

Scotts Corners, Pound Ridge, NY Wastewater Management & Water Supply Engineering Plan

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NYS PE # 056900



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TABLE OF CONTENTS

EXECUTIVE SUMMARY	7
ENGINEERING REPORT CERTIFICATION	15
1. PROJECT OBJECTIVES & STUDY AREA CONDITIONS.....	16
1.1 Project Objectives	16
1.2 Study area - Census	16
1.2 Wastewater Flow Estimates	23
1.3 Water Use Data	23
1.4 Summary of Scotts Corner Business District Zoning Regulations	24
1.5 Agencies with Jurisdictions and Associated Regulations.....	31
1.6 Permitting Requirements	34
2. WASTEWATER MANAGEMENT OPTIONS.....	36
2.1 On-Site Technologies.....	36
2.2 Cluster/Small & Large Neighborhood Systems.....	36
3. EVALUATION OF ON-SITE & NEIGHBORHOOD OPTIONS.....	40
3.1 Methodology and Existing Data	40
3.2 On-Site Option.....	40
3.3 Cluster Option	40
4. CANDIDATE SITES FOR WASTEWATER TREATMENT / DISPOSAL	52
4.0 Overview	52
4.1 Town Park Site	58
4.2 Pine Drive – Lower Trinity Pass	66
4.3 Oceanus	74
4.4 Old Pound Road.....	87
4.5 Elementary School	92
4.6 Town Land adjacent to School.....	98
4.7 Clark Property	103
4.8 Barnegat Road Site	107
5. PRELIMINARY CANDIDATE SITES DISPOSAL CAPACITY ANALYSIS.....	115
Darcy’s Law Capacity Estimates Methodology	115
5.1 Town Park Ballfield Site	119
5.2 Old Pound Road Site.....	122
5.3 Lower Trinity Pass Road Site.....	124
5.4 Barnegat Road Site	126
5.5 Oceanus Site.....	128
6. SITE TESTING PLAN	130
6.1 Site Evaluation and Testing Overview	130
6.2 Pine Drive – Lower Trinity Road	133
6.3 169 Barnegat Road	140
6.4 Town Park	144
6.5 Old Pound Road.....	148
7. WASTEWATER SYSTEM – GROUNDWATER MODELING AND SITE SELECTION	152
8. WASTEWATER SYSTEM–PRELIMINARY ENGINEERING + OPINIONS ON COSTS.....	153
8.1 Preliminary Engineering	153
8.2 Project Capital Cost and Budget	154
8.3 Annual O&M Costs.....	154
8.4 Wastewater and Water Supply Implementation / Connection Issues	154
8.5 Energy Efficiency Considerations	161
8.6 Impact of Climate Change / Resiliency	161

8.7 Risk Considerations	161
9. WATER SYSTEM – PRELIMINARY ENGINEERING AND COST ESTIMATES.....	162
9.1 Preliminary Engineering	162
9.2 System Capital Cost.....	165
9.3 Annual O&M Costs.....	165
10. FINANCING, USER CHARGES, PUBLIC PARTICIPATION & IMPLEMENTATION PLAN	166
10.1 Legal & Financing.....	166
10.2 User Charges	166
10.3 Implementation Plan & Draft Schedule	167
10.4 Public Participation.....	167
REFERENCES	176
GLOSSARY	177
APPENDIX A POUND RIDGE WATER/WASTE WATER TASK FORCE, 2017, EXISTING CONDITIONS REPORT	179
APPENDIX B POUND RIDGE CANDIDATE SITES USDA NCRS SOILS DESCRIPTIONS ...	180
APPENDIX C SMART GROWTH ASSESSMENT & SEXUAL HARRASSMENT FORMS.....	195

List of Figures

Figure ES-1 Scotts Corner Location Map	7
Figure ES-2 Scotts Corner Study Area Aerial Photo with Candidate Wastewater Treatment & Disposal Sites	8
Figure ES-3 Scotts Corner Wastewater Treatment System Process Flow Diagram	9
Figure ES-4 Scotts Corner Wastewater + Water Supply Implementation Schedule.....	13
Figure 1-1 Scotts Corner Aerial Photograph with Business District Boundaries.....	17
Figure 1-2 Scotts Corner Parcel Map – with PID	18
Figure 1-2a Scotts Corner Parcel Map – with addresses.....	19
Figure 1-3 Streams and Water Bodies in Scotts Corner.....	20
Figure 1-4 Zoning Map PB-A District.....	27
Figure 1-5 Zoning Map PB-A, PB-B & PB-C Districts	28
Figure 1-6 NYSDEC Stream Classification in Pound Ridge.....	35
Figure 2-1 Overview of Neighborhood Wastewater Collection, Treatment, and Dispersal / Reuse Technologies	39
Figure 3-1 Available Area Map – Scotts Corner Study Area	41
Figure 3-2 Scotts Corner Study Area Existing Septic and Well Locations – Northeast	43
Figure 3-3 Scotts Corner Study Area Existing Septic and Well Locations – Center	44
Figure 3-4 Scotts Corner Study Area Existing Septic and Well Locations – Southwest	45
Figure 3-5 Scotts Corner Percolation Test and Test Pit Locations – Aerial Overlay	49
Figure 3-6 Scotts Corner Percolation Test and Test Pit Locations – Base Overlay	50
Figure 4.0-1a Candidate Sites – Location Map.....	54
Figure 4.0-1b Candidate Sites – Location Map with Watershed Boundaries	55
Figure 4.0-2 Available Area Map – Northern Sites	56
Figure 4.0-3 Available Area Map – Southern Sites.....	57
Figure 4.1-1 Town Park Soils Map	59
Figure 4.1-2 Town Park Soils Rating Map	60
Figure 4.1-3 Town Park Wetlands Map	62
Figure 4.1-4 Town Park Slopes Map	63
Figure 4.1-5 Town Park Test Boring Locations.....	65
Figure 4.2-1 Lower Trinity Pass Soils Map	67

