, 60 Westchester Ave	retail	1.698		7,791	sq. ft.	0.24	1,870	
9455	4	PB-B	39 Westchester Ave	residential	2.196	0	0	NA	NA	0	
9456	1.9	PB-B	55, 57 Westchester Ave	retail	7.71	54,138	54,139	sq. ft.	0.24	12,993	
				PB-B Subtotal	**17.45**	**83,881**	**NA**	NA	NA	**21,166**	
9455	10	PB-C	22, 24 Westchester Ave	office	2.005	4,781	4,781	sq. ft.	0.10	478	
9455	13	PB-C	26 Westchester Ave	apartment	0.781	2,197	1	apts.	300.00	300	
9455	13	PB-C	26 Westchester Ave	office			1,648	sq. ft.	0.10	165	
9455	14	PB-C	30 Westchester Ave	residential	1.002	1,708	1,708	NA	NA	0	
9456	8	PB-C	21 Westchester Ave	residential	0.656	2,342	2,342	NA	NA	0	
9456	7	PB-C	23, 23 A, B Westchester Ave	retail	1.537	3,062	3,062	sq. ft.	0.24	735	
9456	6	PB-C	27 Westchester Ave	apartment	0.693	3,036	1	apts.	300.00	300	
9456	6	PB-C	27 Westchester Ave	retail			1,518	sq. ft.	0.24	364	
9456	5	PB-C	29 Westchester Ave	residential	3.195	11,018	12	apts.	300.00	3,600	
9456	55	PB-C	35 Westchester Ave	retail	0.764	3,425	3,425	sq. ft.	0.24	822	
				PB-C Subtotal	**10.633**	**31,569**	**NA**	NA	NA	**6,764**	
				PB Total	**32.525**	**178,532**				**50,633**	

Waterwater Generation Rates from New York City Department of Environmental Protection	
retail	0.24 gallons per day per square foot
office	0.10 gallons per day per square foot
rest.	35 gallons per day per seat (about 60 square feet per seat)
Apts.	100 gallons per day per person/3 persons per apartment (Census Bureau data for affected blocks)
garage	1000 gallons per day for first bay and 500 gallons per day for remaining bays
Acreage for lots 9455-18.9 and 9455-27 are for PB-B section only and approximate	

POUND RIDGE WASTEWATER TASK FORCE

Appendix E: Photos of current conditions

Photos indicate wells that exist near Westchester Ave. and septic systems behind the buildings on Westchester Ave. under the parking lots and in one case extending into the woods, and high water table during an excavation.


RESTAURANT
ENTRANCE