

Appendix B-2

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.

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

- 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 – Capital 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

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APPENDICES

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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.

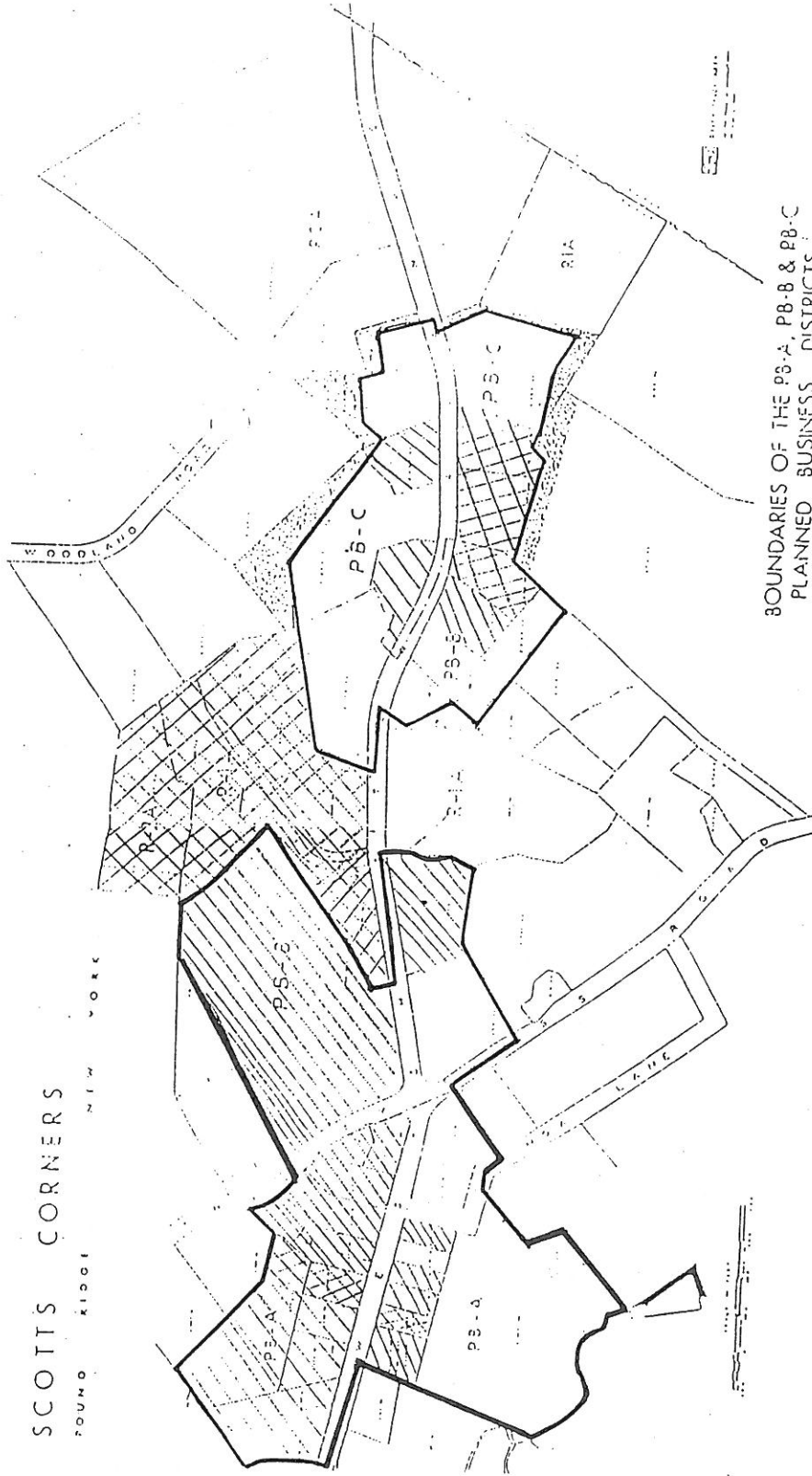
The Scotts Corners Commercial District area encompasses approximately 41.1 acres. This is divided into primary and secondary zones (see Figure 3.1). The primary zone encompasses 24.43 acres and the secondary zone encompasses 16.68 acres.

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

SCOTTS CORNERS

ROUNO KIDGE NEW YORK



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

AS ADOPTED BY THE BOARD OF ALDERS AND COMMON COUNCIL, APRIL 14, 1981

LEGEND

- /// - Favorable Response
- XXXX - Unfavorable Response
- BLANK - No Response

Figure 3-2

SCOTTS CORNERS WASTEWATER
DISTRICT COMMISSION
QUESTIONNAIRE RESPONSES

JREA

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

<u>Building Square Footage</u>	<u>Primary Zone</u>
Commercial	159,680
Residential (Apartments)	<u>13,222</u>
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

	<u>Primary Zone</u>
Commercial	62,193
Residential	<u>67,699</u>
TOTAL	129,892

These values are influenced by several factors, as follows.

- o 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.
- o 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

<u>District</u>	<u>Commercial Use</u>		<u>Residential Use</u>	
	<u>Total % Change</u>	<u>% Change/Year</u>	<u>Total % Change</u>	<u>% Change/Year</u>
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

<u>District</u>	<u>Commercial Use</u>			<u>Residential Use</u>		
	<u>Exist SF</u>	<u>Saturation SF</u>	<u>% Change</u>	<u>Exist SF</u>	<u>Saturation SF</u>	<u>% Change</u>
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

<u>District</u>	<u>Commercial Use</u>		<u>Residential Use</u>	
	<u>1990 Existing (Sq.Ft.)</u>	<u>2012 Projected (Sq.Ft.)</u>	<u>1990 Existing (Sq.Ft.)</u>	<u>2012 Projected (Sq.Ft.)</u>
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

	<u>Commercial Flow</u>	<u>Residential Flow</u>	<u>Zone Total</u>
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

	<u>Exist Comml</u>	+	<u>Exist Resid</u>	=	<u>Total Exist</u>	+	<u>Proj Comml</u>	+	<u>Proj Resid</u>	=	<u>Total Proj</u>
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

<u>Flow Class</u>	<u>Estimated 2012 Flow</u>		<u>GPD</u>	
	<u>1990 Existing</u>	<u>Sq.Ft.</u>	<u>Flow</u>	<u>2012 Estimated</u>
	<u>Sq.Ft.</u>	<u>Flow</u>	<u>Sq.Ft.</u>	<u>Flow</u>
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

<u>Parameter</u>	<u>Concentration</u>	<u>#/D @ .028 mgd</u>
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.

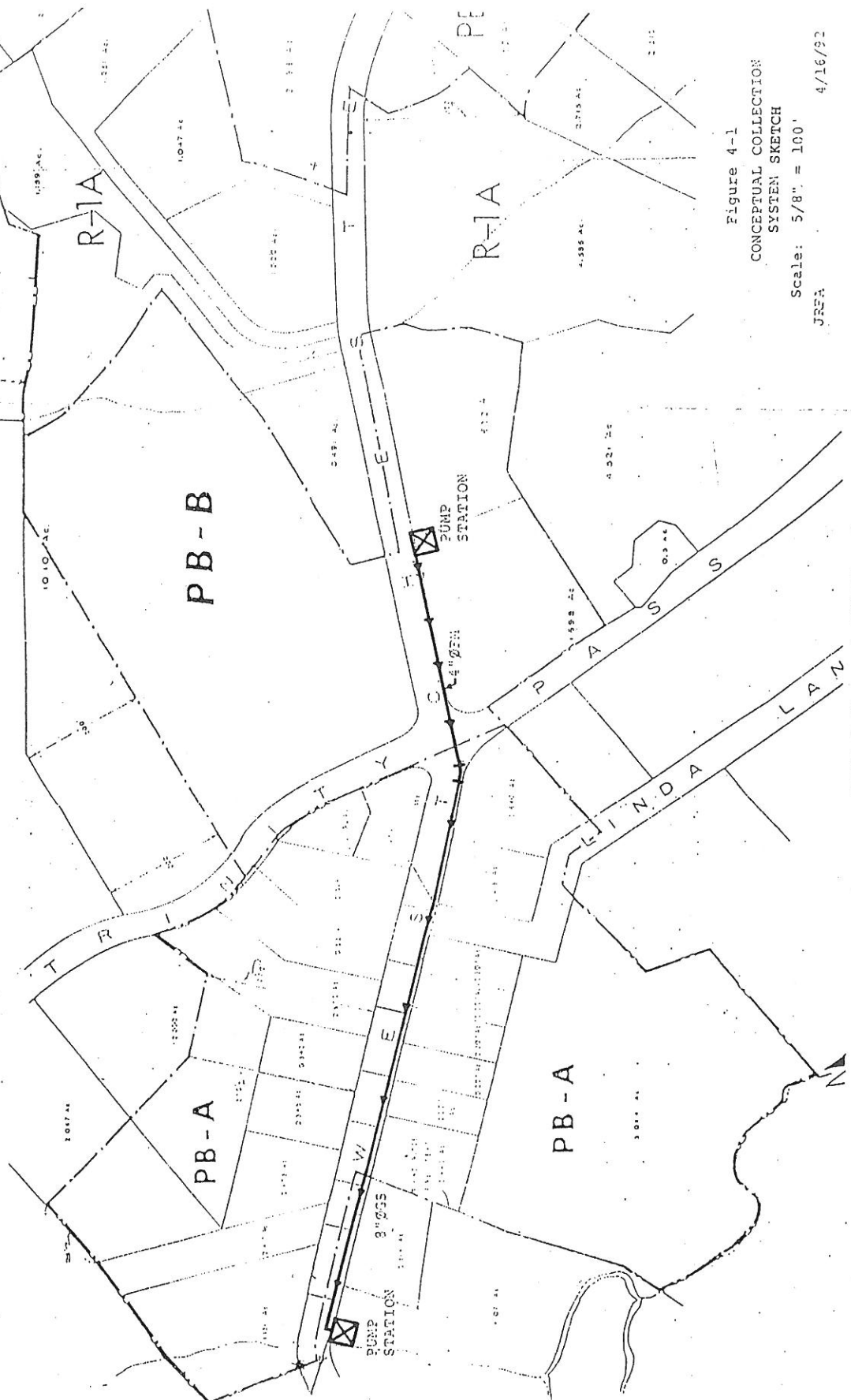
4. Failure of a 30,000 gpd SSDS without pretreatment would present problems several orders of magnitude greater than those historically associated with the Trinity Corners Shopping Center.
5. Given the regulatory situation and geologic and hydrologic conditions in the Scotts Corners area, pretreated 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.

SCOTTS CORNERS

POUND RIDGE NEW YORK



TO TREATMENT
PLANT
(LOCATION
TO BE
DETERMINED)

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

for each R...

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.

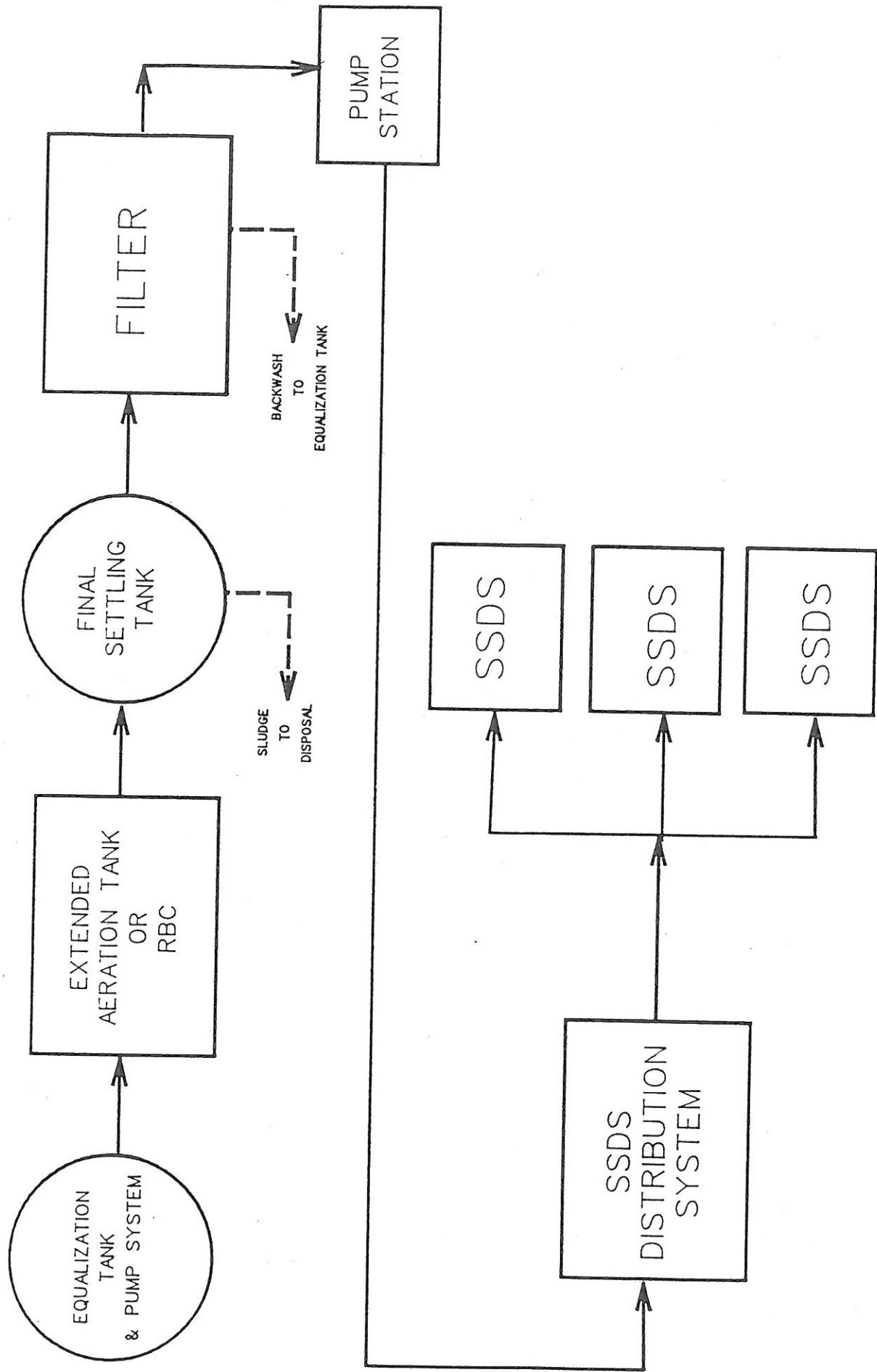


FIGURE 4-2
PROCESS FLOW DIAGRAM

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

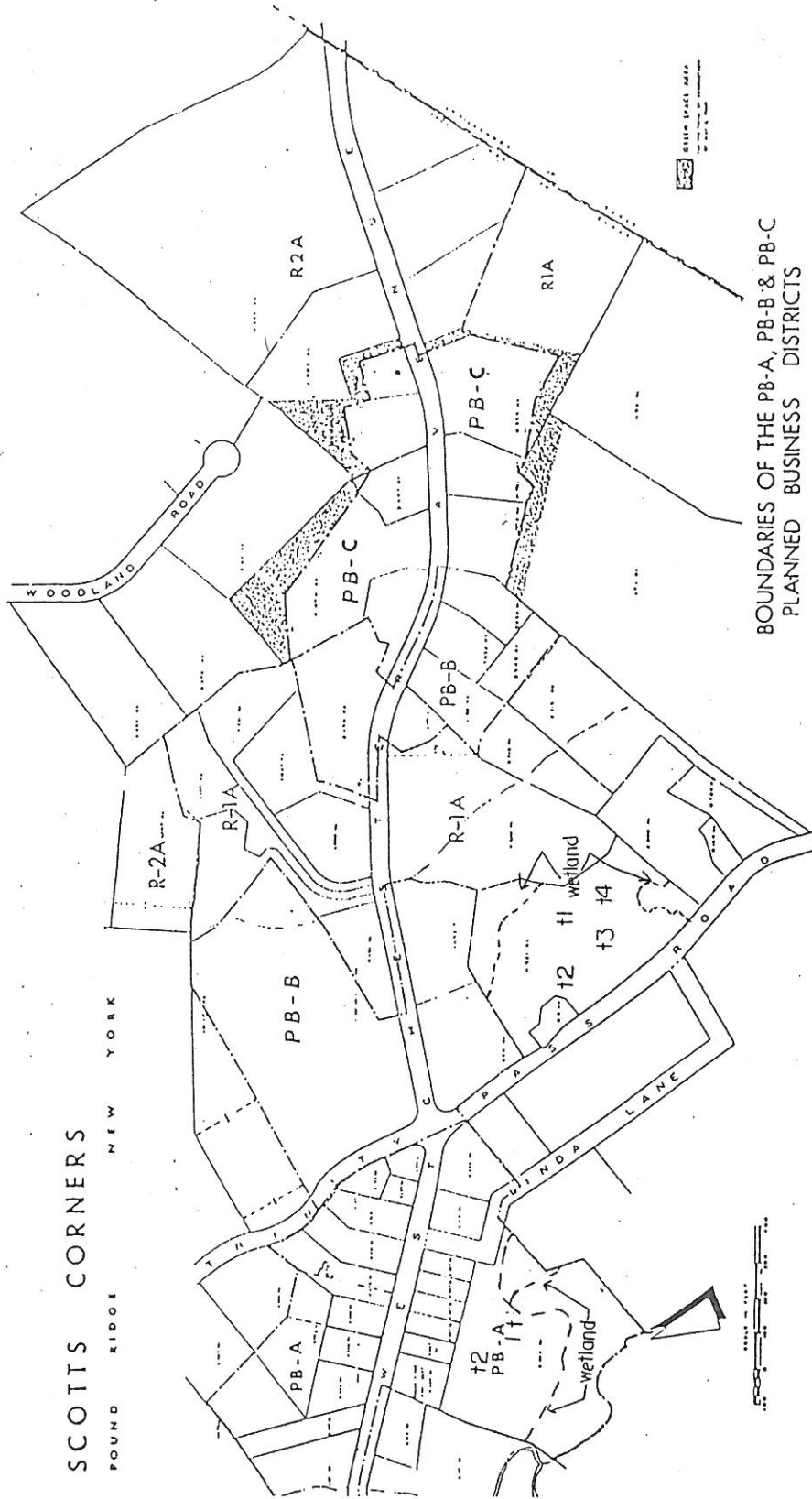
required minimum SSDS area of approximately 2 acres. Additional area would be required for buffers and pumping/distribution structures and expansion.

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.

SCOTTS CORNERS
 FOUND RIDGE NEW YORK



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

AS ADOPTED BY THE TOWN BOARD APRIL 8, 1988 AND AMENDED MAY 6, 1988, AND MAY 11, 1978, AND APRIL 14, 1983

LEGEND

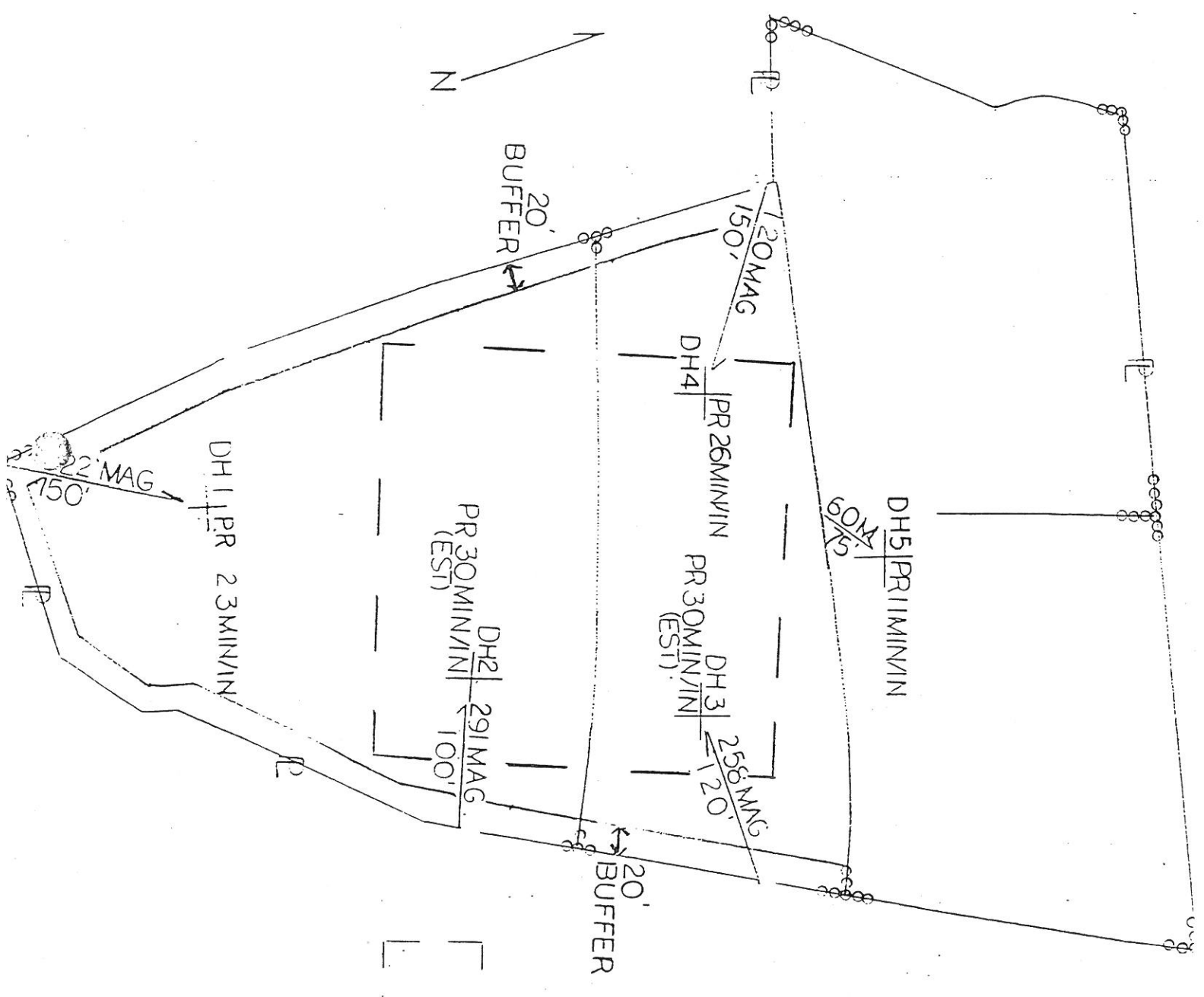
+ - D.H. Location

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

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

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

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

<u>Item</u>	<u>Cost</u>
Site Work	\$ 48,000
Site Preparation	
Earth Work	
Roads/Drainage	
Collection System	\$ 450,000
Gravity Sewers	
Force Main & Pump Station	
Wastewater Treatment Facility	\$ 360,000
Treatment Plant & Effluent P.S.	
Structures	
Electrical	
HVAC	
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	<u>\$ 1,500</u>
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

<u>Annualized Capital Cost</u>	<u>Annual O&M Cost</u>	<u>Total Annual Cost</u>
\$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 qualify 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.

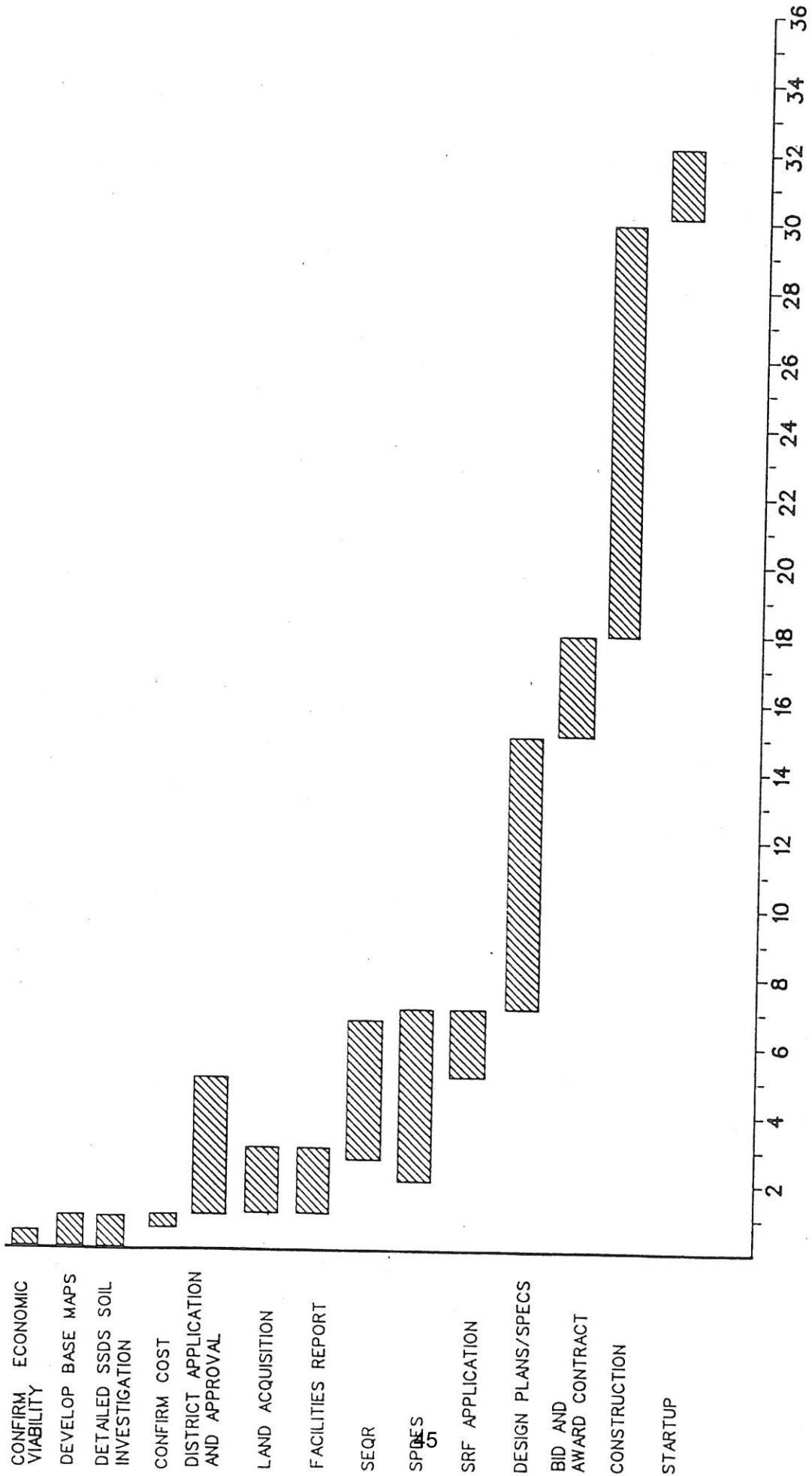
- 6.7.1 Establish Municipal Wastewater Treatment District.
- 6.7.2 Collect Water Quality data from Stamford Water Company.
- 6.7.3 Complete Facility/Engineering Report.
- 6.7.4 Meet with DEC for scoring of application.
- 6.7.5 See Appendix D for SRF Requirements.

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.



TIME IN MONTHS

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 range 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, 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

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.

**MALCOLM
PIRNIE**

Mr. Clay Fowler
Town House

December 2, 1998
Page 5

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

P:\354100\PROJ\APPR.LTR

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 from 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

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)

Mr. Clay Fowler, Chairman
Town House

September 3, 1999
Page 2

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

Mr. Clay Fowler, Chairman
Town House

September 3, 1999
Page 3

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.

Mr. Clay Fowler, Chairman
Town House

September 3, 1999
Page 4

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

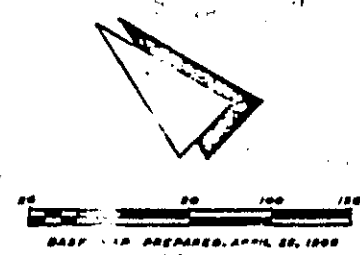
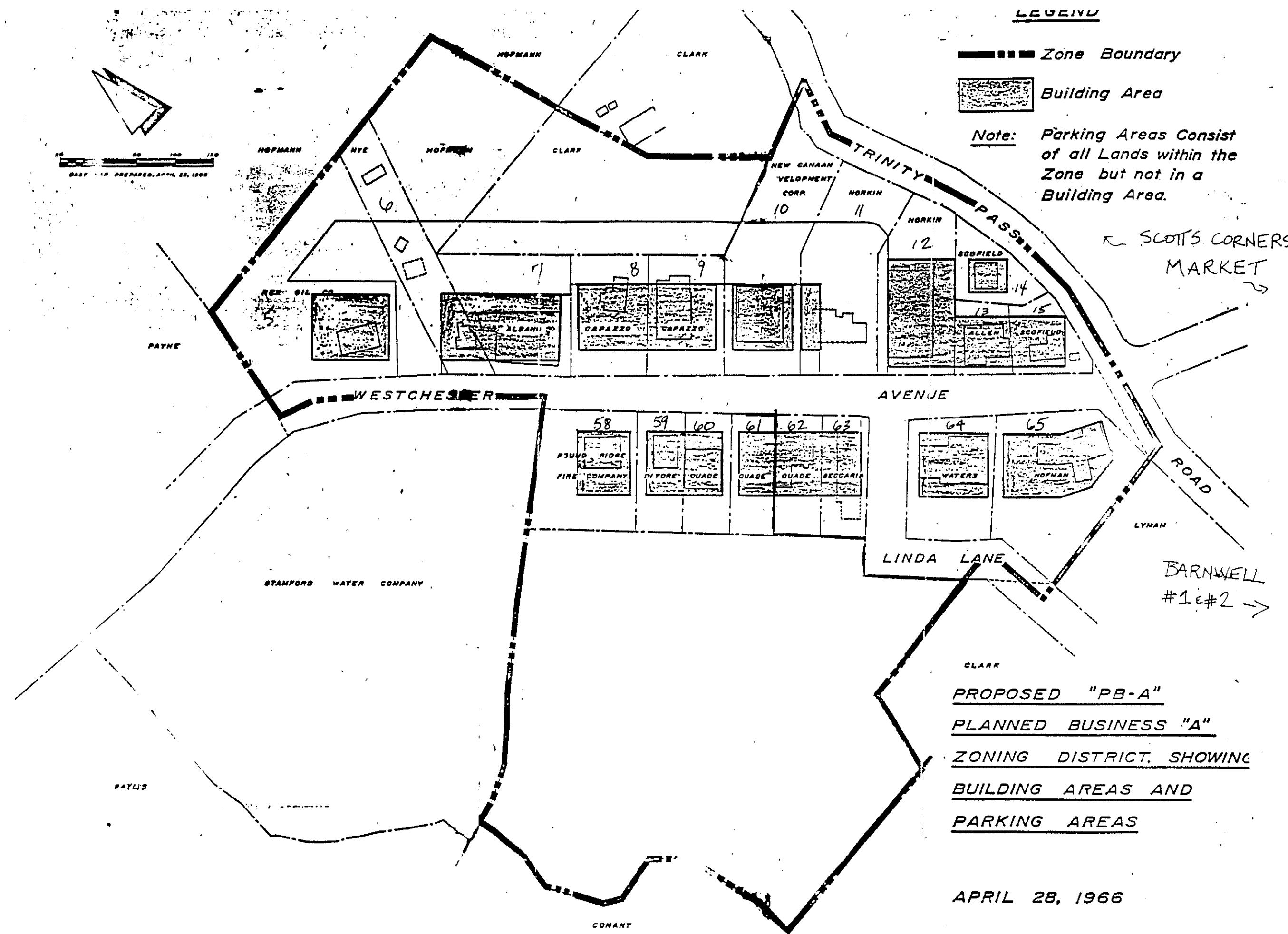
**TOWN OF POUND RIDGE
SCOTTS CORNERS WASTEWATER TREATMENT STUDY
EXISTING CONDITIONS ASSESSMENT**

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	5 - 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)		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	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	DONO 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.

DRAFT



SCOTT'S 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

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.

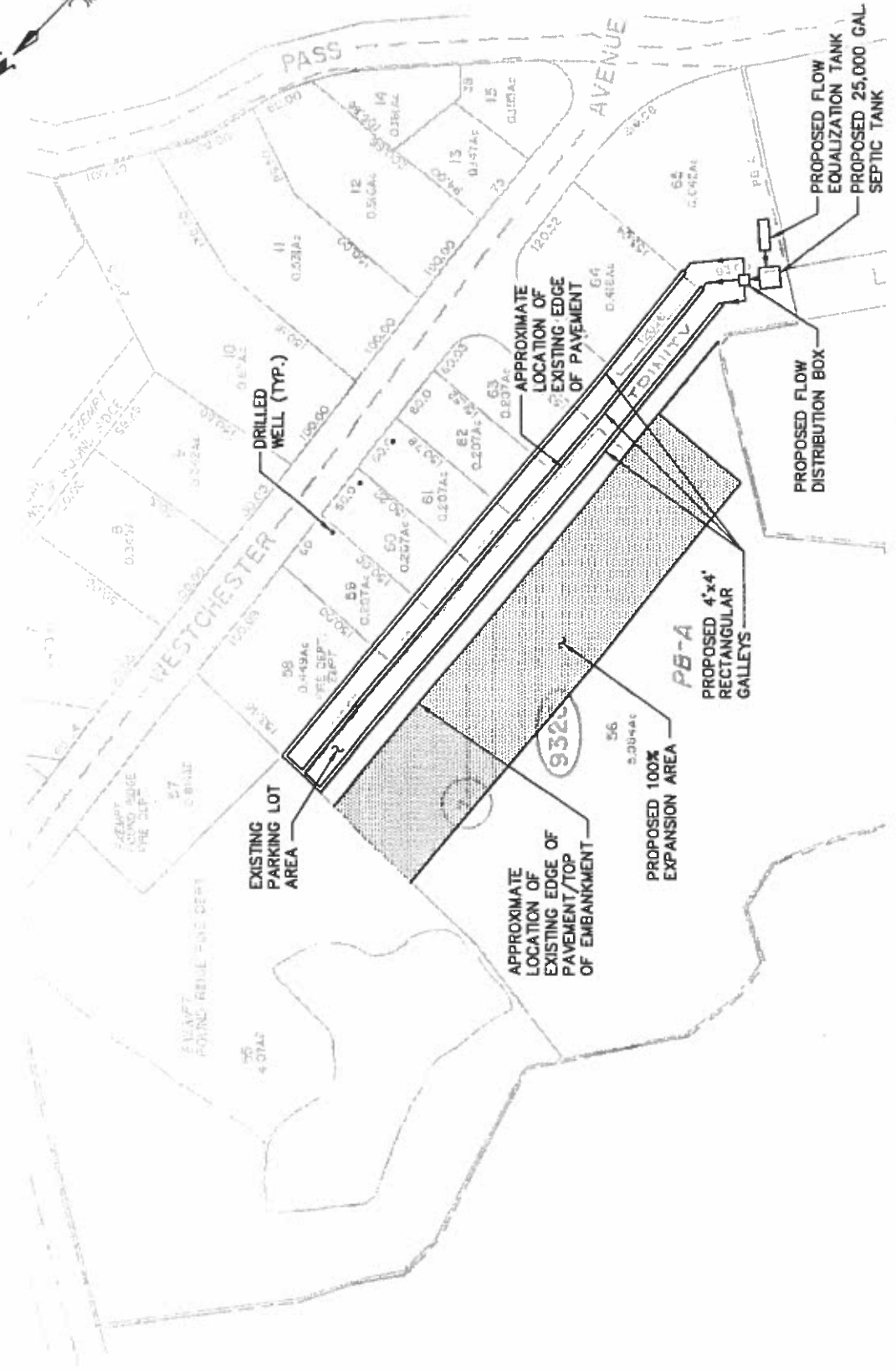
Mike departed the site during the excavation of the second test pit. Ed was content with three test pits. Additional test pits were planned for the area of the parking lot near the firehouse however Ed said they would not be necessary because the WCDOH has extensive records of the soils in this location. 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



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

TOWN OF POUND RIDGE
 WESTCHESTER COUNTY, N.Y.
 SCOTT'S CORNERS
 WASTEWATER DISPOSAL

MALCOLM PIRNIE

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 from 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

July 11, 2000

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

DRAFT

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 (ft²) of subsurface disposal area. A wastewater application rate of 0.6 gallons/day/ft² 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 ft², 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

Mr. Clay Fowler
Town House

July 11, 2000
Page 3

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.

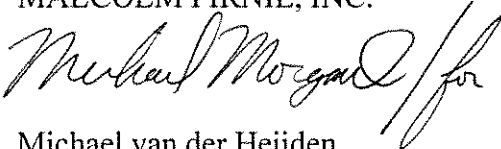
Upon the review and acceptance of the preliminary design by the regulatory agencies, the next phase of the project would require the following:

- 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

TEST PIT #: TP-2		SITE NAME: Scott's Corner		PROJECT #: 3541003	
GROUND ELEV.:		DATE: June 22, 2000		LOCATION SKETCH (not to scale) 	
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					

ELEV. FT.	SAMPLE NUMBER	SAMP TYPE	Geo Tech Properties	DEPTH (bgl)	STRATIGRAPHIC DESCRIPTION	USCS	STRAT. SYMBOL	PID	REMARKS
				0	0-4" Blacktop pavement				
				1	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:	<u>Test #</u>	<u>Water Drop (in)</u>	<u>Time (min)</u>	<u>Rate (min/in)</u>	
		1	3"	48 min	16.0	
		2	3"	67 min	22.3	
		3	3"	72 min	24.0	

TEST PIT LOG

TEST PIT #: TP-3	SITE NAME: Scott's Corner	PROJECT #: 3541003
GROUND ELEV.:	DATE: June 22, 2000	LOCATION SKETCH (not to scale)
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		

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

TEST PIT LOG

TEST PIT #: TP-1	SITE NAME: Scott's Corner	PROJECT #: 3541003
GROUND ELEV.:	DATE: June 22, 2000	LOCATION SKETCH (not to scale)
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		

ELEV. FT.	SAMPLE NUMBER	SAMP TYPE	Geo Tech Properties	DEPTH (bgl)	STRATIGRAPHIC DESCRIPTION	USCS	STRAT. SYMBOL	PID	REMARKS
				0	0-4" Blacktop pavement				
				1	4"- 7' SAND, med to fine, trace silt and gravel tan brown, dry (Sandy Loam)				
				2					
				3					
				4					
				5					
				6					
				7					
				8	7-12' SAND, med Grey tan, dry				
				9					
				10					
				11					
				12					Bottom of Test Pit #1
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				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 Corners 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 previous 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 Pimie 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 previous 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.

Mr. Clay Fowler
Town of Pound Ridge Planning Board

September 26, 2000
Page 4

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 previous work, we are confident that, at a minimum, the new leach field area (behind lots 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
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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.

1 CLAY

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

CIVIL / ENVIRONMENTAL ENGINEERS

247 ROUTE 100
PINWOOD BUS. CTR.
SOMERS, NY 10589
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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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Honorable Joy Simpkins
Scotts Corners Potable Water and Wastewater Conceptual Investigation
April 11, 2002
Page 2

- 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.

Honorable Joy Simpkins
Scotts Corners Potable Water and Wastewater Conceptual Investigation
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Page 3

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 galleys 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 galleys may not be permitted for use on slopes approaching 20%. tri-galleys 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

Honorable Joy Simpkins
Scotts Corners Potable Water and Wastewater Conceptual Investigation
April 11, 2002
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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.

Honorable Joy Simpkins
Scotts Corners Potable Water and Wastewater Conceptual Investigation
April 11, 2002
Page 5

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.

Honorable Joy Simpkins
Scotts Corners Potable Water and Wastewater Conceptual Investigation
April 11, 2002
Page 6

2.3 WATER SERVICE VIA PROPOSED GOLF COURSE

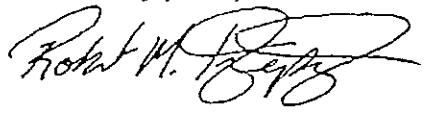
BHC has indicated that the storage tank being contemplated for the Golf Course will be owned and operated by BHC for its Connecticut customers. Peter Galant, BHC, believed that the proposed tank size is adequate to serve the Scott's Corners Area originally contemplated for service, but could not recall 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. Trzepakz, 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 “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~~
FILE

Cons. Case 112

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 situated 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

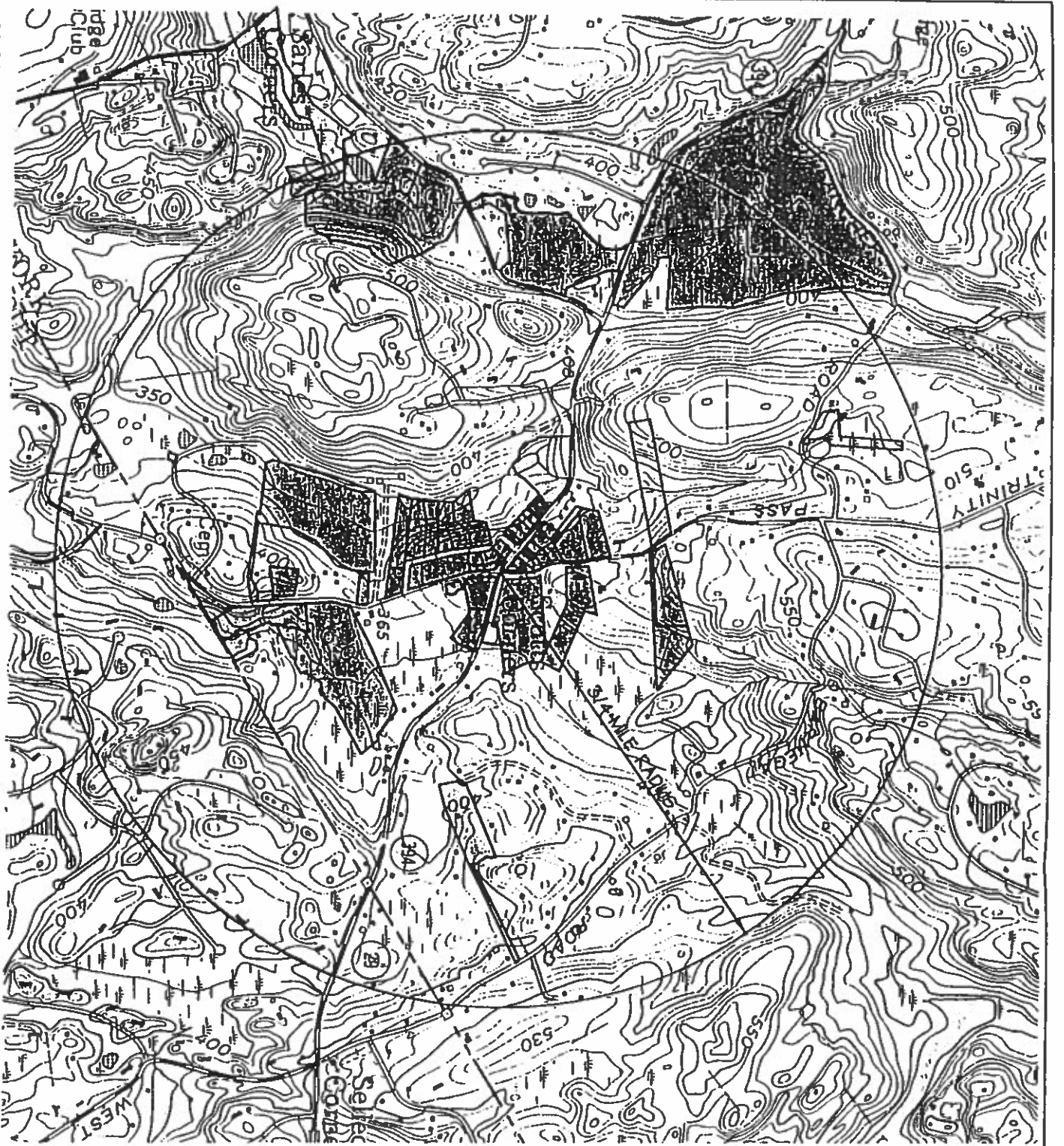
BY L. Sanford Reis
Its President

TOWN OF POUND RIDGE

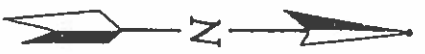
BY Fred D. Jewick, Supervisor





Lucille K. 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.



- LEGEND**
-  PROPERTY BOUNDARY
 -  TOWN PROPERTY
 -  STAMFORD WATER COMPANY (SWC) PROPERTY
 -  PROPERTIES WHERE MTBE WAS DETECTED




**BRIDGEPORT HYDRAULIC COMPANY
 HYDROGEOLOGIC ASSESSMENT
 POUND RIDGE, NEW YORK**

STUDY AREA AND PROPERTY MAP

DATE	REVISED	PREPARED BY:	

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

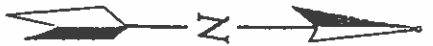

L. BOGOTTE BRASHBARS & GRAHAM, INC.
 Professional Ground-Water and Environmental Engineering Services
 126 Moore's Turnpike
 Trumbull, CT 06611
 (203) 432-3100



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.



LEGEND

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

SUB-BASIN AREAS

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

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



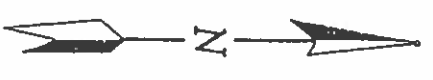
BRIDGEPORT HYDRAULIC COMPANY
HYDROGEOLOGIC ASSESSMENT
POUND RIDGE, NEW YORK

STRATIFIED DRIFT AREA AND DRAINAGE BASIN MAP

DATE	REVISED	PREPARED BY:
		LEGGETTE, BRASHBAS & GRAHAM, INC.
		Professional Geologist, Water and Environmental Engineering Services
		125 Main Street, Tarrytown
		Tarrytown, NY 10591
		(914) 635-1100
DRAWN BY:	CHECKED BY:	DATE:
UNV	JAB	4/18/97
		FIGURE: 2



SOURCE: USGS TOPOGRAPHIC QUADRANGLE POUND RIDGE, NEW YORK (PHOTOREVISED 1971).
 PROPERTY BOUNDARY SOURCE: TOWN OF POUND RIDGE LOT AND BLOCK MAPS.