Figure 4.2-2 Lower Trinity Pass Soil Ratings Map.....	68
Figure 4.2-3 Lower Trinity Pass Wetlands Map.....	69
Figure 4.2-4 Lower Trinity Pass Slopes + Contours Map.....	70
Figure 4.2-5 Lower Trinity Pass Floodplains Map.....	71
Figure 4.2-6 Lower Trinity Pass Test Pit Locations Map.....	73
Figure 4.3-1 Oceanus Soils Map.....	76
Figure 4.3-2 Oceanus Soil Ratings Map.....	77
Figure 4.3-3 Oceanus Site Wetlands + Buffer Zones Map.....	78
Figure 4.3-4 Oceanus Site Slopes + Contours Map.....	79
Figure 4.3-5 Oceanus Site Location Map 1.....	83
Figure 4.3-6 Oceanus Site Location Map 2.....	84
Figure 4.3-7 Oceanus Site Location Map 3.....	85
Figure 4.3-8 Oceanus Site Location Map 4.....	86
Figure 4.4-1 Old Pound Road Soils Map.....	88
Figure 4.4-2 Old Pound Road Soils Rating Map.....	89
Figure 4.4-3 Old Pound Road Wetlands Map.....	90
Figure 4.4-4 Old Pound Road Slopes Map.....	91
Figure 4.5-1 Elementary School Soils Map.....	93
Figure 4.5-2 Elementary School Soil Ratings Map.....	94
Figure 4.5-3 Elementary School Wetlands Map.....	95
Figure 4.5-4 Elementary School Slope + Contours Map.....	96
Figure 4.6-1 School Adjacent Land Soils Map.....	99
Figure 4.6-2 School Adjacent Land Soils Map.....	100
Figure 4.6-3 School Adjacent Land - Wetlands Map.....	101
Figure 4.6-4 School Adjacent Land - Slopes + Contours Map.....	102
Figure 4.7-1 Clark Properties Wetlands Map.....	104
Figure 4.7-2 Clark Properties Slopes & Contours Map.....	105
Figure 4.7-3 Clark Properties Floodplains Map.....	106
Figure 4.8-1 Barnegat Road Soils Map.....	108
Figure 4.8-2 Barnegat Road Soils Map.....	109
Figure 4.8-3 Barnegat Road Wetlands and Wetlands Buffer Map.....	110
Figure 4.8-4 Barnegat Road Slopes and Contours Map.....	111
Figure 4.8-5 Barnegat Road Test Pit Locations Map 2.....	114
Figure 5.0-1 Mounding Schematic.....	116
Figure 5.0-2 Simplified Darcy's Law Applied to Mounding Analysis.....	117
Figure 5.0-3 Simplified Darcy's Law Mounding Analysis-Example.....	118
Figure 5.1-1 Town Park Available Areas and Potential Disposal Zones.....	120
Figure 5.1-2 Example of Trench Layout – Town Park.....	121
Figure 5.2-1 Old Pound Road Site Available Area and Potential Disposal Zones.....	123
Figure 5.3-1 Lower Trinity Pass Road Site Available Area and Potential Disposal Zones.....	125
Figure 5.4-1 Barnegat Road Site Available Area and Potential Disposal Zones.....	127
Figure 5.5-1 Oceanus Site Available Area and Potential Disposal Zones.....	129
Figure 6-1-1 Candidate Sites, Subwatershed Locations and Creeks.....	132
Figure 6-2-1 Lower Trinity Pass, Test Pit Locations Map.....	134
Figure 6-2-2 Lower Trinity Pass, Area Watershed Map.....	135
Figure 6-2-3 Lower Trinity Pass, North Test Pits Cross-Section.....	137
Figure 6-2-4 Lower Trinity Pass, Center Test Pits Cross-Section.....	138
Figure 6-2-5 Lower Trinity Pass, South Test Pits Cross-Section.....	139
Figure 6-3-1 Barnegat Road, Test Pit Locations.....	141
Figure 6-3-2 Barnegat Road, Area Watershed Map.....	142
Figure 6-4-1 Town Park, Test Pit Locations.....	145

Figure 6-4-2 Town Park, Area Watershed Map	146
Figure 6-5-1 Old Pound Ridge, Test Pit Locations	149
Figure 6-5-2 Old Pound Road, Area Watershed Map	150
Figure 8-1 WWMS Process Flow Diagram	153
Figure 8-2 Scotts Corner Preliminary Sewer Layout Plan.....	155
Figure 8-3 Scotts Corner Pump Station Plan Views	156
Figure 8-4 Scotts Corner Preliminary Transmission Line Layout	157
Figure 8-5 Barnegat Road Preliminary Wastewater Treatment and Disposal Site Layout	158
Figure 8-6 80,000-gpd Wastewater Treatment System Preliminary Layout	159
Figure 9-1 Scotts Corner Preliminary Water System Layout.....	163
Figure 9-2 Scotts Corner Preliminary Water System Layout.....	164