LEGEND

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

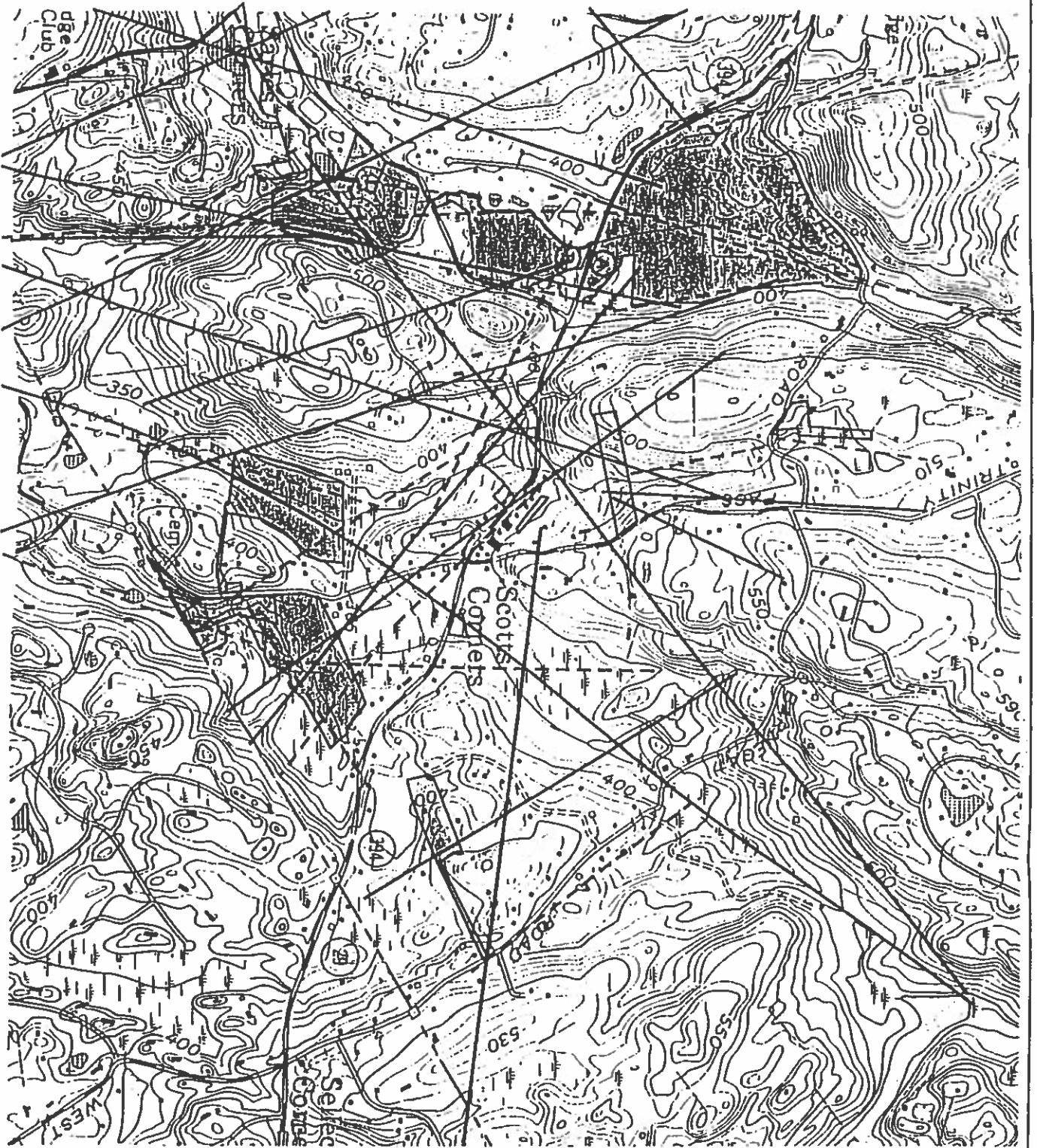
↙ SEE TABLE I FOR WELL INFORMATION



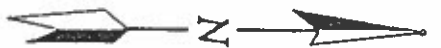
**BRIDGEPORT HYDRAULIC COMPANY
 HYDROGEOLOGIC ASSESSMENT
 POUND RIDGE, NEW YORK**

BEDROCK WELL LOCATIONS

DATE	REVISION	PREPARED BY
		LEONETTE BRASHBARS & GRAHAM, INC.
		Professional Geologic, Hydr. and Environmental Engineering Services
		126 Main Street, Trumbull, CT 06611
		(203) 452-3100
DATE	CHECKED BY	DATE
		4/21/97
FIGURE		3



SOURCE: USGS TOPOGRAPHIC QUADRANGLE POUND RIDGE, NEW YORK (PHOTOREVISED 1971).
 PROPERTY BOUNDARY SOURCE: TOWN OF POUND RIDGE LOT AND BLOCK MAPS.



LEGEND

- PROPERTY BOUNDARY
- ▭ TOWN PROPERTY
- ▨ STANFORD WATER COMPANY (SWC) PROPERTY
- FRACTURE TRACE BY LBS
- - - FRACTURE TRACE FROM WESTCHESTER COUNTY 206 STUDY



**BRIDGEPORT HYDRAULIC COMPANY
 HYDROGEOLOGIC ASSESSMENT
 POUND RIDGE, NEW YORK**

FRACTURE TRACE MAP

DATE: REVISED

PREPARED BY:

LEBOETTLE BUSHSPAINS & GRAHAM, INC.
 Professional Geologic, Water and Environmental Engineering Services
 126 Main Street, Torrington
 Torrington, CT 06811
 (203) 452-3100

DATE: 4/28/97

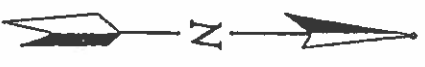
DRAWN: UNV

CHECKED: JAG

DATE: 4/28/97

FIGURE: 4

SOURCE: USGS TOPOGRAPHIC QUADRANGLE POUND RIDGE, NEW YORK (PHOTOREVISED 1971).
 PROPERTY BOUNDARY SOURCE: TOWN OF POUND RIDGE LOT AND BLOCK MAP.



- LEGEND**
- PROPERTY BOUNDARY
 - ▭ TOWN PROPERTY
 - ▨ STARFORD WATER COMPANY (SWC) PROPERTY
 - ▩ PROPERTIES WHERE MTBE WAS DETECTED
 - ⓐ PROPOSED TEST DRILLING AREA



**BRIDGEPORT HYDRAULIC COMPANY
 HYDROGEOLOGIC ASSESSMENT
 POUND RIDGE, NEW YORK**

PROPOSED TEST DRILLING AREAS MAP

DATE	REVISED	PREPARED BY:
		LEGGETTE, BRASHBEARS & GRAHAM, INC.
		Professional Geologic, Water and Environmental Engineering Services
		126 Main Street, Torrington
		Torrington, CT 06461
		(203) 432-3100
DRAWN	UNR	CHECKED
		DATE
		7/18/97
		FIGURE
		5

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

E G E U W E
MAY 13 1997
FRANK DEANE

307

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.

Page 2
Mr. David McNeil
May 12, 1997

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,

A handwritten signature in black ink, appearing to read "Peter Galant", with a long horizontal flourish extending to the right.

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

cc: J. Suttle
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 (\pm 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 <i>PBG</i>
	Cesare Manfredi - DEC	Date	June 4 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. Suttle
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

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.

3 copies

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
TALSO 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

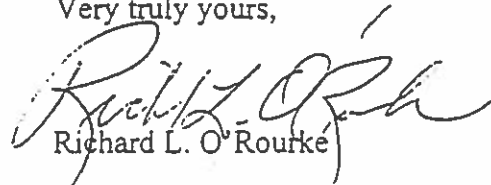
Re: BHC Company, Town of Pound Ridge Water Supply

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

KEANE & BEANE, P. C.

Mark Weyman, Esq.

December 9, 1998

Page 2

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

Cesar 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
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.

Page 2

Mr. Richard L. O'Rourke, Esq.

November 16, 1998

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

Sincerely:

A handwritten signature in cursive script, appearing to read "Peter B. Galant", followed by a long horizontal flourish.

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

- 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 listed 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.

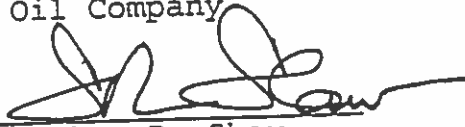
7. BHC shall complete the work required by this Agreement (including providing a cost estimate) within 120 days of the execution of this Agreement by Shell which 120 days shall not include the period of review and comment set forth in

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. Fierette
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 Undley 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 Pound 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



Printed on recycled paper



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. *Caesar Manfredi*
- 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

Does it include paving?



Mr. Richard L. O'Rourke

June 21, 1999

Page 2

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,

A handwritten signature in black ink, appearing to read "Peter Galant", followed by a long horizontal line extending to the right.

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

99 JUN 16 AM 11:58
SUPERVISOR'S OFFICE
POUND RIDGE, NY

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 # _____

- | | | | |
|-------------------------------------|--------------------|--------------------------|-------------|
| <input checked="" type="checkbox"/> | Telephoned | <input type="checkbox"/> | Please call |
| <input type="checkbox"/> | Called to see you | <input type="checkbox"/> | Will call |
| <input type="checkbox"/> | Wants to see you | <input type="checkbox"/> | Rush |
| <input type="checkbox"/> | 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.

2-21

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, approximately \$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 devastating 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



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

Mr. Richard L. O'Rourke

June 21, 1999

Page 2

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,

A handwritten signature in black ink, appearing to read "Peter Galant", with a long horizontal line extending to the right.

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

P.S.D. Town of Poundridge

Date: Permit ²⁰⁸ 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: 616-284

NOT APPROVED

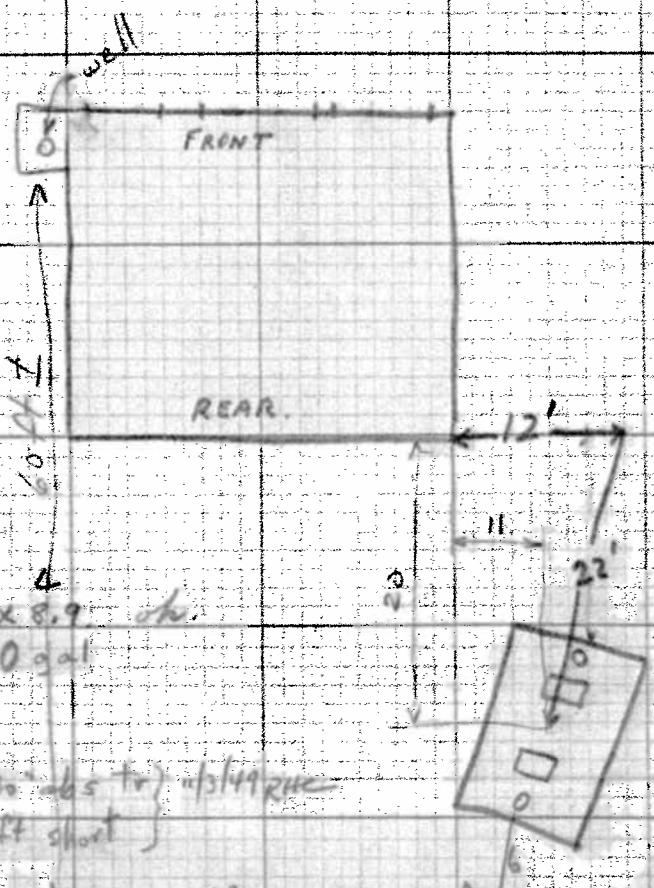
Town of Poundridge

AB-28A

Foundridge Fire Department, Westchester Ave.

8/19/49, Louis Beccaria, 1000 gals. 165" x 24"

Westchester Ave.



ST = 4.4 x 4.2 x 8.9 dk.
 vol = 1,240 gal

120 LF x 30" dia tr) 11/14/49 RHC
 30 sq ft short

49

Separate Sewerage System Private Water Supply

Pound ridge
Municipality

CERTIFICATE OF CONSTRUCTION COMPLIANCE

WCDH File No. PR 91-07

Located at Westchester Avenue Section 7 Block 9820

Owner Pound Ridge 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 Colleys
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 J. 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 Oliver S. Am...
Westchester County Department of Health



DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM

FILE NO. _____

Owner Pound Ridge Fire Dist. Address Westchester Avenue

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

Municipality Poundridge Watershed _____

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Feb 4, 1991

HOLE #	CLOCK TIME		Elapse Time Min.	Depth to Water From Ground Surface		PERCOLATION		Soil Rate Min/in. drop
	Start	Stop		Start Inches	Stop Inches	Water Level in Inches	Drop in Inches	
1	10 ¹⁰	10 ¹²	12	30	33	3	4	
2	10 ¹²	10 ²⁴	12	30	33	3	4	
3	10 ²⁴	10 ³⁶	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.

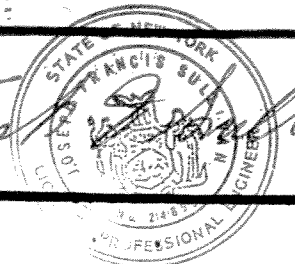
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLE

DEPTH	HOLE NO. 1	HOLE NO. 2	HOLE NO. 3	HOLE NO. 4
0'	Black top			
6"				
12"				
18"	Sand & Gravel			
24"				
30"				
36"				
42"				
48"				
54"				
60"				
66"				
72"				
78"				
84"				

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED NONE
 INDICATE LEVEL FOR WHICH WATER LEVEL RISES AFTER HOLE IS ENCOUNTERED -
 TESTS MADE BY J.F. Sullivan DATE 2-4-91

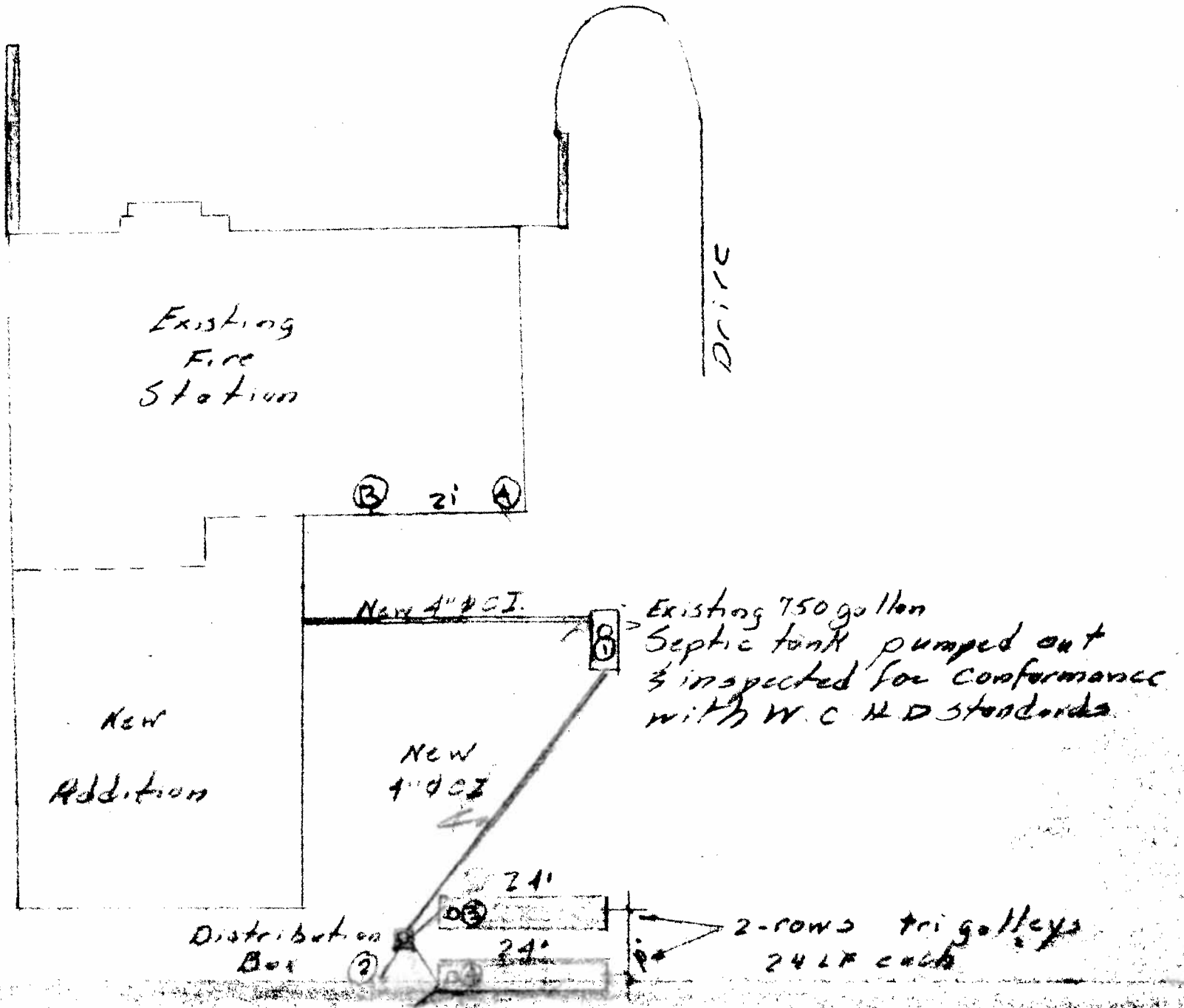
DESIGN
 Soil Rate Used 0-5 ML/1" Drop: S.B. Usable Area Provided -
450 gallons/day.
 No. of Bedrooms 4 Septic Tank Capacity 750 Gals. Masonry Metal
 Absorption Area Provided by 48 J.P.S. 24" 35 width trench. Other tri galleys

Name J.F. Sullivan Signature [Signature]
 Address 2972 Ferncrest Dr.
Yorktown Heights N.Y.



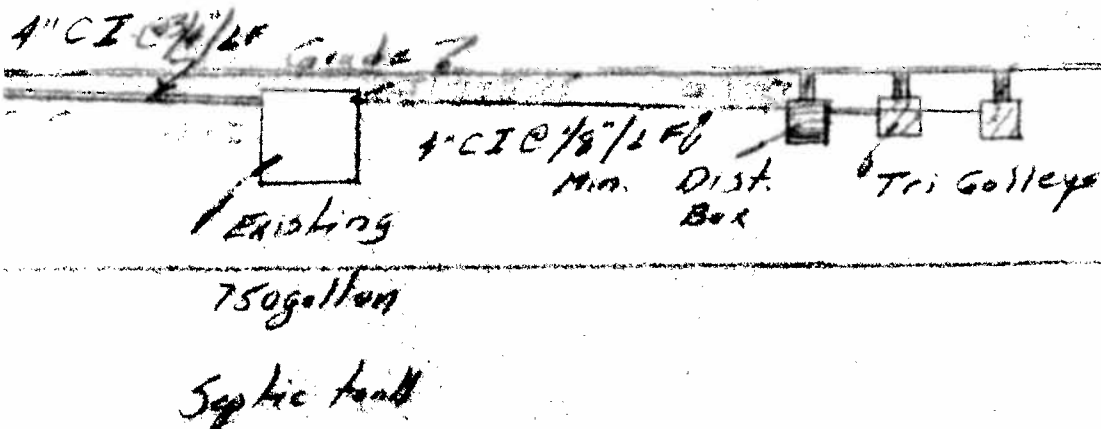
Norchester County Health Department
 Soil Rate Approved 0-5 G.P./Gal. Checked by [Signature]
 Date 2-4-91
 S.D. 87.6 (Rev. 5/78)

Westchester Avenue



PLAN
Scale 1" = 20'-0"

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



PROFILE Scale 1" = 20' hor
1" = 16' vert.

Joseph F. Sullivan

AS-BUILT SEWAGE DISPOSAL SYSTEM

Pound Ridge Fire District
 Westchester Avenue
 Pound Ridge, N.Y.

SUB-DIV.
 T.M. NO. 7-9320-5557 | DATE 7-24-91

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

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

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: *With distributing station of garage*
Application is hereby made for a permit to construct a sewage disposal system to serve... *BUILDING FOR PAIRY GARAGE*
(Number, type, and use of building to be served.)

1. Owner *JOHN FRANK DI TORA*.....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*.....*ROUND RIDGE*.....*(SCOTT'S 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.....*wall in ref. for bath*
Extra lavatories.....Special Fixtures.....Maximum Future Occupancy.....

6. Source of water supply.....*WELL*
Watershed on which system is located.....*part of town water supply*
Distance to nearest watercourse.....*1500 ft.* Owner's wells.....*YES* Adjacent wells.....*650*

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.....*500*
Material *Masonry*.....inside dimensions: Length.....*6*.....width.....*4*.....effective depth.....*4*
Minimum liquid capacity - 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*.....sq. ft.
gals. waste (No. 7) Absorption rate from table.....bottom area.....

11. Absorption treatment: Trenches.....*24*.....inches wide.....*7.5*.....linear feet.
Gravel.....*8*.....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 Tora*.....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.

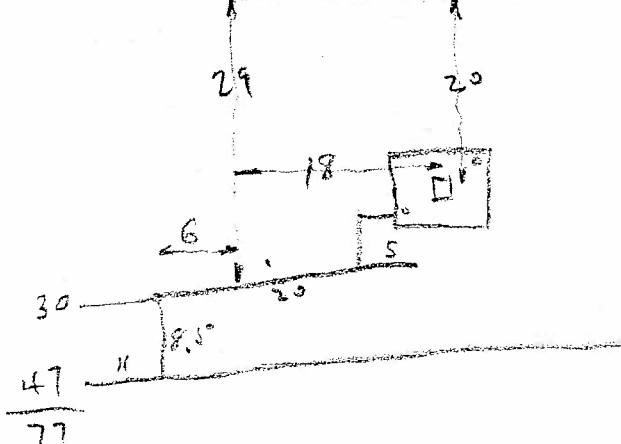
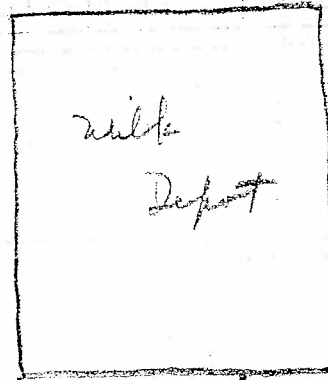
Town of Pound Ridge
John & Frank Di Tore, Westchester Avenue
4/19/51 - 500 gal. 75' x 24"

Westchester Ave



$$5.3 \times 4.1 \times 4.1 = 660$$

Drilled Well



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

P.S.D. Town of Pound Ridge Date: Permit 4/19/51¹⁵²

Approval 5/29/51

Location: Westchester Avenue

Section _____ Blocks: _____ 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
Permitting*

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

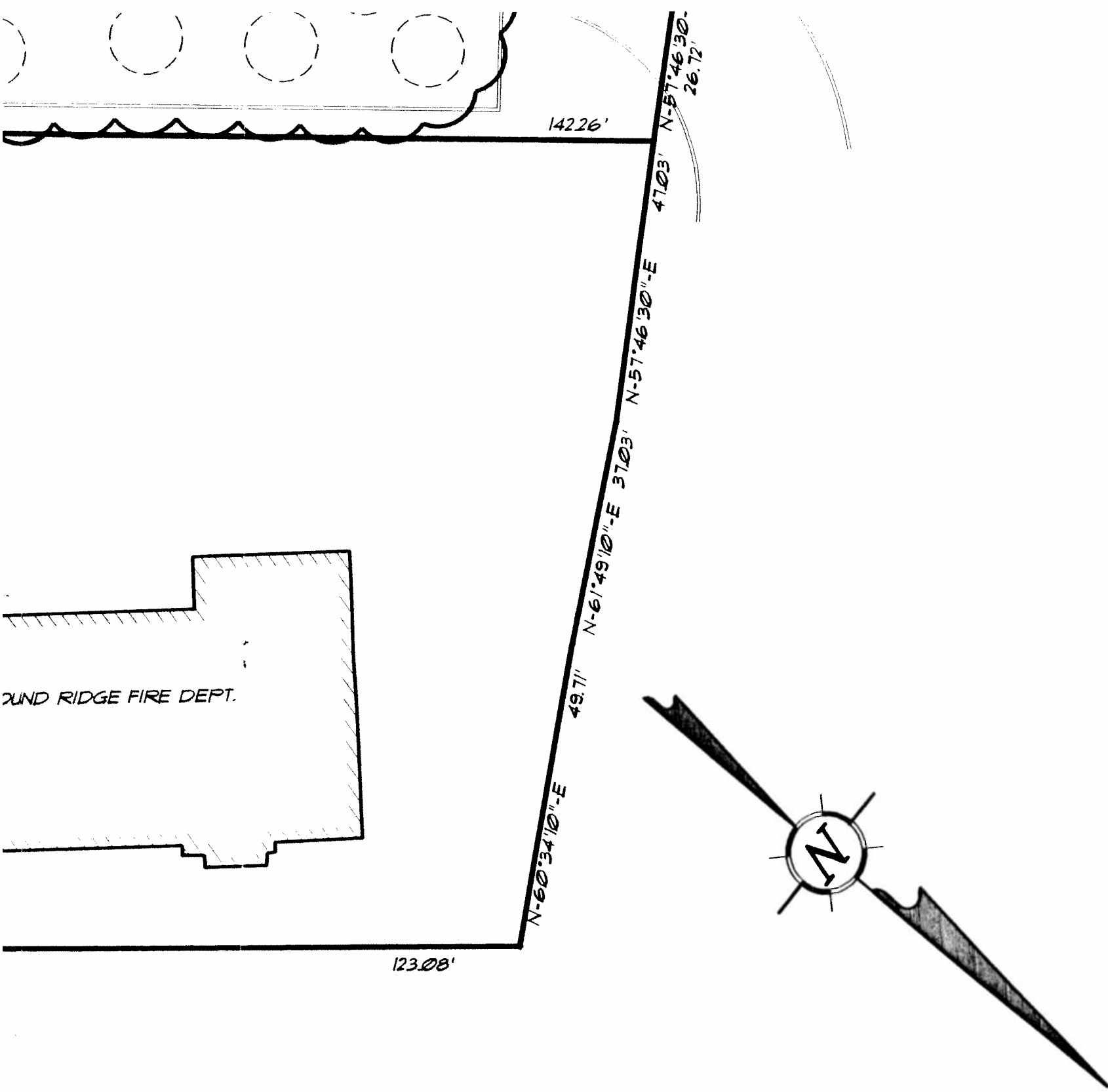
- I. *No portion of the system shall be backfilled or covered until inspected.*
Inspections are made during regular working hours only. Twenty-four hours' notice is required.
- II. The system shall not be used until it has been constructed in an approved manner, inspected and back-filled, and the written 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.

INW:RFF

[Signature]

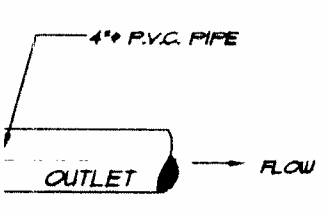
Commissioner of Health

9320-60 76 WESTCHESTER AVE



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

MANHOLE COVER OVER "D" BOX



SHEET TITLE :
ASBUILT DRAWING & DETAILS

PROJECT :
SEPTIC SYSTEM ASBUILT

PREPARED FOR :
ROSALIE ROTH

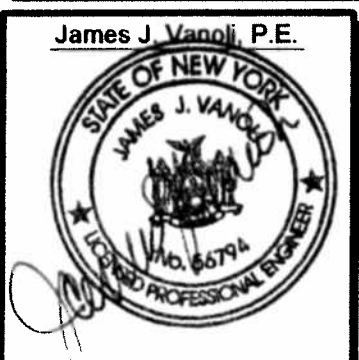
PROJECT LOCATION :
**SCOTTS CORNERS
POUND RIDGE
WESTCHESTER COUNTY, NEW YORK**

JJV, PE

*Consulting Engineering
Site Development*

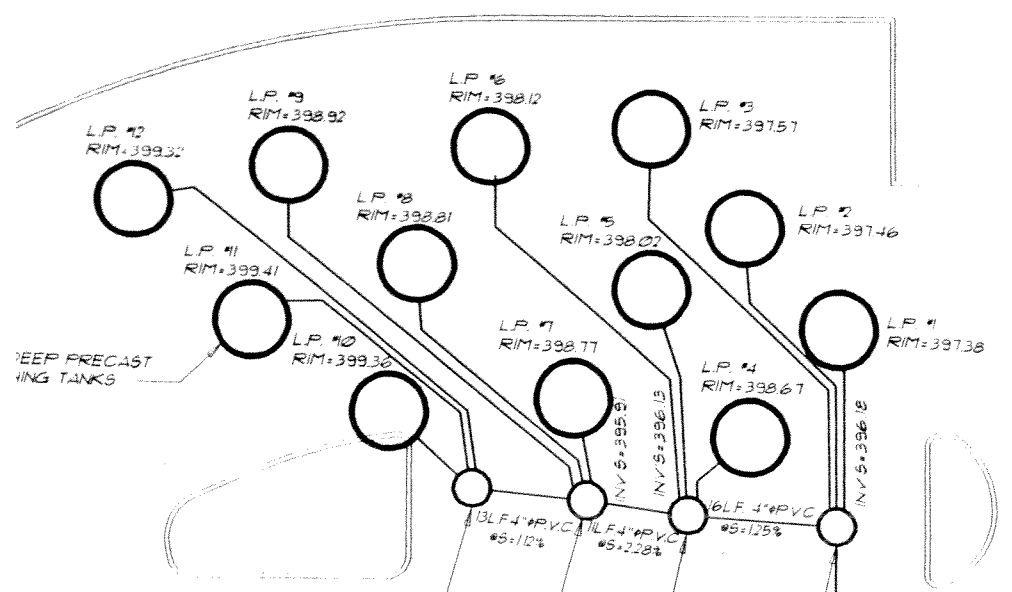
James J. Vanoli, P.E.
752 Old Kensico Road
Thornwood, New York 10594
Telephone 914.769.0902 Fax 914.747.3402

SCALE



SCALE : 1"=20'	
04/13/02	ORIGINAL
DATE	REVISION

SHEET NO.
1 of 1



EXISTING LINE REMOVED
 & REPLACED WITH NEW
 4\"/>

EXISTING JUNCTION
 BOX TO REMAIN

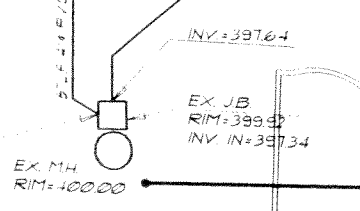
N-38°19'50" W

DB #4
 RIM=399.54
 INV IN=395.10
 INV OUT=395.58

DB #5
 RIM=399.48
 INV IN=396.06
 INV OUT=395.84

DB #6
 RIM=399.75
 INV IN=396.27
 INV OUT=396.03

DB #7
 RIM=399.98
 INV IN=396.32
 INV OUT=396.07



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

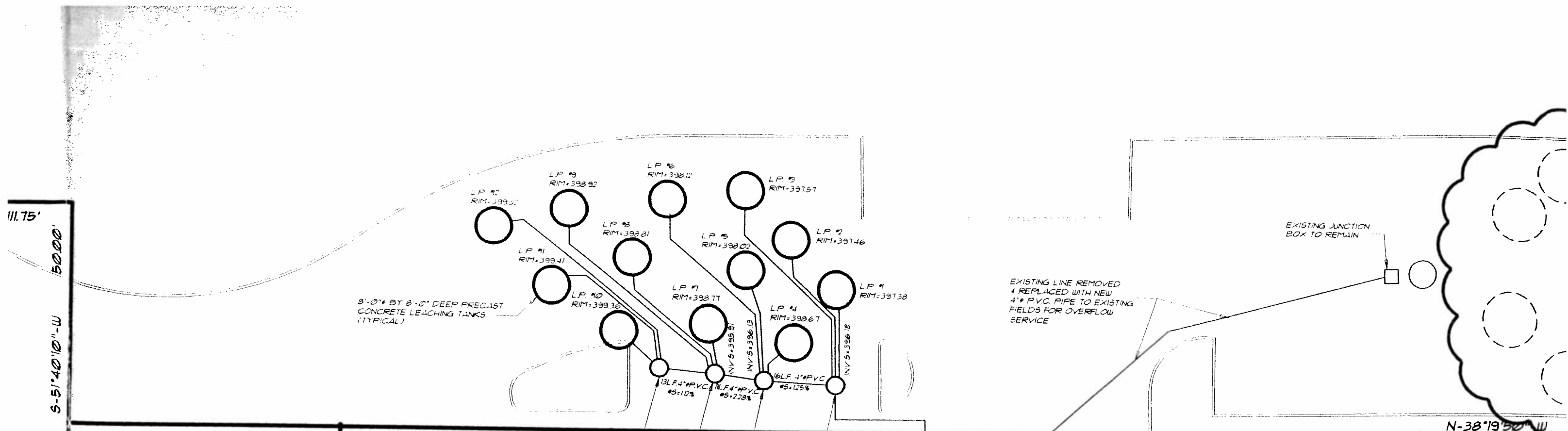
N/F CARL J. QUADE
 KATHERINE L. QUADE
 BYRON S. CLEMONS
 ADELINE Q. CLEMONS

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

N/F JOHN A.
 DITORE

POUND RIDGE FIRE DEPT.

N-60°34'10"



111.75'
 50.00'
 5'-51"40"10"-W

N-38°19'50" W

DE #4 RIM: 399.57 INV: 395.10 INV. OUT: 395.59
 DE #3 RIM: 399.49 INV: 396.06 INV. OUT: 395.84
 DE #1 RIM: 399.25 INV: 396.27 INV. OUT: 396.09
 DE #2 RIM: 399.98 INV: 396.37 INV. OUT: 396.07

EX. MH RIM: 400.00
 EX. JB RIM: 399.97 INV. IN: 397.34
 INV: 397.04

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'

NF ESTHER PECCARIE

NF CARL J. QUADE
 KATHERINE L. QUADE
 STEPHANIE M. RALL

NF CARL J. QUADE
 KATHERINE L. QUADE
 BYRON S. CLEMONS
 ADELINE Q. CLEMONS

NF CARL J. QUADE
 KATHERINE L. QUADE
 HERMAN F. ROTH
 ROSALIE C. ROTH

NF JOHN A. DITORE

143.03'

9'-51"40"10"-W

9'-51"40"10"-W

9'-51"40"10"-W

9'-51"40"10"-W

-51"40"10"-W

S-28°52'50"-W

S-42°32'00"-E 17.98'
S-38°06'40"-E

111.75'

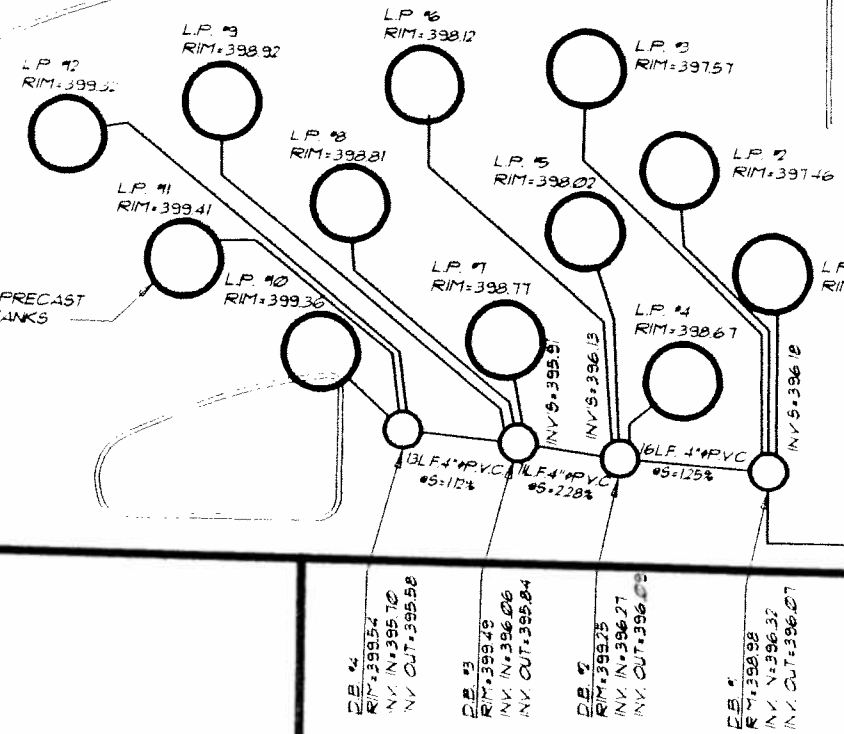
50.00'

S-51°40'10"-W

143.03'

LINDA LANE

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



TIES TO LEACHING PIT & "D" BOX

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

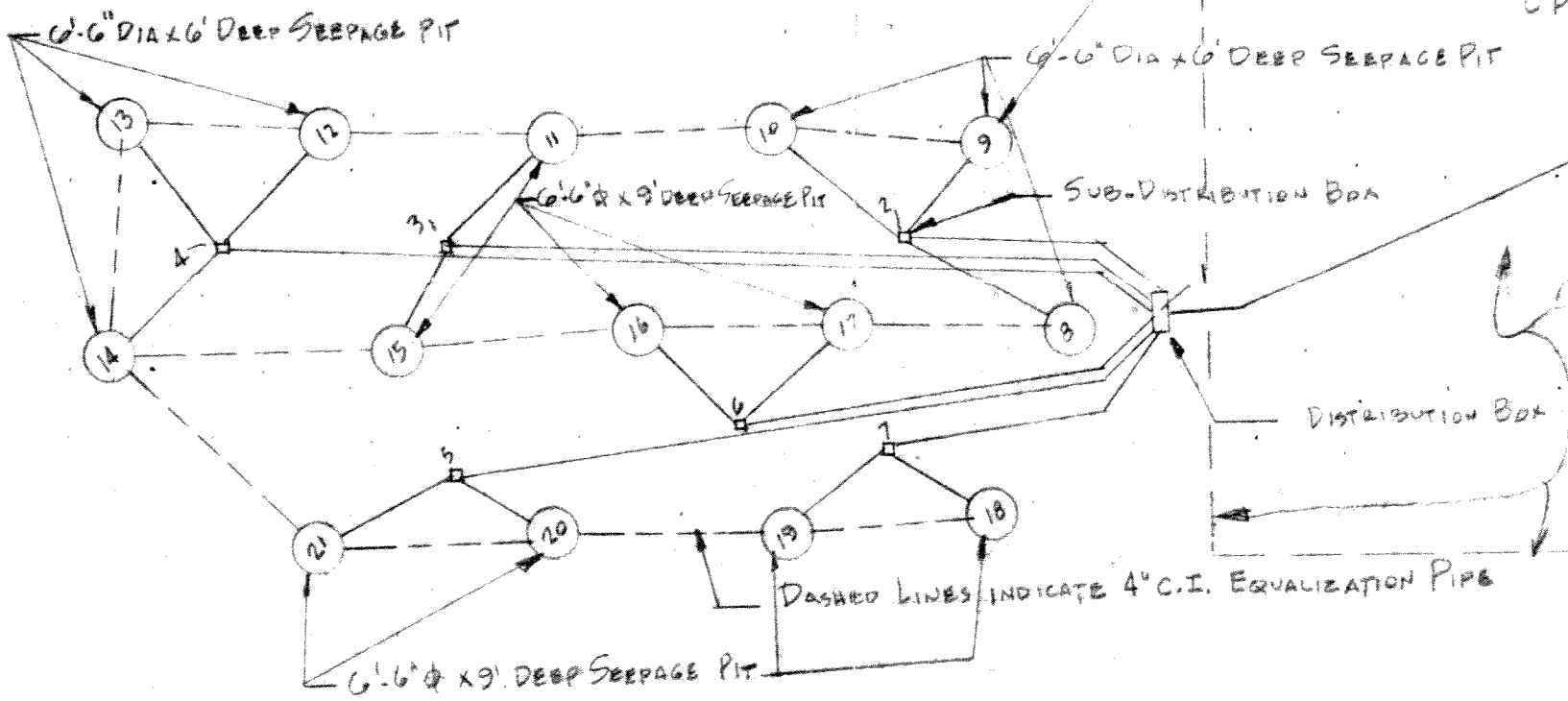
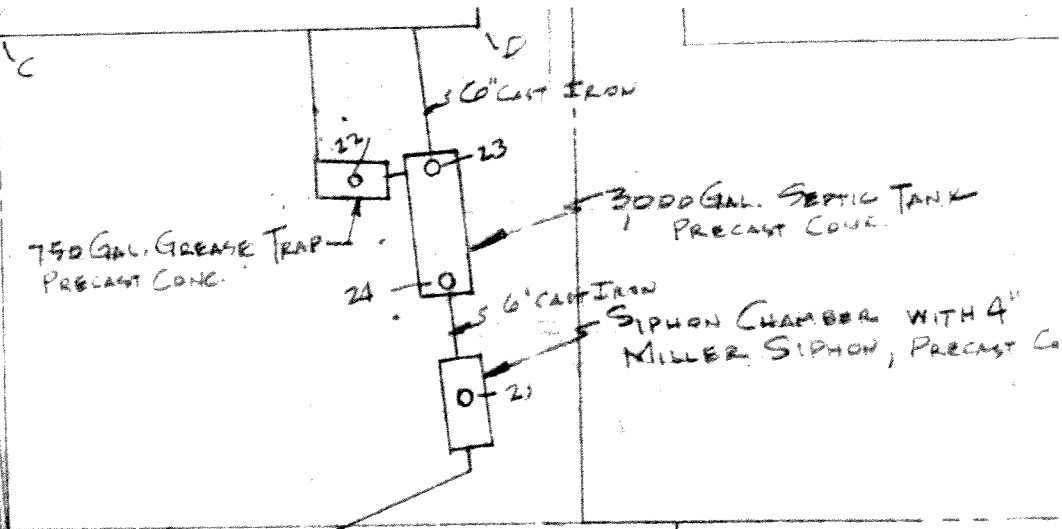
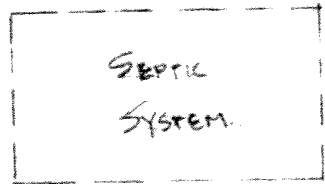
NF ESTHER
PECCARIE

NF CARL J. QUADE
KATHERINE L. QUADE
STEPHANIE M. RALL

NF CARL J. QUADE
KATHERINE L. QUADE
BYRON S. CLEMONS
ADELINE Q. CLEMONS

INV=397.11

S-51°40'10"-W



100% EXPANSION AREA

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

PROPERTY LINE

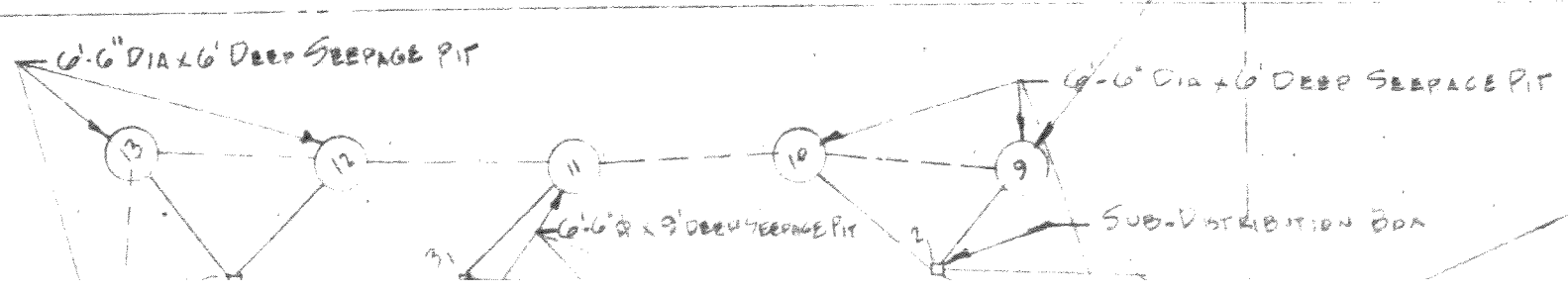
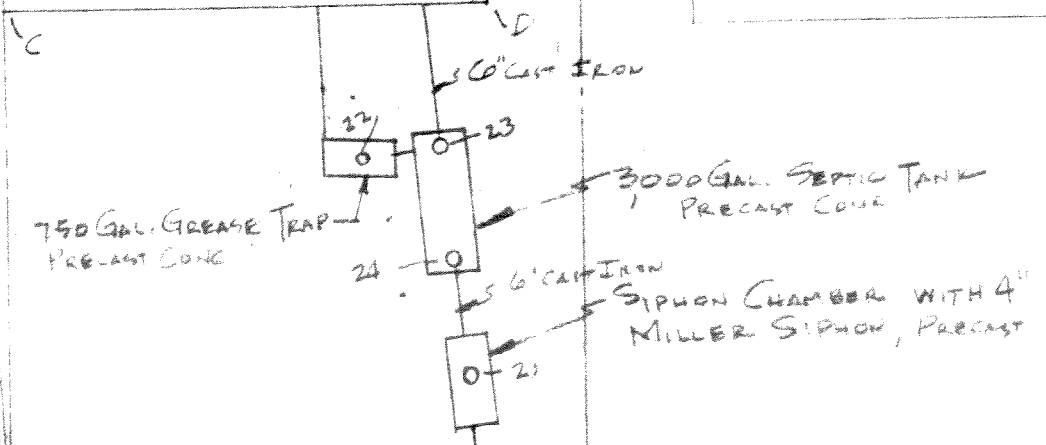
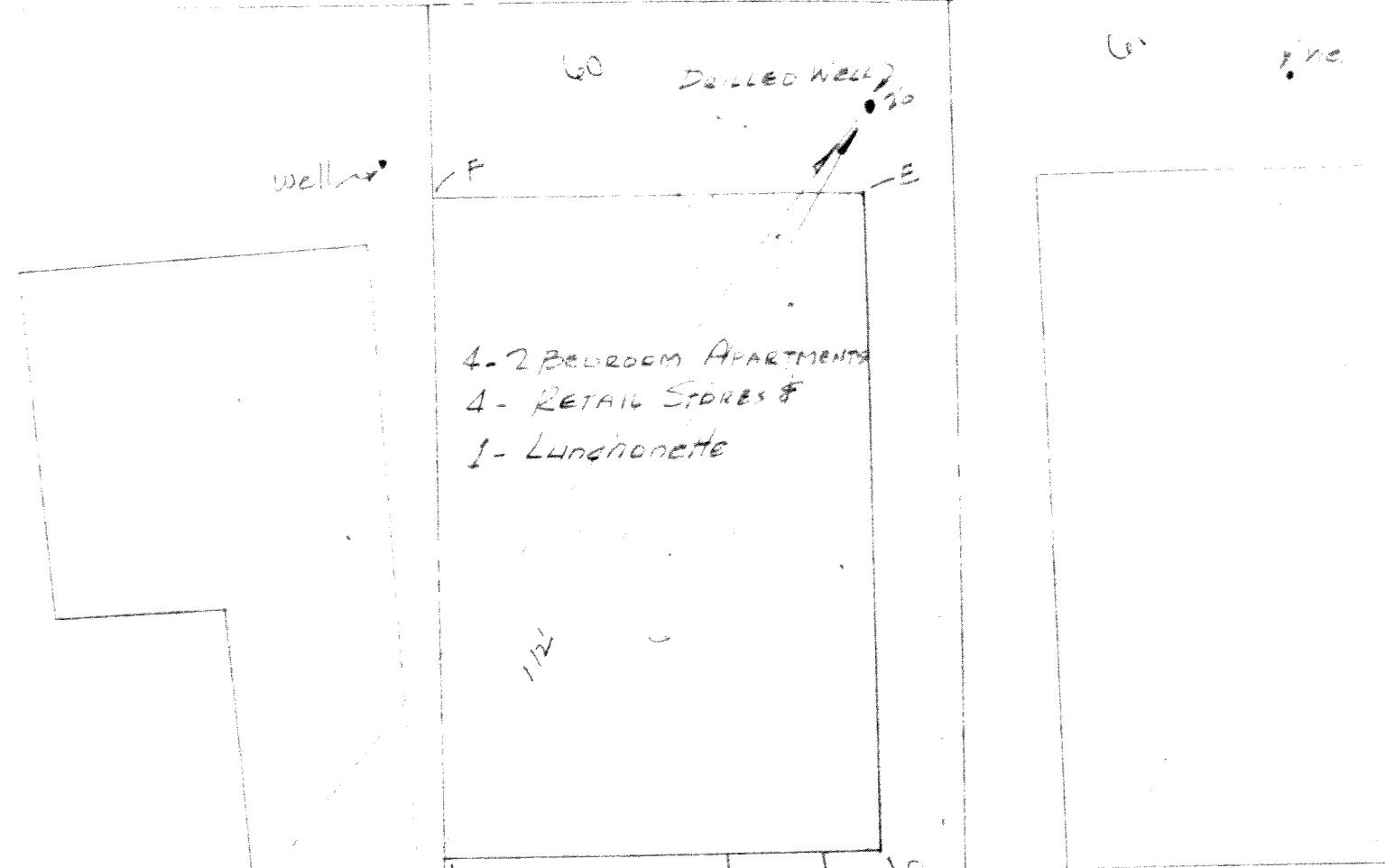
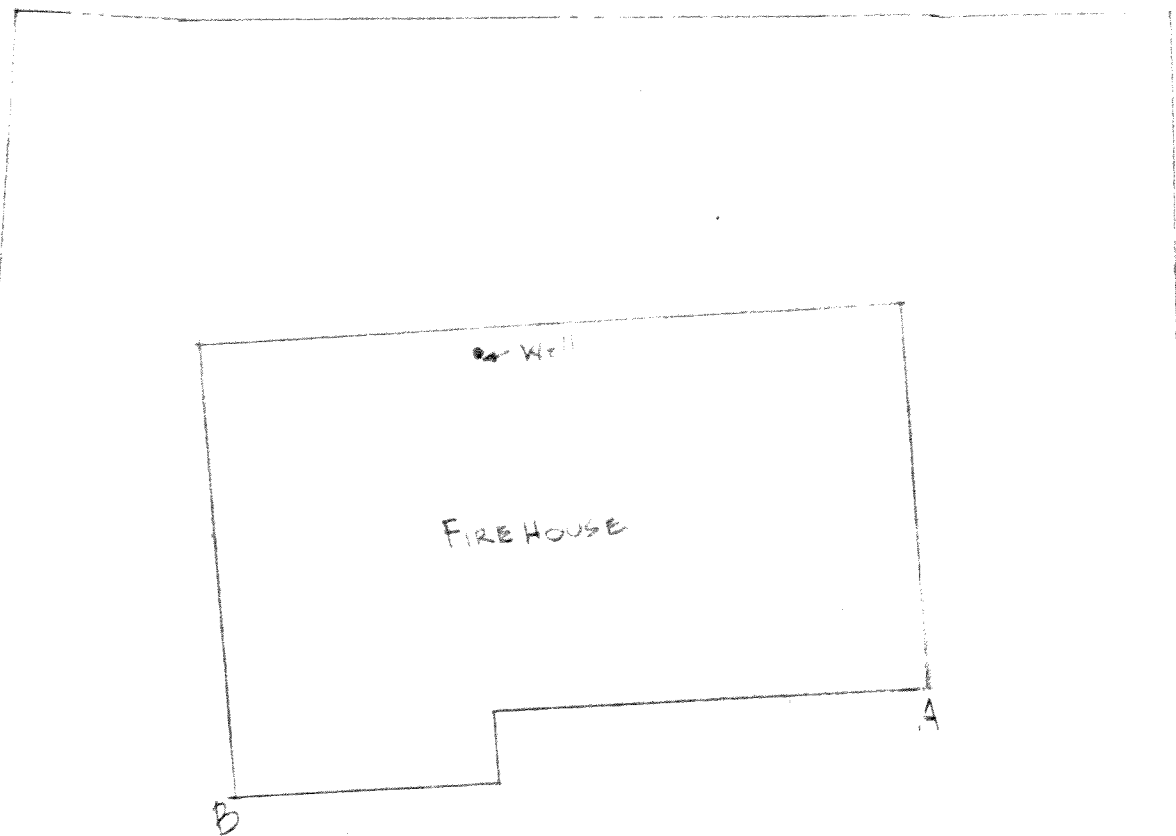
50 FEET
 TO
 GROUND

AP. 20' LOCATION TOP OF BANK

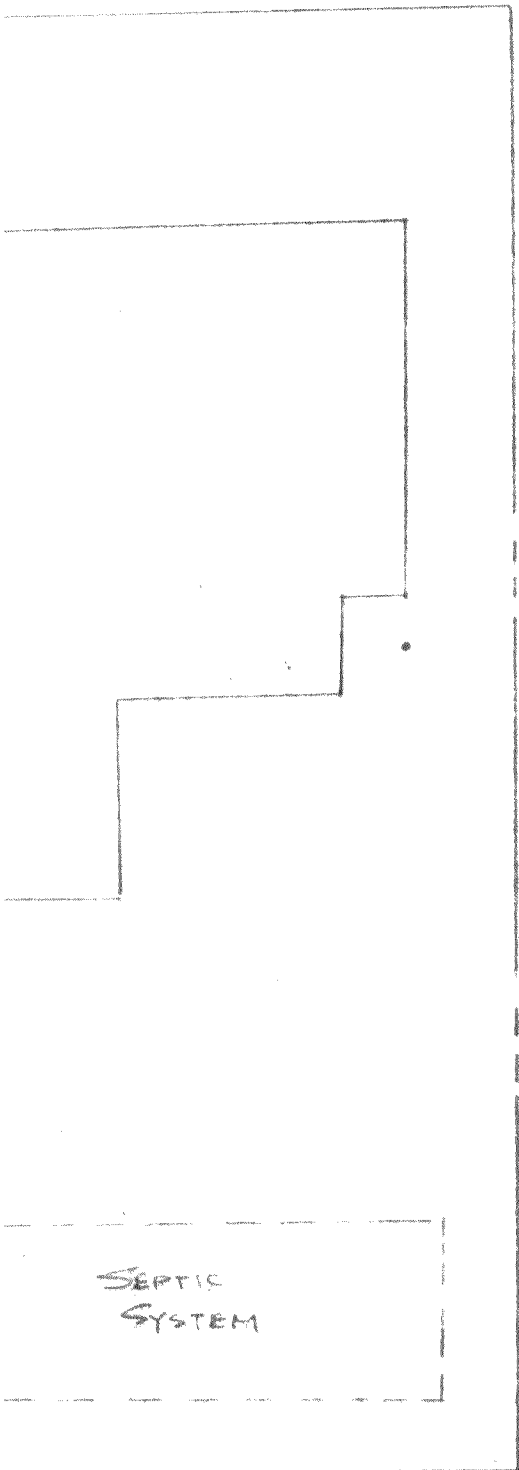
NOTES:

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

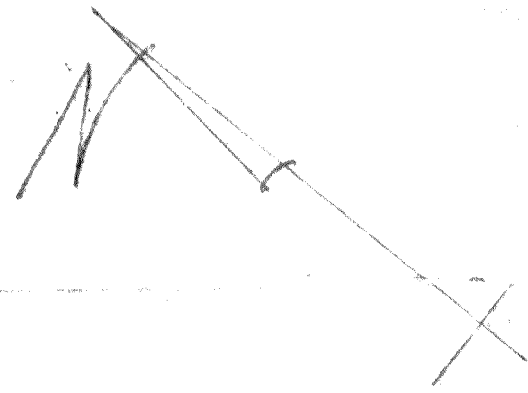
WESTCHESTER AVE.



PROPERTY LINE



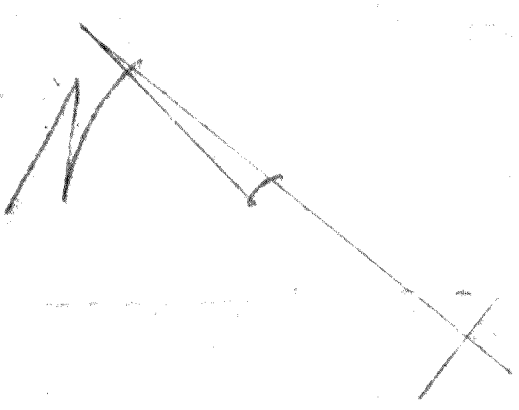
POINT	DISTANCE FROM					
	A	B	C	D	E	F
1	120'	147'				
2	107'	122'				
3	116'6"	100'				
4	128'6"	97'				
5	140'	124'				
6	128'	130'				
7	130'	140'				
8	119'	142'				
9	97'11"	121'				
10	96'	105'				
11	102'	93'6"				
12	112'	86'				
13	124'	84'				
14	145'	109'				
15	130'	110'6"				
16	120'	116'				
17	117'	121'				
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'	21'		
25			61'	38'2"		
26					10'6"	52'



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

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"	16'-6"		
24			53'	27'		
25			61'	38'-3"		
26					10'-6"	52'

SEPTIC SYSTEM



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

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



Stanley J. Lander
STANLEY J. LANDER
Box 267
Aurora, N.Y. 12506

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 50-38 W

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

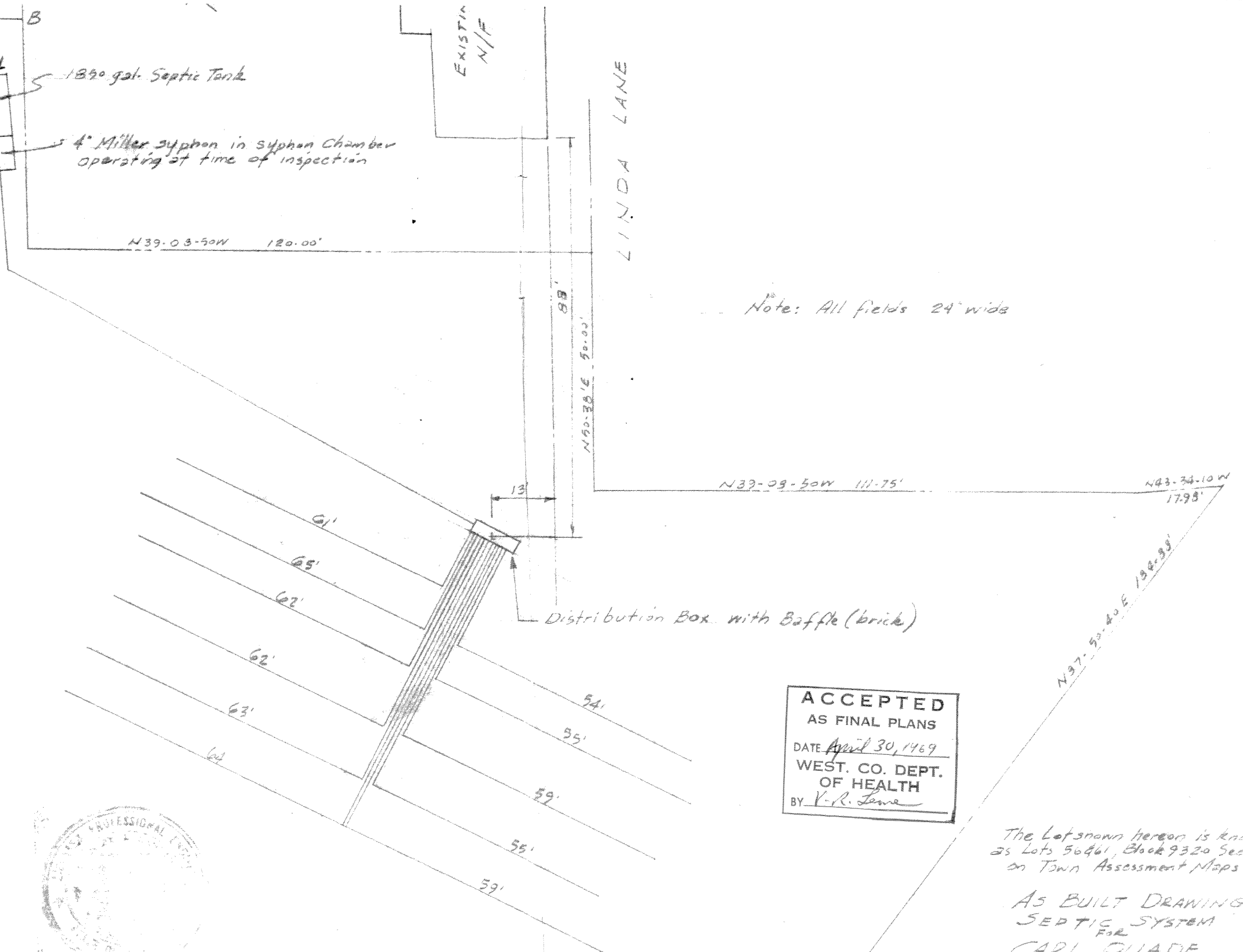
1890 gal. Septic Tank
4" Miller syphon in syphon chamber
operating at time of inspection

EXISTING
N/F

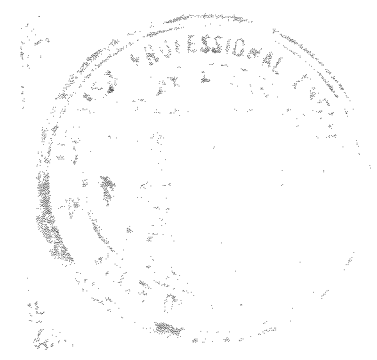
LINDA LANE

Note: All fields 24' wide

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



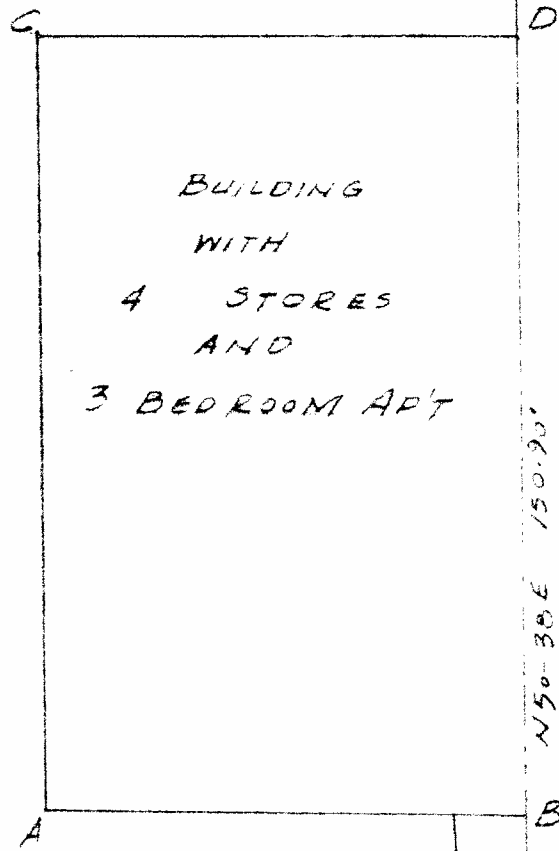
ACCEPTED
AS FINAL PLANS
DATE April 30, 1969
WEST. CO. DEPT.
OF HEALTH
BY V. R. Lane



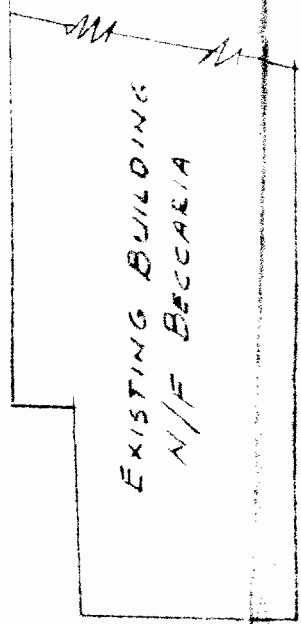
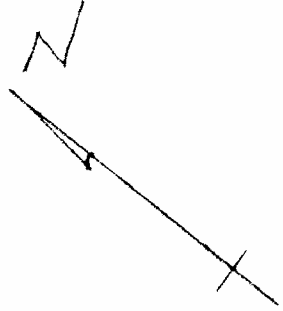
Stanley J. Lane
Stanley J. Lane, P.E.

The Lots shown hereon is known as Lots 56461, Block 9320 Section on Town Assessment Maps

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



BUILDING
WITH
4 STORES
AND
3 BEDROOM AP'T



LINDA LANE

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

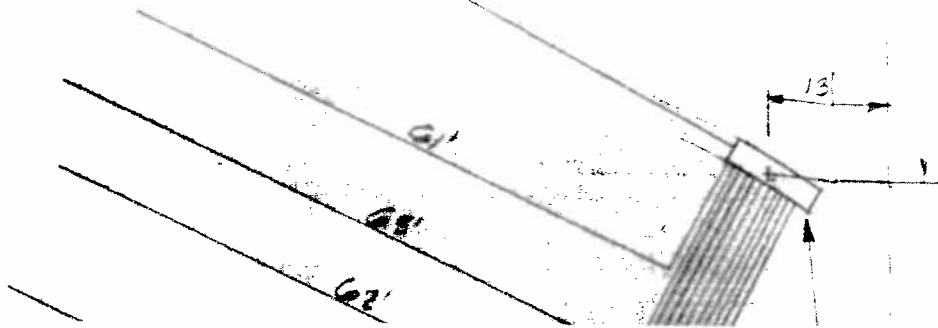
1350 gal. Septic Tank

4" Miller syphon in syphon chamber
operating at time of inspection

N 39-03-50W 120.00'

Note: All fields 24' wide

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



N 33-09-50W 18.75'

N 43-24-10 W
17.95'

E 192.95'

89'
N 50-38 E 50.00'

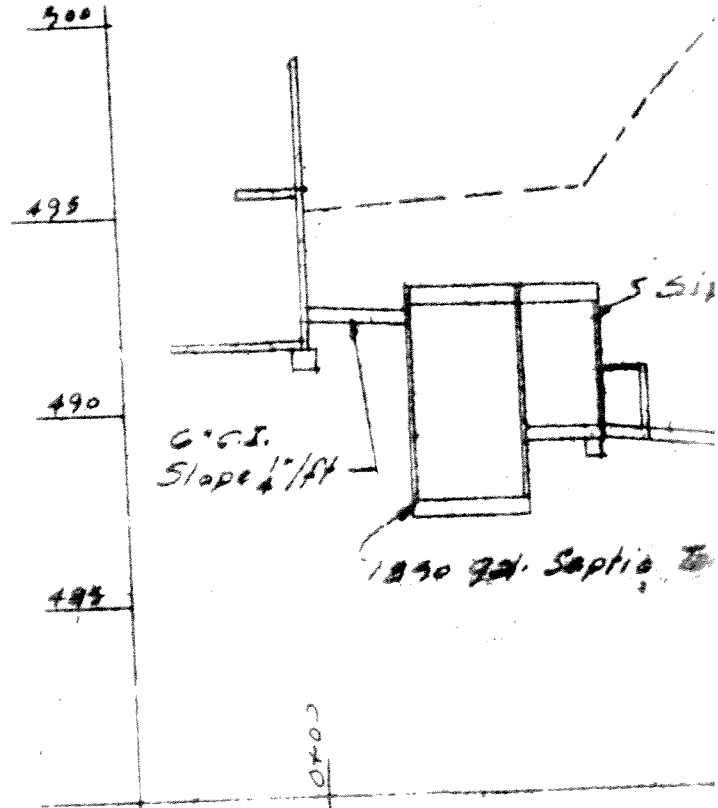
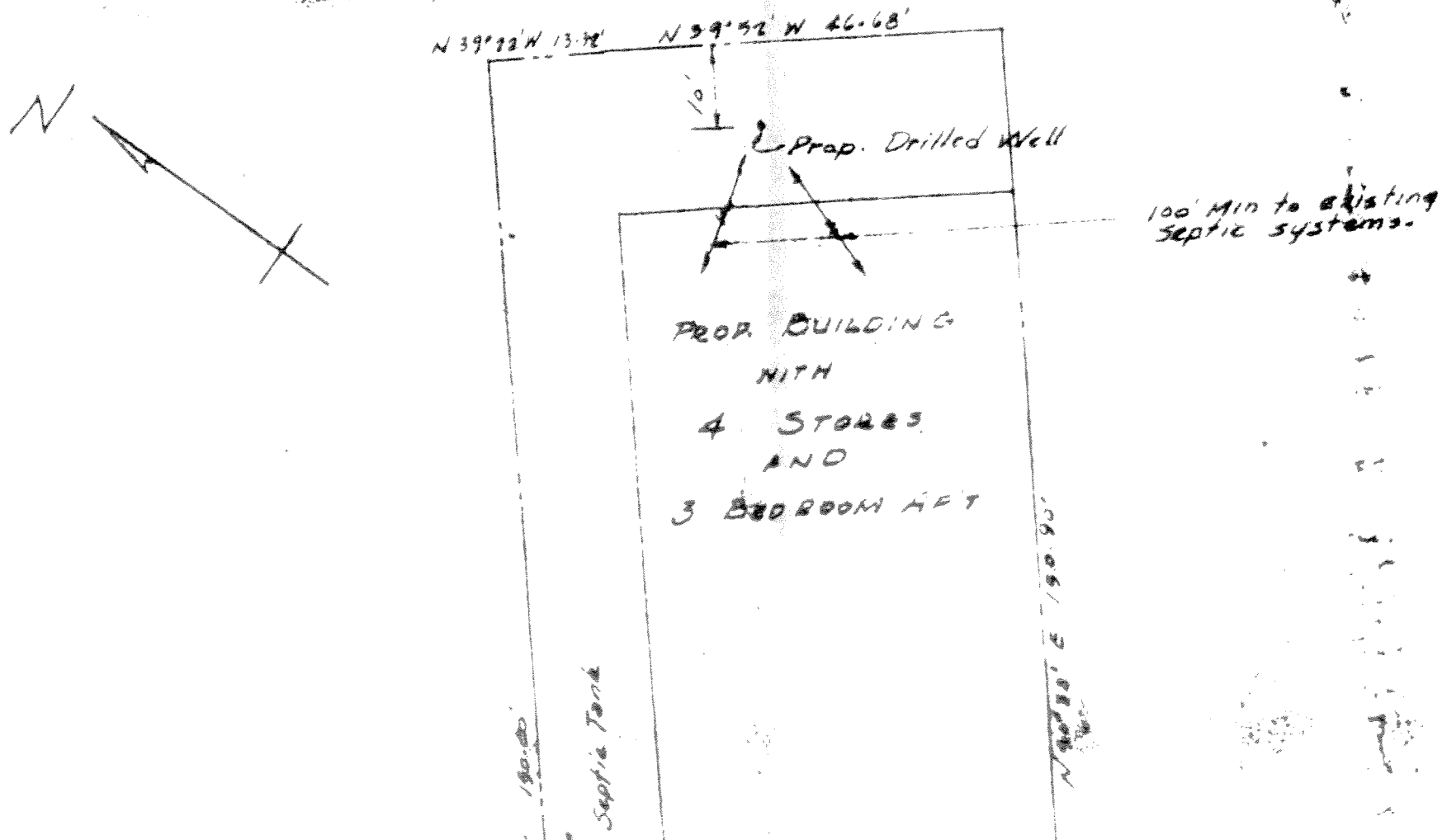
S 50-38 W 150.00'

W

ENGINEER'S REPORT

1. Design Flow: 4 stores @ 450 gal./day = 1800 gal./day + three bedroom apartments @ 300 gal. per day = 2700 gal./day.
2. Size of septic tank from Figure 1, Bulletin 1, Part II, Intermediate Waste Treatment Works 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. = 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 $\frac{2700}{4.70} = 660$ Lin. ft. of 24" trench.
5. Size of Siphon Chamber $\frac{660(0.5)}{7.48} = 44.1$ cu. ft. Using 4' Siphon, Drawing depth: 1'-5" width of Chamber 4'-6" \therefore Length $\frac{44.1}{4.5(7.48)} = 6.9'$ say 6'-11"

WESTCHESTER AVE.



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 test 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

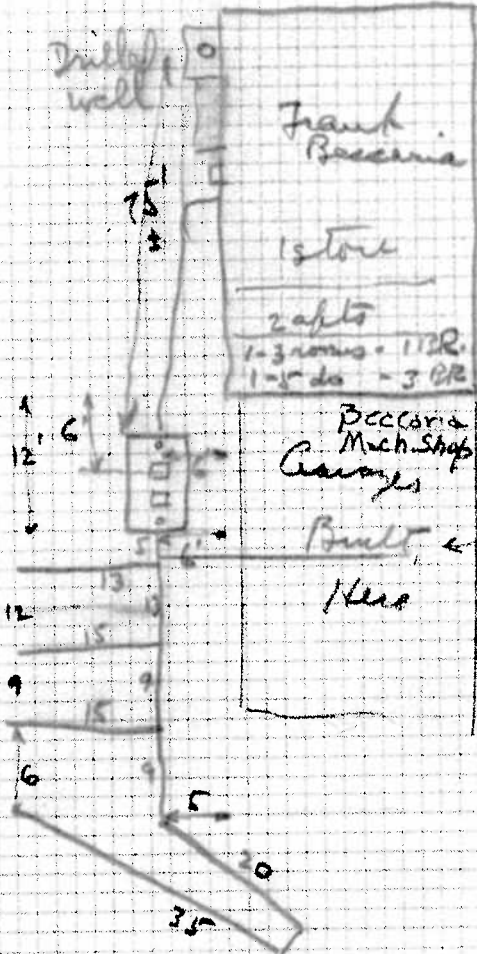
Frank Beccaria, Westchester Ave.

9/4/47 -Same- 1000 gals., 130' x 30'

Westchester Ave

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

7.9 x 40 x 12
1000
gals



30' of driveway
 "added before
 building
 garage to"
 received
 11/12/47 36' dia
 20
 36'
 91
 13
 14
 15
 134
 30
 164

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

William A. Holla, M. D., Commissioner

White Plains, N. Y.

*Sewers
Poundridge*

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 Baccaria, 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 Baccaria, 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 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.

Date: September 3, 1947.
HAG:ME

A2-972
COMMISSIONER

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

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

COMMISSIONER
Director
William A. Holla, M.D., Commissioner
County Office Building
White Plains, New York

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. 5 Ridgefield Town
Note: Owner must receive permit and approval. Check here for extra copy....
 2. Property location Westchester ave...... Place Pound Ridge
(Street) (Village, Town, City)
 3. Tax Map Location: Section..... Block 7326 Lot..... Subdivision.....
 4. Construction: New, Replacement, Proposed Future Building New.....
 5. Lot area 60 X 150.. No. of rooms 8.. Bedrooms 4.. Bathrooms 2.....
Extra Lavatories 1..... Special Fixtures..... Maximum Future Occupancy 7.....
 6. Source of water supply Arterian 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 gal......
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: 32.5 sq. ft...... -:-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 Town

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.

9454-10 73 WESTCHESTER AVE

ystem

N-11
6

H-30

Pound Ridge
Municipality

CERTIFICATE OF COMPLETION

located at N. Whitehall Ave Scotts Corner Section-Ward

owner Westchester Development Co Block

system built by The Pease Co Lot Job #

building type Bank & Stores Permit issued 22 Jan 59 W. C. D. H. File # PR3-1

system consists of 2700 Gal. masonry, metal septic tank 512 Lineal feet x 2 Width trench

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.*

FILE COPY

Date 1-17-59 William A. Brumfield Jr., M. D., Commissioner By AR. Saxon
Westchester County Department of Health Saxon, Eng.

Separate Sewage System

APPLICATION & CONSTRUCTION PERMIT

PR3-1

Pound Ridge
Municipality

located at WESTCHESTER AVE POUND RIDGE N.Y. Section-Ward

owner WESTCHESTER DEVELOP CO. Address 216 ELMSIDE N.C. CORN Block

to be constructed by _____ Address _____ Lot Job #

Building Type Shops Lot Area _____

SYSTEM CONSISTING OF 2700 gal. masonry, metal septic tank 507 lineal feet x 24" width trench

other requirements PUMP INSTALLATION under kitchen sink
Not for Restaurant, Hairdresser or Store using more than min. amt. of water

GUARANTY: 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 assigns, 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 County 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 condition 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.

Date Jan 22-59 Signed Stanley B. Carter

APPROVED FOR CONSTRUCTION: This approval expires one year from the date issued unless construction of building or sewer system shall have 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 only.

Date 22 Jan 59 William A. Brumfield Jr., M. D., Commissioner By J. S. Havel
Westchester County Department of Health

FILE COPY

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 70 VICTOR CHRISTIANER, ARCHT. 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) 1,008 Sq.Ft.

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

TRIPPLICATE 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.
- 4. DISTANCES (Nearest Foot) TO:
 - Street lines, name street
 - Property lines (within 250')
 - 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 THE PEASE CO.

OWNER (.); BUILDER (.); CONTRACTOR (SOMEY)

IF CORPORATION, GIVE NAME AND TITLE THE PEASE CO. R. DOUGLAS MACKAY

MAIL ADDRESS 488 GLENBROOK R.D. STAMFORD TELEPHONE NUMBER 818-6244

Job Location

Westchester County Department of Health

PR 3-1

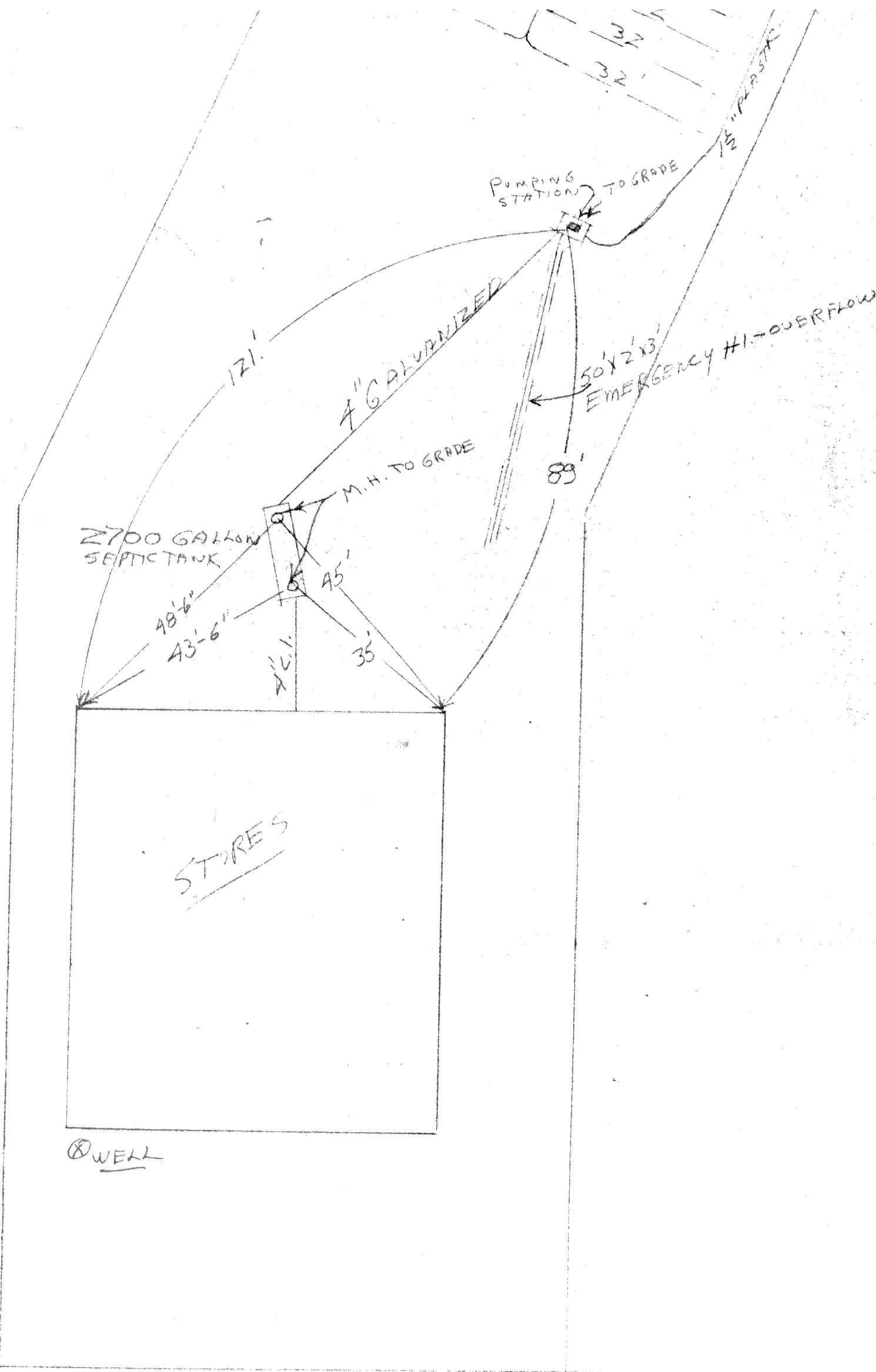
TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO. <u>1</u>	HOLE NO. _____	HOLE NO. _____	HOLE NO. _____
G.L.	<u>TOP SOIL</u>	_____	<u>TOP SOIL</u>	_____
6"	<u>TOP SOIL</u>	_____	<u>TOP SOIL</u>	_____
12"	<u>SANDY LOAM</u>	_____	<u>SANDY LOAM</u>	_____
18"	<u>SANDY LOAM</u>	_____	<u>SANDY LOAM</u>	_____
24"	<u>SAND LOAM GRAVEL</u>	_____	<u>SANDY LOAM GRAVEL</u>	_____
30"	<u>SAND LOAM GRAVEL</u>	_____	<u>SAND & GRAVEL</u>	_____
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

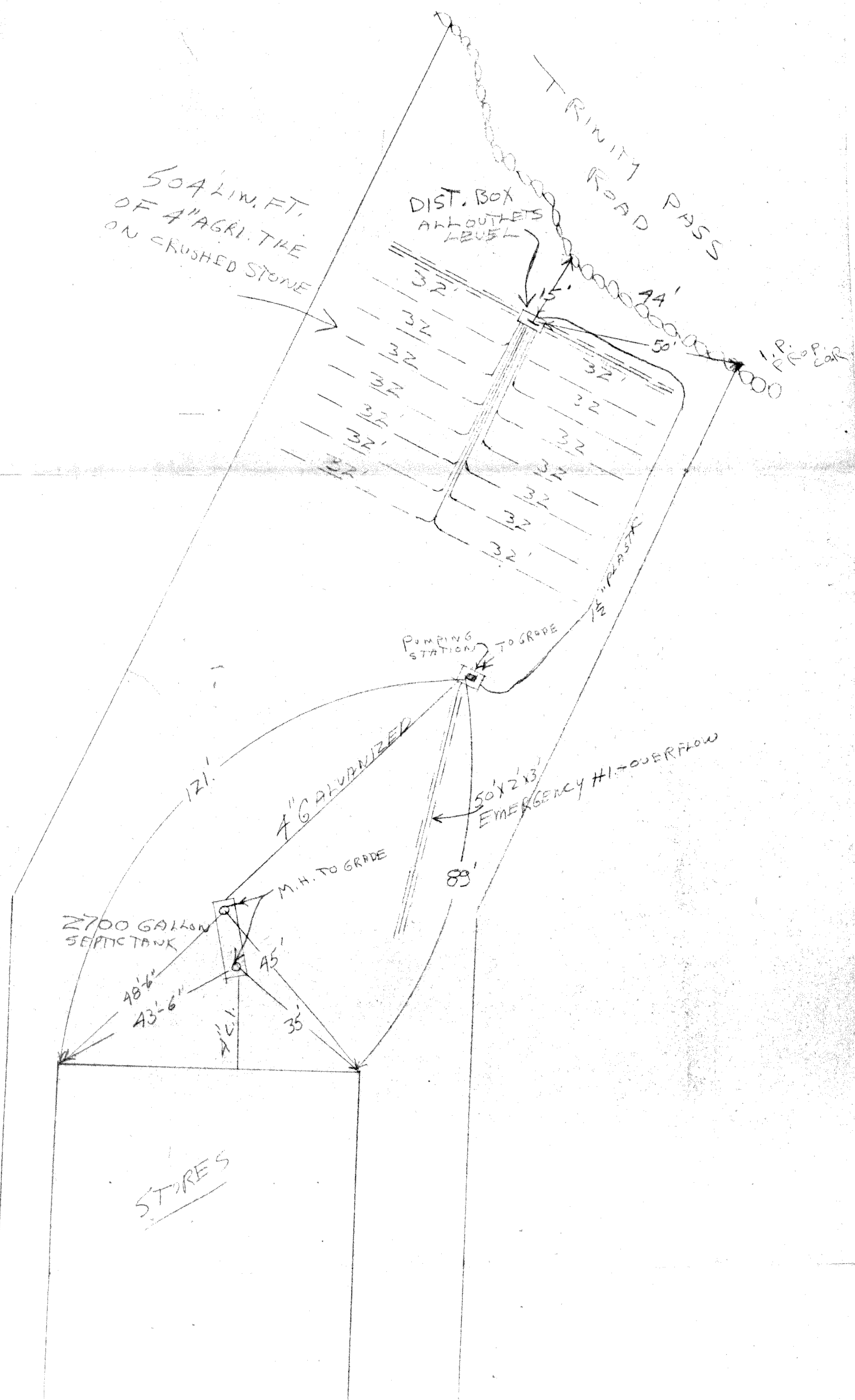
Tests made by J.H.E. P.E.A.S.E. CO. Date DEC. 30, 1958 . . .



WESTCHESTER AVE.

APPROVED
 SEP 17 1959
 West. Co. Dept.
 of Health
 By *AR Deed*

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

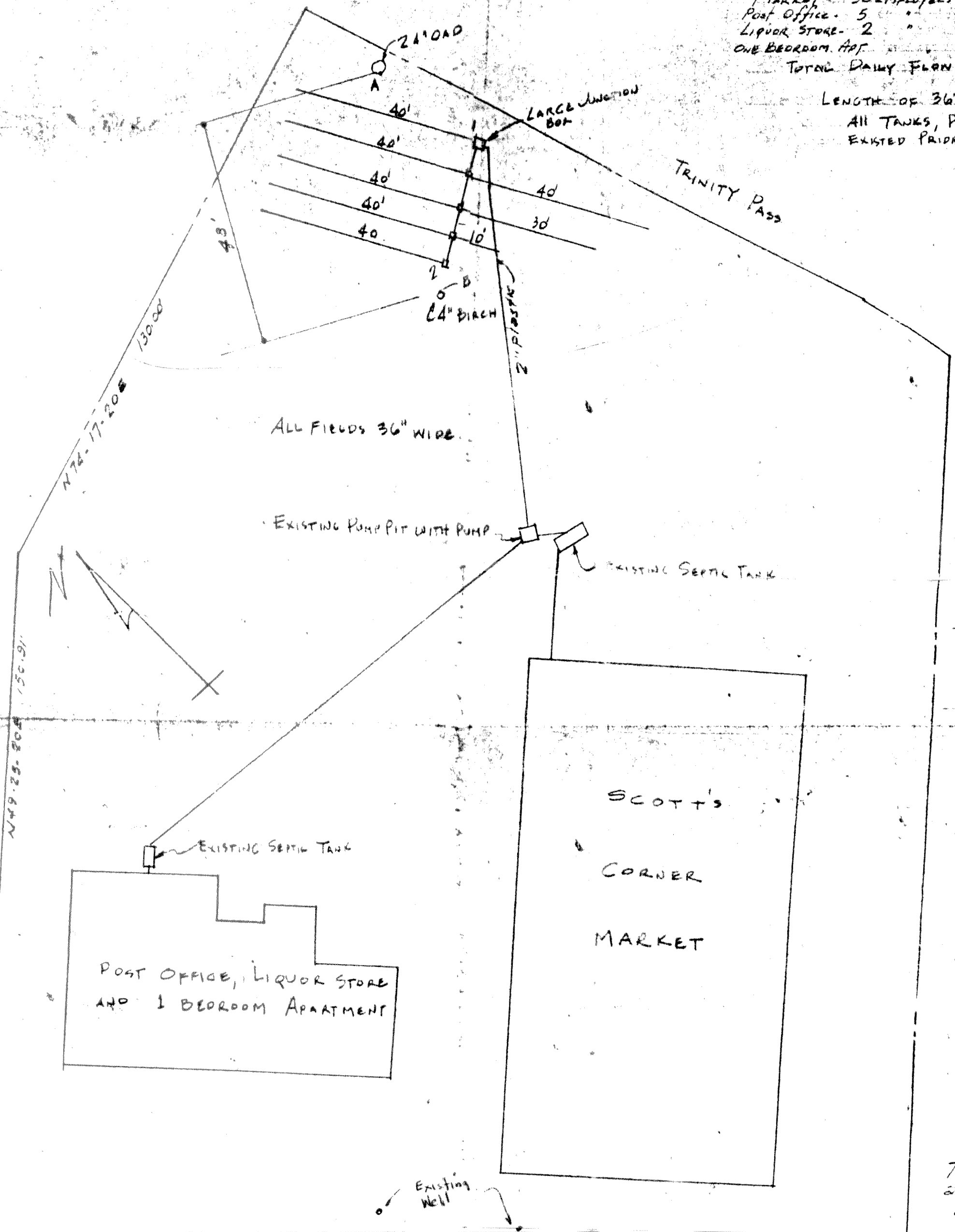


9454-12 and 9454-11 69-71
WESTCHESTER AVE

DESIGN

MARKET - 30 EMPLOYEES @
Post Office - 5
LIQUOR STORE - 2
ONE BEDROOM APPT.
TOTAL DAILY FLOW

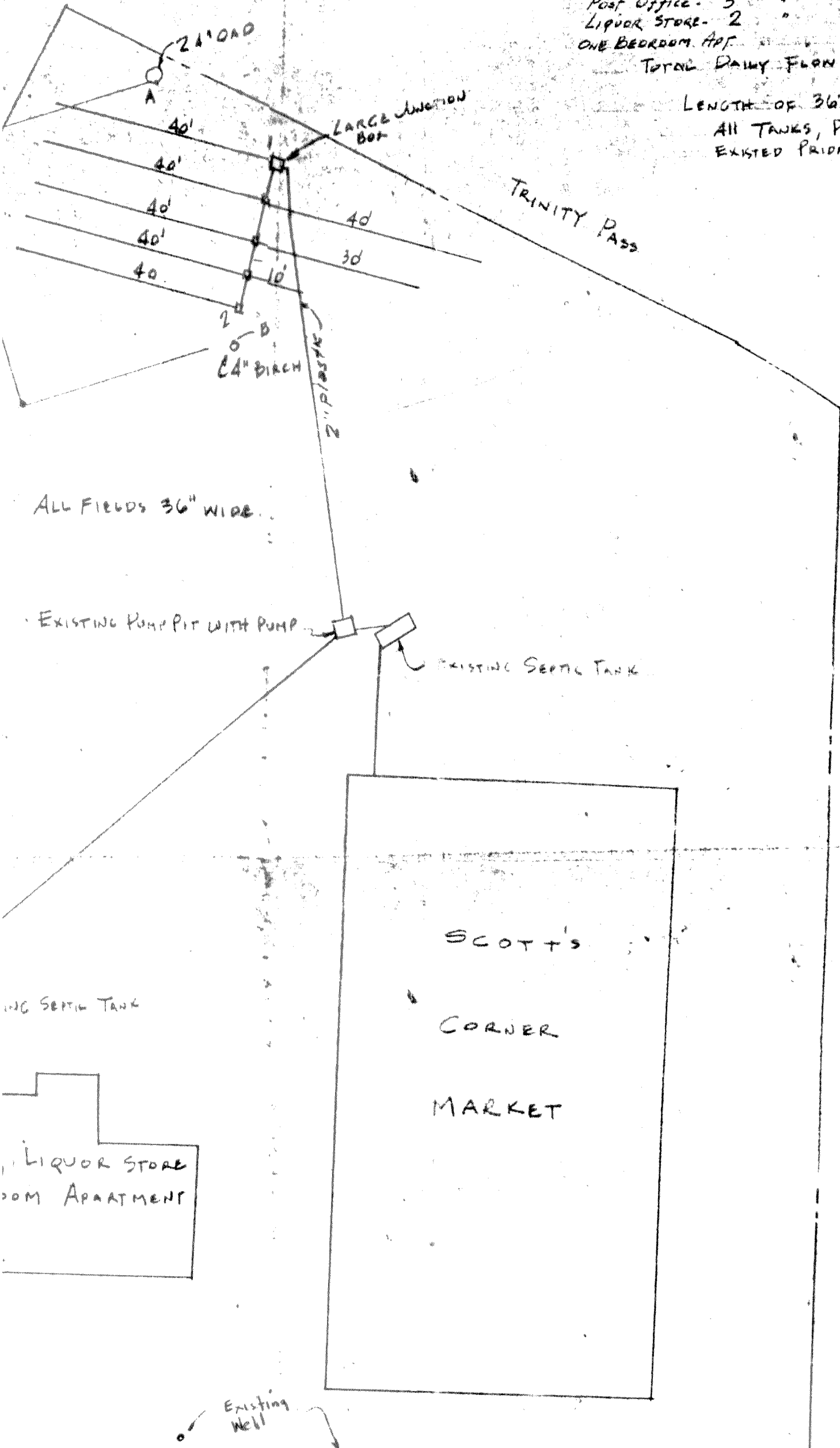
LENGTH OF 36" T
ALL TANKS, PUM
EXISTED PRIOR



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	B
1	26'-1"	32'-10"
2	42'-3"	61'-1"

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

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 9454 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

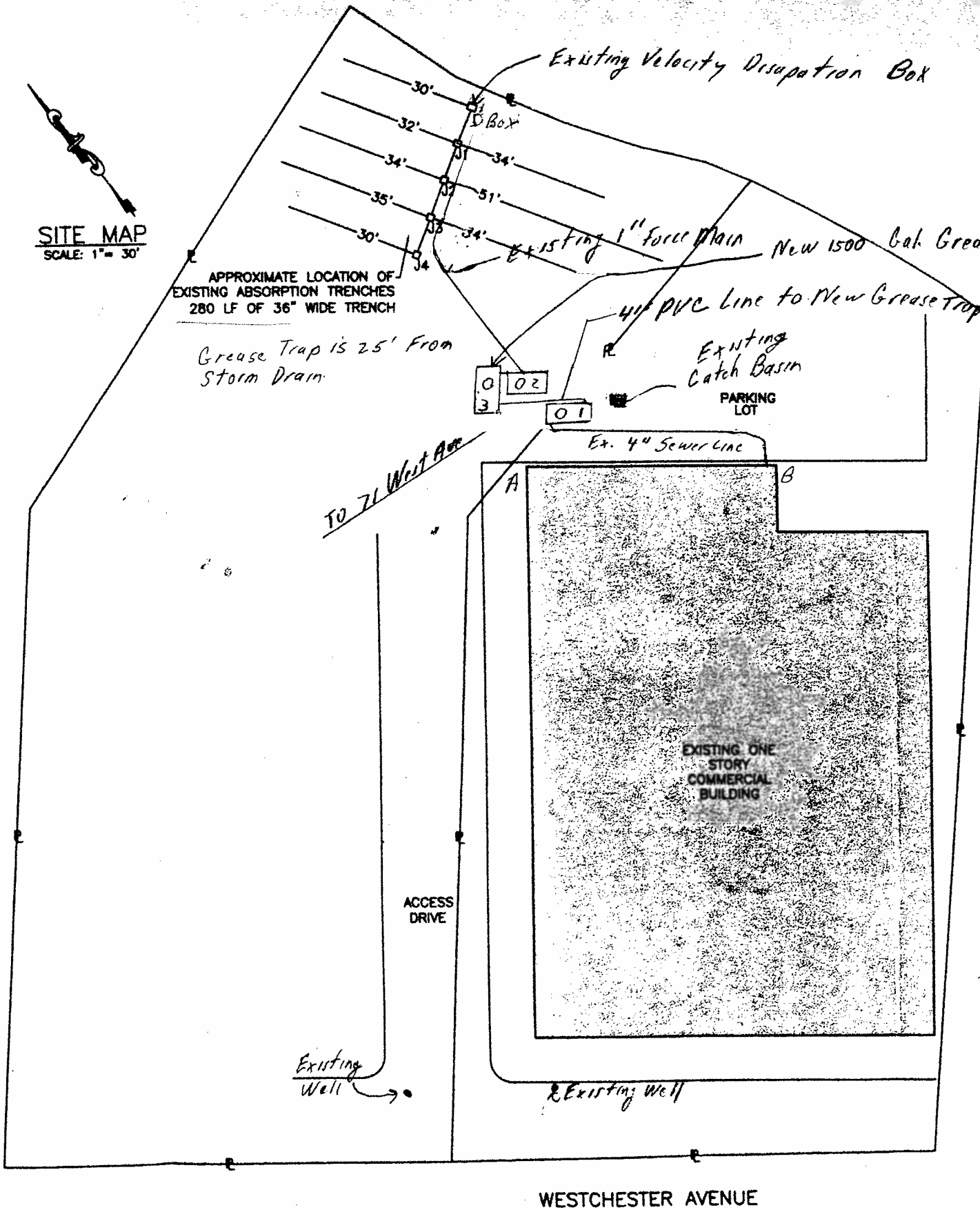
I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), in accordance with the standards, rules and regulations of the State of New York and the approval issued by the Westchester County Department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

Date: 11/17/12 Signed: _____


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 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: _____


SITE MAP
SCALE: 1" = 30'



1) Flow Date - Pound Ridge Plaza - 69 Westchester Ave - 450 gpd incl.
Pizza Rest. 105 ypd
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 6T 5x10-15 (Precast) 1500 Gallons - Heavy Duty by Rotondo 4 Sons Inc.