List of Tables

Table ES-1 Darcy Law Estimates of Candidate Sites Disposal Capacity.....	9
Table ES-2 Wastewater & Water Supply Systems Capital Cost Estimates.....	10
Table ES-3 Wastewater & Water Supply Systems User Charge Estimates.....	11
Table 1-1 Scotts Corner Property Data & Wastewater Design Flow	21
Table 1-2 Scotts Corner 1992 Buildout Estimated Flows.....	23
Table 1-3 Annual Water Use Data for Scotts Corner	24
Table 1-4 PB-A, PB-B and PB-C Zoning Schedule of Use Regulations.....	29
Table 1-5 Westchester County DHS Minimum SSTS Separation	32
Table 1-6 WC DoH SSTS Required Absorption Trench Lengths.....	33
Table 1-7 NYS DEC WWTP Separation Requirements.....	33
Table 1-8 NYS DEC SSTS Minimum Horizontal Setbacks	34
Table 2-1 Typical Wastewater Treatment Technologies Used for Various Flow Rates	38
Table 3-1 Scotts Corner Available Area Summary	42
Table 3-2 Pound Ridge Task Force Records – Scotts Corner Percolation Test and Test Pit Summary	46
Table 3-3 Pound Ridge Task Force – Scotts Corner Test Pit Records 1	47
Table 3-4 Pound Ridge Task Force – Scotts Corner Test Pit Records 2	48
Table 4.0-1 Candidate Properties for Scotts Corner Wastewater Treatment / Disposal.....	52
Table 4.0-2 Candidate Sites Existing Information Summary.....	53
Table 4.1-1 Town Park Perc Test & Depth to Bedrock / GW Data.....	58
Table 4.1-2 Town Park Test Pit Records.....	64
Table 4.2-1 Lower Trinity Pass Test Pit & Depth to Bedrock / GW Data.....	66
Table 4.2-2 Lower Trinity Pass Test Pit Records.....	72
Table 4.3-1 Oceanus Site Percolation Test and Test Pit Summary	75
Table 4.3-2 Oceanus Site Test Pit Summary 1.....	80
Table 4.3-3 Oceanus Site Test Pit Summary 2.....	81
Table 4.3-4 Oceanus Site Test Pit Summary 3.....	82
Table 4.5-1 Pound Ridge Elementary School Percolation Test and Test Pit Summary	92
Table 4.5-2 Pound Ridge Elementary School Test Pit Records.....	97
Table 4.8-1 Barnegat Road Test Pit Summary	107
Table 4.8-2 Barnegat Road Test Pit Summary 1	112
Table 4.8-3 Barnegat Road Test Pit Summary 2.....	113
Table 5.0-1 Candidate Sites Preliminary Darcy’s Law Capacity Estimates.....	116
Table 5.1-1 Darcy’s Law Disposal Capacity Estimates – Town Park	119
Table 5.2-1 Disposal Capacity Estimates – Old Pound Road	122
Table 5.3-1 Disposal Capacity Estimates –Lower Trinity Pass Road Site.....	124
Table 5.4-1 Disposal Capacity Estimates – Barnegat Road Site	126

Table 5.5-1 Disposal Capacity Estimates – Oceanus Site	128
Table 6-2-1 Lower Trinity Pass, Test Pit Locations and Form for Field Data	136
Table 6-3-1 Barnegat Road, Test Pit Locations and Form for Field Data.....	143
Table 6-4-1 Town Park, Test Pit Locations and Form for Field Data	147
Table 6-5-1 Old Pound Road, Test Pit Locations and Form for Field Data	151
Table 8-2 Scotts Corner Wastewater System Opinion of Probable O&M Revenue	154
Table 8-1 Scotts Corner Wastewater System Opinion of Probable Cost	160
Table 9-1 Scotts Corner Water System Opinion of Probable Capital Cost.....	165
Table 9-2 Scotts Corner Water Supply System Opinion of Probable Annual O&M Cost.....	165
Table 10-1 Property Wastewater System Capital Costs & User Charges By Address.....	168
Table 10-2 Wastewater System Estimated User Charges by Use	170
Table 10-3 Property Water System Capital Costs and User Charges – By Address.....	171
Table 10-4 Wastewater & Water Supply Systems User Charge Estimates.....	173
Table 10-5 Draft - Implementation Schedule	175

EXECUTIVE SUMMARY

This Engineering Plan has been prepared for Wastewater Management and Water Supply Systems for Scotts Corner, Pound Ridge, New York to address the needs for the Scotts Corner three (3) Planned Business Districts, which consists of 41 parcels. Figure ES-1 presents a Scotts Corner Location Map, with Figure ES-2 illustrating the Scotts Corner area and candidate wastewater treatment and disposal sites. The Scotts Corner wastewater and water supply difficulties/challenges have been documented by numerous engineering studies since 1992 and were summarized by the Scotts Corner Water / Wastewater Task Force, whose report is attached as Appendix A.