3) Water Shed - Mianus River Acquarian Water Co.

4) Owner - Pound Ridge Plaza LLC
114 Glendok Rd
Scarsdale NY 10583

5) Grease Trap in Pizzeria To Be Cleaned @ least once per 3 days

- 1 - Existing Septic Tank
- 2 - " " Pump Pit

As Built - 11/17/12
W.C.H.D. Comments 11/14/12; 11/15/12

Pound Ridge Plaza
69 Westchester Ave.
Pound Ridge, NY 10574
"As Built" 1500 gal Grease Trap - PR 2012-12
Nov. 12, 2012 15-9452-12
Scale 1" = 30'



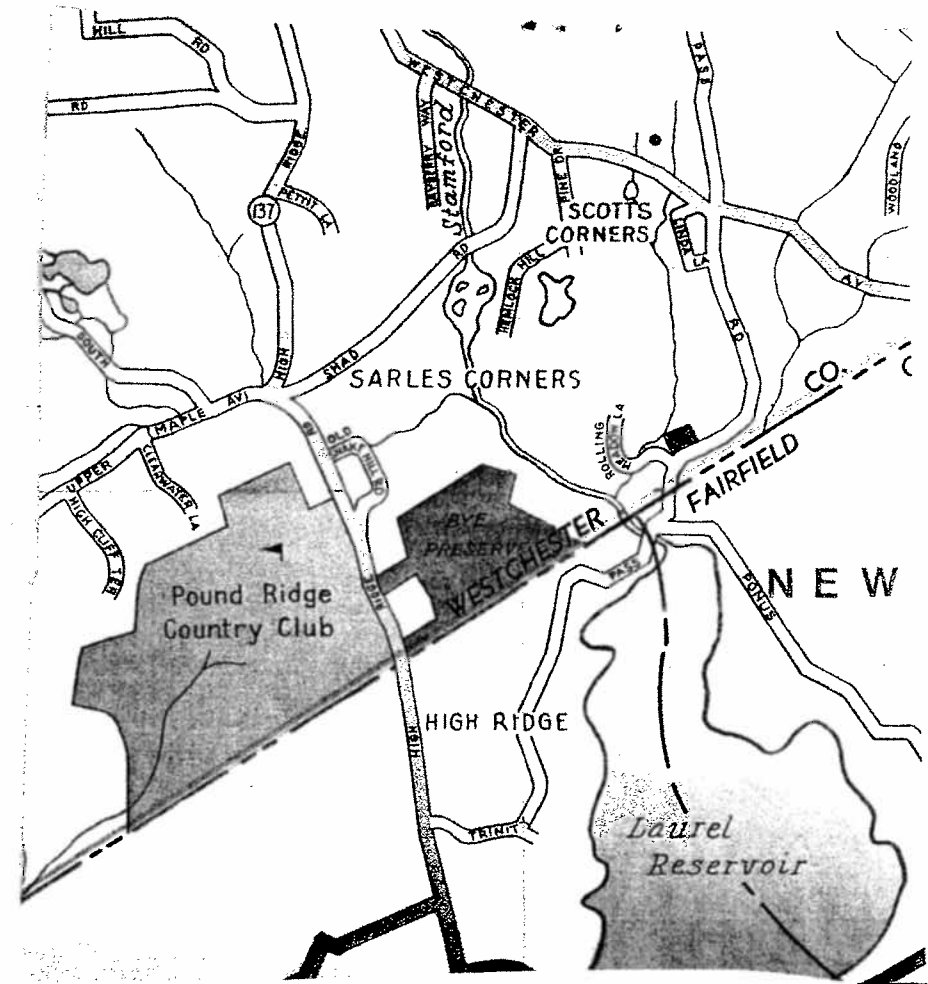
John P. Annicelli, P.E.
Troy La. Bedford, N. Y. 10506
914-273-3682.

Map Shown Based on a Map by
Keane, Coppelman Gregory
Dated 5/16/11

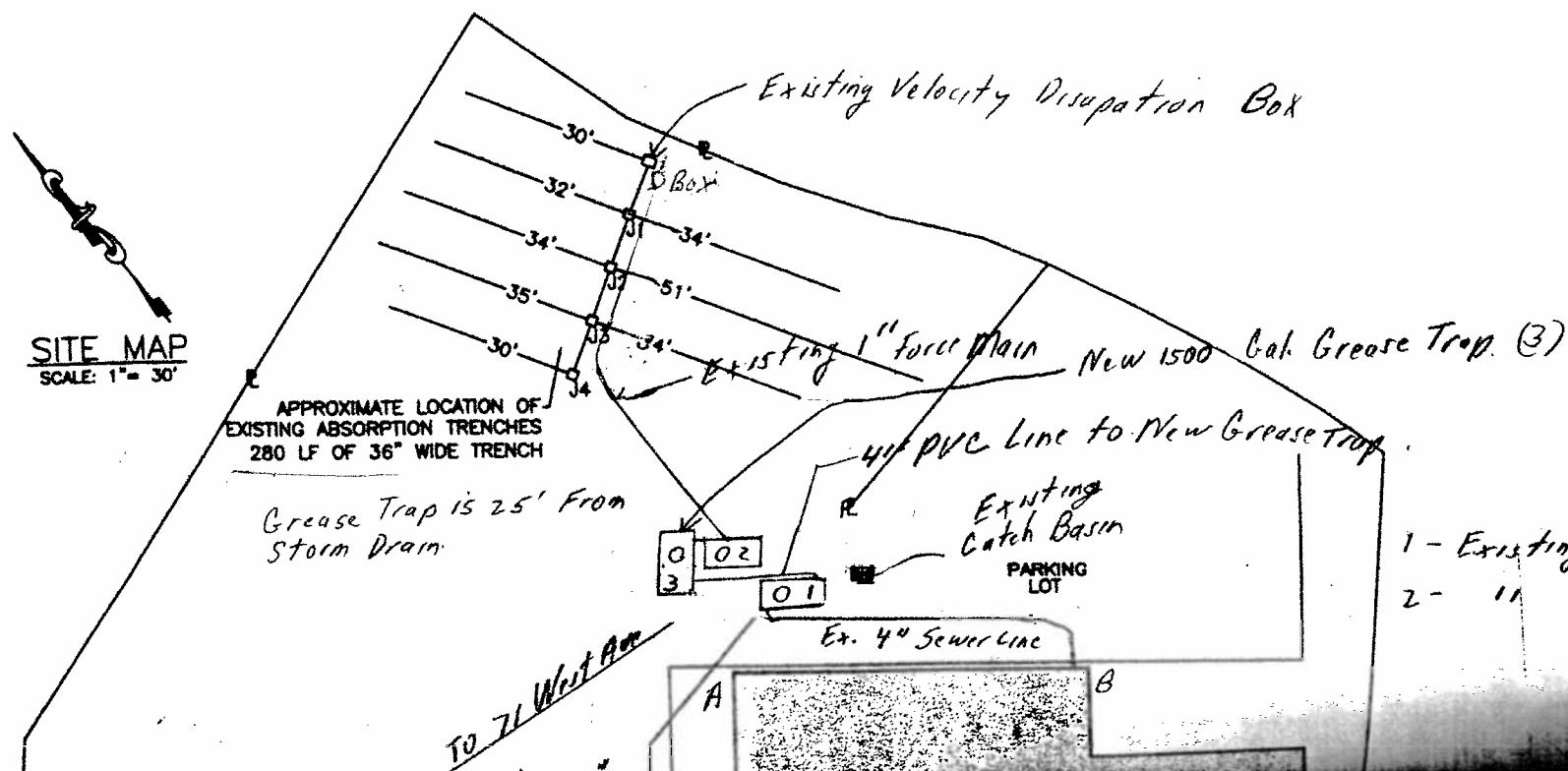
NOTE

All Water Usage Meter Readings in Both 69 & 71 Westchester Ave Buildings To Be Submitted to the Westchester County Health 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 5x10-15 (Precast) 1500 Gallons - Heavy Duty by Rotondo & Sons Inc.

3) Water Shed - Mianus River Aquarion Water Co.

- 1 - Existing Septic Tank
- 2 - " Pump Pit

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.

WCDOT File # PR2012-12

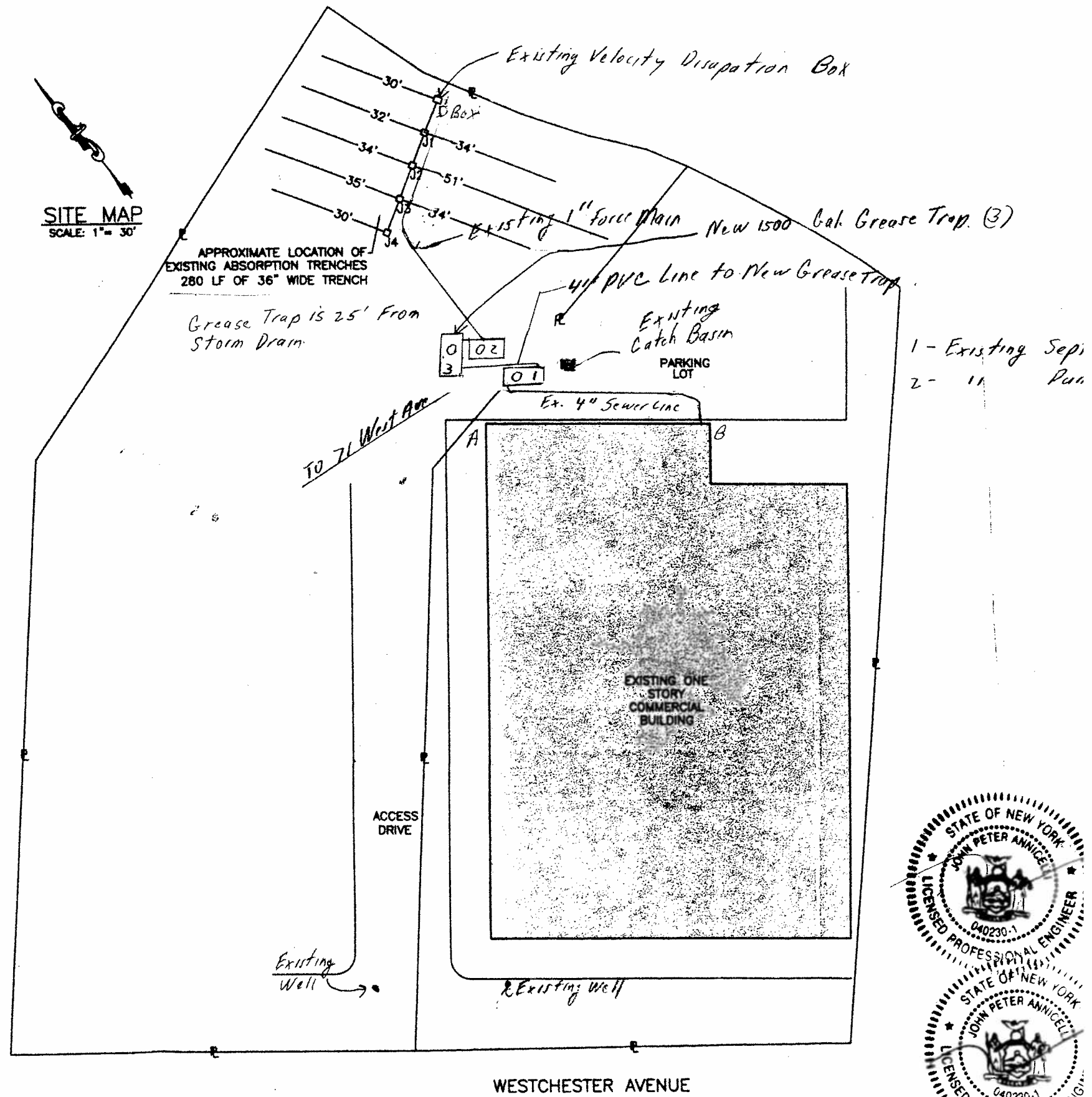
ACCEPTED
AS FINAL PLANS

DEC 03 2012

WEST. CO. DEPT. OF HEALTH

BY *[Signature]*

* GREASE TRAP ONLY *



1 - Existing Sepi
2 - " " " " " "



WESTCHESTER AVENUE

Map shown based on a map by
Keane, Cappelman Gregory
Dated 5/16/11

9454-6 85 WESTCHESTER AVE

CERTIFICATE OF CONSTRUCTION COMPLIANCE APPLICATION – OWTS REMEDIATION

WCDH File #: PR 2009-06R Municipality: Pound Ridge

Residential Commercial Watershed Basin Name: Mianus River (Aqueduct Water Co.)

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 944 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: 50 Bedford Rd Mt Kisco State: NY Zip Code: 10549

Owner Phone #: (914) 760-5888

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:	<u>1200</u>	_____	Gal.	
Pump Chamber:	_____	_____	Gal.	
Dose:	<u>550</u>	_____	Gal.	
Overflow Tank:	<u>1250</u>	_____	Gal.	
Absorption Trench(es):	_____	_____	LF	_____ Ft. Width
Gravelless Trench(es):	<u>Infiltrator</u>	<u>224</u>	LF	
Absorption Pit(s): # of pits	<u>(Quick & High Capacity)</u>	_____	Ft Dia.	_____ Sq. Ft.
Galleys:	_____	_____	LF	_____ Sq. Ft.
Flow Diffusers:	_____	_____	LF	_____ Sq. Ft.
75A Alternative:	_____	_____		
Junction/Distribution Box(es):	_____	<u>8</u>	Number	<u>7 J Boxes</u> <u>1 D Box</u> Size
Curtain Drain:	_____	_____	Ft Depth	_____ Ft. Width
ROB Sand/Gravel Fill:	_____	_____	Ft. Depth	_____ Sq. Ft Area
Other:	_____	_____		

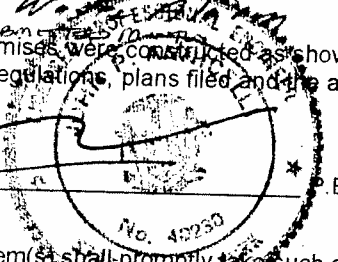
Erosion Control (EC) Completed _____

Separate Sewage Contractor (SSC): Name: (R. Ribeiro) United Septic Systems Inc WCDH SSC License # 109

Other Requirements/Conditions: 3' Rot B Fill; Pump Timer (Run 1/2 hrs) Overflow Tank w. High Water Alarm

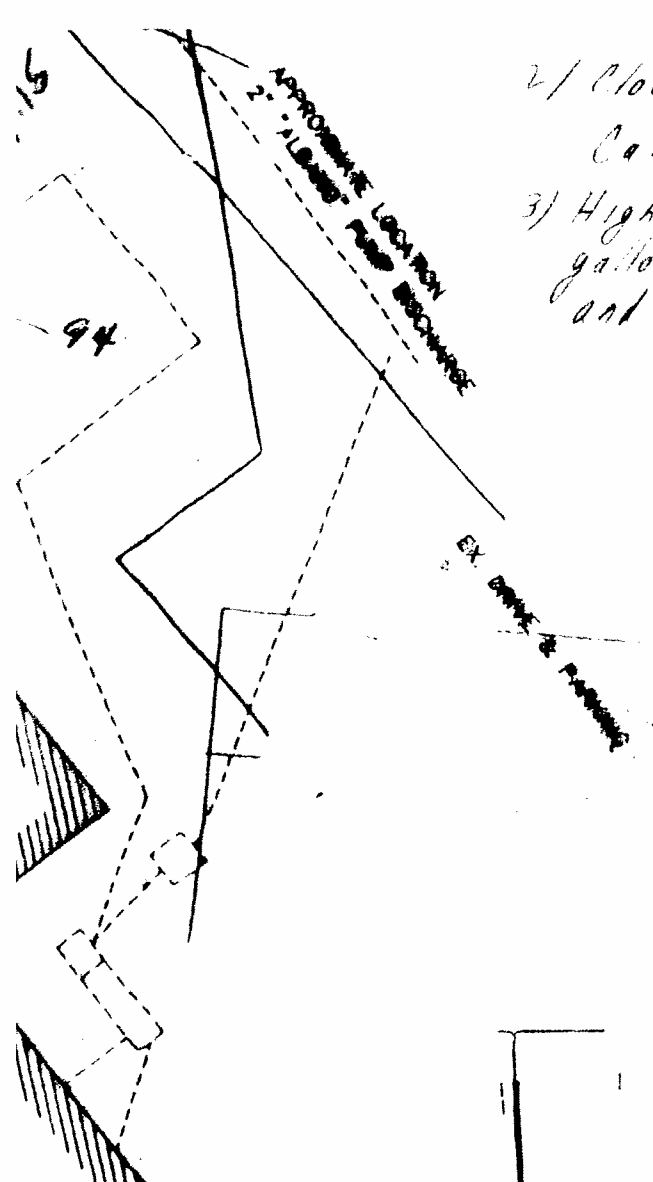
* Daily WATER + SEWAGE FLOW READINGS must be submitted to the Department of Health. I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), in accordance with the rules and regulations, plans filed 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 from 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: _____

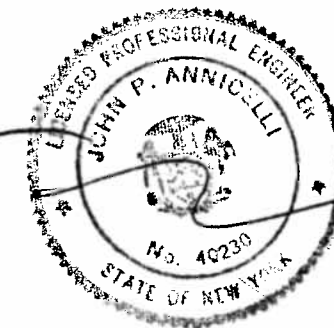


- 2) Clock timer to pump installed in No Star Electric Room.
Calibrated 4 Pumps each 12 hours 310 gal / pumping Centipice Pump Control Panel with Time Clock.
- 3) High Water Alarm in overflow Tank set to 600 gallons. Alarm light & audible in North Star Restaurant and Overflow Tank to be pumped when Alarm activated.
Sonix Corp Level Sensor HL 1000 & Gould High Water Alarm

Owner of Property
 F. Accocella
 Westchester Properties L.P.
 North Star Restaurant
 85 Westchester Ave.
 Pound Ridge, NY 10576

Manas River Drainage Basin (Aquarius Water Co)

JOHN ANNICELLI, P.E.
TROY LANE 914-273-3682
BEDFORD, NEW YORK, 10506

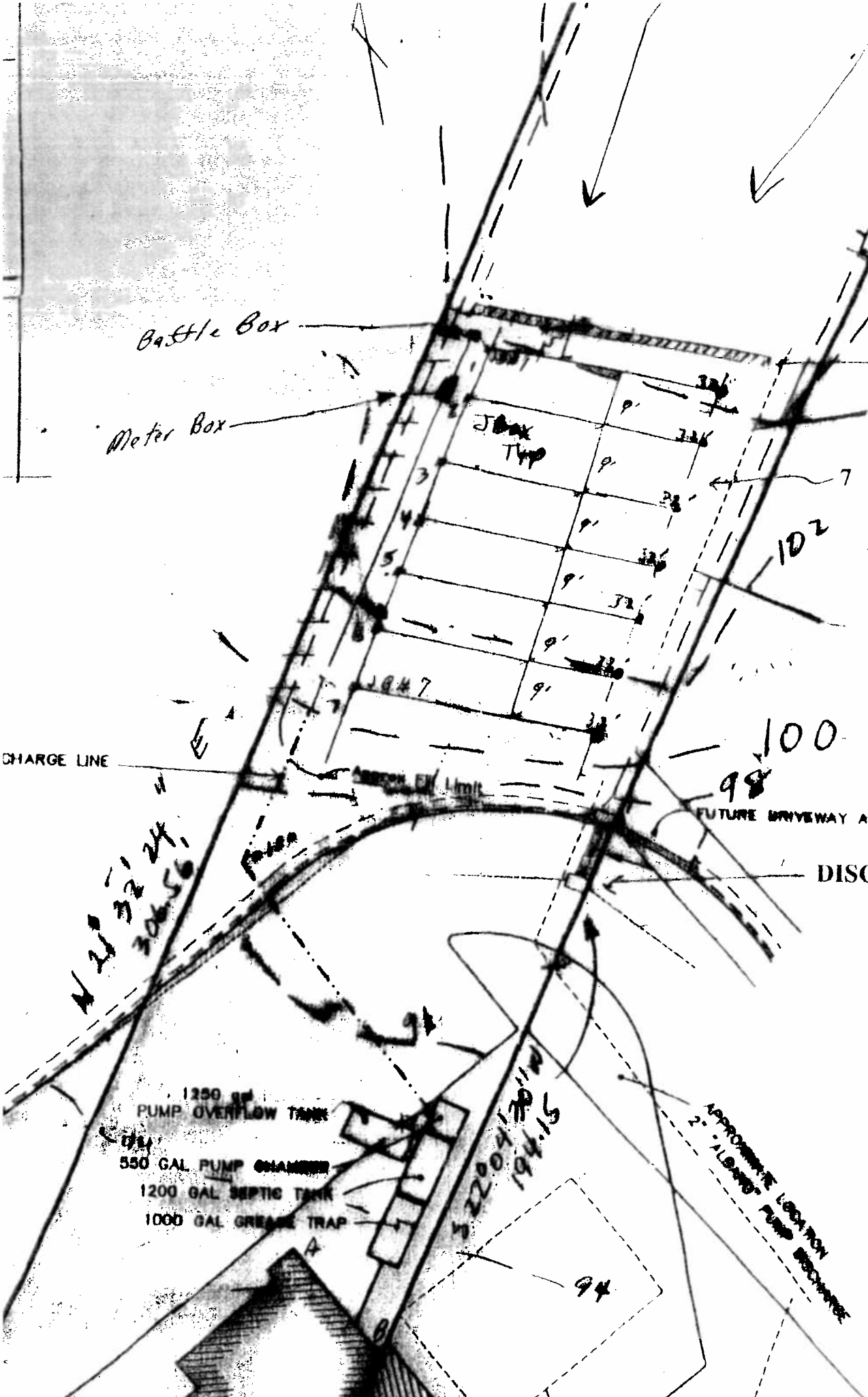


W2004 E110# PR207-04B
ACCEPTED
 AS FINAL PLANS
 DEC 17 2009
 WEST. CO. DEPT. OF HEALTH
 BY *[Signature]*
 MAX DAILEY FLOW 695 gpd

NORTH STAR RESTAURANT 85 WESTCHESTER AVENUE POUNDRIDGE (T) 10576 <i>Sect. 15, Bk. 9454, Lot 6</i>	SCALE: SHOWN	LATEST REVISION:
	"As Built" REMEDIAL SSTS PLAN	DATED: <i>11/21/09</i> CHECKED:

SSTS; OWTS-SEPARATE SEWAGE TREATMENT SYSTEM

12/10 W.C.H.D. Comments 12/02



4" Discharge Line From (C.B.)

3 Foot. Clay Barrier Between Systems

7 Rows of Infiltrators
 224' (Quick 4 High Capacity) Vol. 3472 gal
 Capacity 895 gal.

Inspection Ports Installed @ the ends of
 All Rows of Infiltrators with a Vertical
 Pipe capped at the Ground Surface

3' Rot B F.H Package
 for new system

DISCHARGE POINT OF ROOF LEADERS

Mechanical Equipment

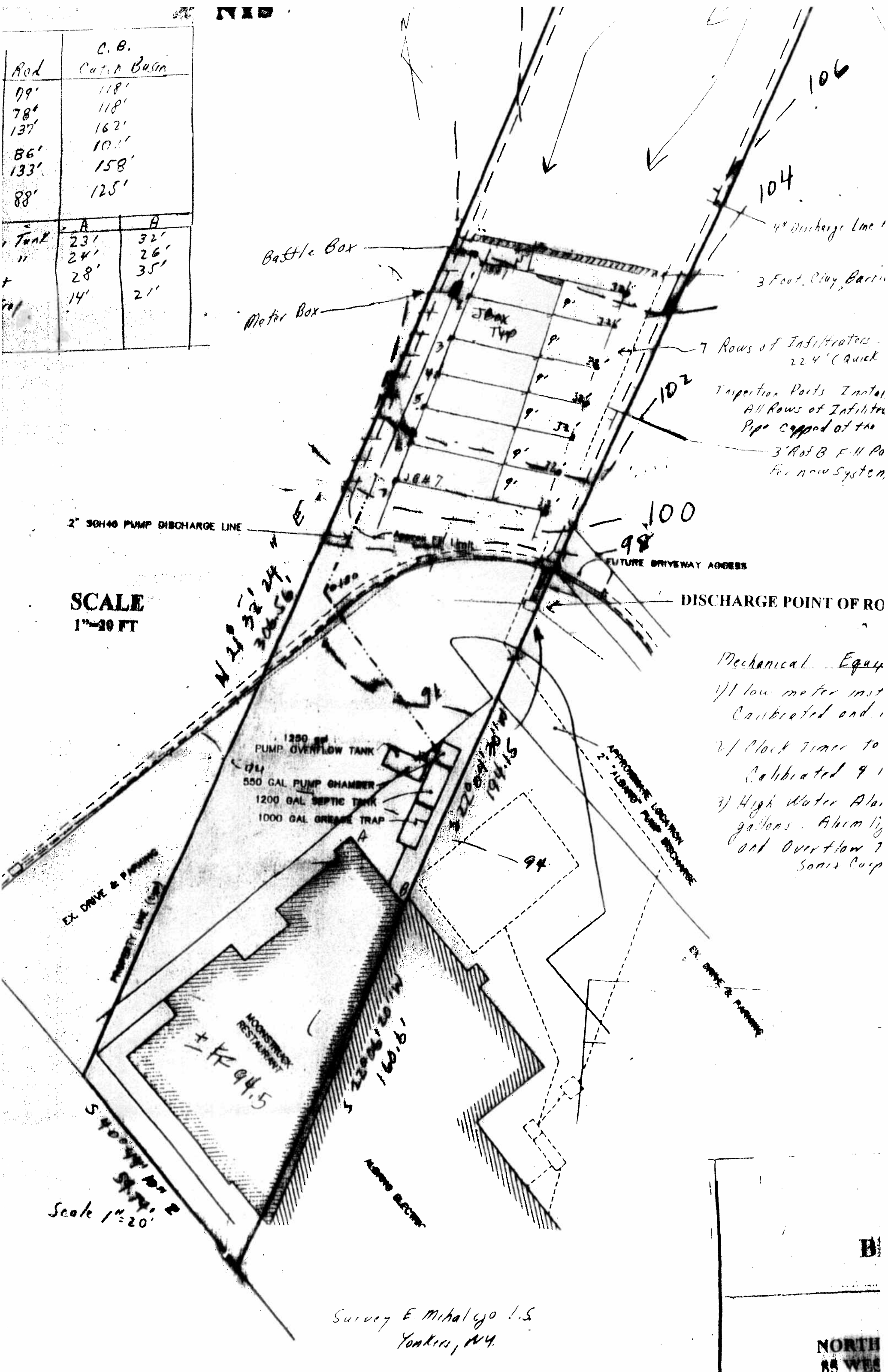
- 1) Flow meter installed Mc Crometer Ultra Mag VM06 (reads 100 gal)
 Calibrated and read in office of North Star Transmitter EA40 (1A-12)
- 2) Clock Timer to pump installed in No Star Electric Room.
 Calibrated 9 Pumps each 12 hours 310 gal / pumping Centipro Pump Control Panel with Time Clock.
- 3) 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
 Sonix Corp Level Sensor UL1000 & Gould High Water Alarm

- 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

1250 gal
 PUMP OVERFLOW TANK
 550 GAL PUMP CHAMBER
 1200 GAL SEPTIC TANK
 1000 GAL GREASE TRAP

Rad	C. B. Catch Basin	
179'	118'	
78'	118'	
137'	162'	
86'	101'	
133'	158'	
88'	125'	

Tank	A	B
"	23'	32'
"	24'	26'
"	28'	35'
"	14'	21'

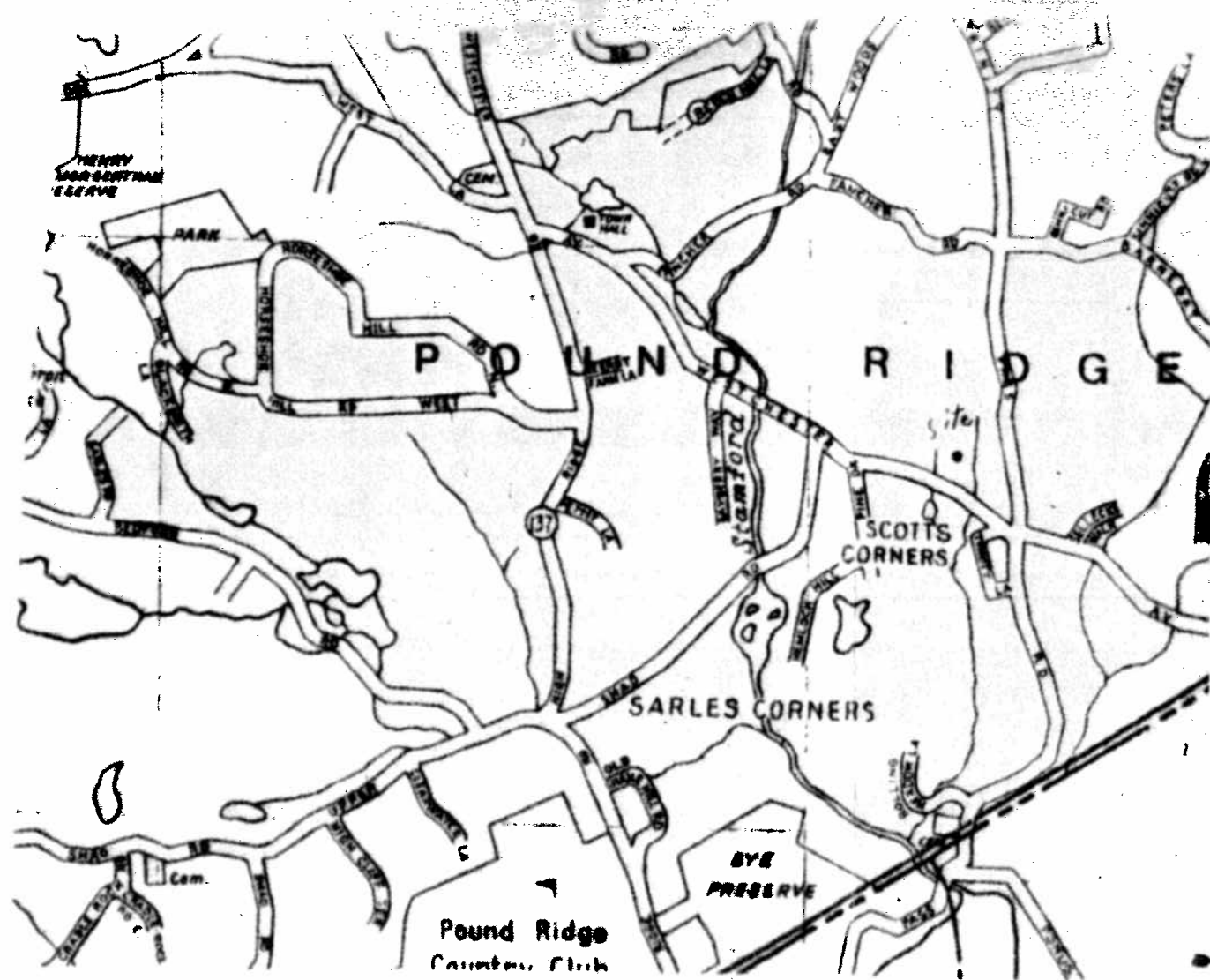


SCALE
1"=20 FT

- Mechanical Equip*
- 1) low meter inst
 - Calibrated and
 - 2) Clock timer to
 - Calibrated 9'
 - 3) High Water Alarm
 - gallons. Alarm by
 - and overflow 7
 - Sanix Corp

Survey E. Michalco L.S.
Yonkers, NY.

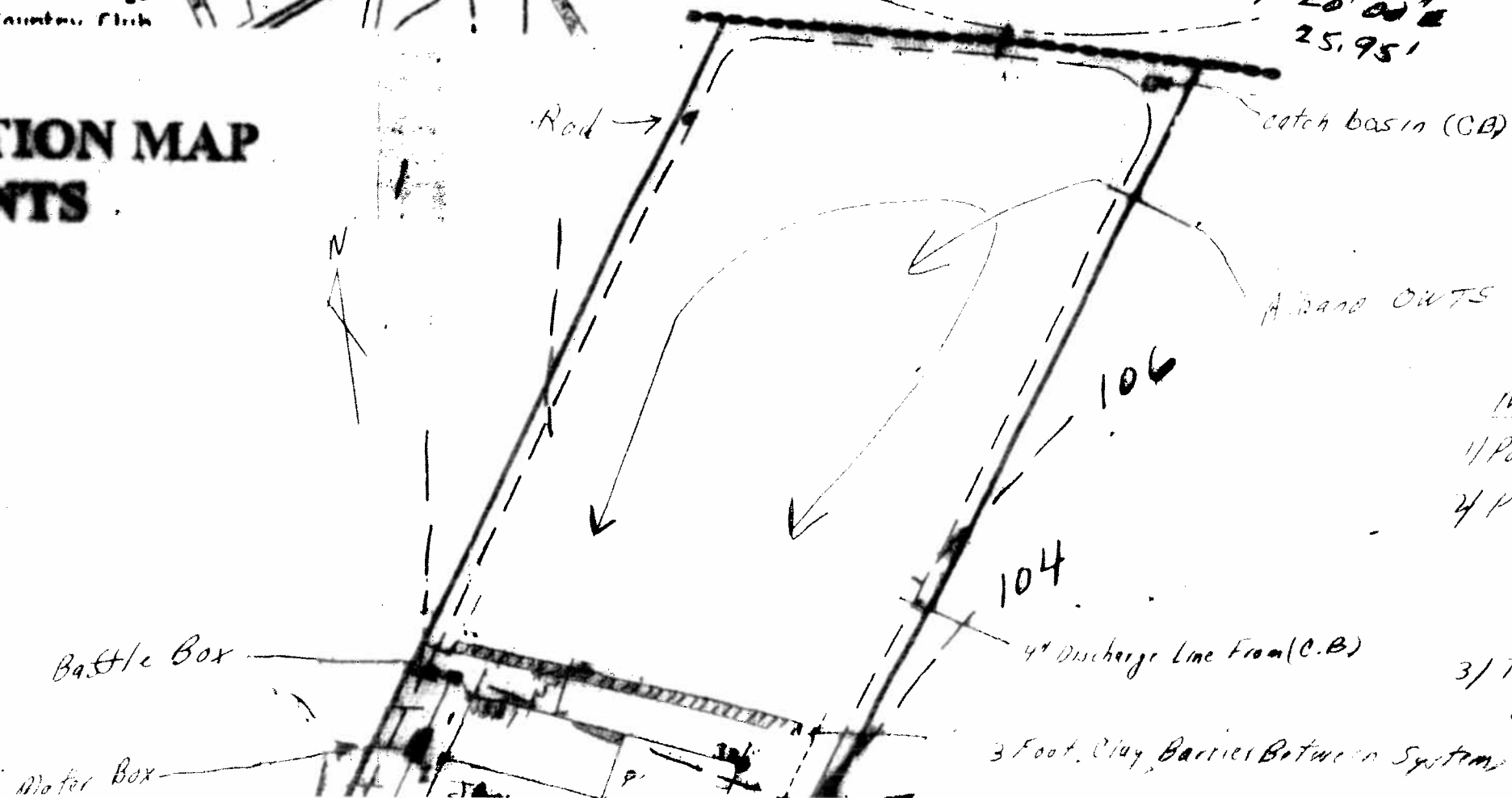
NORTH
85 WBS



**LOCATION MAP
NTS**

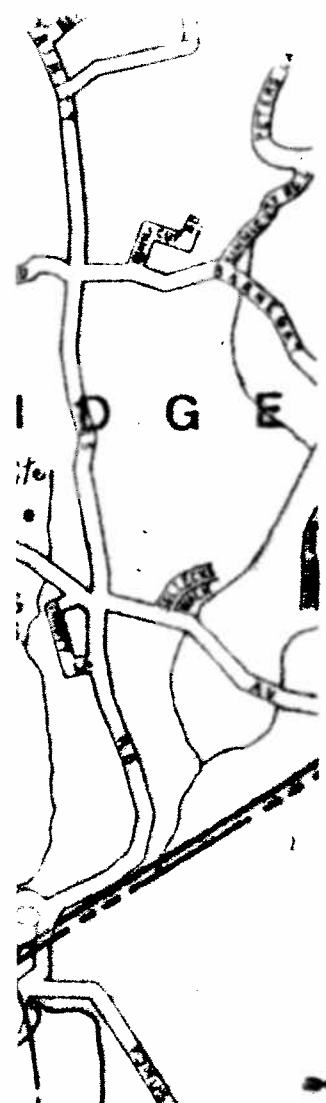
Item	Rod	C. B. Catch Basin
D Box	79'	118'
J Box #1	78'	118'
" #7	137'	162'
J Box #1 (End)	86'	10'
#7 (End)	133'	158'
Peter Box	88'	125'

	A	A
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
 with t
Design
 Restaura
 a) Capa
 B) Pun
 Pa.
 c) Slop
 Soil
 New

Notes
 1) Pot Scrubbing Sink Co
 2) Pump Readings to be
 1) Water Use - Mea
 if Flow to OWTS
 3) The Design Profer.
 Supply Line to No.
 NOT to have



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

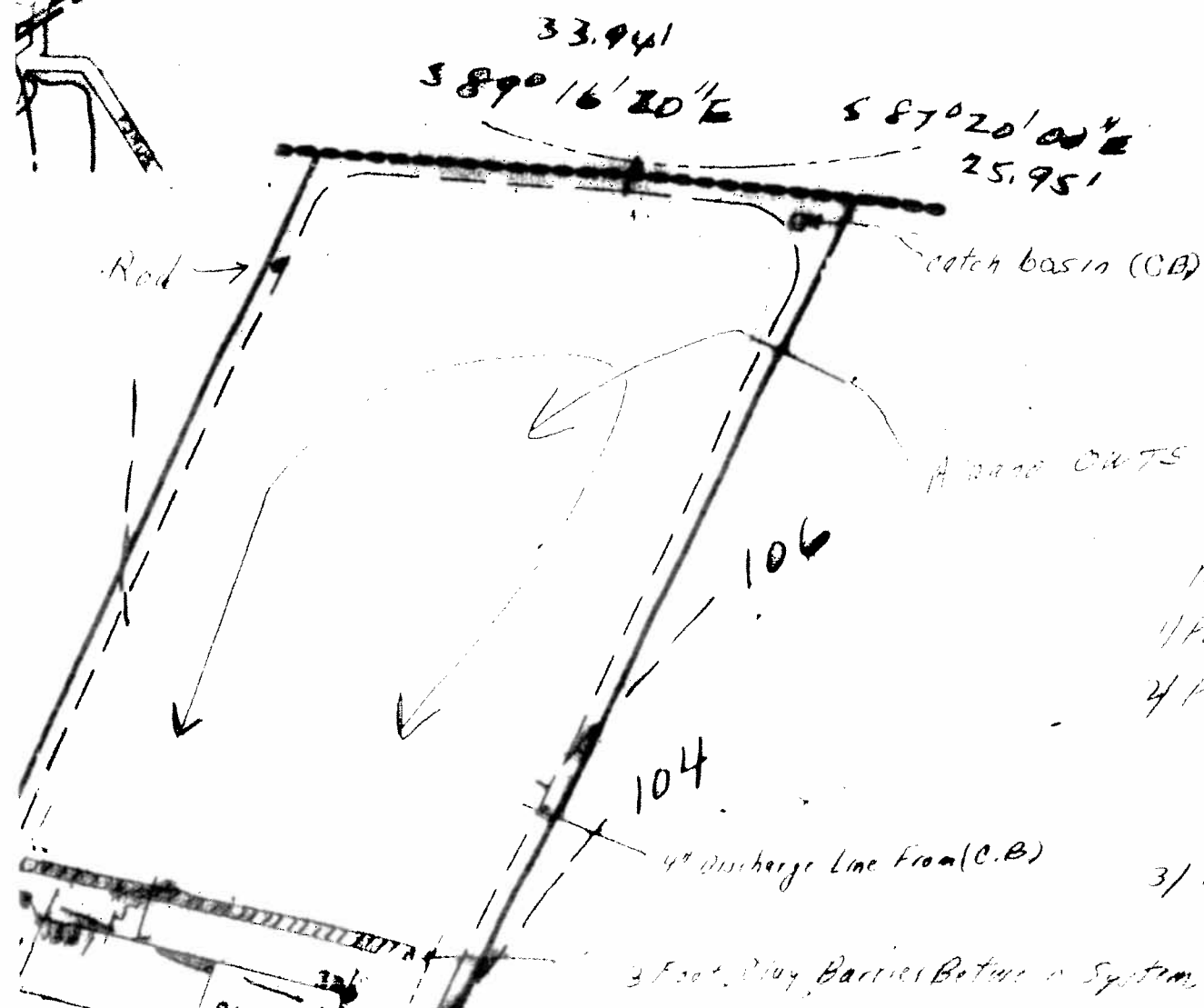
Design Data

Restaurant capacity 46 seats @ 35 gal./seat = 1610 gal/day

a) Capacity of infiltrators 695 gal./Day

b) Pump Dose Verified in field 22 1/2" 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 Reading tube Faced to W.C.H.D. Monthly
- 3) Water Use - Meter in Bathroom - Daily Readings
- 4) 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 8/1/51¹⁰⁹
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

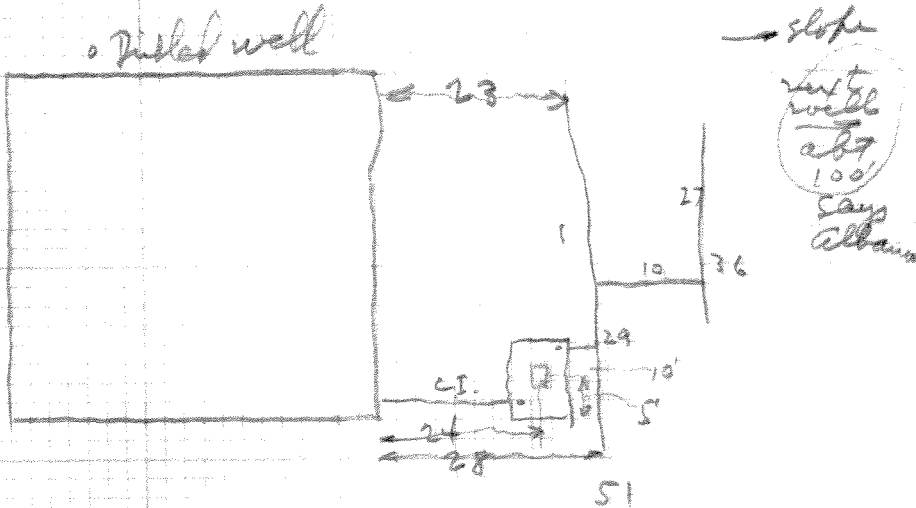
Alfred Albano, Westchester Avenue

8/1/51 - Herman Coutermash - 800 gal. 80' x 24"

Westchester Ave

$6.8 \times 40 \times 40 = 810 \text{ gal}$

filled well



810 gal masonry S.T.

81 LF x 24" abs to

8-23-52

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

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

Issued August 1, 1951

*Sewer
Pondridge*

PERMIT FOR SEWERAGE SYSTEM

APPROVAL is hereby given pursuant to Article VII of the Sanitary Code of the Westchester County Health District to **Herman Couterdash, 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.**

for an occupancy of _____ persons, provided that

4/25/52

- 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 back-filled, 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.

WAG:tf

H. A. Holla

Commissioner of Health

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

Site
7-31-51
OK

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 Received.....
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 CANE, 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..... 2 PER STORE..... Adjacent wells..... 450 feet

7. Daily Sewage Flow: No. of persons..... 6..... x 75 gals = 450 gals. per day.

8. Settling treatment: Septic tank; liquid capacity below flow line..... 900 GALS.
Material, CONC.:..... inside dimensions: Length..... 7'-0"..... width..... 4'..... effective depth..... 9'-0"
Minimum liquid capacity - 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..... 30..... 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 Coutinias..... Title..... Contractor.....
(By owner or person presenting owner's written authorization)

Mail permit to..... Pidgefield Conn. R. F. D. 25.....