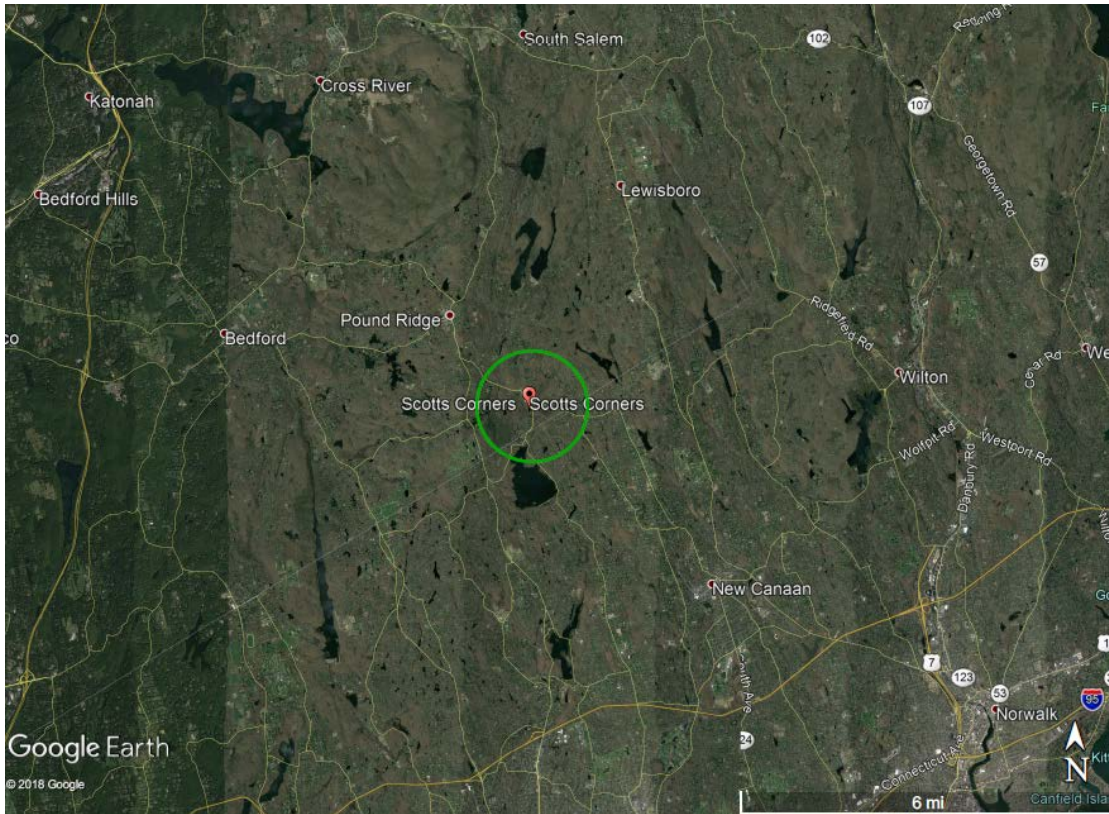


Figure ES-1 Scotts Corner Location Map

This Engineering Plan reviewed the previous studies and performed its own independent analysis and concluded that due to the small lot sizes and shallow depth to rock/groundwater, on-site solutions are not viable and off-site wastewater solutions are required. Small cluster solutions were examined and it was determined that insufficient land exists for small cluster solutions. Consequently, a Scotts Corner study area wide wastewater system is required.

Due to shallow depth to rock/groundwater in the study area, the septic tank – effluent collection system was selected due to its lower cost and overall wastewater system simplicity. As the project location is in a NYSDEC designated AA-S watershed, which is a source of potable water supply, wastewater disposal must be via subsurface disposal. Eight (8) candidate sites for a Scotts Corner wastewater treatment and disposal facility were identified and evaluated based upon existing information. The following four sites were identified as being the most technically promising and cost-effective for a Scotts Corner wastewater treatment and disposal facility.