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 REQUIRED

**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 | |
|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | House Sewer or other Solid Pipe(s) |
| <input type="checkbox"/> | <input type="checkbox"/> | Septic Tank#1 Size(gallons): _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Septic Tank#2: Size (gallons): _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Junction/Distribution Box(es) |
| <input type="checkbox"/> | <input type="checkbox"/> | Sewage Pump(s) or other Dosing Equipment |
| <input type="checkbox"/> | <input type="checkbox"/> | Absorption Trench Length <u>320</u> ft. X Trench Width _____ ft |
| <input type="checkbox"/> | <input type="checkbox"/> | Seepage Pit(s) |
| <input type="checkbox"/> | <input type="checkbox"/> | Galley(s) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Gravelless Trench(es) |
| <input type="checkbox"/> | <input type="checkbox"/> | 75-A Alternative System |
| <input type="checkbox"/> | <input type="checkbox"/> | Other Advanced Alternative System |
| <input type="checkbox"/> | <input type="checkbox"/> | Other System Component(s) - Describe: _____ |

**DRAW BUILDING AND LOCATION
OF WORK PERFORMED ON BACK
OF THIS FORM**

Entire System Replaced

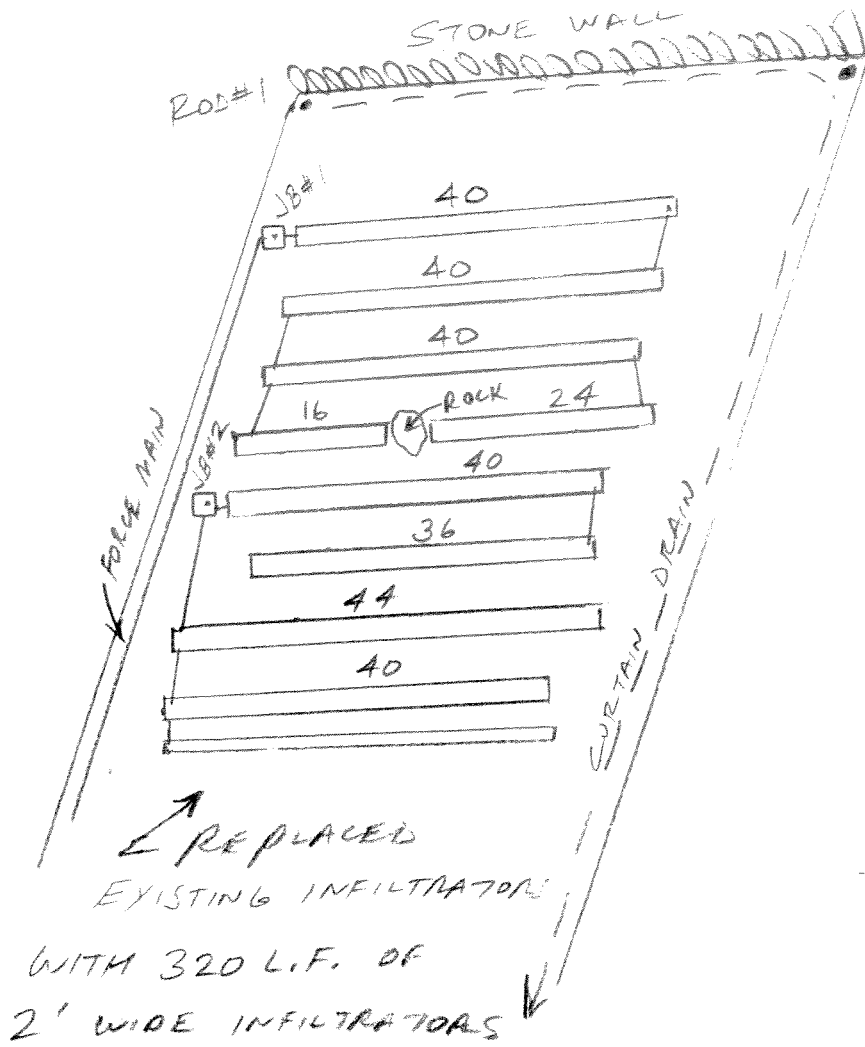
Contractor's Name (print): UNITED SEPTIC & EXCAVATION Date Repair/Remediation Completed: 6-18-14

Contractor's Signature: [Signature] License No.: 109

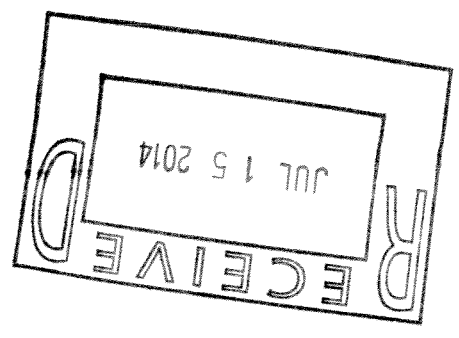
Upon completion please remit to:

Westchester County Department of Health- BEQ
25 Moore Ave., 1st Floor
Mt. Kisco, NY 10549
Attn: Patricia Tornello-Adams

Repair File #: REP [Signature]
(WCDH Staff only)



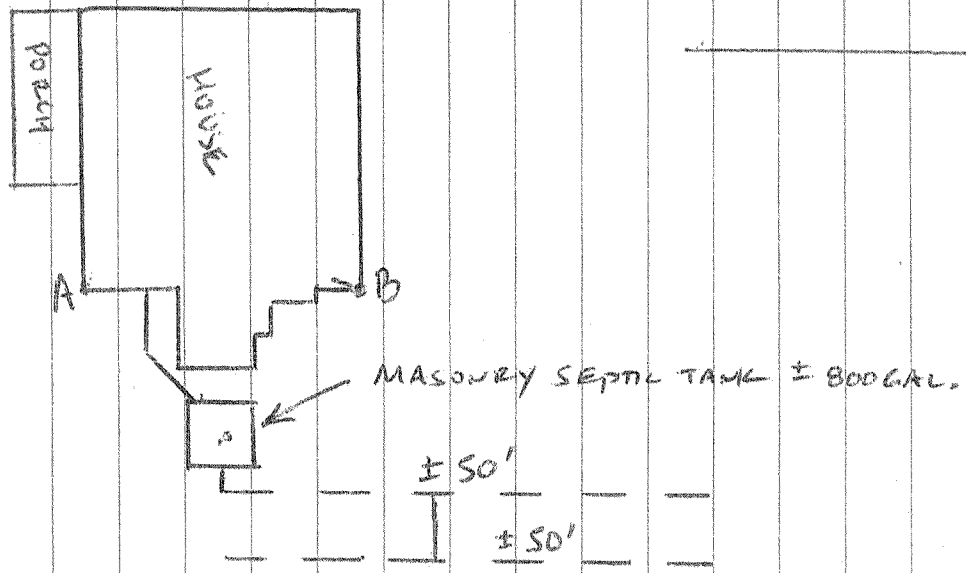
	ROD #1	ROD #2
J-BOX #1	13 1/2	63 1/2
END #1	39 1/2	23
BEGIN #4	35	76
END #4	49	42
J-BOX #2	42 1/2	81 1/2
END #5	48 1/2	49
BEGIN #8	65	99
END #8	64	71



SEPTIC REPAIRS
 ALBANO APPLIANCE
 83 WESTCHESTER AVE.
 POUND RIDGE, NY
 6-18-14

9454-8 79 WESTCHESTER AVE

14



	A	B
SEPTIC TANK	20½	20
BEGIN OF FIELD #1	24	22½

AS BUILT INFORMATION PROVIDED BY
 UNITED SEPTIC OF BEDFORD HILLS N.Y.

SEPTIC LOCATION
 DYNAX CORP
 79 WESTCHESTER AVE.
 POUND RIDGE, NY
 11-13-2015

9455-10 22 WESTCHESTER AVE

99-34-28/5

E-17/5 H-32

eparate Sewage System AUX.

Pound Ridge
Municipality

PR 65-5
W. C. D. H. File #

CERTIFICATE OF COMPLETION

located at 570 Westchester Ave. E. of Scotts Cor. Section-Ward 2

owner Mildred B Kaufman Block 10

system built by Harry Kaiser Jr. Lot 9455 Job # 1

building type residence Permit issued 13 Jan 65 Guarantee -

system consists of 570 Gal. masonry, metal septic tank 75 Lineal feet X 3 Width trench.

area drainage _____

final grading & seeding: Completed _____ Waiver _____ Escrow _____

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 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.

Date 13 July 65 William A. Brumfield Jr., M. D., Commissioner By J. C. Hawley
D 47.60 Westchester County Department of Health

FILE COPY

AUX Separate Sewerage System Private Water Supply POUND RIDGE N.Y.
Municipality

ADDITION TO EXISTING HOUSE 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 1

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 3 X 18 in dia width trench

To be constructed by HARRY C KAISER JR INC Address 878 VALLEY ROAD NEW CANTON, N.Y.

Water Supply: DRILLED WELL Public Supply from _____ Private Supply to be drilled by _____ Address _____

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. C. Hawley
SD 46.64 Westchester County Department of Health

FILE COPY

0265-5

APPROVED

Designs
Maintenance
Installation
Cleaning
Septic Tanks

JUL 13 '65

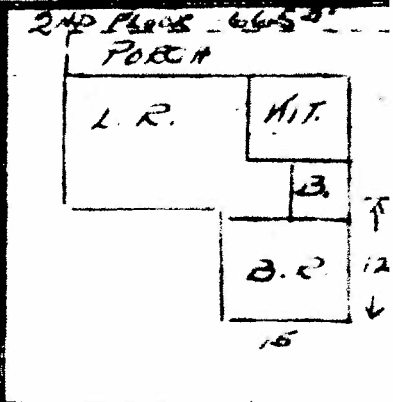
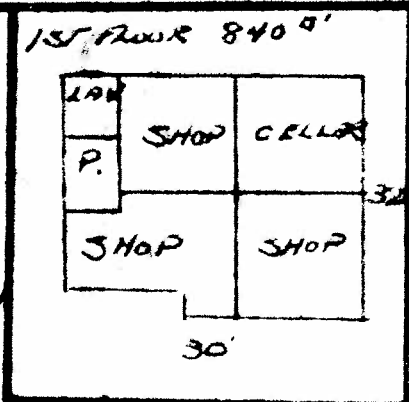
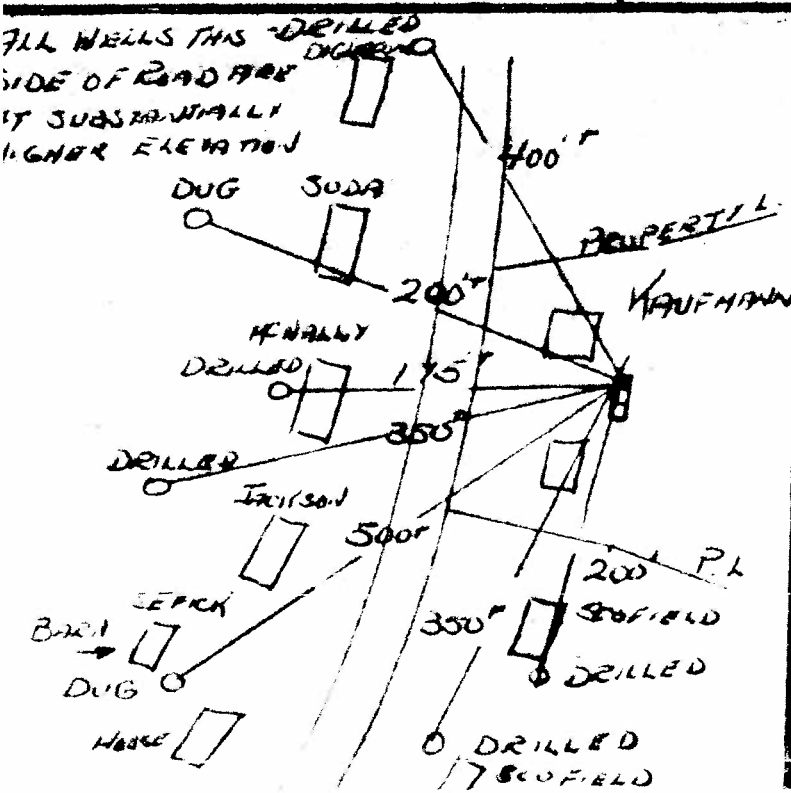
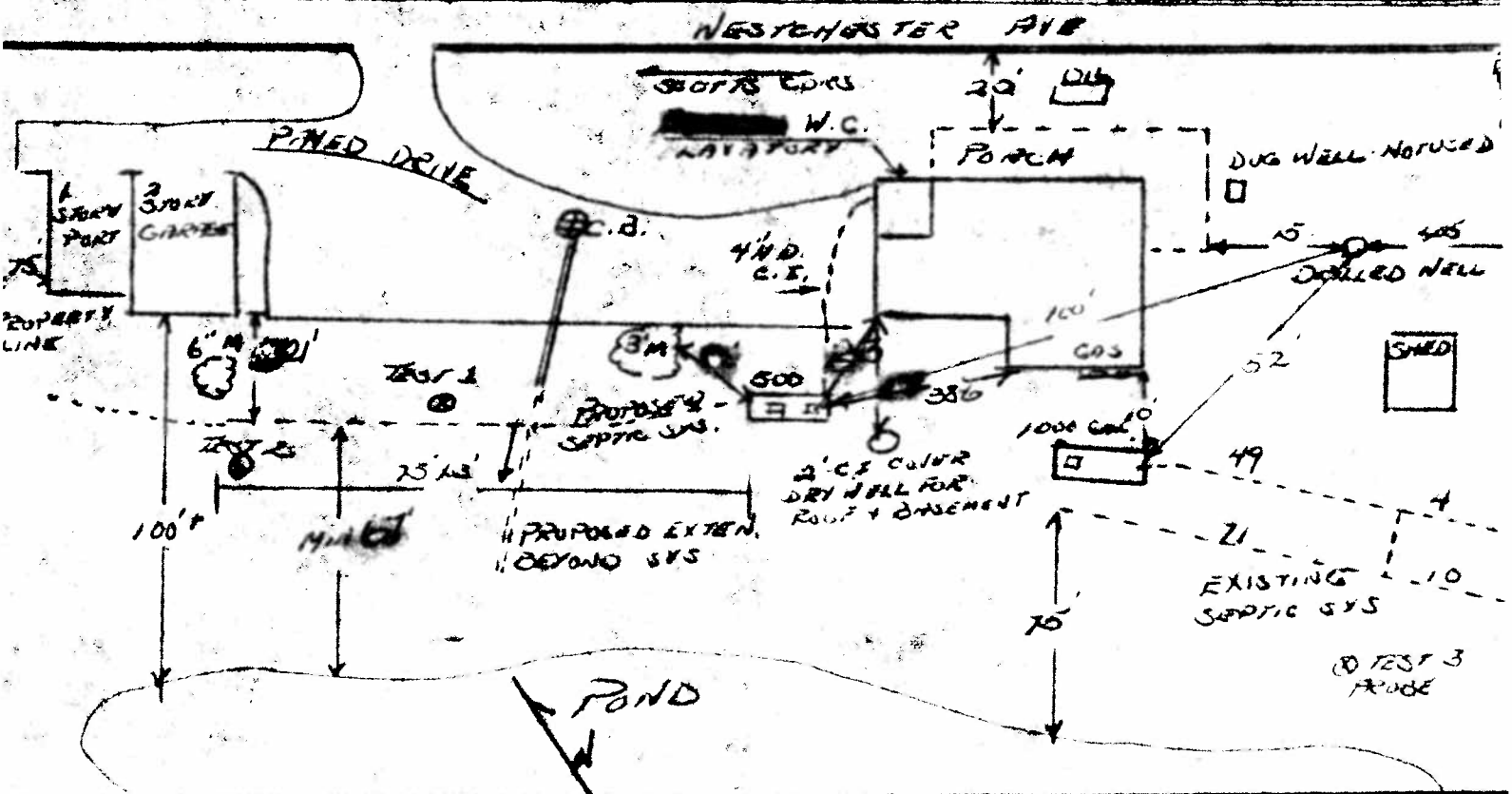
West. Co. Dept.
of Health

Harry C. Kaiser, Jr.
DRAINAGE & SEWAGE CONTRACTOR
VALLEY ROAD - NEW CANAAN, CONN.

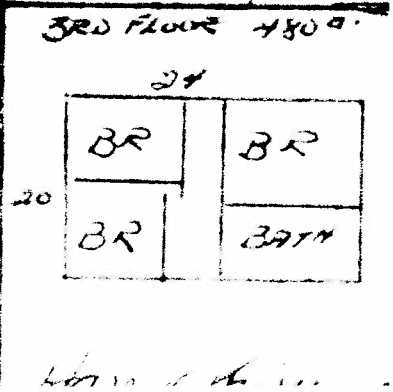
By *J. G. Handy*

0265

KAUFMANN MILDRED O. WESTCHESTER AVE POUND RIDGE / SEC 2 - BLOCK 10 - LOT 9450
EXISTING SEPTIC SYS + PROPOSED FOR W.C. + LAB - ELEC. OVERHEAD - 2 GAS TANKS SURFACE -
6-ACRE AREA



ELEC. OVERHEAD
 ROOF-DRAIN DRAINS TO GRADE W/ DRINKING
 GAS & SURFACE TANKS
 WELL WATER ELE. SHOWN!
 NO CURTAIN DRAINS
 NO CURTAIN CHANCE
 PAVED AREA AS SHOWN



DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM

FILE NO. PR 65-5

Located At (Street) 1/4 MI EAST SCOTTS CORN WESTCHESTER AVE

Municipality POUND RIDGE NY

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 ^{sq ft}

Water Supply: Drilled Driven Dug Well : Depth ? Public

No. of Rooms 10 Bedrooms 4 Future: Yes No Other

Septic Tank Capacity (From Table, Item 5.1) 500 Gals. Masonry 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

TRIPPLICATE 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)

- | | |
|---|--|
| <p>PLOT PLAN</p> <p>Check off items required to be shown on plans</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> 1. Identification (Name-Title) <input checked="" type="checkbox"/> 2. Scale, north point, date <input checked="" type="checkbox"/> 3. SEWERAGE DISPOSAL SYSTEM: <ul style="list-style-type: none"> <input type="checkbox"/> Dimensions; <input type="checkbox"/> Sewer Line <input type="checkbox"/> Septic Tank; <input type="checkbox"/> Distr. Box <input checked="" type="checkbox"/> Trenches; <input type="checkbox"/> Spacing <input type="checkbox"/> Other. <input checked="" type="checkbox"/> 4. DISTANCES (Nearest Foot) TO: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Street lines, name street <input checked="" type="checkbox"/> Property Lines <input checked="" type="checkbox"/> Buildings and Structures <input checked="" type="checkbox"/> Driveways, paved areas <input checked="" type="checkbox"/> Watercourses, ponds, etc. <input checked="" type="checkbox"/> 9. Storm and Ground Water Disposal <ul style="list-style-type: none"> <input type="checkbox"/> Street; <input type="checkbox"/> Area; <input type="checkbox"/> Roof; <input checked="" type="checkbox"/> Footing; <input type="checkbox"/> Cellar; <input type="checkbox"/> Other <input checked="" type="checkbox"/> 10. Drilled wells within 500 ft. <input checked="" type="checkbox"/> 11. Dug wells or springs within 500' <input checked="" type="checkbox"/> 12. Curtain Drains to discharge pt. <input checked="" type="checkbox"/> 13. Water, oil, gas, electric services and tanks (underground) <input checked="" type="checkbox"/> 14. Trees, over 6" diameter, when grown <input checked="" type="checkbox"/> 15. Contours, before & after grading in or above sewage disposal area. | <p>SEPARATE SEWERAGE DISPOSAL SYSTEM PROFILE</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> 1. Identification <input checked="" type="checkbox"/> 2. Scales, date <input checked="" type="checkbox"/> 3. Section - main system <input checked="" type="checkbox"/> 4. Pipe Invert Elevations <ul style="list-style-type: none"> <input type="checkbox"/> Building; <input type="checkbox"/> Tank; <input type="checkbox"/> Distr. Box; <input type="checkbox"/> Trenches; <input checked="" type="checkbox"/> Curtain Drain. <input checked="" type="checkbox"/> 5. Ground Level Elevations (Before and After Grading) <ul style="list-style-type: none"> <input type="checkbox"/> Building; <input type="checkbox"/> Tank; <input type="checkbox"/> Distr. Box; <input type="checkbox"/> Trenches; <input type="checkbox"/> Curtain Drain. <input checked="" type="checkbox"/> 6. Ground Water Elevation <input checked="" type="checkbox"/> 7. Ledge Rock Elevation <input checked="" type="checkbox"/> 8. Flow Line Elevations <ul style="list-style-type: none"> <input type="checkbox"/> Watercourses <input checked="" type="checkbox"/> Adj. ponds, etc. <input checked="" type="checkbox"/> 9. Well Water Elevation <input checked="" type="checkbox"/> 10. Curtain Drain Discharge Elevation <p>Reviewed By <input type="checkbox"/> Date <input type="checkbox"/></p> |
|---|--|

DATA SUBMITTED BY (Sign) Henry Kaiser Inc. Henry Kaiser J. Pres

OWNER BUILDER CONTRACTOR

IF CORPORATION, GIVE NAME AND TITLE (Form SD28 Required)

MAIL ADDRESS 878 Valley Road TELEPHONE NUMBER 966 2828

S.D. 7.1 - 1962 New Canaan, Conn.

- Location M. B. HAUFMANN - WESTCHESTER AVE ROUND 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	2:10	3:PM	50	26"	16	7	7	
	2	3:05	3:55	50	26	16 1/4	5	10	
	3	4:05	4:25	20	26	15 1/4	3 1/4	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 Kusey 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. <u>1</u>	HOLE NO. <u>2</u>	HOLE NO. <u>3</u>	HOLE NO. _____
G. L.	<u>SOD</u>	<u>PROBED TO 4'-6"</u> <u>SOD</u>	<u>PROBED TO 27"</u>	
6"	<u>TOP SOIL</u>			
12"	} <u>LOAM</u>			
18"				
24"	<u>LOAM TO CLAY MIX.</u>			
30"			<u>HARD BROWN CLAY</u>	
36"				
42"				
48"		<u>GROUND WATER</u>		
54"		<u>GROUND WATER</u>		
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 Hamp King DATE 14 Jan 65

S.D. 27.6 8.14.63

9455-21 34 WESTCHESTER AVE

Separate Sewerage System Private Water Supply

Round Ridge NY Municipality
WCDH File No. PR 73-30 403
HI# 7

CERTIFICATE OF CONSTRUCTION COMPLIANCE

Located at Walden Ave Section 9A Block 941
Owner Columbo & Mastromarino Lot 21 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 _____

RECEIVED
MAY 1 1975

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 4/1/75 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 May 1, 1975 William A. Brumfield, Jr., M. D., Commissioner By Vincent A. Leone, Sen. Eng.
SD 47.64 Westchester County Department of Health

Separate Sewerage System Private Water Supply

Round Ridge NY Municipality
WCDH File No. PR 73-30

CONSTRUCTION PERMIT

Located at Westchester Ave Section 9A Block 9455
Subdivision _____ Lot 21 Job _____
Owner Columbo & Mastromarino Address Post Office Round Ridge NY Lot Area _____
Building Type Addition to Commercial Bldg No. of Bedrooms _____ Total Habitable Space _____ Square Feet
Separate Sewerage System to consist of 500 Gal. Masonry, Metal Septic Tank 75' lineal feet X 2' width trench
To be constructed by John A. Ferrara Address New Rochelle, NY
Water Supply: _____ Public Supply from _____
_____ Private Supply to be drilled by J.W. Turtlet Address Roseton, NY
Other Requirements No use of the addition shall be made for any other purpose, water or sewerage.

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 3/28/73 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 Oct. 11, 1973 Jack J. Goldman, M. D., Commissioner By Vincent A. Leone, Sen. Eng.
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. Colombo & J. Mastromarino Address Witchester Ave

Located At (Street) Witchester Ave @ Scott Corners Sec 9A Block 9415 Lot 21
 (Indicate nearest cross street)

Municipality Pound Ridge (T) Watershed _____

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Hole Number	CLOCK TIME		Elapse Time Min.	PERCOLATION			PERCOLATION Soil Rate Min/in.drop	
	Run No.	Start		Stop	Depth to Water From Ground Surface Start Inches	Water Level in Inches Stop Drop in Inches		
1	1	0	5	12"	15"	2 1/2"/min	4	
	2	0	4	12"	15"	2 1/2"/min	4	
	3	0	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 REQUIRED TO BE SUBMITTED WITH APPLICATION
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO.	HOLE NO.	HOLE NO.	HOLE NO.
G.L.	<u>Topsoil</u>			
6"	<u>Beak Run Gravel</u>			
12"	<u>"</u>			
18"	<u>"</u>			
24"	<u>"</u>			
30"	<u>"</u>			
36"	<u>"</u>			
42"	<u>"</u>			
48"	<u>"</u>			
54"	<u>"</u>			
60"	<u>"</u>			
66"	<u>"</u>			
72"	<u>"</u>			
78"				
84"				

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED 0
 INDICATE LEVEL AT WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED 0
 TESTS MADE BY John P. Annunzio DATE 2/22/73

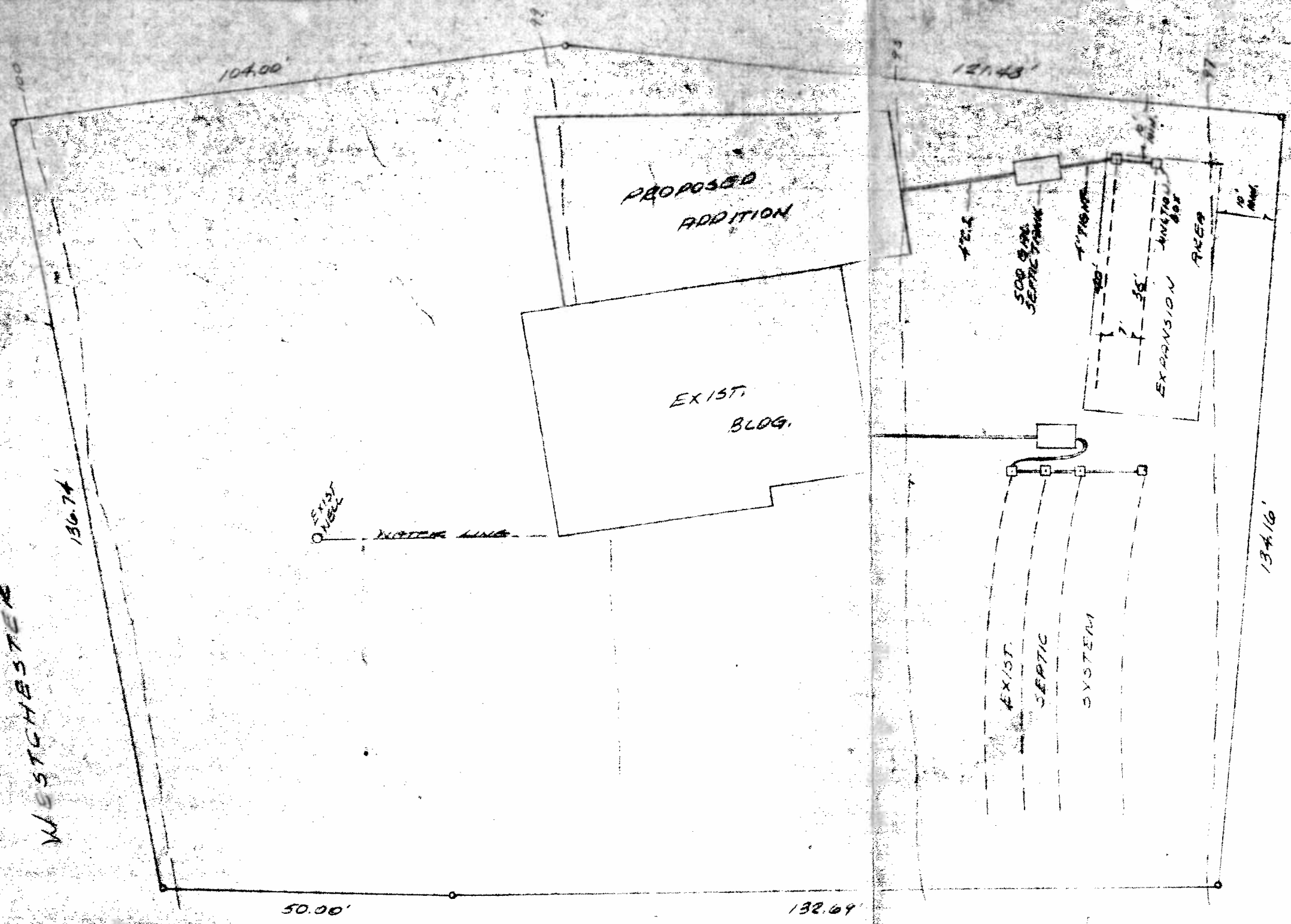
DESIGN
 Soil Rate Used 4 Min/1" Drop: S.D. Usable Area Provided Double the System
 Maximum 8 persons/day @ 15 gpd/person/day = 120 gallons/day
 No. of Bedrooms _____ Septic Tank Capacity 500 Gals. Masonry Metal
 Absorption Area Provided By 75 L.F. x 24" 36" width trench. Other _____

Name John P. Annunzio Signature [Signature]
 Address Troy Lane SEAL _____
Bedford N.Y.
 WEST. CO. DEPT. OF HEALTH SOMERS OFFICE

Westchester County Health Department 3161 07 100
 Soil Rate Approved _____ Sq. Ft./Gal. Checked by _____ Date _____

RECEIVED

WESTCHESTER AVE.



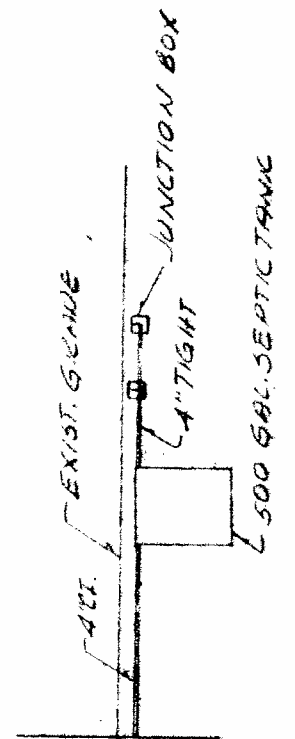
500 GAL. SEPTIC TANK
75 LF X 24" ABS. TR.

SYSTEM TO CONFORM TO WEST
CO. DEPT. OF HEALTH BULLETIN 50-22

JOHN P. ANNICELLI P.E. NYS. LIC. NO.

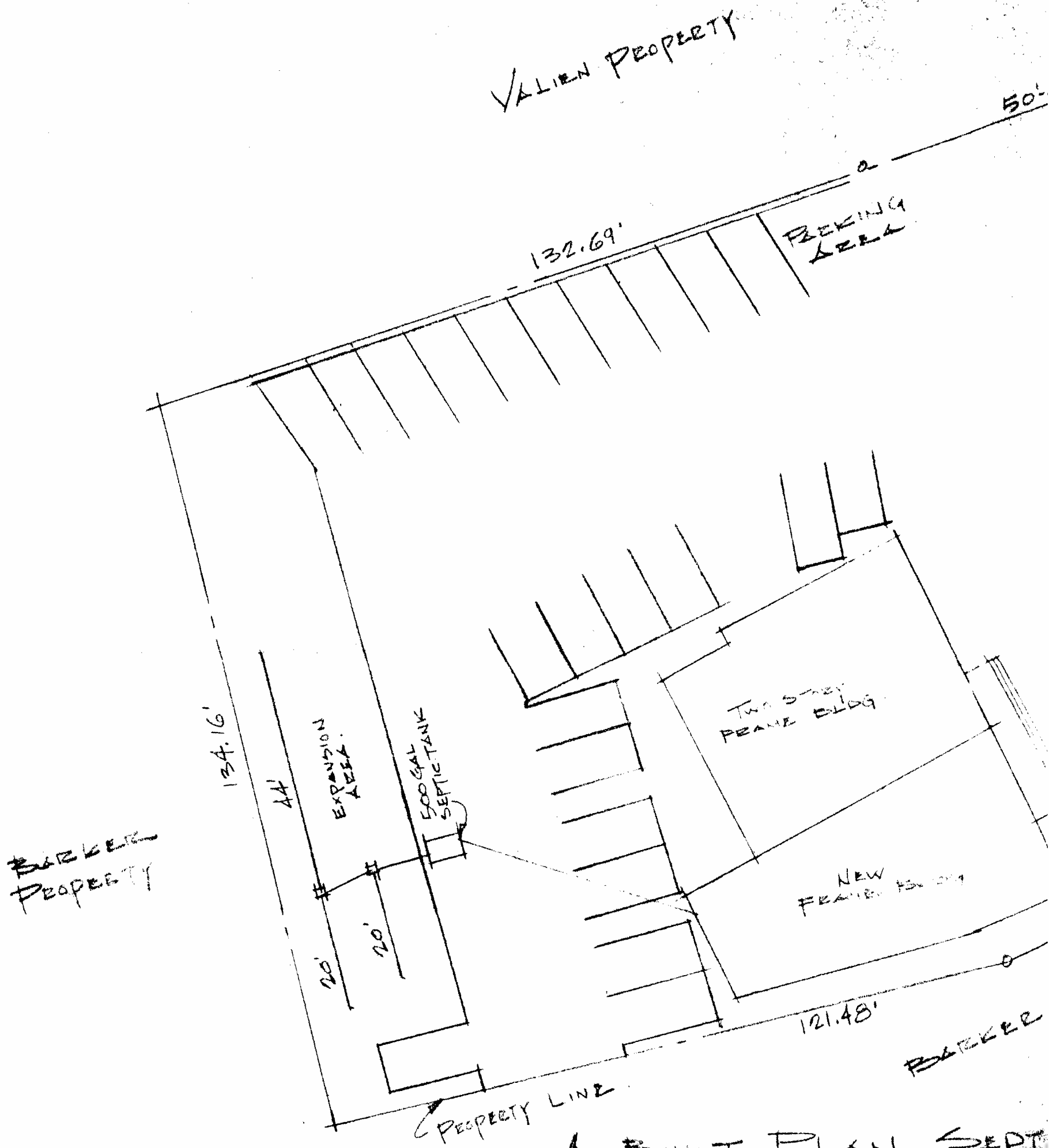


SEPARATE SEWAGE SYSTEM
 F. COLOMBO & J. MASTROMAURO
 WESTCHESTER AVE.
 TOWN OF POUND RIDGE
 WESTCHESTER CO., N.Y.
 SCALE AS SHOWN APRIL 10, 1973
 JOHN P. ANNICELLI P.E.
 TROY LANE BEDFORD N.Y.



PROFILE
1" = 10' V 1" = 20' H

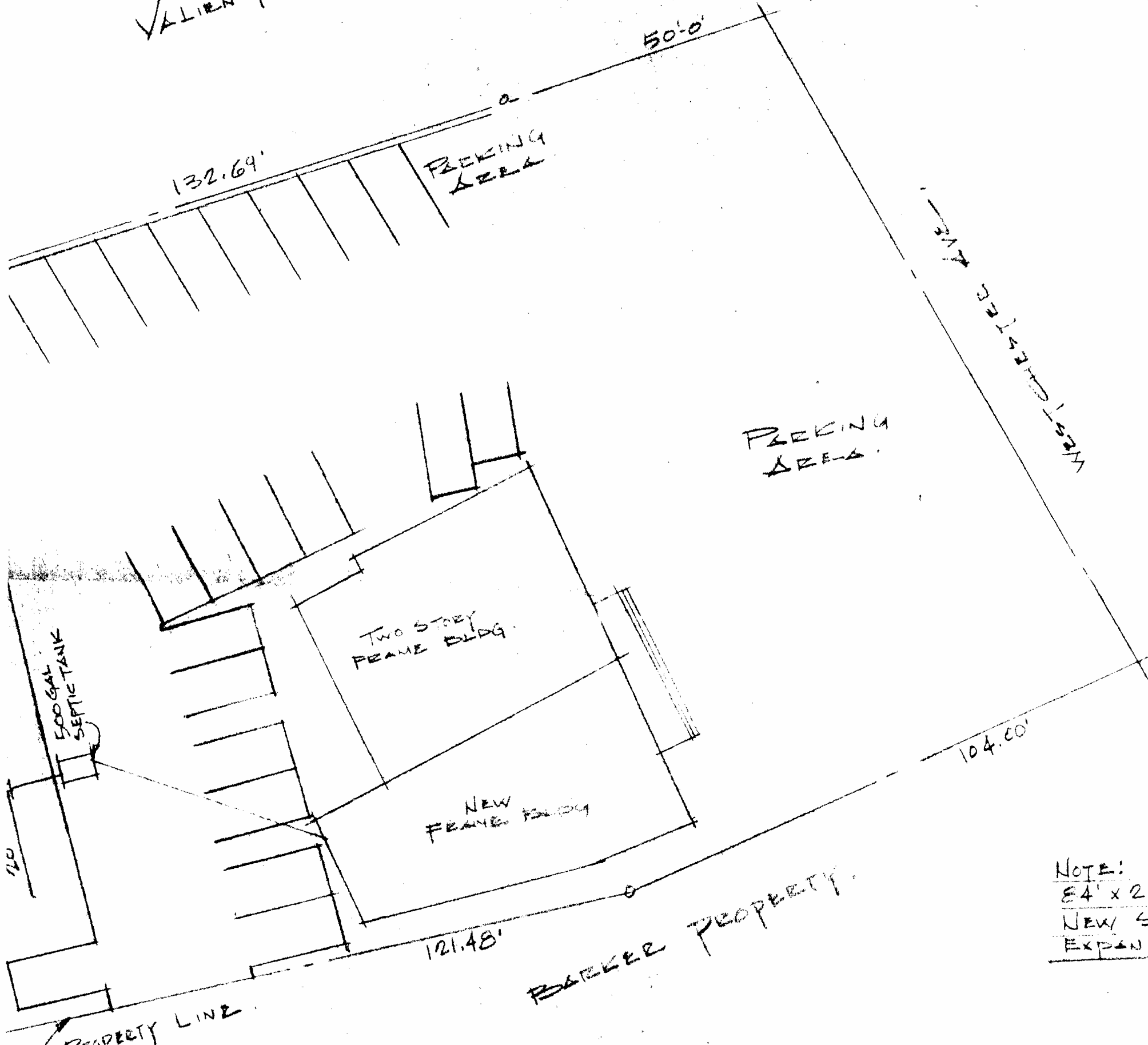
APPROVED
 FOR CONSTRUCTION
 DATE Oct. 11, 1973
 WEST. CO. DEPT.
 OF HEALTH
 BY V.R. Leone



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 AND ANY REVISIONS THERE TO AND THE RULES AND REGULATIONS OF THE PERMIT ISSUING GOVERNMENTAL AGENCY.

VALIEN PROPERTY



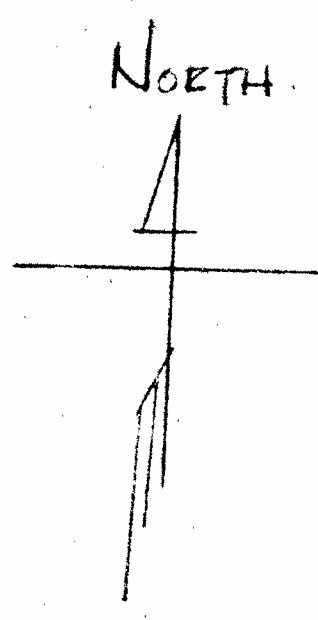
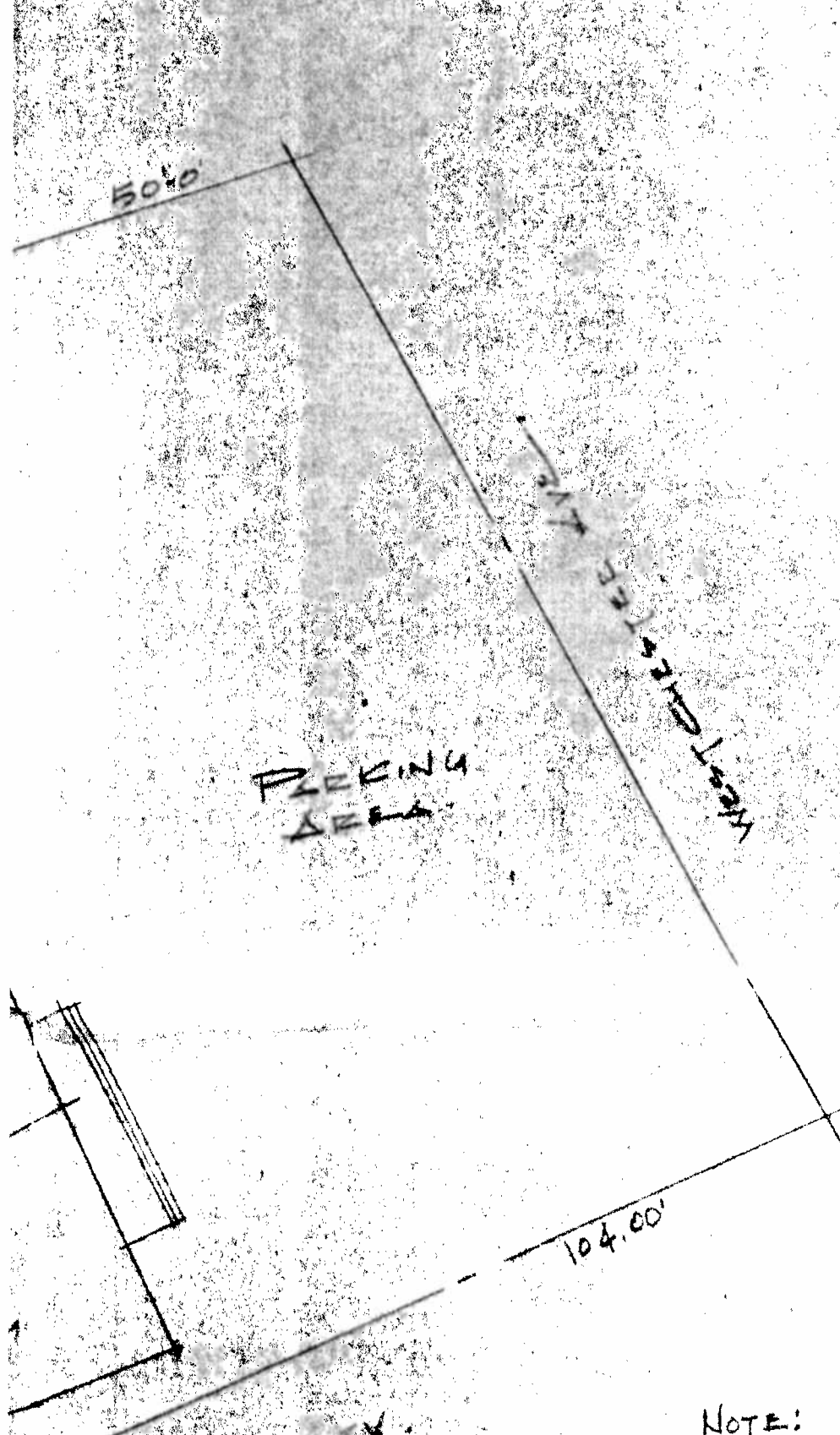
NOTE:
 8'4" x 2' T
 NEW SYS
 EXPANSION

AS BUILT PLAN SEPTIC FIELD

SCALE 1" = 20'-0"

[Handwritten Signature]

IS NOT EXCAVATED EARTH
 CONSTRUCTION OF THE SYSTEM
 AND ANY REVISIONS THERE TO AND
 WITH LOCAL GOVERNMENTAL AGENCY.



PARKING AREA

WESTCHESTER AVE

104.00'

SEWER PROPERTY

SEPTIC FIELD
1" = 20'-0"

NOTE:
84' x 2' TILE FIELD
NEW SYSTEM FOR
EXPANSION.

ACCEPTED
AS FINAL PLANS
DATE MAY 1, 1975
WEST. CO. DEPT.
OF HEALTH
BY V.R. Leone

PROPERTY OF: F COLUMBO
& J. MASTROMAURO
LOCATION: WESTCHESTER AVE
POUND RIDGE NEW YORK
DATE APR 15, 1975 SCALE 1" = 20'
JOHN P. ANNICELLI P.E.
TROY LANE BEDFORD NY

9455-25 54 WESTCHESTER AVE

Separate Sewerage System Private Water Supply

Paradise **HH 404**
Municipality **E-58**

CERTIFICATE OF CONSTRUCTION COMPLIANCE

94-35-10

WCDH File No. **PR 75-25-1**

Located at _____ Section _____ Block **9400**

Owner **Paradise Assoc** Lot _____ Job _____

Separate Sewerage System built by **Paradise Assoc** Address **New York Ave**

Consisting of **1000** Gal. Masonry, Metal Septic Tank **181** lineal feet X **36** width trench

Other requirements _____

Water Supply _____ Public Supply From _____

Private Supply Drilled By **Ernsting** Address _____

Building Type **Commercial** Number of Bedrooms **0** Date Permit Issued **Oct. 8, 1975**

Erosion Control Completed **100%** 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 **7/2/76** Certified By **[Signature]**

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 **[Signature]**

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. 3 Block 9455 Lot 24
 (Indicate nearest cross street)

Municipality Round Ridge N.Y. Watershed _____

SOIL PERCOLATION TEST DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

Hole Number	CLOCK TIME		Elapse Time Min.	PERCOLATION			PERCOLATION Soil Rate Min/in.drop	
	Run No.	Start		Stop	Depth to Water From Ground Surface Start Inches	Water Level in Inches Stop Drop in Inches		Soil Rate
1	1	11:00	11:35	36	27	24	3	12
2	2	11:36	12:09	33	27	24	3	17
3	3	12:10	12:44	34	27	24	3	12
4	4							
5	5							
1	1							
2	2	11:02	11:40	38	27	24	3	13
3	3	11:40	12:16	36	27	24	3	12
4	4	12:16	12:52	36	27	25	2	12
5	5							
1	1							
2	2							
3	3							
4	4							
5	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. <u>1</u>	HOLE NO. _____	HOLE NO. _____	HOLE NO. _____
G.L.	<u>Top Soil</u>			
6"	<u>"</u>			
12"	<u>Sandy loam</u>			
18"	<u>"</u>			
24"	<u>"</u>			
30"	<u>"</u>			
36"	<u>"</u>			
42"	<u>"</u>			
48"	<u>"</u>			
54"	<u>"</u>	<u>W. Clay</u>		
60"	<u>"</u>	<u>"</u>		
66"	<u>"</u>	<u>"</u>		
72"	<u>"</u>	<u>"</u>		
78"	<u>"</u>	<u>"</u>		
84"	<u>"</u>	<u>"</u>		

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED 9'
 INDICATE LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED 3'
 TESTS MADE BY John P. Annice DATE 9/1/75

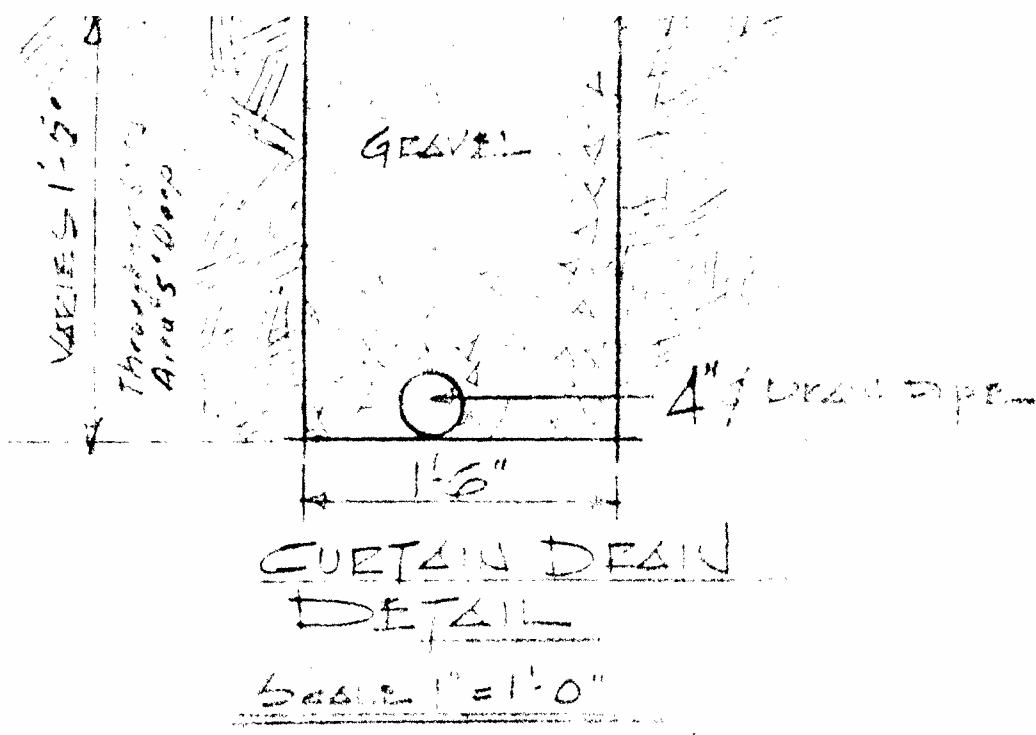
DESIGN
 Soil Rate Used 11-15 Min/1" Drop: S.D. Usable Area Provided Double
011A.
 No. of Bedrooms 600 gallons/day Septic Tank Capacity 500 Gals. Masonry Metal
 Absorption Area Provided By 155 L.F.x24" 36" width trench other

Name _____
 Address John P. Annice 18506
Troy La. Bedford, N.

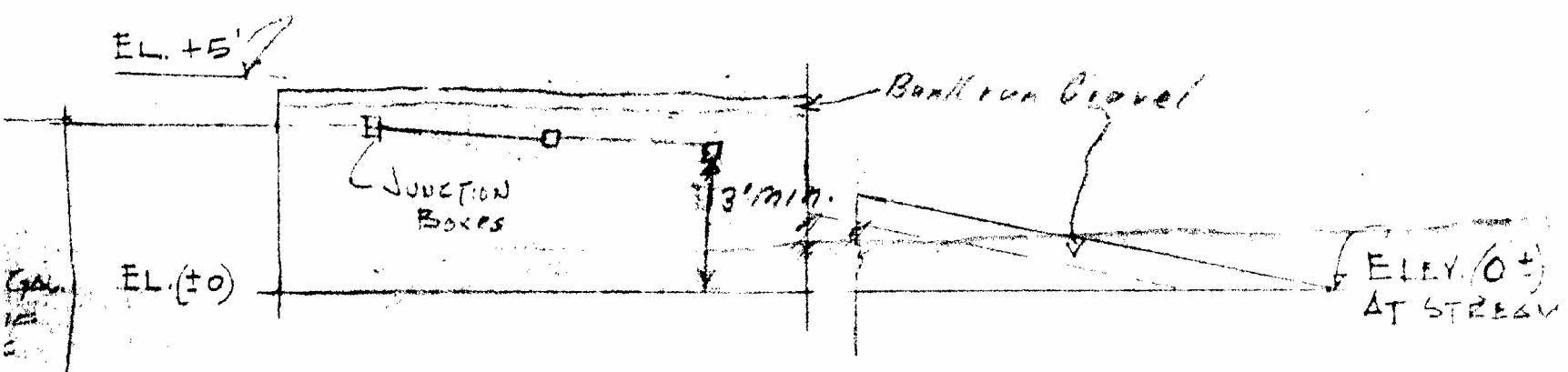
Signature _____
 SEAL

RECEIVED
 SEP 24 1975
 WEST. CO. DEPT.
 DEPT. OF HEALTH

Westchester County Health Department
 Soil Rate Approved _____ Sq.Ft./Gal. Checked by _____ Date _____



CURTAIN DRAIN
DETAIL
SCALE 1" = 1'-0"



PROFILE
SCALE 1" = 10'-0"

NOTE:
 1,000 GAL. SEPTIC TANK
 189' L.F. X 36" LB. T2
 ⊗ TEST HOLE.
 + Perc. Hole
 309' OF CURTAIN DRAIN 5' DEEP

	"A"	"B"
SEPTIC TANK	42'	54'
JUNCTION BOX #1	152'	145'-6"
JUNCTION BOX #4	167'	154'-6"

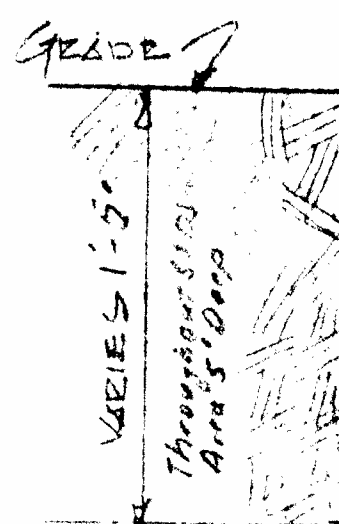
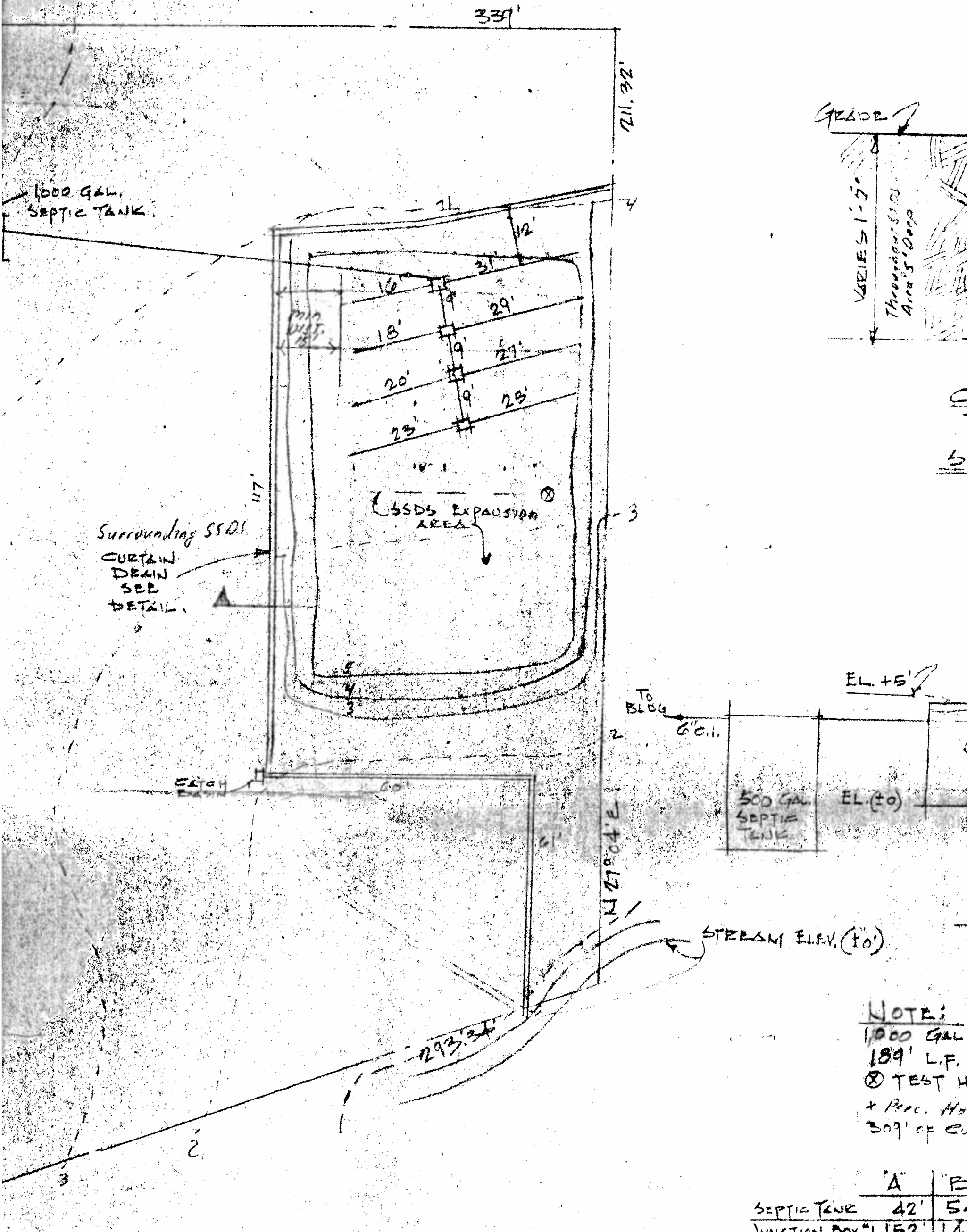
ACCEPTED
 AS FINAL PLANS
 DATE July 26, 1976
 WEST. CO. DEPT.
 OF HEALTH
 BY V.R. Lave

REVISION AS BUILT JULY 13, 1976.

BARNWELL ASSOC.
 SEWERAGE SYSTEM
 LOCATION: W. CHESTER RD & TRINITY PASS RD
 POUND RIDGE NEW YORK
 SECTION: 8 BLOCK: 9455 LOT: 24
 DATE SEPT 18, 1975 SCALE AS NOTED



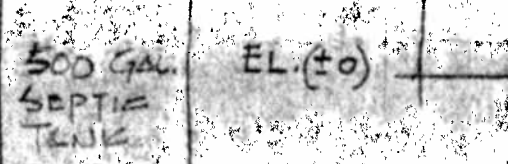
John P. Annicelli, P.E.
 Troy La. Bedford, N. Y. 10500



Surrounding SSDS
CURTAIN
DRAIN
SEE
DETAIL.

EL. +5'

TO BLDG
6" c.i.



STEAM ELEV. (10')

NOTE:
1000 GAL.
189' L.F.
⊗ TEST H
+ Perc. H
309' of CU

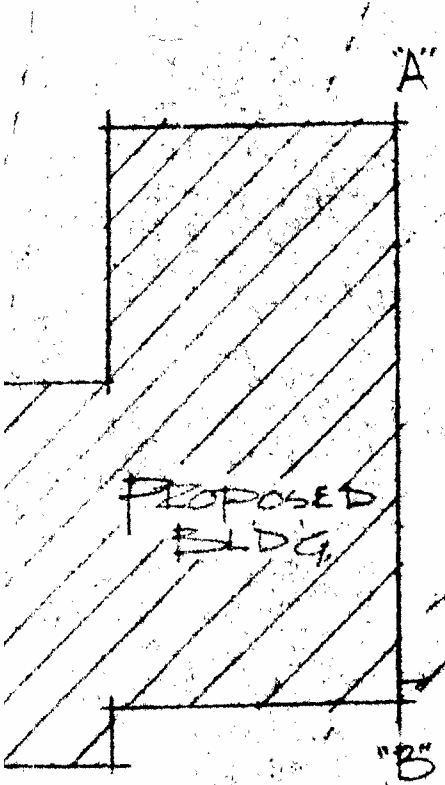
	"A"	"B"
SEPTIC TANK	42'	5'
JUNCTION BOX #1	52'	14'
JUNCTION BOX #4	167'	15'

SITE PLAN

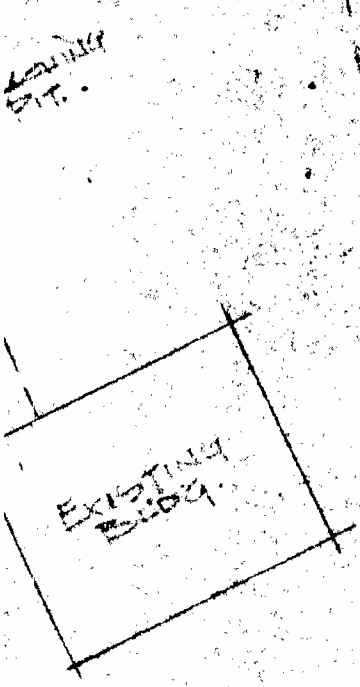
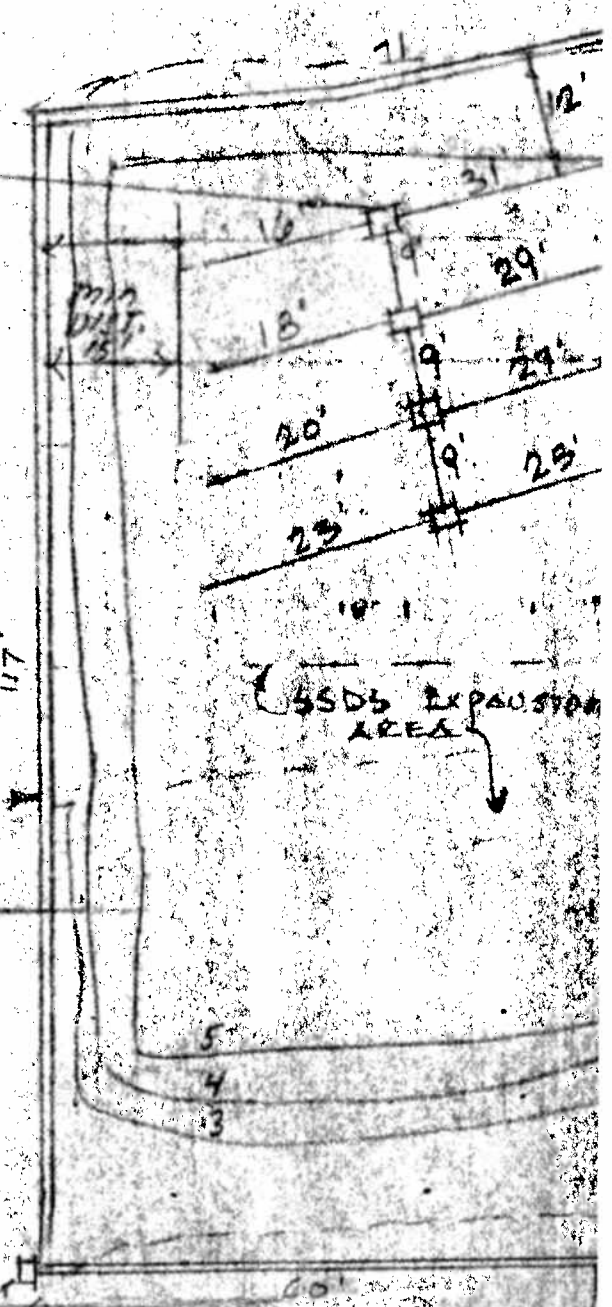
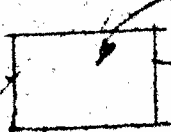
SCALE 1" = 20'-0"

--- Existing Contours
— New Contours

100' MIN.



1000 GAL. SEPTIC TANK



N82°12'20" E

SITE PLAN
 SCALE 1" = 20'-0"

----- Existing Contour
 _____ New Contour

293.34

WESTCHESTER AVE

S 63° 40' E

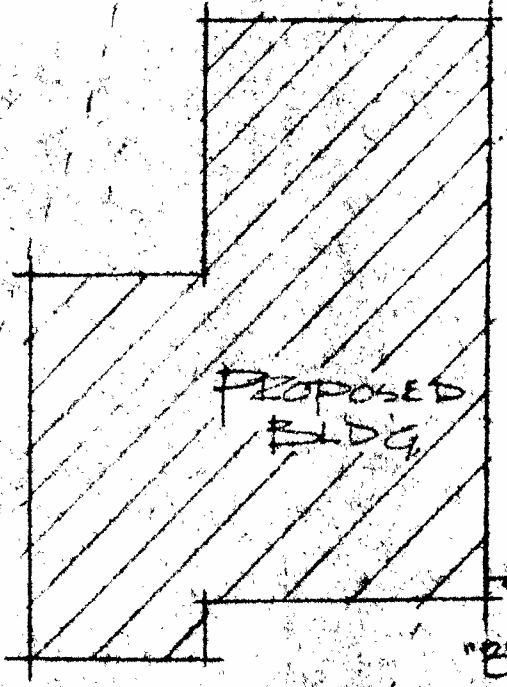
100' MIN.

80.00'
N 11° 59' E

EXISTING BLDG.

LEACHING PIT.

100.00'



EXISTING BLDG.

SEPTIC TANK

LEACHING FIELD

LEACHING PIT.

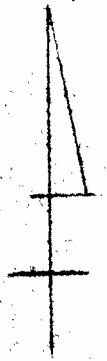
EXISTING BLDG.

TRINITY PARK ROAD

100.00'

N 82° 12' 20" E

NORTH



9455-25 54 WESTCHESTER AVE

Separate Sewerage System Existing Private Water Supply

Townbridge N.Y.
Municipality

CERTIFICATE OF CONSTRUCTION COMPLIANCE

WCDH File No. PIZ 67-51

Wpschester Ave
Owne: Pluto Properties Section 2 Block 9455
Lot 25 Job

Separate Sewerage System built by Pluto Properties Address 32 W. Douglass Dr. No. W.P.N.Y.

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 min. amt. 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

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. H. Havel
Westchester County Department of Health



See back to page 2 FILE COPY on West office

Douglas Mackey
PRESIDENT



KAISER - BATTISTONE, INC.

Sewage Systems Specialists

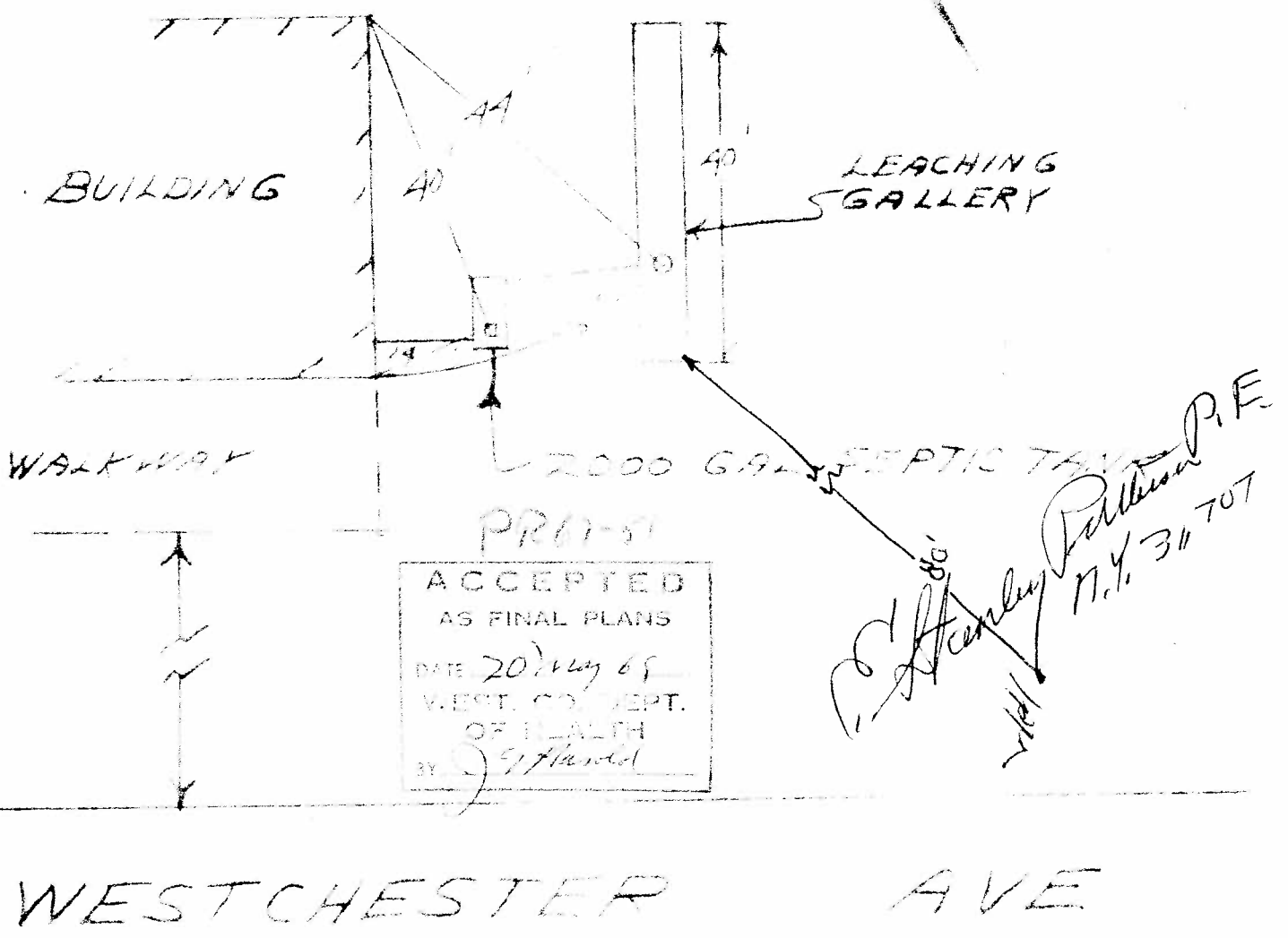
- CLEANING
- REPAIRS
- INSTALLATIONS
- ELECTRIC POWER
- DRAIN CLEANING
- SEWAGE TREATMENT PLANTS
- CHLORINATION EQUIPMENT

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



SCALE 1"=20'

COUNTY OF WESTCHESTER DEPARTMENT OF HEALTH - Division of Environmental Sanitation

DESIGN DATA SHEET - SEPARATE SEWERAGE SYSTEM

FILE NO. PK67-51

Owner Plato Properties Inc Address 32 McDonough Drive

Located At (Street) Westchester Ave (Trinity Road) White Plains N.Y. 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	CLOCK TIME			Elapse Time Min.	PERCOLATION			PERCOLATION Soil Rate min/in.drop
	Run No.	Start	Stop		Depth to Water From Ground Surface Start Inches	Water Level in Inches Drop in Inches	Stop Inches	
	1	12:27	12:37	10	19 1/2"	20 1/4"	3/4"	13 Min
	2	12:37	12:47	10	20 1/4"	20 3/4"	1/2"	20 Min
	3	12:47	12:57	10	20 3/4"	21 1/4"	1/2"	20 Min
	4	12:57	1:07	10	21 1/4"	21 3/4"	1/2"	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. <u>1</u>	HOLE NO. _____	HOLE NO. _____	HOLE NO. _____
G. L.	<u>6" Top Soil</u>	_____	_____	_____
6"	<u>" "</u>	_____	_____	_____
12"	<u>Yellow Sub soil</u>	_____	_____	_____
18"	<u>" " "</u>	_____	_____	_____
24"	<u>"</u>	_____	_____	_____
30"	<u>Compact</u>	_____	_____	_____
36"	<u>"</u>	_____	_____	_____
42"	<u>Sand</u>	_____	_____	_____
48"	<u>"</u>	_____	_____	_____
54"	<u>"</u>	_____	_____	_____
60"	<u>Gravel</u>	_____	_____	_____
66"	<u>"</u>	_____	_____	_____
72"	<u>"</u>	_____	_____	_____
78"	<u>No Water</u>	_____	_____	_____
84"	<u>or Rock @ 6'</u>	_____	_____	_____

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 _____

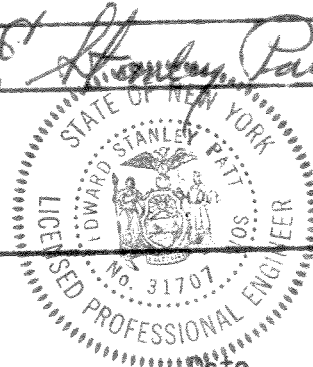
Absorption Area Provided By L.F. x 24" x 36" width trench. Other _____

Name E. Stanley Patterson

Address 510 Scofieldtown Road
Stamford Conn

Signature E. Stanley Patterson P.E.

SEAL



Westchester County Health Department

Soil Rate Approved _____ Sq.Ft./Gal.

Checked by _____ Date _____

*Plans showing 4 stories & one detail
 suite returned with permit*

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 Commercial
 Other - Describe: _____

OWTS Remediation

CASE#
WCDH File #: BEQ-2665-17-MK-

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.

VAST-SS

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)
- Galleys
- Gravelless Trench(es)
- 75-A Alternative System
- Other Advanced Alternative System
- Other System Component(s) - Describe: Covers of septic tank/grease trap/Obox

DRAW BUILDING AND LOCATION
OF WORK PERFORMED ON BACK
OF THIS FORM

Entire System Replaced

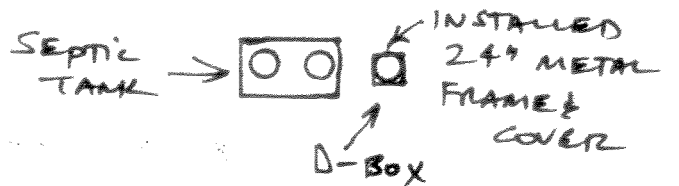
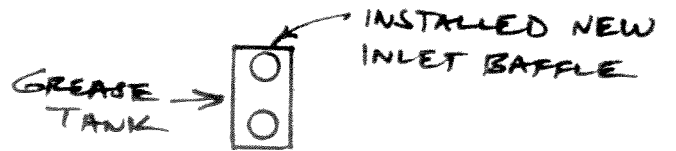
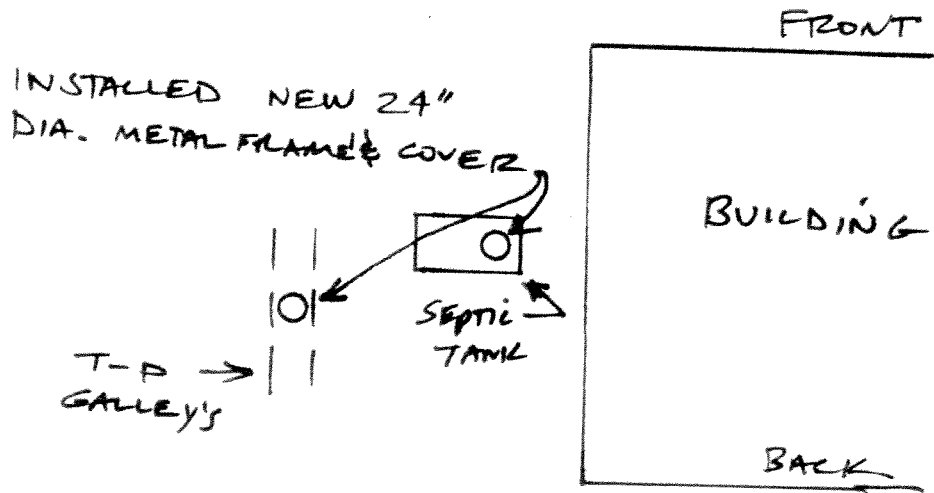
with seal tight lids
installed new baffle at inlet of
grease trap

Contractor's Name (print): UNITED SEPTIC & EXCAVATION 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





Attention Vincent S:104

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: 10596
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 | |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | House Sewer or other Solid Pipe(s) |
| <input type="checkbox"/> | <input type="checkbox"/> | Septic Tank#1 Size(gallons): _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Septic Tank#2: Size (gallons): _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Junction/Distribution Box(es) |
| <input type="checkbox"/> | <input type="checkbox"/> | Sewage Pump(s) or other Dosing Equipment |
| <input type="checkbox"/> | <input type="checkbox"/> | Absorption Trench Length _____ ft. X Trench Width _____ ft |
| <input type="checkbox"/> | <input type="checkbox"/> | Seepage Pit(s) |
| <input type="checkbox"/> | <input type="checkbox"/> | Galley(s) |
| <input type="checkbox"/> | <input type="checkbox"/> | Gravelless Trench(es) |
| <input type="checkbox"/> | <input type="checkbox"/> | 75-A Alternative System |
| <input type="checkbox"/> | <input type="checkbox"/> | Other Advanced Alternative System |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Other System Component(s) - Describe: <u>REPAIR AND REPLACE W/ NEW GRAVE</u>
<u>THE CHAMBERS IN GOOD CONDITION.</u>
<u>FAN/INTEGRATORS</u> <u>REPLACE ALL BROKEN CHAMBERS OR SAME</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | Entire System Replaced (Sketch attached) |

Contractor's Name (print): William J Pacheco Date Repair/Remediation Completed: 03/09

Contractor's Signature: [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

FROM :

FAX NO. :

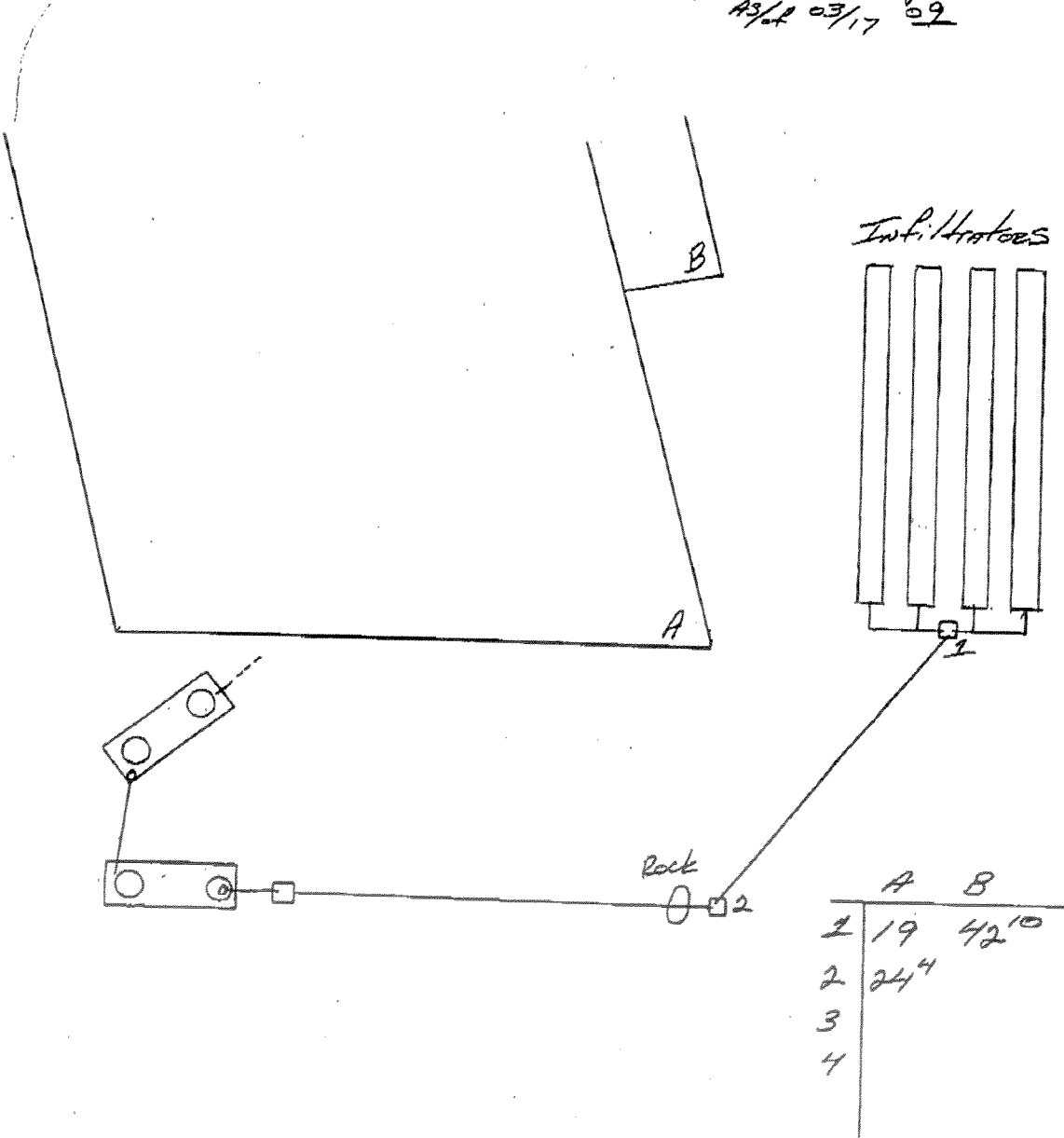
Jan. 25 2007 03:24AM P1



KATONAH SEPTIC, LLC.
WILLIAM J. POCHINTESTA
12 ANDERSON RD.
KATONAH, NY 10536
(914) 232-6010



54 Westchester Av.
Pound Ridge NY
AS/LP 03/17 09



9455-27 38 WESTCHESTER AVE

WCDH File No. PR2007-18 Municipality: In Pound Ridge Separate Sewage System
 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 Owner First Name: Thomas
Becker Sarah Lot: 27 R.S. Lot:

Separate Sewage System to Consist of:

Septic Tank Size: 1,000 Gallons Trench Length: 34 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): Francher INC # 159

Water Supply:

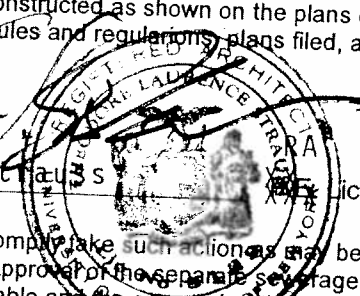
Public Water Supply Public Water Source:

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. Status License #: 8129



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 the systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

Date: Recommended By:

Date: 8/2/08 Approved By: [Signature]

Shua Lipsman, M.D., M.P.H., Commissioner, Westchester County Department of Health

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 Ppund Ridge Lot: 27
Owner Last Name: Ferrara Owner First Name: Thomas
St. #: 38 St. Name: West Municipality: In Pound Ridge State: NY Zip Code: 10576
Well Driller (WD) Company Name: TORLISH + SONS

Well Pit and Pump Equipment Details: Pitless Adapter: Other - Describe:
Pump Make: Grundfos Pump Type: Submersible Pump Capacity: 1 1/2 Pump GPM: 5
Storage Tank Type: WellxTool Storage Tank Capacity: wx102

Well Details:
Casing Length: 35 Ft. Yield Test Type: Air Measured from Land Surface:
Casing Diameter: 6 In. Yield Test Duration: 6 Hrs. Water Level, Static: 0 Ft.
Casing Material: Steel Well Yield: 5 G.P.M. 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
if ___, 20__.
Notary Public, Westchester County.
Well Driller Signature: *[Signature]*

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

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			
	Run No.	Start	Stop	Elapse Time Min.	Depth to Water From Ground Surface Start Inches	Stop Inches	Water Level Drop In Inches	Soil Rate 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

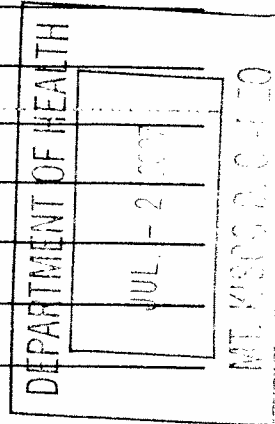
Notes:

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

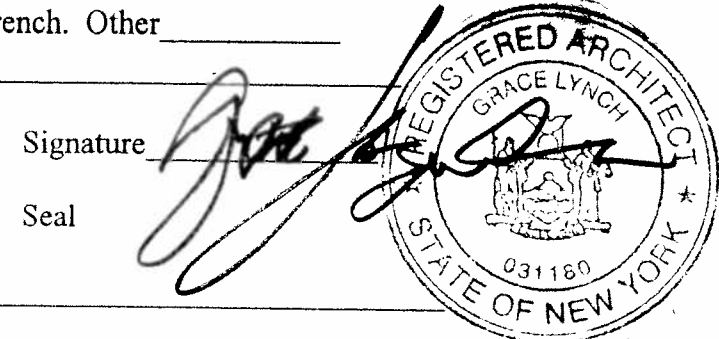
DEPTH	HOLE NO. <u>1</u>	HOLE NO. <u>2</u>	HOLE NO. <u>3</u>	HOLE NO. _____
G.L.	Topsoil	Topsoil	Topsoil	
6"	Topsoil	Topsoil	Topsoil	
12"				
18"	Sandy Loam	Sandy Loam	Sandy Loam	
24"	"	"	"	
30"				
36"	Fine graded sand with small to medium stones			
42"	"	"	"	
48"	"	"	"	
54"	"	"	"	
60"	"	"	"	
66"	"	"	"	
72"	Water	Water	Water	
78"				
84"				



WAS GROUNDWATER ENCOUNTERED Yes
 INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED 72"
 INDICATED LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED 66"
 DEEPEST 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
 Address 63 Moore Avenue
Mt. Kisco, NY, 10549



Westchester County Health Department
 Soil Rate Approved _____ Sq. Ft./Gal Checked by _____

THEODORE LAURENCE STRAUSS
A S S O C I A T E S
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.

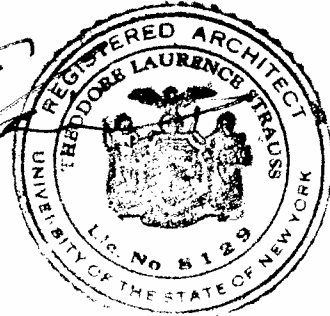
Dear Fred,

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



Westchester
gov.com

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality

PERMIT NUMBER: PRZ007-17

Name: Ferron + Becker Municipality: Pound Ridge

Description: 150 GPD MAX - office use only SSTS
+ WELL (w/meter)

of Sheets: ONE (1)

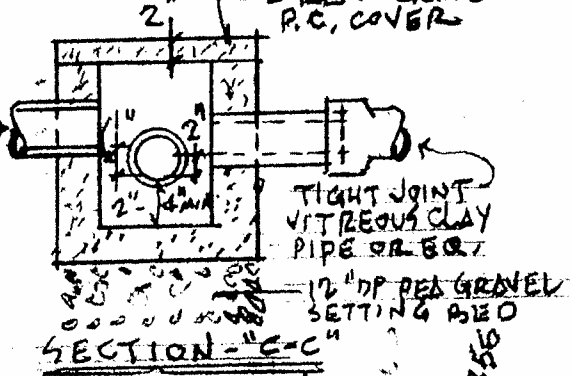
Are hereby accepted as conforming to the provisions of Chapter
873, Article VIII, Section 873.708.1
of the Westchester County Sanitary Code, subject to the provisions
of the Certificate of Construction Compliance issued this date.

Reviewed by: _____ Date _____

Recommended by: _____ Date _____

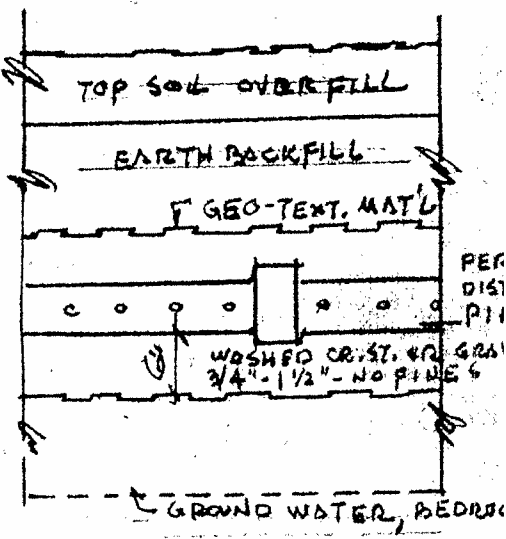
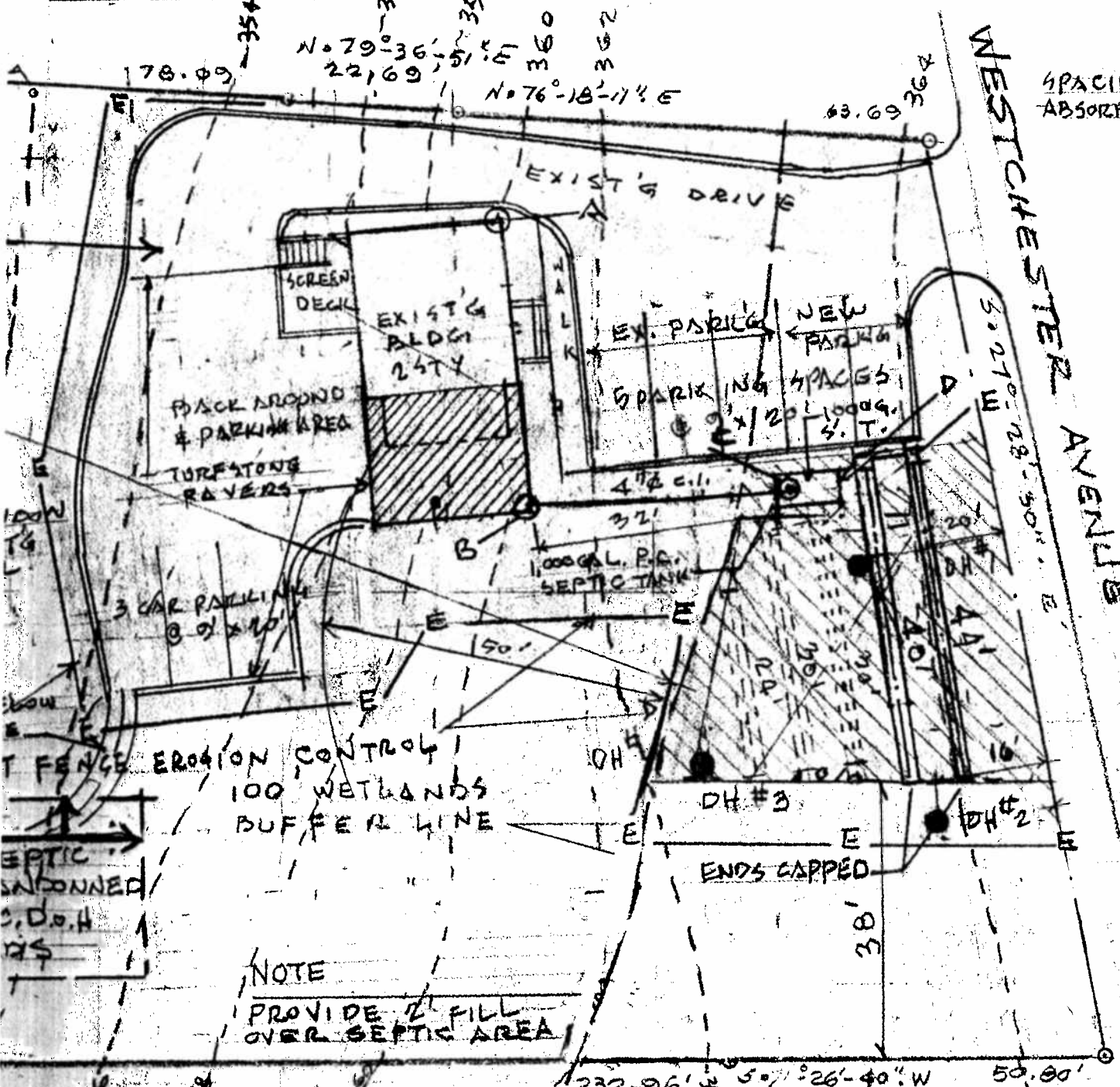
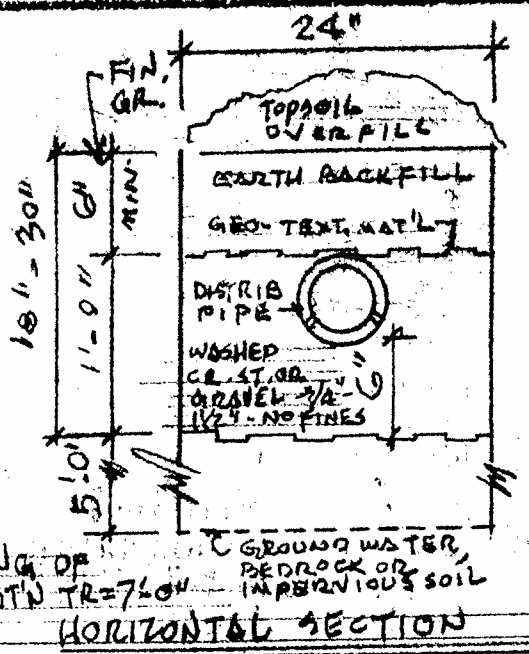
Accepted by: Fuelberg 5/23/08
Dist. _____

DETAILS



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.



LONGITUDINAL SECTION

LEACHING TRENCH DETAILS

1. DO NOT INSTALL TRENCHES IN WET SOIL
2. MAKE SIDES & BOTTOM OF TRENCH BEFORE PLACING GRAVEL.
3. ENDS OF ALL DISTRIB. PIPES MUST BE PLUGGED.
4. TRENCH STONE TO BE 3/4" - 1 1/2" WASH GRAVEL FREE OF FINES OR SILT.
5. TRENCH COURSE TO BE COVER WITH GEO-TEXTILE MATERIAL OR APPROVED EQUAL.

SEPTIC SYSTEM ANALYSIS & NOTES

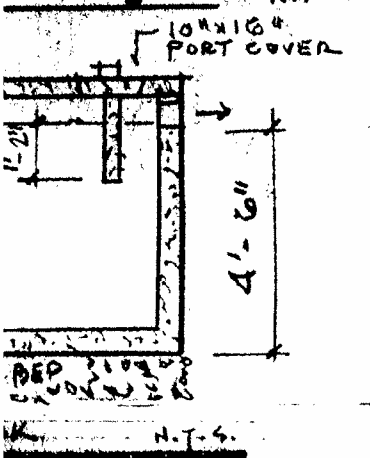
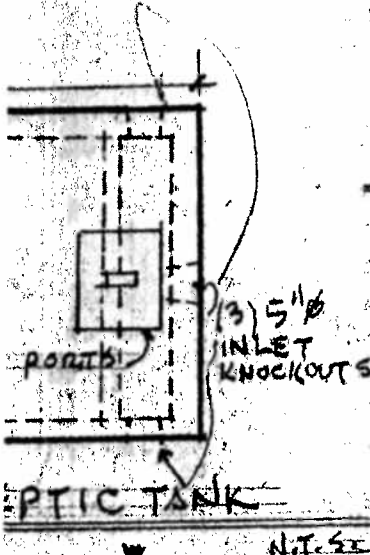
1. NO KNOWN WELLS WITHIN 100' OF PROPOSED S.S.R.A. OR WITHIN 200' IN LINE WITH DRAINAGE TO PROPOSED S.S.R.A.
2. 100 YEAR FLOOD PLAIN 100' FROM S.S.R.A.
3. NO WATER COURSES, WETLANDS OR STREAMS WITHIN 100' OF S.S.R.A.
4. ALTERED EXISTING RESIDENCE INTO OFFICE BUILDING FOR 5 OFFICES + RECEPTION + CONFERENCE ROOM = 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 x 0.9 G/SF) / 2 SF/FT = 67 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			WINTER DESIGN TEMP	ICE SHIELD UNDERLAY REQ'MENT	FLOOD HAZARD	
			WEATHER'S	FROST LING DEPTH	TERMITE DECAY				
90 P.S.F.	100-110	D-1	SEVERE	42"	MODERATE	SLIGHT	7°F	YES	MINIMA

WATER SHED: UPPER LONG ISLAND SOUND.