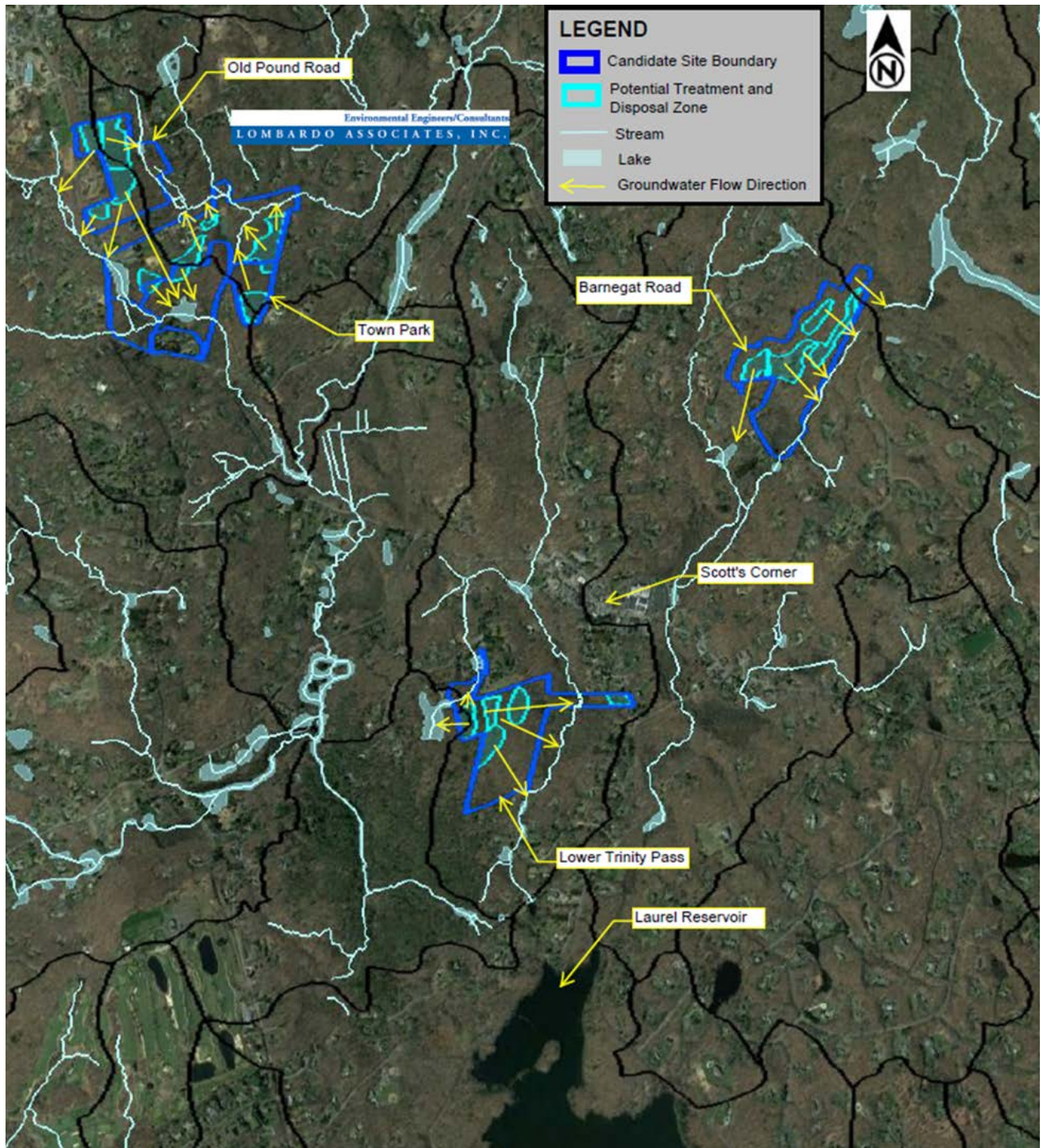


Figure ES-2 Scotts Corner Study Area Aerial Photo with Candidate Wastewater Treatment & Disposal Sites

- ✓ Pine Drive – Lower Trinity Road
- ✓ Town Park
- ✓ Old Pound Road
- ✓ 169 Barnegat Road

As an order of magnitude estimate of the disposal capacity of each site, Darcy's law estimates were prepared and are presented on Table ES-1. For a variety of technical hydrogeologic reasons and data limitations, Darcy's Law estimates are insufficient for determining the disposal capacity of a site. Groundwater modeling, which is beyond the scope of this Report, needs to be performed to finalize a site's disposal capacity.

Candidate Disposal Sites Summary		
Site #	Site Name	Flow - Darcy's (GPD)
1	Town Park	69,031
2	Old Pound Ridge Rd	42,897
3	Lower Trinity Pass	55,976
4	Barnegat Rd	18,007
5	Oceanus	29,428

Table ES-1 Darcy Law Estimates of Candidate Sites Disposal Capacity

Test pits and soil testing at the Barnegat and Lower Pound Ridge sites is scheduled to be completed in July 2019. Due to the relatively shallow soil mantle, groundwater modeling of disposal at the preferred site(s) is necessary to determine the site's capacity for final site selection.

Due to the environmentally sensitive potable water supply watershed in which the candidate sites are located and Class AA-S watersheds that the Study Area is within, a tertiary wastewater treatment system with disinfection is proposed. The treatment and disposal/reuse system's process flow diagram is shown on Figure ES-3.

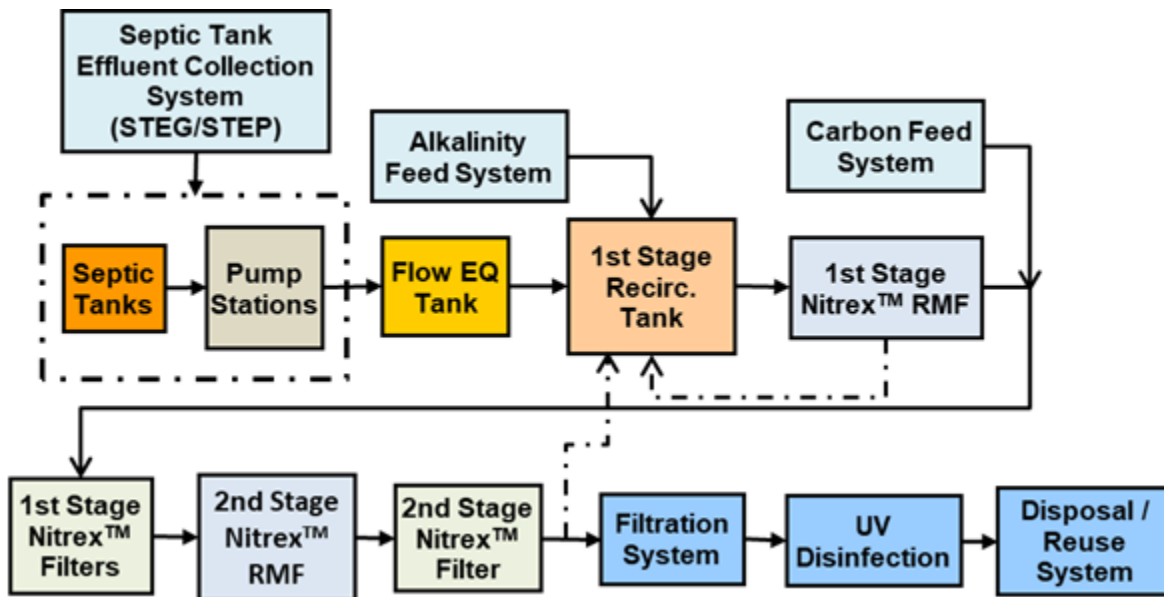


Figure ES-3 Scotts Corner Wastewater Treatment System Process Flow Diagram

The treatment process has been selected due to its demonstrated ability to reliably achieve Tertiary Treatment with Disinfection with low Operations and Maintenance (O&M) requirements. Wastewater treatment effluent quality requirements are proposed as follows:

pH	6.5 – 8.5
BOD/TSS	< 10 mg/L
Oil & Grease	< 15 mg/L
Total Nitrogen (TN)	< 10 mg/L
Fecal Coliform	Average < 24 & Maximum < 200 MPN / 100 ml
Enterococcus	Average < 24 & Maximum < 104 MPN / 100 ml

The treatment process has been approved in Suffolk County NY since 2011, has been permitted and was operational in Malibu CA for 10 years, and was approved by the CA Department of Public Health to achieve CA Title 22 Standards for Unrestricted Water Reuse for Non-Potable purposes.

WATER SUPPLY

The Scotts Corner water supply options are:

- ✓ Connection to Aquarion Water Company water supply system – which has a Water Tank at the Pound Ridge Golf Course, and is the only location from which Aquarion can supply Scotts Corner.
- ✓ Scotts Corner Water Supply Treatment System – According to the December 21, 1973 Agreement, Section 13) between the Town and Stamford Water Company (now Aquarion), the Town has “the right, privilege and priority to draw water from the Siscowit Reservoir.....For that limited purpose the Town shall be deemed to have a perpetual easement over the Water Company property to locate pump house, pipes and other equipment...”

Pending negotiations between Aquarion and the Town of Pound Ridge to tap into the Aquarion water supply system at / near the Water Tank, the proposed water supply system would be fed from the Aquarion water tank, then north along High Ridge Road to Upper Shad Road east to Westchester Avenue and then south to end at 21 Westchester Avenue. Table ES-2 presents water supply and wastewater system capital cost estimates.

Table ES-2 Wastewater & Water Supply Systems Capital Cost Estimates

Scotts Corner Water Supply & Wastewater System Capital Costs	
Wastewater Treatment & Disposal System w/o Interceptor & site costs	\$16,476,000
Interceptor & Site Costs	\$2,068,750
Water Supply System	\$9,251,000
Contingency	\$4,000,000
Total Capital Cost	\$31,795,750

Table ES-3 presents projected user charges assuming various levels of funding and amortization of the local share for 30 years at 4%.

Legal / Financing

It is proposed that Water Supply and Wastewater Districts (individually or combined) would be established by the Town for the Study Area under Town Law Article 12. The Districts are proposed to be Enterprise Funds in which the users pay all costs and the District is a separate legal and financial entity. At this time the District does not exist and no financials exist.