SECTION - B • BLOCK - 9455 • LOT - 1

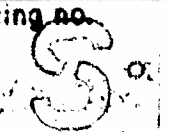


project: ALTERATION TO OFFICES OF:
THOMAS FERRARA & SARAH BECKER
30 WESTCHESTER AVENUE
SCOTT'S CORNERS, TN OF POUND RIDGE, NY

drawing title: AS-BUILT
• PLOT & SEPTIC PLAN

THEODORE LAURENCE STRAUSS and ASSOCIATES
architects • planning consultants
111 W. 42nd St., New York, NY 10018-3604

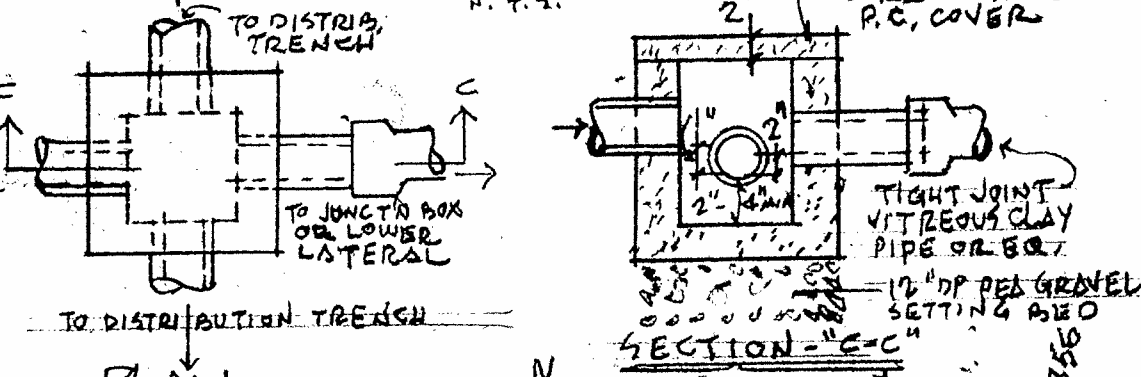
date	6/24/07	revision	8/16
drawn by	TLS	revision	9/19/07
checked by	A.L.	revision	10/10
scale	As shown	revision	10/17
job no.	2500	revision	5/09
drawing no.		revision	8/11



NOTES FOR JUNCT'N BOX

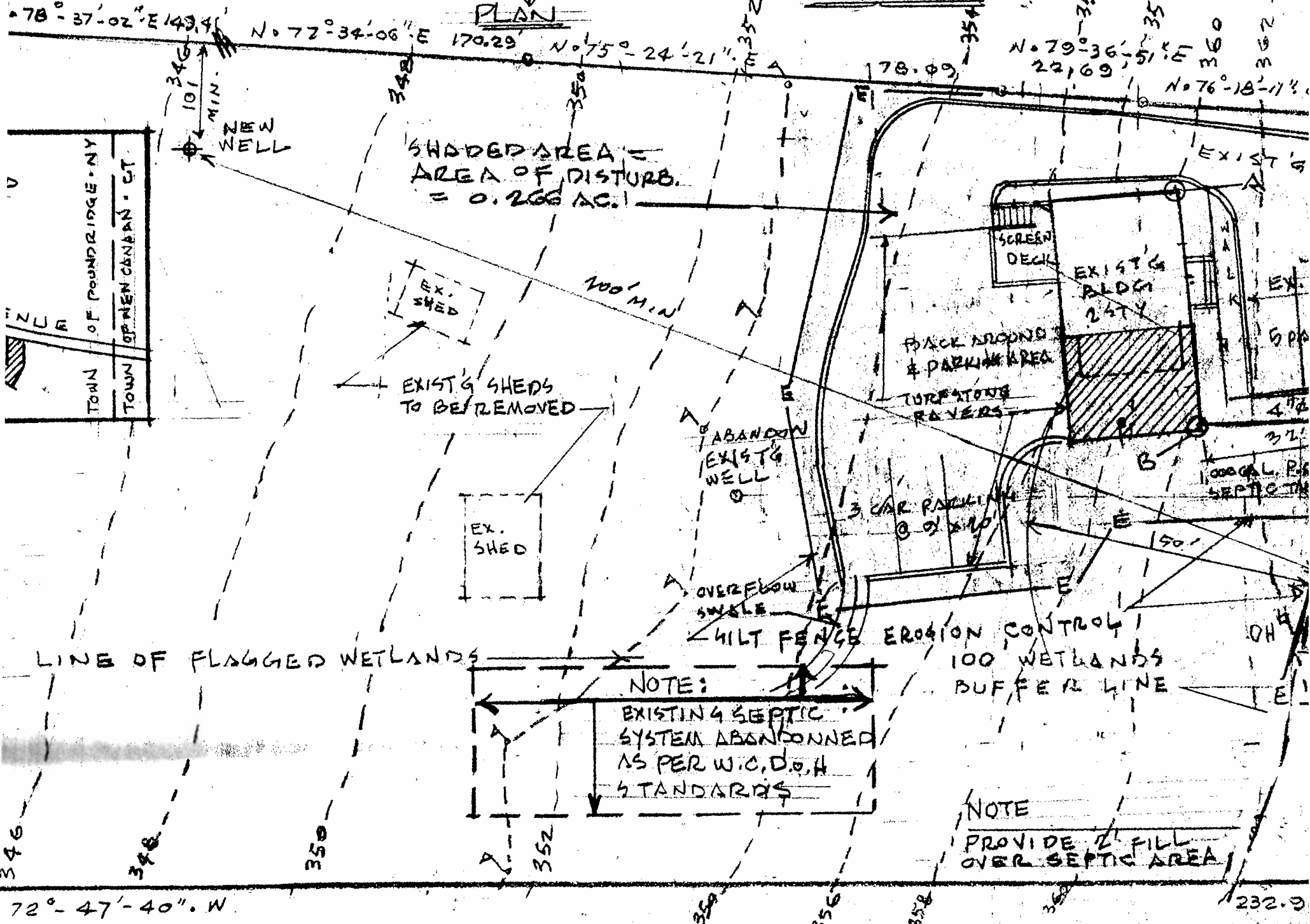
- JUNCTION BOX TO BE MIN. 12" X 12"
- MIN. 12" SOLID PIPE FROM JUNCT'N BOX TO LEACH'G FIELD
- MAX. 12" COVER FROM FIN. GRADE TO TOP OF JUNCTION BOX

JUNCTION BOX DETAILS



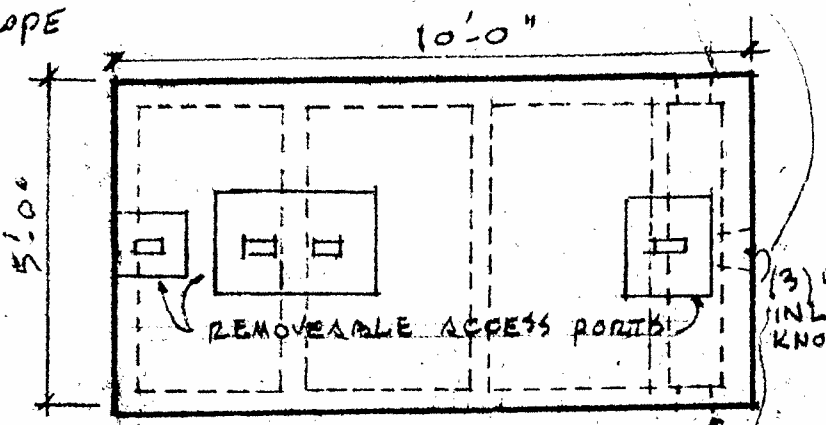
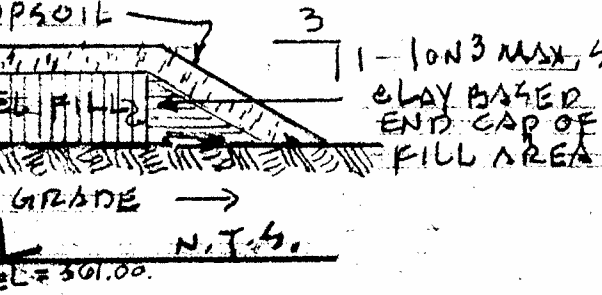
JUNCTIO

1. BOTTOM C AND FIRM LINE. FO GROUND
2. PLACED O
3. WATER PR
4. TIGHT JO BOX & BE

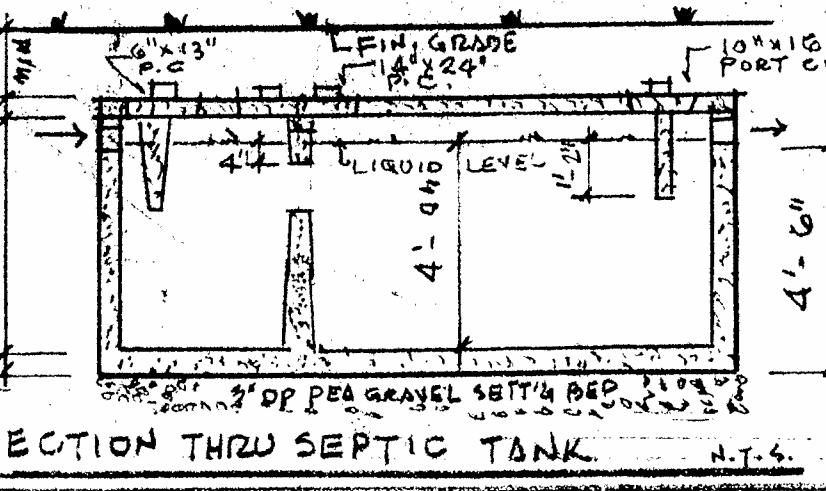
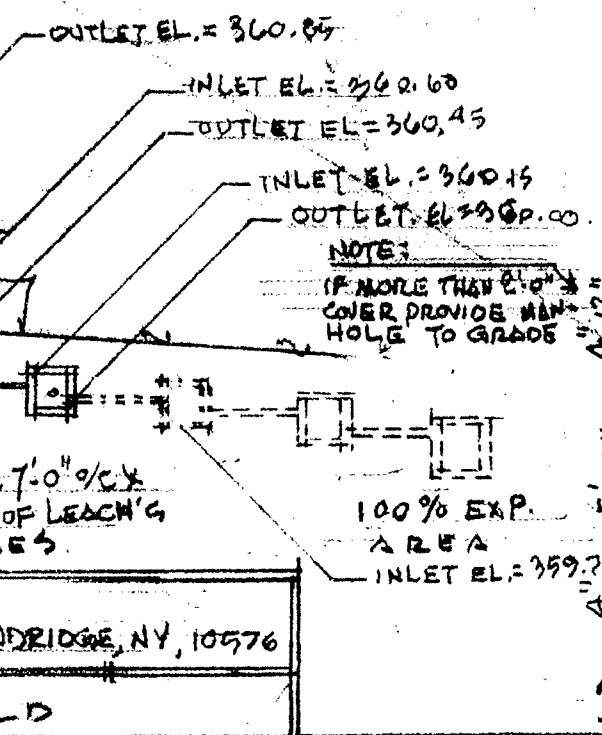


SEPTIC PLAN

LINESHIP PREPARED BY DENNIS B. WALDEN, L.S. 3, NOV. 9, 2006. WETLANDS FLAGGING BY STEPHEN COVEMAN



PLAN OF 1000 GAL. PC SEPTIC TANK



SECTION THRU SEPTIC TANK

SEPTIC SYSTEM ANALYSIS

1. NO KNOWN WELLS WITHIN 100'
2. 100 YEAR FLOOD PLAIN I
3. NO WATERCOURSES, WETLAND
4. ALTERED EXISTING RE: 5 PERSONS (1/OPP.) + 11
5. SEPTIC TANK REQUIR
6. LEACHING FIELDS
7. 100% EXPANSION AREA

CLIMATIC & GE

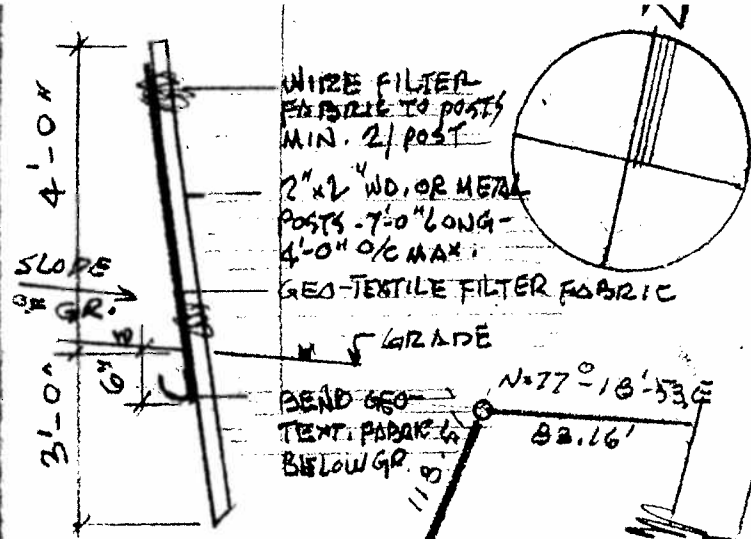
GROUND SNOW LOAD	WIND SPEED (M.P.H.)	SEI DE CAT
90 P.S.F.	100-110	D.

WATER SHED: UPPER LONG



ESTIMATED COMPLETION DATE: 12/30/07

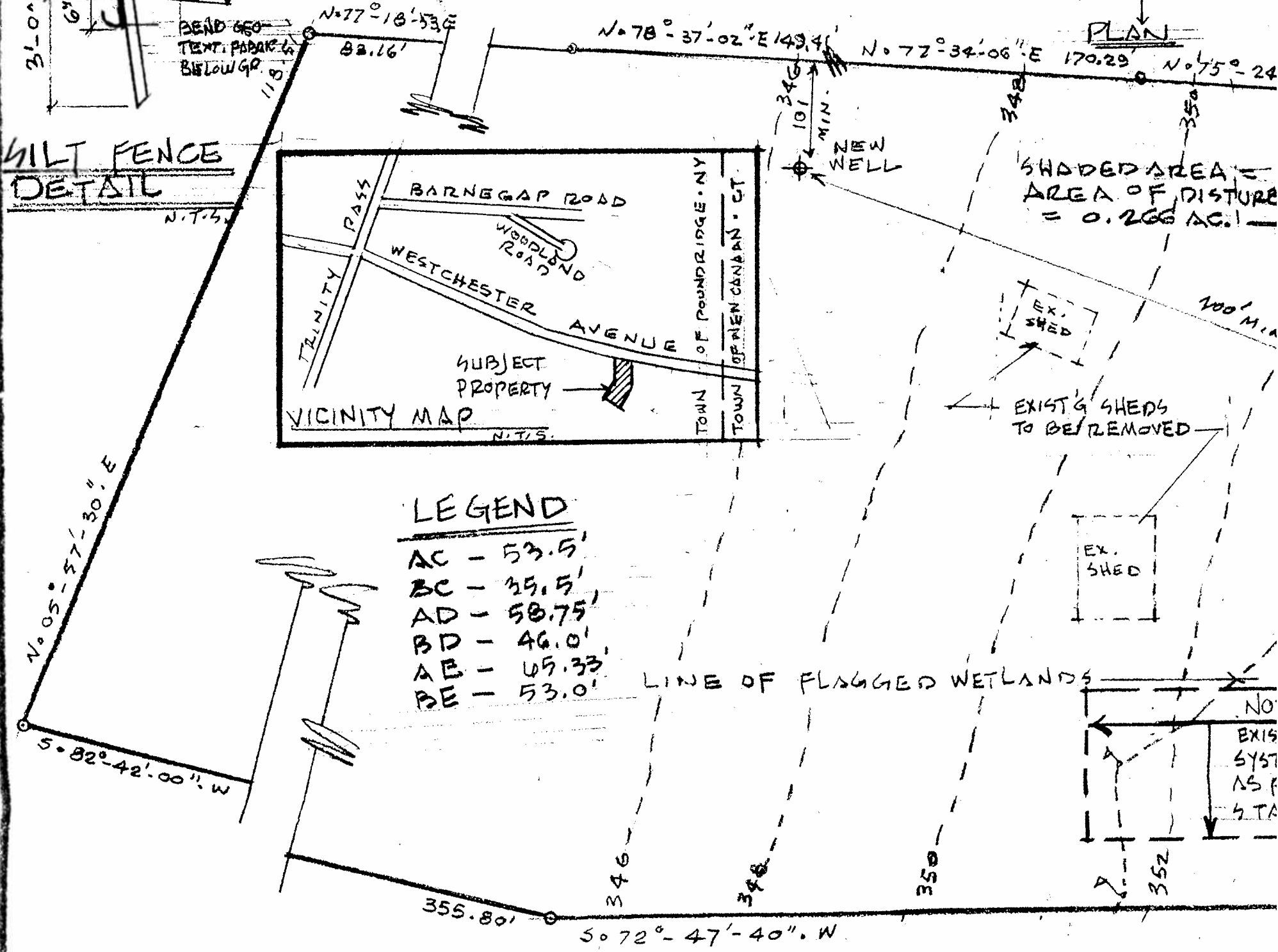
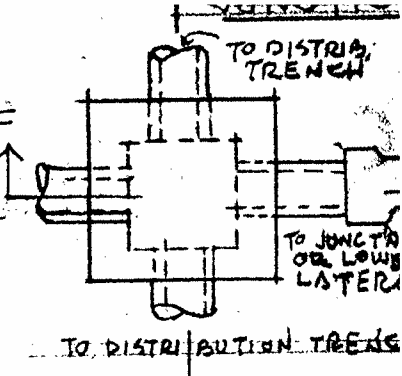
SEED ARCHITECT. SAME SHALL NOT BE ALTERED BY ANYONE, AS PER N.Y.S. LAW, EXCEPT PREPARED



WIRE FILTER DETAIL

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.

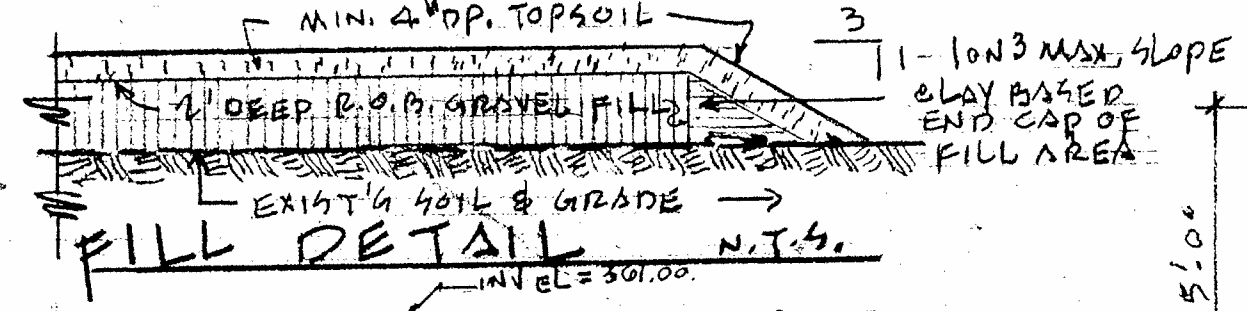


LEGEND

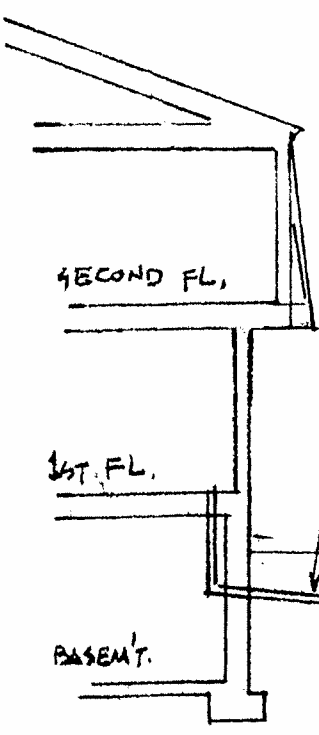
- AC - 53.5'
- BC - 35.5'
- AD - 58.75'
- BD - 46.0'
- AB - 45.33'
- BE - 53.0'

PLOT & SEPTIC PLAN 1"=20'

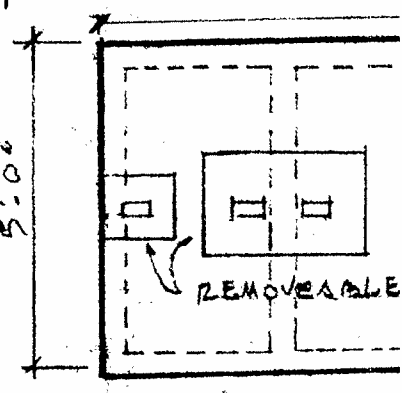
SURVEY DATA & WETLANDS DELINEATION PREPARED BY DENNIS B. WALDEN, L.S.; 386 MAIN ST., BEACON, NY, DATED, NOV. 9, 2006. WETLANDS FLAGGING BY STEPHEN COVEN



FILL DETAIL



SECTION THRU SEPTIC SYSTEM



PLAN OF 1,000 GAL.

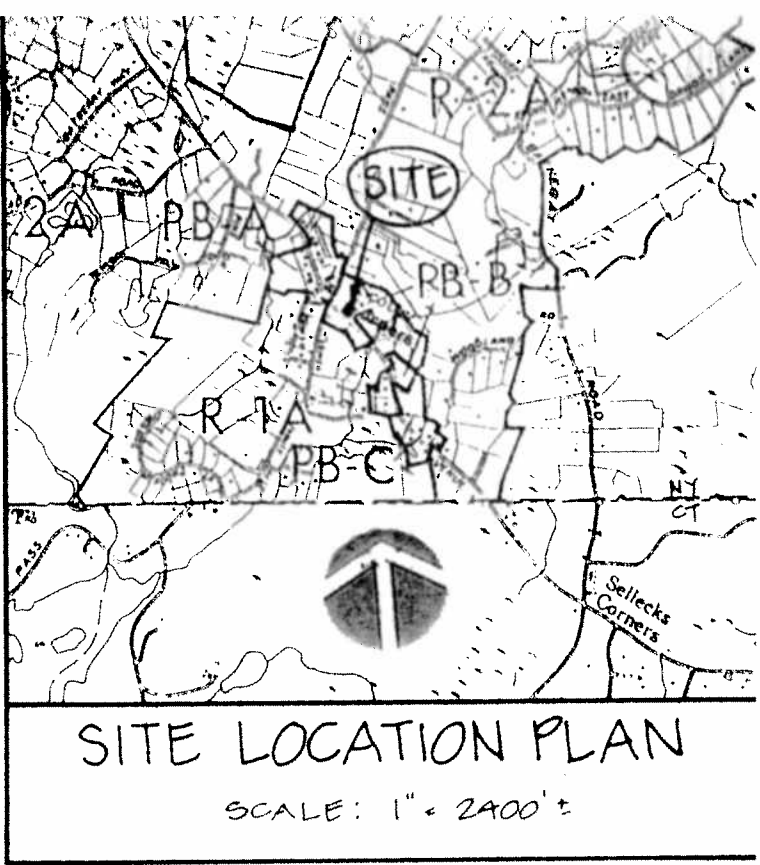
OWNER'S NAME & ADDRESS:
THOMAS FERRARA & SUSAN BECKER - P.O. BOX 336 POUNDRIIDGE, NY, 10576

WELL TYPE: CHARLTON-CHATFIELD

ESTIMATED START DATE: 10/15/07 ESTIMATED COMPLETION DATE: 12/30/07

THESE PLANS HAVE BEEN PREPARED BY A N.Y. LICENSED ARCHITECT. SAME SHALL NOT BE ALTERED BY ANYONE, AS PER

9456-1.9 55 WESTCHESTER AVE



EXISTING GRADE
 (401)
 (402)

ITEM #2

NO	@ DIST. PIPE END	INVERT	
		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	-	-

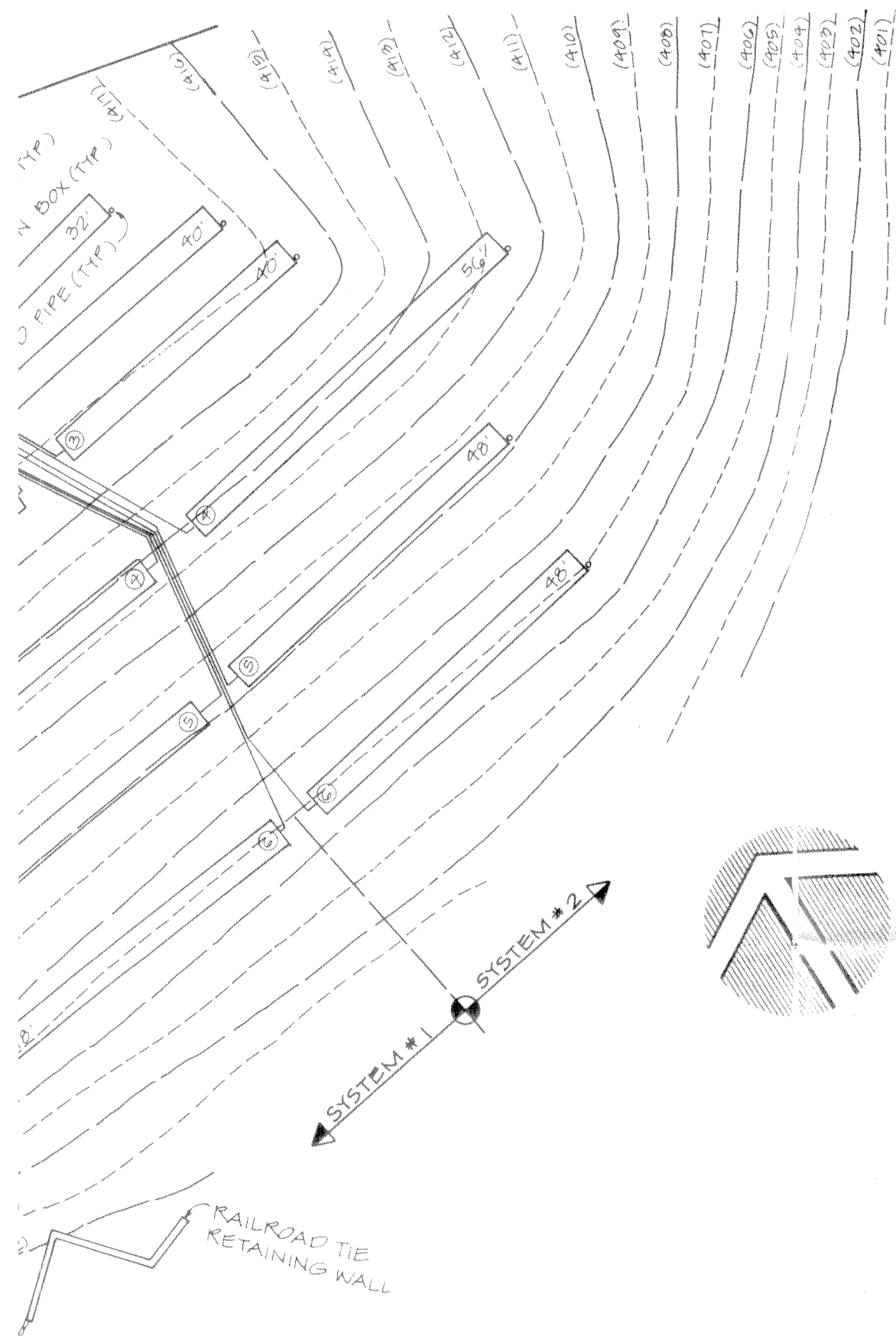
PROJECT:
TRINITY CORNERS SHOPPING CENTER
 WESTCHESTER AVENUE
 POUND RIDGE, NEW YORK

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
 (SSDS REPAIR)

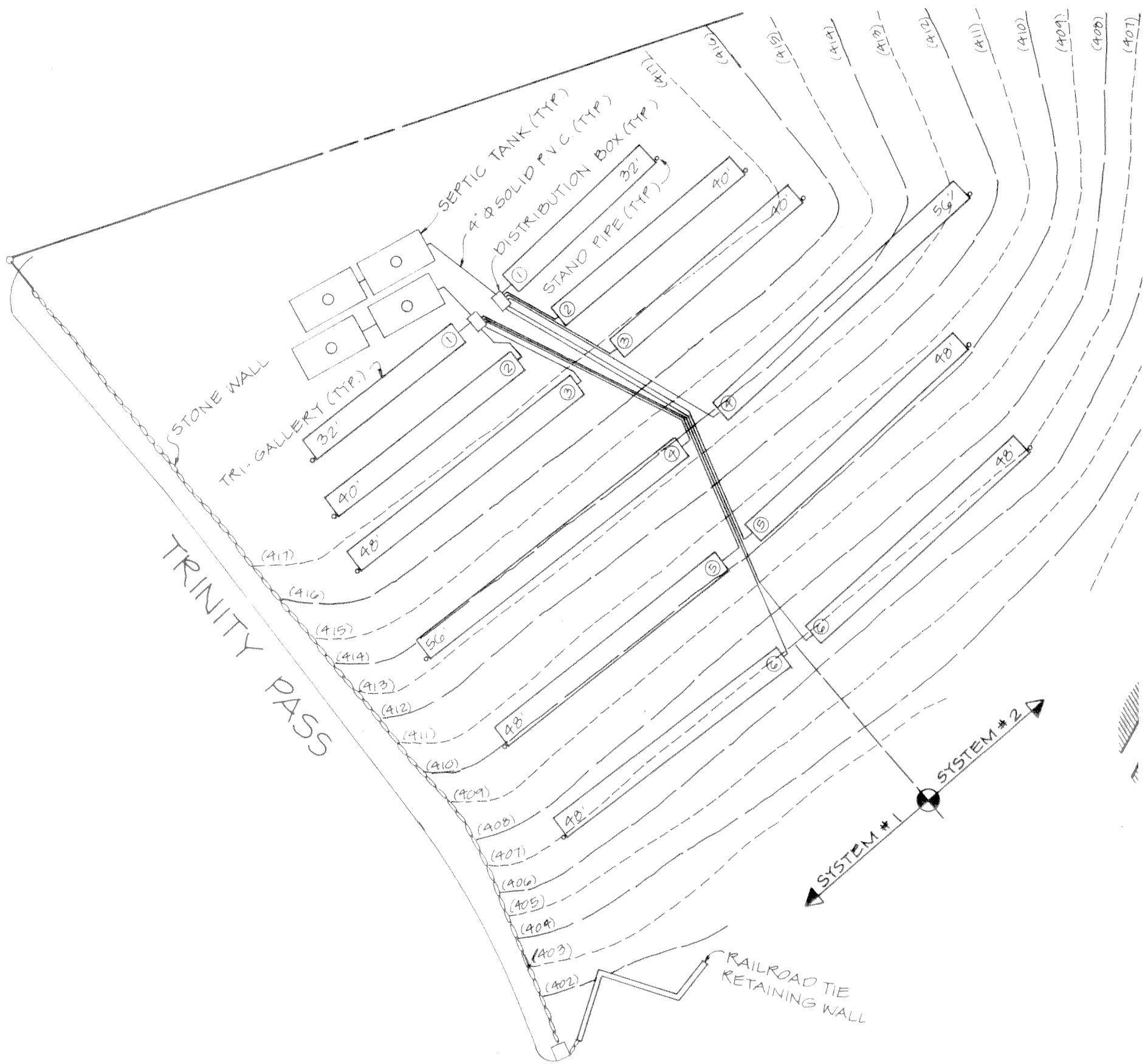
SCALE: 1" = 20'
 DATE: 11 29 93
 DRAWN BY: TR
 CHECKED BY: RWL
 JOB No.: 92089
 DRAWING No.: S-1



SYSTEM #2

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	-

	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

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:

Septic Tank Size: 1500 Gallons Trench Length: 216 Lin. Ft. X Trench Width: 72 Inches
48" x 18" Flow Diffusors
MAX FLOW 600 GPD

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: Full BJ

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~~

~~ADDITIONAL 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"~~

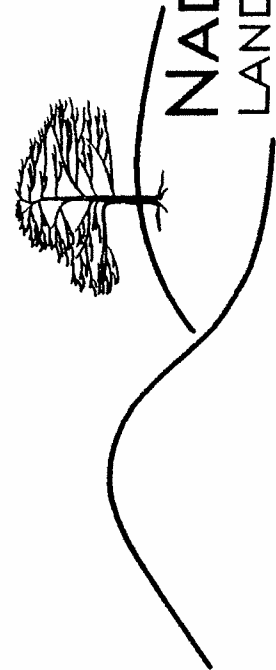
~~CAPACITY: 20.9 cf/in
1.74 cf/in
13.02 gal/in~~

~~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.~~

1	REV. EXIST. WELL	11/17/08
No.	Revision/Issue	Date



NADERMAN
LAND PLANNING AND ENGINEERING, P.C.

3799 nelson ave.
box 7
jefferson valley, ny 10535

tel: 914.245.5403
fax: 914.962.5963
e: bgn@naderman.com

**A - HOME
SCOTTS RIDGE
DEVELOPMENT**

29 WESTCHESTER AVENUE
TOWN OF POUND RIDGE WESTCHESTER CO., NY

**"AS-BUILT"
RECORD PLAN
SUBSURFACE SEWAGE
DISPOSAL SYSTEM**



Project	5349	Sheet	RP-1A
Date	11-07-08		
Scale	1" = 30'		

A" WCHD PERMIT # PR2007-13
~~B" WCHD PERMIT # PR2007-14~~

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:

**ADVANTECH 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:

ADVANTECH 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.

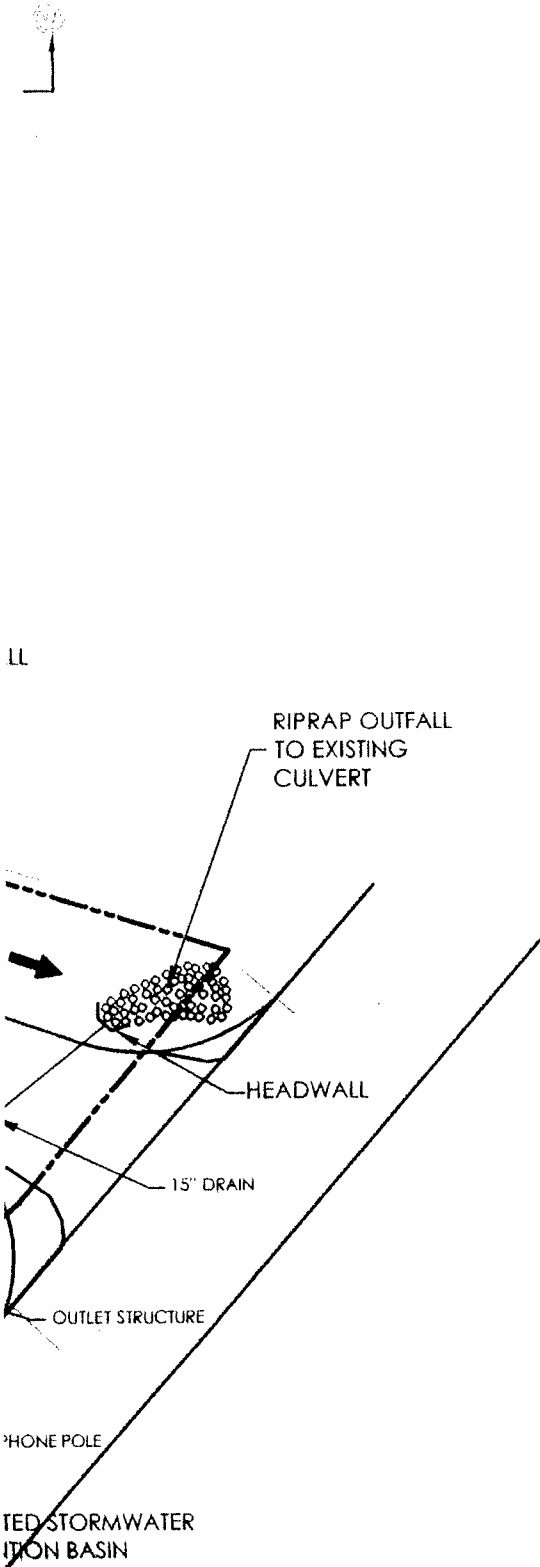
location based upon a survey
 upon field inspection and
 of the new SSTS nor to remain
 the new SSTS.
 of the proposed will nor within 200'
 the general line of drainage from

with the Rules and Regulations for
 surface Sewage Treatment Systems

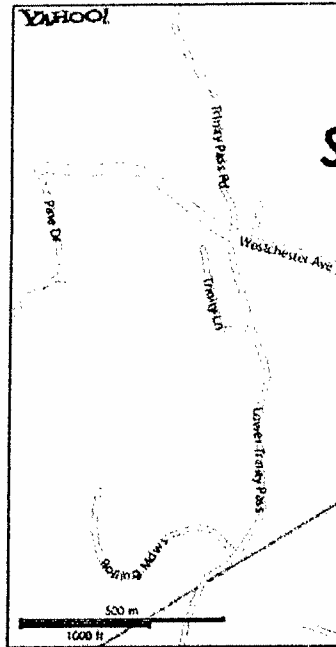
uction of the OWTS and certifies its
 plans.

Basin.

0 feet of the new SDS.



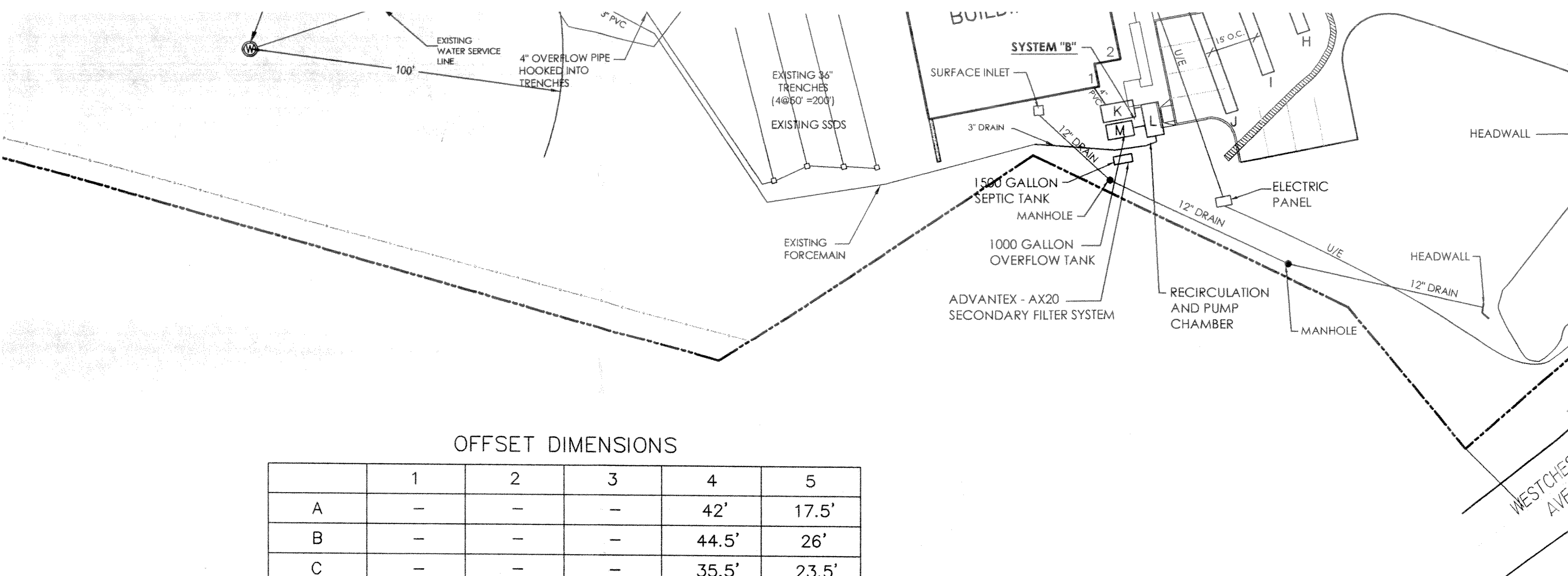
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 THIS DRAWING IS A VI
 OF THE NEW YORK STA



1	REV. EXIST.
No.	Revis

NADERMAN

A - H
 SCOTT

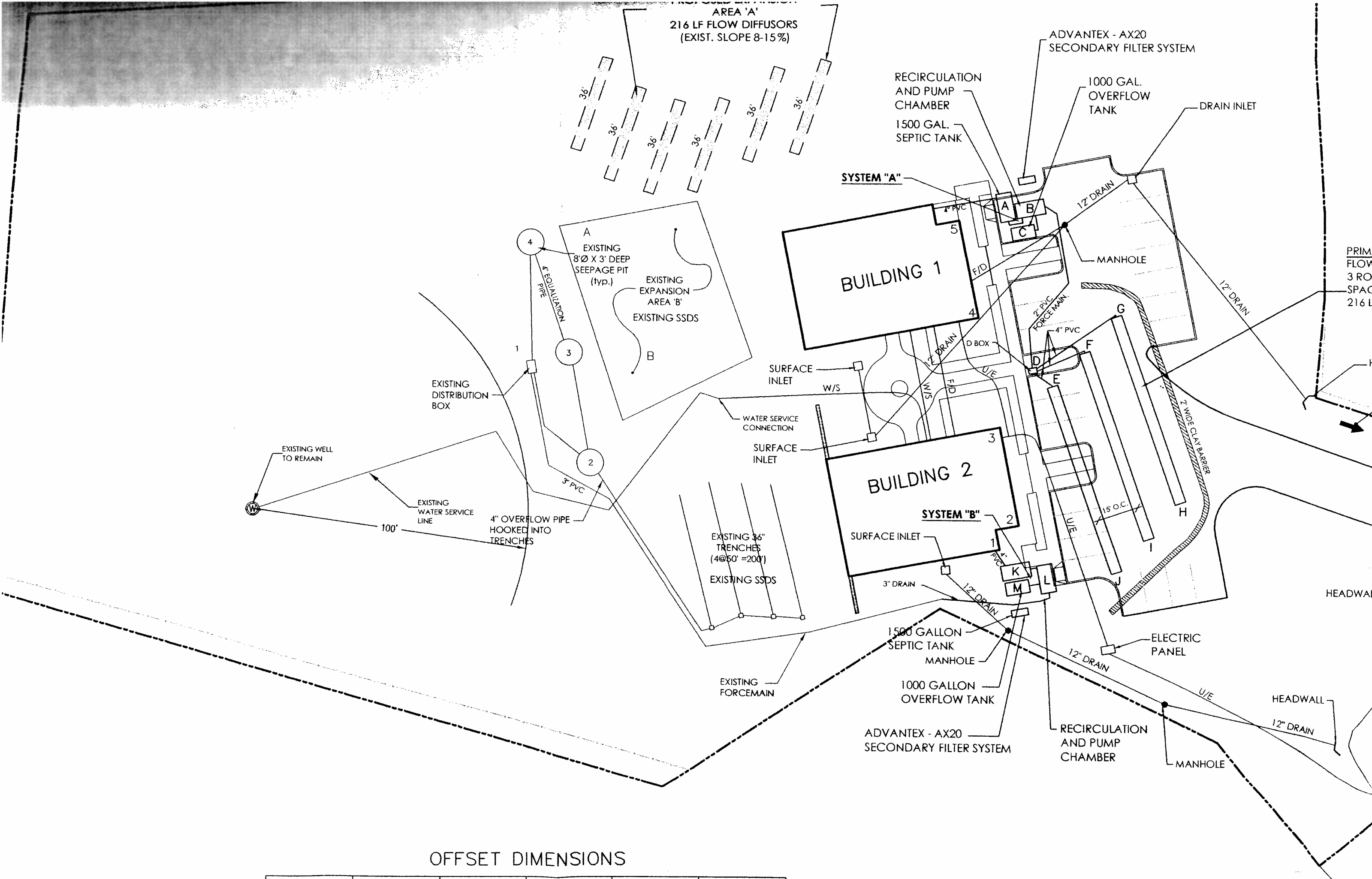


OFFSET DIMENSIONS

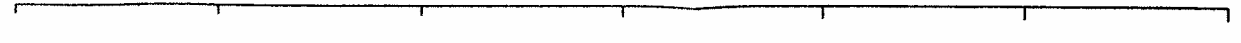
	1	2	3	4	5
A	-	-	-	42'	17.5'
B	-	-	-	44.5'	26'
C	-	-	-	35.5'	23.5'
D	-	-	24'	27.5	-
E	-	53.5'	24.5'	-	-
F	-	68'	40.5'	-	-
G	-	81.5'	56'	-	-
H	-	61.5'	74'	-	-
I	-	49'	68'	-	-
J	-	40'	67.5'	-	-
K	10'	17'	-	-	-
L	20'	22'	-	-	-
M	15.5'	23'	-	-	-

PLAN
SCALE: 1" = 30'

WESTCHESTER AVE



OFFSET DIMENSIONS



WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality

PERMIT NUMBER: PL 2007-13

Name: Joan Arnold, A Home Municipality: Penn Hills

Description: NEW SSTS TO SERVE (Bldg #1)

MAX FLOW 600GPD

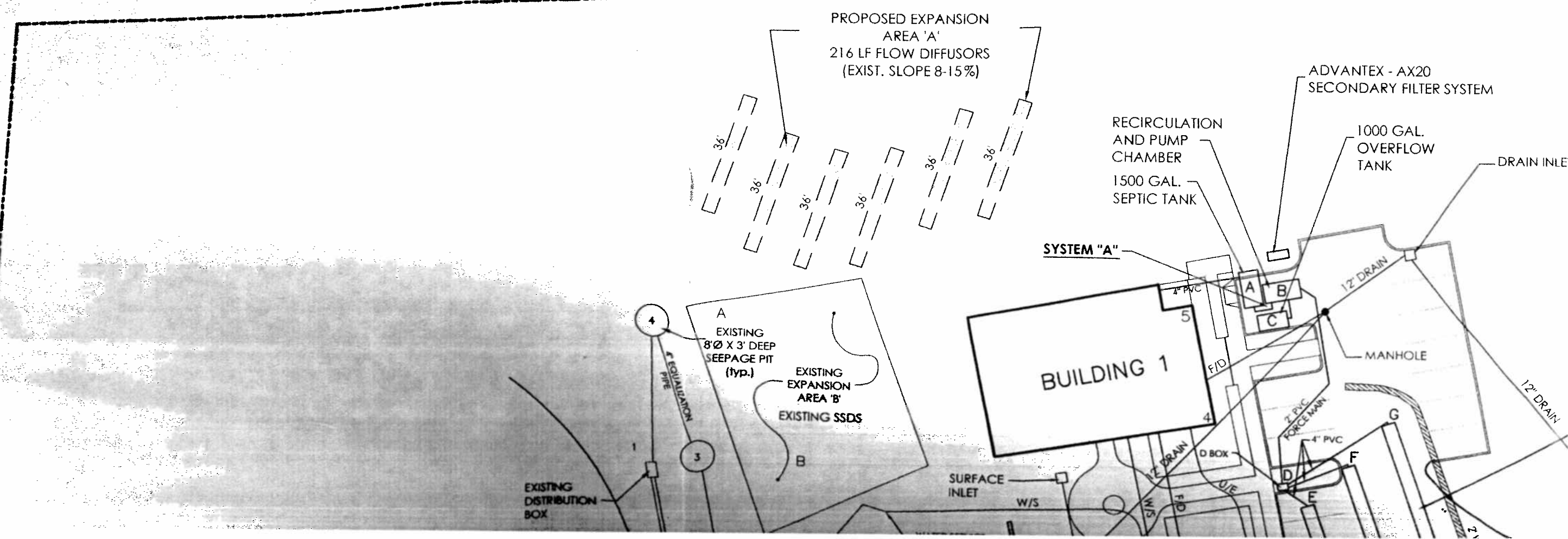
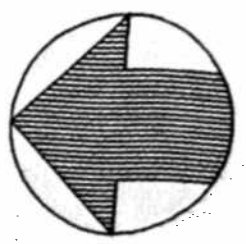
of Sheets: ONE (1)

Are hereby accepted in accordance with the provisions of Chapter 873, Article VIII, Section 873.708.1 of the Westchester County Code, subject to the provisions of the Certificate of Construction Compliance issued this date.