Table ES-3 Wastewater & Water Supply Systems User Charge Estimates

Parcel #	Property Address	Tenant	Use	Final WW Design Flow (gpd)	Final Water Design Flow (gpd)	# of EDU's	Flow Based Annual O&M Cost	Total Capital Cost				Flow-Based Annual User Charge			
								No Grant	25% Grant	50% Grant	75% Grant	No Grants	25% Grant	50% Grant	75% Grant
9454-36	89 Westchester Ave	PR Ambulance Corps	community facility	130	65	0.43	\$734	\$66,496	\$49,872	\$33,248	\$16,624	\$4,580	\$3,620	\$2,660	\$1,690
9454-5	87 Westchester Ave	Avant Garden	retail	144	72	0.48	\$818	\$74,089	\$55,567	\$37,045	\$18,522	\$5,100	\$4,030	\$2,960	\$1,890
9454-6	85 Westchester Ave	North Star	restaurant	1750	875	5.83	\$9,917	\$897,898	\$673,423	\$448,949	\$224,474	\$61,840	\$48,870	\$35,880	\$22,890
9454-6	85 Westchester Ave	North Star	office	136	68	0.45	\$771	\$69,793	\$52,345	\$34,896	\$17,448	\$4,810	\$3,800	\$2,790	\$1,780
9454-7	83 Westchester Ave	Albano Appliance	retail	614	307	2.05	\$3,478	\$314,925	\$236,193	\$157,462	\$78,731	\$21,690	\$17,140	\$12,580	\$8,040
9454-7	83A, & B Westchester Ave	Above Albano Appliance	apartments	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9454-7	83C&D Westchester Ave	Albano Appliance	office	229	115	0.76	\$1,298	\$117,509	\$88,132	\$58,755	\$29,377	\$8,090	\$6,400	\$4,690	\$2,990
9454-8	79 Westchester Ave	Dynax	office	187	94	0.62	\$1,061	\$96,049	\$72,037	\$48,025	\$24,012	\$6,610	\$5,230	\$3,840	\$2,450
9454-9	77 Westchester Ave	Vacant	Vacant	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-9	77A Westchester Ave	Vacant	Vacant	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-35	NA	Parking	Parking	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-10	73 Westchester Ave	Healthy Home Foods	Retail / Food Prep	420	210	1.40	\$2,380	\$215,495	\$161,622	\$107,748	\$53,874	\$14,840	\$11,730	\$8,610	\$5,490
9454-10	73 Westchester Ave	Pound Ridge Dentistry	Medical Office	250	125	0.83	\$1,417	\$128,271	\$96,203	\$64,136	\$32,068	\$8,830	\$6,980	\$5,120	\$3,270
9454-11	71 Westchester Ave	Kitchen Table	restaurant	875	438	2.92	\$4,958	\$448,949	\$336,712	\$224,474	\$112,237	\$30,920	\$24,430	\$17,930	\$11,450
9454-11	71 Westchester Ave	Wine Store	retail	194	97	0.65	\$1,099	\$99,487	\$74,615	\$49,744	\$24,872	\$6,860	\$5,410	\$3,980	\$2,530
9454-11	69 Westchester Ave	La Familia	restaurant	1400	700	4.67	\$7,933	\$718,318	\$538,739	\$359,159	\$179,580	\$49,470	\$39,090	\$28,710	\$18,320
9454-11	69 Westchester Ave	Martin House	Office	307	154	1.02	\$1,740	\$157,581	\$118,186	\$78,791	\$39,395	\$10,850	\$8,570	\$6,300	\$4,010
9454-12	69 Westchester Ave	Summit Company	Office	307	154	1.02	\$1,740	\$157,581	\$118,186	\$78,791	\$39,395	\$10,850	\$8,570	\$6,300	\$4,010
9454-13	67 Westchester Ave	Above Retail	apartments	220	110	0.73	\$1,247	\$112,879	\$84,659	\$56,439	\$28,220	\$7,770	\$6,150	\$4,510	\$2,880
9454-13	67 Westchester Ave	The Cottage / Booksy	retail	282	141	0.94	\$1,596	\$144,485	\$108,363	\$72,242	\$36,121	\$9,950	\$7,860	\$5,770	\$3,690
9454-14	4 Trinity Pass Rd.	Vacant	Vacant	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-15	65A,B Westchester Ave	Kahlo	retail	117	59	0.39	\$665	\$60,210	\$45,158	\$30,105	\$15,053	\$4,150	\$3,280	\$2,400	\$1,540
9454-15	65A,B Westchester Ave	Above Kahlo	apartments	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9320-56	Westchester Ave	Parking	parking w/2 shed	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9320-58	80 Westchester Ave	Fire Department	community facility	708	354	2.36	\$4,010	\$363,059	\$272,294	\$181,529	\$90,765	\$25,010	\$19,750	\$14,510	\$9,260
9320-59	78 Westchester Ave	123 Dough	Food Prep	223	112	0.74	\$1,266	\$114,636	\$85,977	\$57,318	\$28,659	\$7,900	\$6,230	\$4,580	\$2,930
9320-59	78 Westchester Ave	123 Dough	Employees	60	30	0.20	\$340	\$30,785	\$23,089	\$15,393	\$7,696	\$2,120	\$1,670	\$1,230	\$780
9320-59	78 Westchester Ave	Miller's Landscape	office	74	37	0.25	\$422	\$38,212	\$28,659	\$19,106	\$9,553	\$2,630	\$2,070	\$1,530	\$980
9320-60	76 Westchester Ave	Dinardos	restaurant	2100	1,050	7.00	\$11,900	\$1,077,477	\$808,108	\$538,739	\$269,369	\$74,210	\$58,630	\$43,050	\$27,480
9320-60	76 Westchester Ave	Vacant	Vacant	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9320-60	76 Westchester Ave	above Dinardos	apartments	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9320-61	74 Westchester Ave	Blind Charlies	restaurant	1750	875	5.83	\$9,917	\$897,898	\$673,423	\$448,949	\$224,474	\$61,840	\$48,870	\$35,880	\$22,890
9320-61	74 Westchester Ave	Jacob Allen	Spa	200	100	0.67	\$1,133	\$102,617	\$76,963	\$51,308	\$25,654	\$7,060	\$5,580	\$4,110	\$2,620
9320-61	74 Westchester Ave	O'Donnell	Retail	199	100	0.66	\$1,129	\$102,232	\$76,674	\$51,116	\$25,558	\$7,040	\$5,560	\$4,080	\$2,610
9320-61	74 A, B, C, & D Westchester Ave	above Blind Charlies	apartments	660	330	2.20	\$3,740	\$338,636	\$253,977	\$169,318	\$84,659	\$23,320	\$18,430	\$13,530	\$8,630
9320-62	72 Westchester Ave	PR Dry Cleaners	retail	238	119	0.79	\$1,346	\$121,858	\$91,393	\$60,929	\$30,464	\$8,390	\$6,630	\$4,870	\$3,110
9320-62	72 Westchester Ave	Plum Plum's	Food Prep	119	59	0.40	\$673	\$60,929	\$45,697	\$30,464	\$15,232	\$4,200	\$3,310	\$2,430	\$1,550
9320-62	72 Westchester Ave	Plum Plum's	Employees	60	30	0.20	\$340	\$30,785	\$23,089	\$15,393	\$7,696	\$2,120	\$1,670	\$1,230	\$780
9320-62	72 Westchester Ave	Nephawa	retail	119	59	0.40	\$673	\$60,929	\$45,697	\$30,464	\$15,232	\$4,200	\$3,310	\$2,430	\$1,550
9320-62	72 A & B Westchester Ave	above PR Dry Cleaners	apartment	220	110	0.73	\$1,247	\$112,879	\$84,659	\$56,439	\$28,220	\$7,770	\$6,150	\$4,510	\$2,880
9320-63	70 Westchester Ave	above retail	apartments	220	110	0.73	\$1,247	\$112,879	\$84,659	\$56,439	\$28,220	\$7,770	\$6,150	\$4,510	\$2,880
9320-63	70 Westchester Ave	Barber	Barber	250	125	0.83	\$1,417	\$128,271	\$96,203	\$64,136	\$32,068	\$8,830	\$6,980	\$5,120	\$3,270
9320-63	70 Westchester Ave	P. Queens, Avalon Ins, Hedg., PR Home	retail / Office	103	51	0.34	\$583	\$52,827	\$39,620	\$26,414	\$13,207	\$3,640	\$2,880	\$2,110	\$1,340