Reviewed by: _____ Date _____

Recommended by: _____ Date _____

Accepted by: [Signature] 11/21/07
Date



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:

Septic Tank Size: 1500 Gallons ^{max Flow Capacity} Trench Length: *** Lin. Ft. X Trench Width: *** Inches

Other Requirements: ^{***Exist. Pits & trenches/Ref/WCHD Permit PR73-2} 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

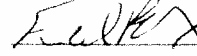
Well Driller (WD) Company Name: NYDEC Reg. #

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: 

UMP CYCLE DEPTH: 21.5"

UMP VOLUME: 9.77 gal/in x 21.5 in = 210 gal/cycle

SYSTEM 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

ADDITIONAL IMPROVEMENTS:

EXIST AX-20 SECONDARY FILTER SYSTEM (Not Required or Approved by WCHD)

SYSTEM "B"

UMP CHAMBER - VOLUME 215 GALLONS/CYCLE

UMP CHAMBER SIZE: 43" x 70"

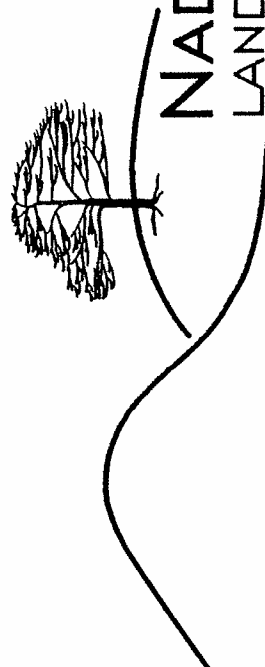
CAPACITY: 20.9 cf/ft
 1.74 cf/in
 13.02 gal/in

UMP CYCLE DEPTH: 16.5"

UMP VOLUME: 13.02 gal/in x 16.5 in = 215 gal/cycle

SYSTEM TESTED ON 10/30/08 WITH WCHD.

1	REV. EXIST. WELL	11/17/08
No.	Revision/Issue	Date



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



~~WCHD PERMIT # PR2007-13~~
 WCHD PERMIT # PR2007-14

Project	5349	Sheet	RP-1B
Date	11-07-08		
Scale	1" = 30'		

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:

ADVANTEK 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:

ADVANTEK AX-20 SECONDARY FILTER SYSTEM (Not Required or Approved by WCHD)

SYSTEM "B"
PUMP CHAMBER - VOLUME 215 GALLONS/CYCLE

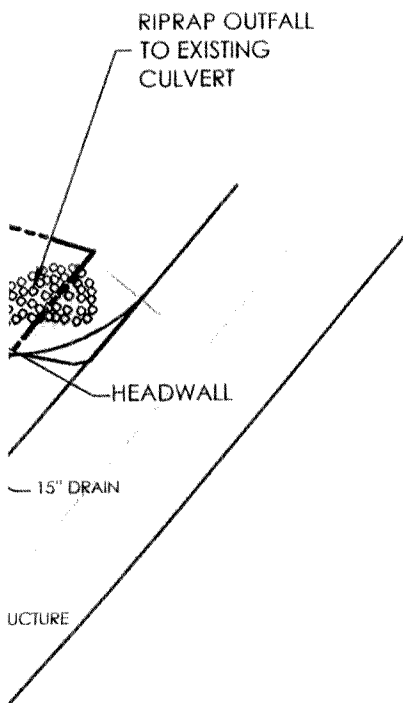
PUMP CHAMBER SIZE: 43" x 70"

CAPACITY: 20.9 cf/ft
 1.74 cf/in
 13.02 gal/in

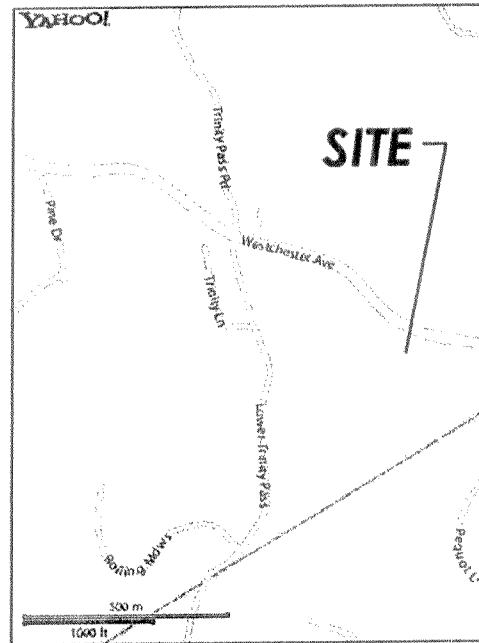
PUMP CYCLE DEPTH: 16.5"

PUMP VOLUME: 13.02 gal/in x 16.5 in =
 215 gal/cycle

SYSTEM TESTED ON 10/30/08 WITH WCHD.



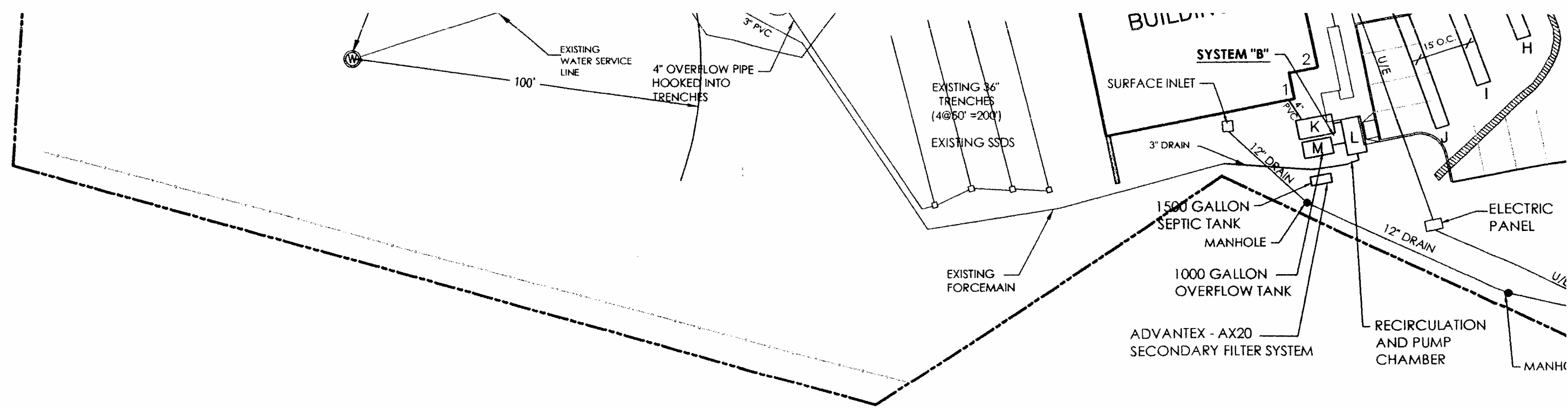
UNAUTHORIZED ALTERATIONS / THIS DRAWING IS A VIOLATION OF THE NEW YORK STATE EDUC



No.	Revision/Iss
1	REV. EXIST. WELL



A - HOI
 SCOTTS R



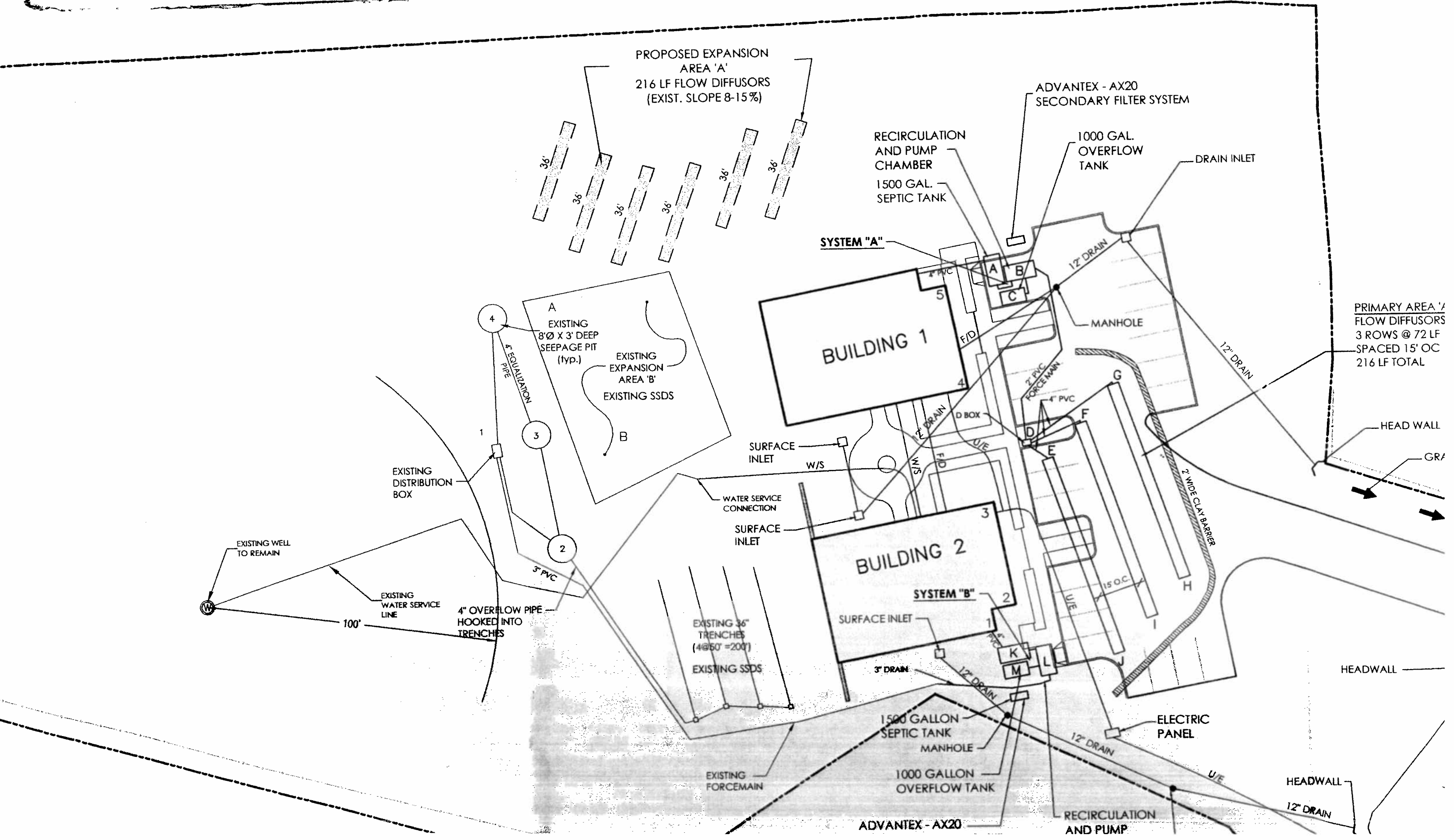
OFFSET DIMENSIONS

	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: E. B. B. Date 11/24/07

The subject property
 There are no reservoirs





WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality

PERMIT NUMBER: PR2007-14

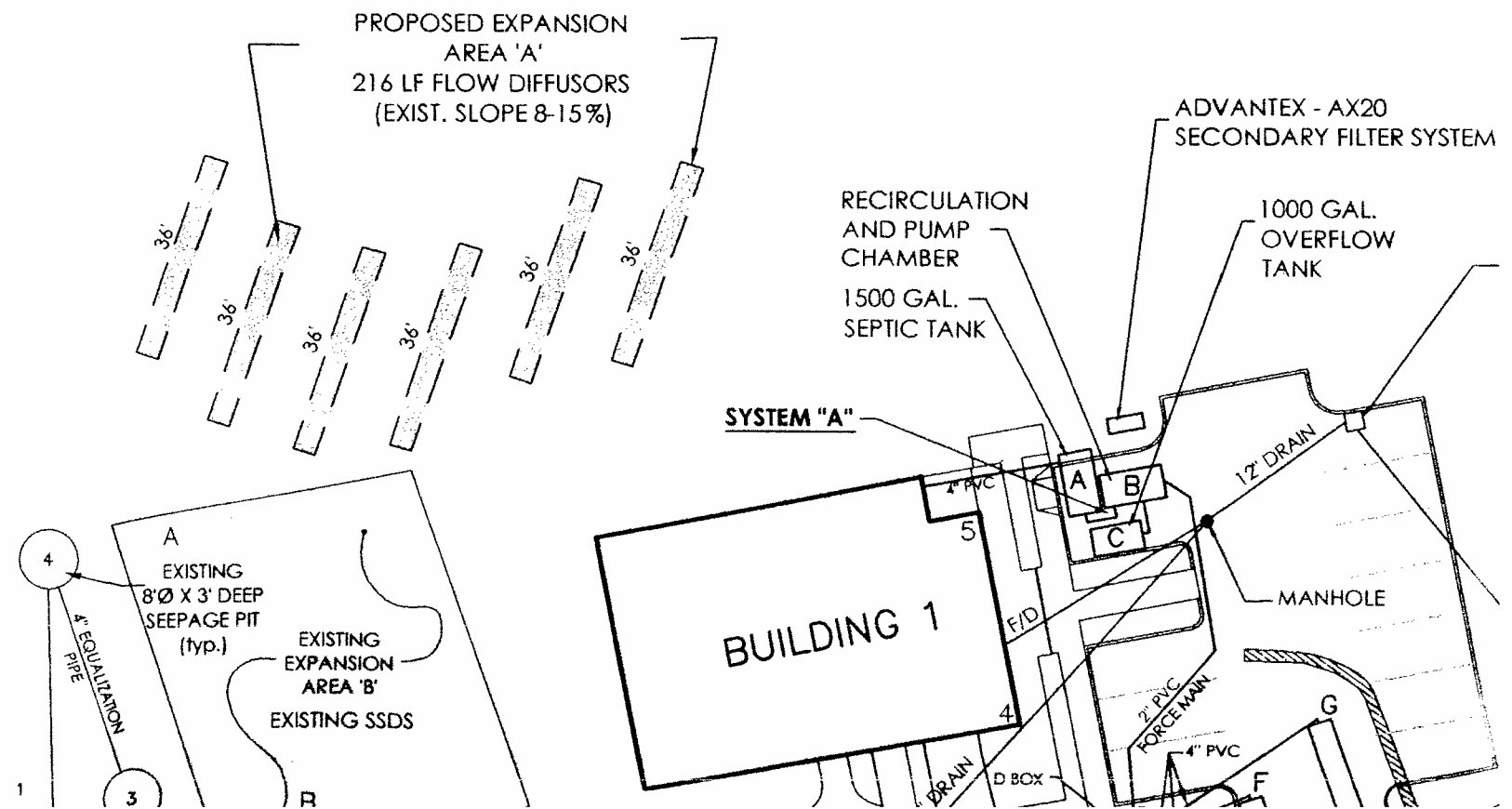
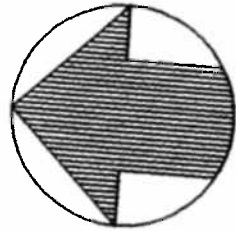
Name: Jim Arick, A Home Municipality: Powder Mill
Description: SSTB Improvement To Sewer Building #11
(New Septic tank + pump chamber) Max Flow 600 gpd
of Sheets: one (1)

Are hereby accepted: _____ provisions of Chapter
873, Article VIII, Section _____ VII, Section 873.708.1
of the Westchester County Code, subject to the provisions
of the Certificate of Construction Compliance issued this date.

Reviewed by: _____ Date _____

Recommended by: _____ Date _____

Accepted by: E. J. B. G. 11/24/07
Date



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

Located at (Street) WESTCHESTER AVE Sec. 9 Block 9456 Lot 5A ^{N.Y. 10583}
 (Indicate nearest cross St.)

Municipality ROUND 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"

36" DEEP

36" DEEP

36" DEEP

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									

Notes: Perc test done by: BERRY G. NORDMAN, 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 BOULDER	↓
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. NADGERMAN, P.E. DATE OF DEEP TESTS 11/19/02
w/ ED O'BRIEN - WCHO

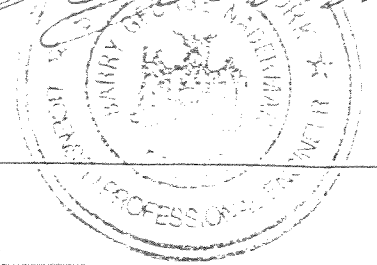
DESIGN
 Soil Rate Used 16-20 Min/1" Drop: S.D. Usable Area Provided 9,600 S.F.

No. of Bedrooms 6 Septic Tank Capacity 1,500 Gals. Masonry Metal
 (3-2 BORM UNITS) 48"x18" FLOW DIFFUSORS

Absorption Area Prov. by 320 L.F. x 24" width trench. Other 18"-24" ROB
WITHIN PRIMARY AREA, 1,500 GAL HOLDING TANK, PUMP CHAMBER w/
1/3 HP PUMP - PUMP DEPTH 314.8 IN.

Name BARRY G. NADGERMAN, P.E. Signature 

Address 3799 NELSON RD - BOX 7 SEAL
JEFFERSON VALLEY, N.Y. 10535



Westchester County Health Department

Soil Rate Approved _____ Sq.Ft./Gal. Checked by _____
 Date _____

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

Located at (Street) WESTCHESTER AVE Sec. 9 Block 9456 Lot 5A ^{N.Y. 10583}
 (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

36"
DEEP

HOLE #	CLOCK TIME		Elapse Time Min.	PERCOLATION		Soil Rate Min/In Drop		
	Run No.	Start		Stop	Depth to Water From Grd Surface Start Inches		Water Level Drop In Inches	
4	1	10:56	11:24	28	26	29 1/4	3 1/4	8.6
	2	11:25	11:52	27	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							

Notes: Perc test done by: BARRY G. NADLERMAN, 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

DEPTH	HOLE NO. <u>5</u>	HOLE NO. <u>6</u>	HOLE NO. <u>7</u>	EXPANSION RATE HOLE NO. <u>8</u>
G.L.	<u>LIGHT WOODS</u>	<u>LIGHT WOODS</u>	<u>LIGHT WOODS</u>	<u>LIGHT WOODS</u>
6"	<u>TOPSOIL</u>	<u>TOPSOIL</u>	<u>TOPSOIL</u>	<u>TOPSOIL</u>
12"	<u>SANDY LOAM SOMB SILTS</u>	<u>SANDY LOAM SOMB SILTS</u>	<u>SANDY LOAM SOMB SILTS</u>	<u>SANDY LOAM SOMB SILTS</u>
18"	↓	↓	↓	↓
24"	<u>SANDS/GRAVEL</u>	<u>SANDS/GRAVEL</u>	↓	<u>SANDS/GRAVELS</u>
30"	↓	↓	<u>MEDIUM SANDS GRAVELLY</u>	↓
36"	↓	<u>VERY ROCKY GRAVELLY</u>	↓	↓
42"	<u>VERY ROCKY</u>	↓	↓	↓
48"	<u>GRAVELLY</u>	↓	↓	↓
54"	↓	↓	↓	↓
60"	↓	↓	<u>VERY ROCKY</u>	↓
66"	↓	↓	↓	↓
72"	↓	↓	↓	↓
78"	↓	↓	↓	↓
84"	↓	↓	↓	↓

WAS GROUNDWATER ENCOUNTERED NO
INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED N/A
INDICATE LEVEL FOR WHICH WATER RISES AFTER BEING ENCOUNTERED
DEEPEST TESTS MADE BY BARRY G. NADERMAN, P.E. DATE OF DEEP TESTS 11/19/02
w/ ED O'BRIEN - WCHD

DESIGN
Soil Rate Used 16-20 Min/1" Drop: S.D. Usable Area Provided 9,600 S.F.

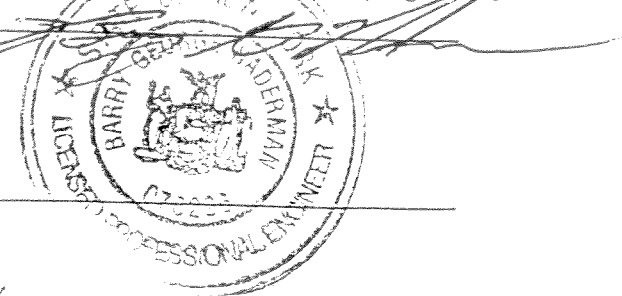
No. of Bedrooms 6 Septic Tank Capacity 1,500 Gals. Masonry X Metal
(3-2 BORM UNITS) 48" x 18" FLOW DIFFUSERS

Absorption Area Prov. by 320 L.F. x 24" width trench. Other 18"-24" POB
WITHIN PRIMARY AREA, 1,500 GAL HOLDING TANK, PUMP CHAMBER w/

Name BARRY G. NADERMAN, P.E. Signature [Signature] 1/3 HP PUMP - PUMP DESE 314 GPM.

Address 3719 NELSON RD - BOX 7 SEAL

JEFFERSON VILLEY, N.Y. 10535



Westchester County Health Department

Soil Rate Approved _____ Sq.Ft./Gal. Checked by _____
Date _____

9456-55 35 WESTCHESTER AVE

Separate Sewerage System Private Water Supply **99-35-10** **H1 403**
Municipality **TOWN OF ROUND RIDGE**

WCDH File No. **P.R. 73-12**

CERTIFICATE OF CONSTRUCTION COMPLIANCE

Located at **WESTCHESTER AVE** Section **9** Block **995B**

Owner **EMIL DOLENSER** Lot **P10 5** Job

Separate Sewerage System built by **SAP SEPTIC SYSTEMS INC.** Address **NEW ROCHELLE, N.Y.**

Consisting of **750** Gal. Masonry, ~~750~~ Septic Tank **4-5' Ø X 5' DEEP SEPTIC PITS** lineal feet X width trench

Other requirements **1 HP PUMP IN PUMP PIT, ALARM IN BUILDING CEILING**

Water Supply: Public Supply From Private Supply Drilled By **BORIS CHURYK** Address **STAMFORD, CONN.**

Building Type **RESIDENTIAL** Number of Bedrooms **FLOW 600 GPD** Date Permit Issued

Erosion Control Completed Waived

Other Requirements

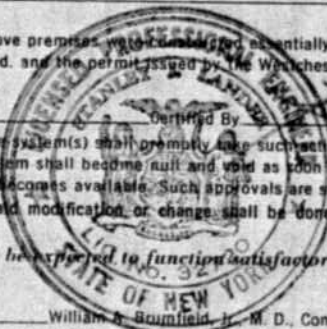
I certify that the system(s) as listed serving the above premises, with the exception of any modifications, are essentially as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans filed, and the permit issued by the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

Date **7-18-74** Certified By **Stanley Janda**

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. Bournefield, Jr. M. D., Commissioner By **Vincent H. Leone, Sr. Eng.**
Westchester County Department of Health



Westchester County Department of Health
Division of Environmental Sanitation

WELL COMPLETION REPORT

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 & REGULATIONS RELATING TO INDIVIDUAL WATER SUPPLIES"

LOCATION: MUNICIPALITY Pound Ridge NY SECTION 9 BLOCK 9456 PART OF LOT 5

WELL OWNER: Mr Emil Dolensek Westchester Ave Pound Ridge NY
Name Street Address City and Town

WELL DRILLER: Boris Churek 20 Corbo Terr Stamford Conn
Name Street Address City and Town

CASING DETAILS		YIELD TEST		WATER LEVEL		SCREEN DETAILS	
Length:	<u>33</u> Feet	<input type="checkbox"/> Bailed <input checked="" type="checkbox"/> Pumped	<u>6</u> Hours	Static:	<u>5</u> Feet	Make:	
Diameter:	<u>6</u> Inches	Yield:	<u>15</u> G.P.M. or Pumped	When Bailed or Pumped	<u>290</u> Feet	Length	Ft. Slot Size
Material:	<u>Heavy Duty Steel</u>					Diameter	In.
TOTAL DEPTH OF WELL		<u>290</u>		FEET			

WELL LOG

Depth From Ground Surface	Give description of formations 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.
<u>1 Ft. to 15 Ft.</u>	<u>clay & boulders</u>
<u>5 Ft. to 290 Ft.</u>	<u>granite</u>
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	

Date Well Was Completed June 3 1974 Date of Report
Well Driller Boris Churek

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
 Pitless Adapter - Casing Min. 12 inches above grade
 Other: Describe

Pump: Make Berkeley Type submersible Capacity 1/2 H.P. G.P.M. 10

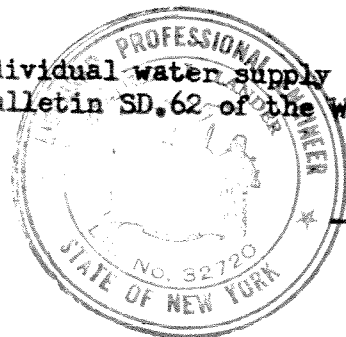
Storage Tank: Type gal. Capacity 82 Gal. (42 Gal. Min.)

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.

RECEIVED
AUG 15 1974
WEST. CO. DEPT.
OF HEALTH
MT. KISCO OFFICE

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.



Kenley Jordan

COUNTY OF WESTCHESTER DEPARTMENT OF HEALTH - Division of Environmental Sanitation

DESIGN DATA SHEET - SEPARATE SEWAGE SYSTEM

FILE NO. _____

Owner 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	CLOCK TIME		Elapse Time Min.	PERCOLATION		PERCOLATION	
	Start	Stop		Depth to Water From Ground Surface Start Inches	Water Level in Inches Stop Drop in Inches	Soil Rate Min/in.drop	
P ₁	1	9:50	20	4'-0"	4'-3 1/2"	3 1/2"	5.7
	2	10:11	21	4'-0"	4'-3 3/8"	3 3/8"	6.2
P ₂	1	10:00	12	4'-0"	4'-3 1/4"	3 1/4"	3.7
	2	10:13	13	4'-0"	4'-3 1/8"	3 1/8"	4.1
P ₃	1	10:03	19	4'-0"	4'-3"	3"	6.3
	2	10:23	20	4'-0"	4'-3"	3"	6.6

- 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. <u>P₁</u>	HOLE NO. <u>P₂</u>	HOLE NO. <u>P₃</u>	HOLE NO. <u>DEEP HOLE</u>
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 sq. ft.
 No. of Bedrooms FLOW 6006 PD Septic Tank Capacity 750 Gals. Masonry Metal
 Absorption Area Provided By L.F. x 2 1/2" 36" width trench. Other
4 - 5' 9" x 5' DEEP SEEPAGE PITS

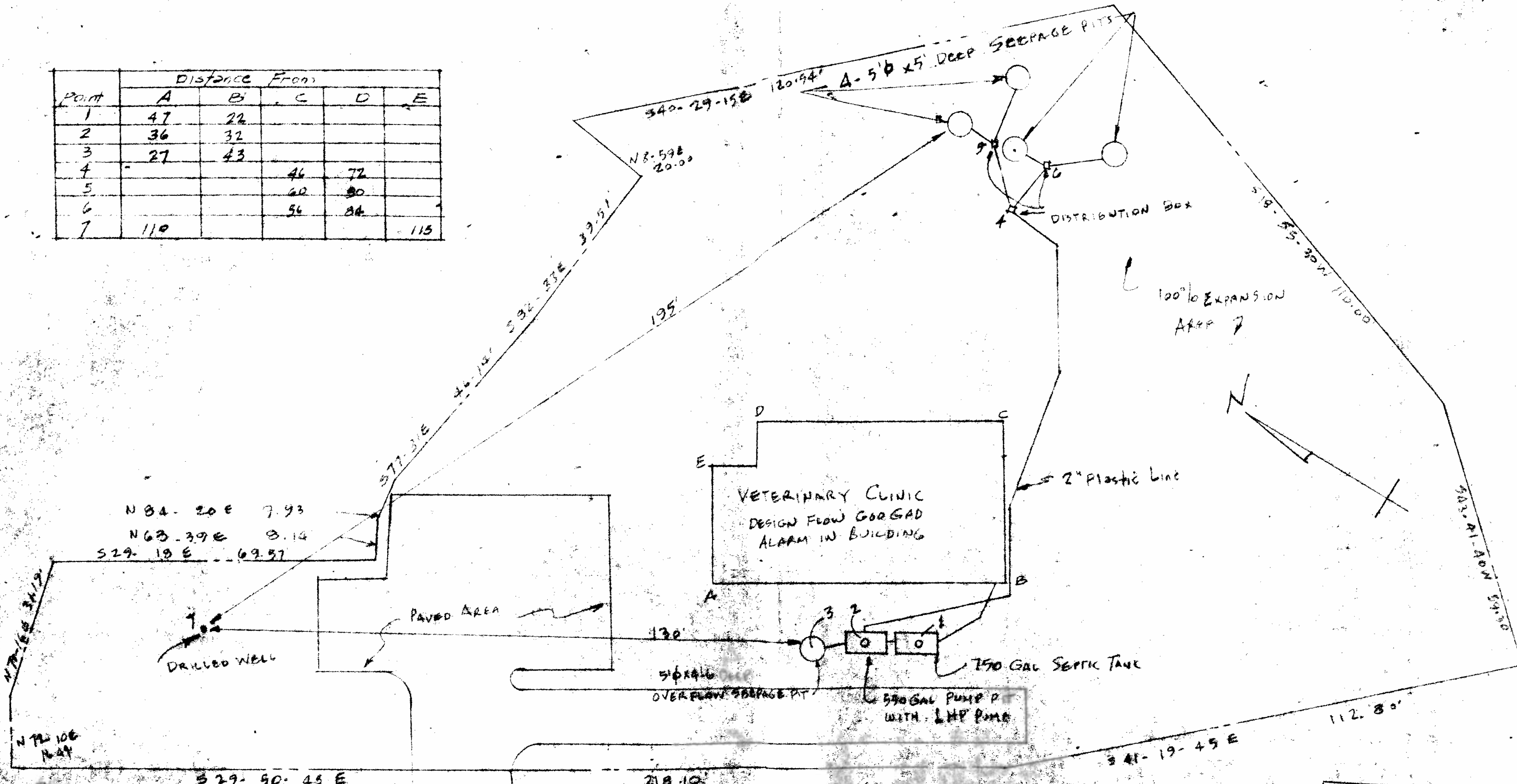
Name STANLEY J. LANDER Signature Stanley J. Lander
 Address BOX 267
AMAWALK, N. Y. 10501
245-2645



Westchester County Health Department
 Soil Rate Approved _____ Sq. Ft./Gal. Checked by _____ Date _____

RECEIVED

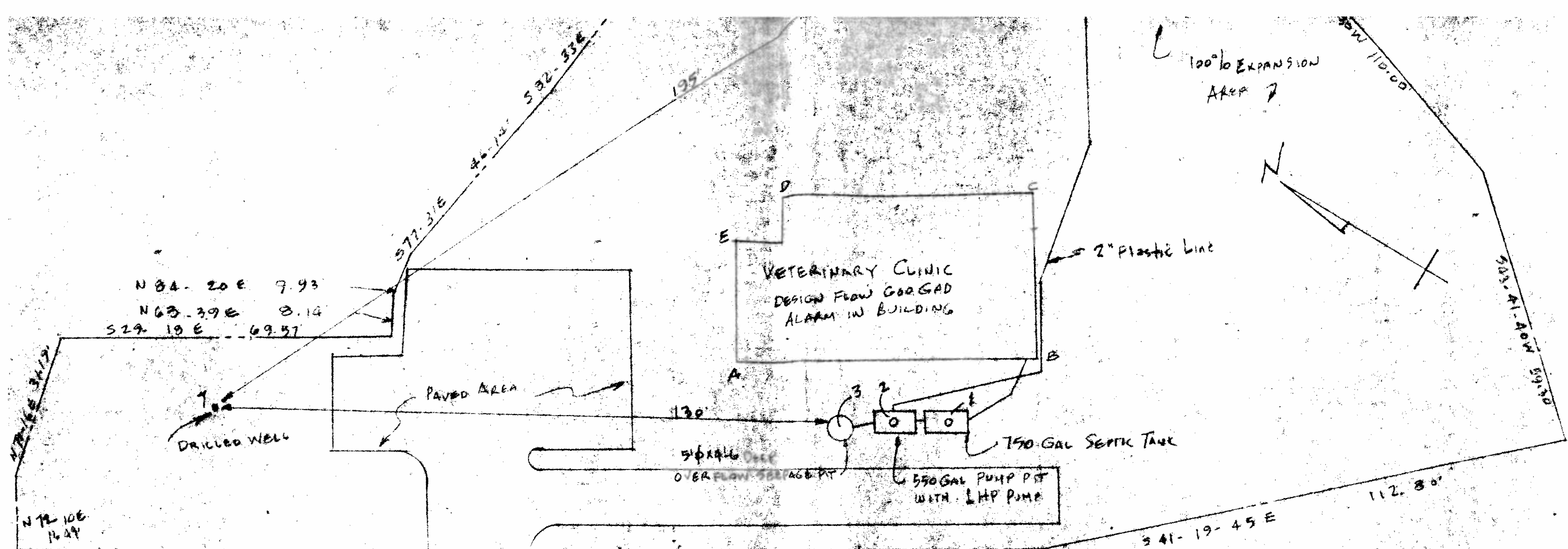
Point	Distance From				
	A	B	C	D	E
1	47	22			
2	36	32			
3	27	43			
4			46	72	
5			60	90	
6			56	84	
7	110				115



WESTCHESTER AVE

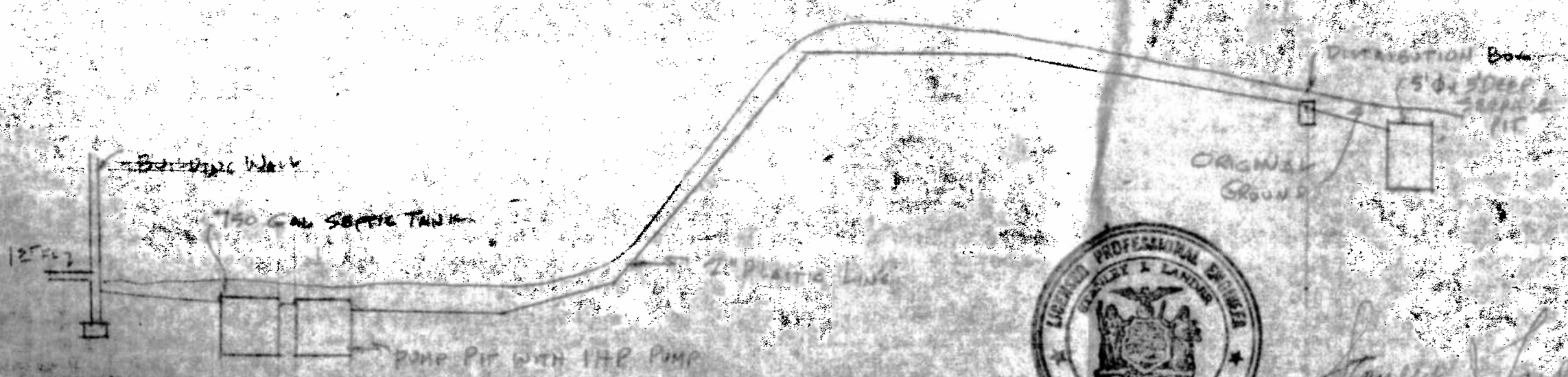
P L A N

ACCEPTED
AS FINAL PLANS
DATE Aug. 16, 1974
WEST CO. DEPT.
OF HEALTH
BY V.R. Jones



WESTCHESTER AVE
 PLAN
 SCALE 1" = 20'

ACCEPTED
 AS FINAL PLANS
 DATE Aug. 16, 1974
 WEST. CO. DEPT.
 OF HEALTH
 BY V.R. Leone



Stanley J. Lander
 Consulting Engineer
 Amherst, N.Y.

The lot shown hereon known as
 No. 5, Block 9456, Section 9 on
 Town Assessment Maps

AS BUILT DRAWING
 SEPTIC SYSTEM
 FOR
 EMIL DOLENSER
 WESTCHESTER AVENUE
 TOWN OF POUND RIDGE
 WESTCHESTER COUNTY, N.Y.
 JULY 18, 1974

9456-6 27 WESTCHESTER AVE

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: Colebridge Snyder, LLC

Owner Mailing Address (No. & Street) (if different): C/O Steven Weis 767 3rd Ave ^{Scheicnet + Davis}

Town/ Village: New York State: NY Zip: 10017 ^{24th Floor}

Property Use: Single Family Multi-Family Industrial Commercial

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

-
-
-
-
-
-
-
-
-
-
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-
-
-
-

-
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-
-
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-
-
-
-
-
-
-
-
-
-

- 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

N

Entire System Replaced

Contractor's Name (print): PAUL SKIADAS

Date Repair/Remediation Completed: 3/9/12

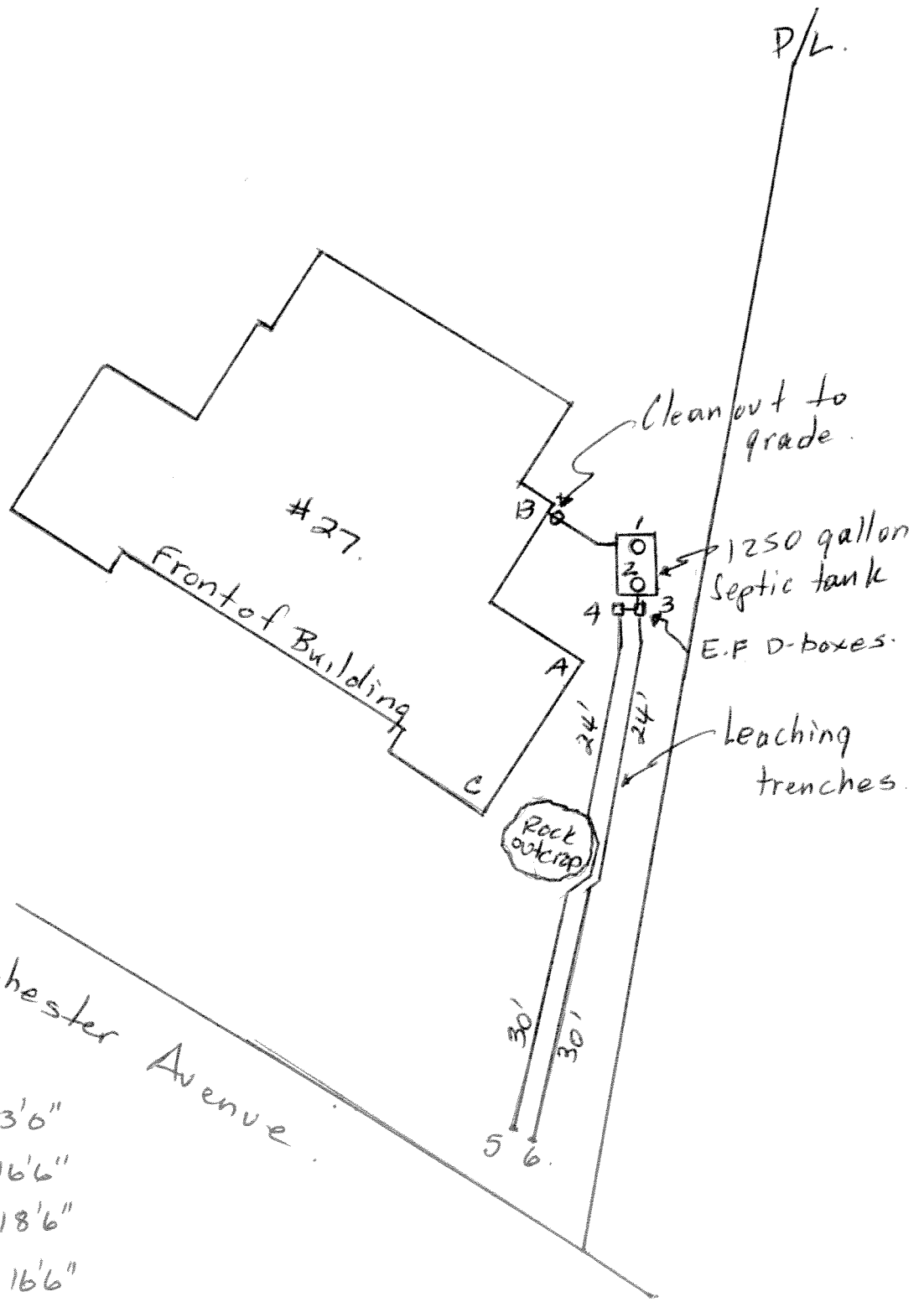
Contractor's Signature: Paul Skiadas

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

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 = 13'6"
 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 A-2-253
A

Poundridge

COUNTY

PET. NO.
ROUTE NO.

COUNTY NO.
SECTION NO.

PAGE

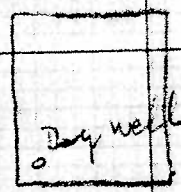
A2-253

J. Augustine McNally, Westchester Avenue

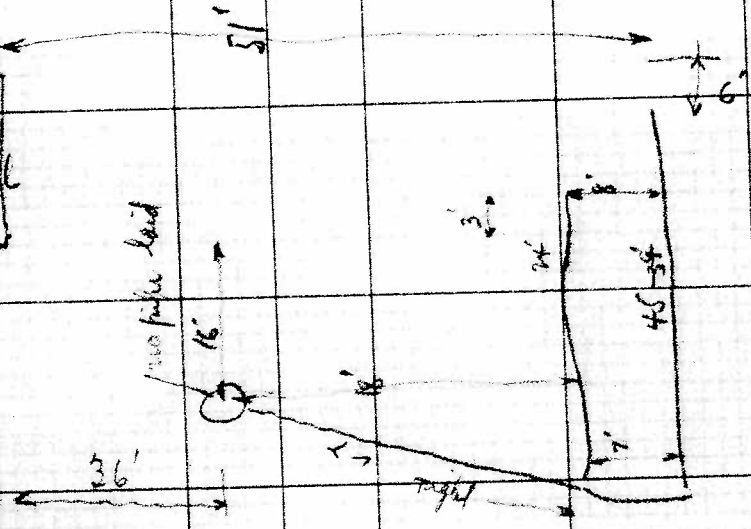
2-16-42 - J. Augustine McNally 300 gal. 80' x 24'

A

Westchester Ave → To Poundridge



300 gal
metal
tank



$\frac{24}{34} \times 21 \text{ wide} = 111 \text{ ft}$
 $\frac{24}{34} \times 21 \text{ wide} = 111 \text{ ft}$
 $\frac{24}{34} \times 21 \text{ wide} = 111 \text{ ft}$
 120 ft required
 3-6-42

$\frac{24}{69} \times 21 \text{ wide} = 120 \text{ ft}$
 3-26-42

County of Westchester

DEPARTMENT OF HEALTH
County Office Building
White Plains, N. Y.

GEORGE H. RAMSEY, M.D.
COMMISSIONER

W. A. HOLLA, M.D.
FIRST DEPUTY

E. H. MARSH, M.D.
A. D. LANGMUIR, M.D.
DEPUTIES

COUNTY BOARD OF HEALTH

EDWIN G. RAMSDELL, M.D., PRESIDENT
NELSON A. ROCKEFELLER, VICE-PRES.
CHARLES C. SWEET, M.D.
MISS RUTH TAYLOR
MISS JANE H. TODD
FREDERICK E. VAUGHAN, M.D.
RALPH A. MCCLELLAND
J. RUSSELL FOSHAY, M.D.

March 27, 1942

*Sewers
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

HMG:I
c/c Stamford Water Company

THE OWNER OR HIS AGENT MUST RECEIVE THIS NOTICE OF APPROVAL OR A COPY THEREOF.

42-253A

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 McVally, Box 244, New Canaan, Connecticut

for the construction or provision of a sewage disposal system consisting of a 300 gallon masonry septic tank and 80 linear feet of 24 inches wide absorption trench

SUBJECT TO SOIL TEST

to serve the bungalow of J. Augustine McVally, Westchester Avenue, Town of Poundridge, New York (maximum occupancy 4 persons)

subject to the following conditions: **NOTE: Well should be 100' distant minimum from septic tank and tile field**

- 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

EMO:I

Date: Copy to: Stanford 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 Powdredge
Permit _____
Inspected by _____

APPLICATION FOR SEWAGE DISPOSAL PERMIT

To the Commissioner of Health:

Date 7/11/12

Application is hereby made for a permit to construct a sewage system to serve one

residential building
Number, type and use of buildings to be served

concerning which the following information is submitted:

- Owner _____ Mail Address 150 241 7th St. N. Y.
Note: Owner must receive permit and approval. Check here if extra copies are requested.
 - Property location Monticello Ave. N. Y. Place Yonkers
(Street) (Village, Town, City)
 - Tax Map Location: Section _____ Block _____ Lot _____ Subdivision _____
 - Construction: New, Replacement. Proposed Future Building new construction
 - Lot area _____ No. of rooms 4 Bedrooms 1 Bathrooms 1
Extra Lavatories _____ Special Fixtures _____ Maximum Future Occupancy 3 or 4
 - Source of water supply well
Watershed on which system is located _____
Distance to nearest watercourse _____ Owner's wells _____ Adjacent wells _____
 - Daily Sewage Flow: No. of persons 4 x 75 gals. = 300 gals. per day
 - Settling treatment, Septic tank: liquid capacity 300 gal material Cement
inside dimensions: length 4 width 2 effective depth 4 diam. _____
Note: Liquid capacity of tank shall be not less than volume of waste per day, with a minimum of 300 gals.
 - 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.
 - Absorption area: _____ ÷ _____ = _____ sq. ft. bottom area.
gals. waste (No. 7) Absorption rate from table
 - Absorption treatment, Trenches: 14 inches wide; 50-80 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: Owner
(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.

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)											1/2
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)
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 Westchester 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	restaurant	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	restaurant	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.