Table ES-3, Continued

Parcel #	Property Address	Tenant	Use	Final WW Design Flow (gpd)	Final Water Design Flow (gpd)	# of EDU's	Flow Based Annual O&M Cost	Total Capital Cost				Flow-Based Annual User Charge			
								No Grant	25% Grant	50% Grant	75% Grant	No Grants	25% Grant	50% Grant	75% Grant
9320-64	68 Westchester Ave	Chubby's	retail	346	173	1.15	\$1,962	\$177,604	\$133,203	\$88,802	\$44,401	\$12,240	\$9,670	\$7,100	\$4,530
9320-64	68 A,B,C,&D Westchester Ave	above Chubby's	apartments	660	330	2.20	\$3,740	\$338,636	\$253,977	\$169,318	\$84,659	\$23,320	\$18,430	\$13,530	\$8,630
9320-65	66 Westchester Ave	gas station	auto repair	800	400	2.67	\$4,533	\$410,468	\$307,851	\$205,234	\$102,617	\$28,270	\$22,340	\$16,400	\$10,460
9455-18.9	26 Lower Trinity Pass	Joiuim Felice	Home	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9455-20	32 Westchester Ave	Wine Connection	retail	444	222	1.48	\$2,517	\$227,861	\$170,896	\$113,930	\$56,965	\$15,700	\$12,400	\$9,100	\$5,810
9455-20	32 Westchester Ave	Above Wine Connection	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9455-21	34 Westchester Ave	above Antique	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9455-21	34 Westchester Ave	Antique	retail	196	98	0.65	\$1,113	\$100,795	\$75,597	\$50,398	\$25,199	\$6,940	\$5,480	\$4,020	\$2,580
9455-27	38 Westchester Ave	Future Value Assoc	office	176	88	0.59	\$997	\$90,303	\$67,727	\$45,151	\$22,576	\$6,220	\$4,910	\$3,610	\$2,300
9455-28	40, 40A Westchester Ave	Wittus	retail	270	135	0.90	\$1,530	\$138,533	\$103,900	\$69,266	\$34,633	\$9,540	\$7,540	\$5,540	\$3,540
9455-28	40, 40A Westchester Ave	Helen Famulare Spa	Spa	400	200	1.33	\$2,267	\$205,234	\$153,925	\$102,617	\$51,308	\$14,140	\$11,170	\$8,200	\$5,230
9455-28	40, 40A Westchester Ave	Private	apartment	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9455-26	46 Westchester Ave	Roeco	office	184	92	0.61	\$1,041	\$94,252	\$70,689	\$47,126	\$23,563	\$6,490	\$5,130	\$3,760	\$2,410
9455-25	54 Westchester Ave	Asia Hamachi	restaurant	875	438	2.92	\$4,958	\$448,949	\$336,712	\$224,474	\$112,237	\$30,920	\$24,430	\$17,930	\$11,450
9455-25	54 Westchester Ave	Dragon Martial Arts	Health Club	300	150	1.00	\$1,700	\$153,925	\$115,444	\$76,963	\$38,481	\$10,610	\$8,370	\$6,150	\$3,920
9455-25	54 Westchester Ave	Curry & Hovis	retail	120	60	0.40	\$680	\$61,570	\$46,178	\$30,785	\$15,393	\$4,240	\$3,350	\$2,460	\$1,570
9455-25	54 Westchester Ave	above Curry & Hovis	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9455-24	56, 60 Westchester Ave	above retail	apartments	770	385	2.57	\$4,363	\$395,075	\$296,306	\$197,537	\$98,769	\$27,210	\$21,500	\$15,790	\$10,080
9455-24	56, 60 Westchester Ave	Key Bank, Toy Store	retail / Office	779	390	2.60	\$4,415	\$399,744	\$299,808	\$199,872	\$99,936	\$27,530	\$21,760	\$15,970	\$10,190
9456-4	39 Westchester Ave	private	residential	660	330	2.20	\$3,740	\$338,636	\$253,977	\$169,318	\$84,659	\$23,320	\$18,430	\$13,530	\$8,630
9456-1.9	55, 57 Westchester Ave	Market, post office, 5 Retail Stores, Office	retail / office	5414	2,707	18.05	\$30,679	\$2,777,787	\$2,083,341	\$1,388,894	\$694,447	\$191,310	\$151,160	\$111,000	\$70,840
9455-10	22, 24 Westchester Ave	PR Organics	Retail	478	239	1.59	\$2,709	\$245,306	\$183,979	\$122,653	\$61,326	\$16,890	\$13,350	\$9,800	\$6,250
9455-13	26 Westchester Ave	Above Educators Alley	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9455-13	26 Westchester Ave	Qualities	retail	55	27	0.18	\$311	\$28,181	\$21,136	\$14,091	\$7,045	\$1,940	\$1,530	\$1,130	\$720
9455-13	26 Westchester Ave	Educators Alley	office	110	55	0.37	\$622	\$56,362	\$42,272	\$28,181	\$14,091	\$3,890	\$3,060	\$2,250	\$1,430
9455-14	30 Westchester Ave	private	residential	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9456-8	21 Westchester Ave	private	residential	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9456-7	23,23A,B Westchester Ave	Kende & London Joiner	retail	306	153	1.02	\$1,735	\$157,106	\$117,830	\$78,553	\$39,277	\$10,830	\$8,550	\$6,280	\$4,010
9456-6	27 Westchester Ave	above Lion Heart	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9456-6	27 Westchester Ave	Di Biase Filkoff Architects	Office	152	76	0.51	\$860	\$77,886	\$58,415	\$38,943	\$19,472	\$5,370	\$4,240	\$3,110	\$1,980
9456-5	29 Westchester Ave	A Home	residential	1760	880	5.87	\$9,973	\$903,029	\$677,271	\$451,514	\$225,757	\$62,200	\$49,140	\$36,080	\$23,030
9456-55	35 Westchester Ave	PR Vet Center	retail	214	107	0.71	\$1,215	\$110,045	\$82,534	\$55,023	\$27,511	\$7,580	\$5,980	\$4,390	\$2,810
	IN-FILL			6365	3,183	21.22	\$36,071	\$3,265,989	\$2,449,492	\$1,632,994	\$816,497	\$224,940	\$177,720	\$130,510	\$83,290
	PM&G		CURRY & HOVIS	20000	10,000	66.67	\$113,333	\$10,261,688	\$7,696,266	\$5,130,844	\$2,565,422	\$706,760	\$558,410	\$410,050	\$261,690
	SCOTT'S CORNER MARKET		Market & Post Office	20000	10,000	66.67	\$113,333	\$10,261,688	\$7,696,266	\$5,130,844	\$2,565,422	\$706,760	\$558,410	\$410,050	\$261,690
				80,000	40,000	267	\$453,333	\$41,046,750	\$30,785,063	\$20,523,375	\$10,261,688	\$2,827,060	\$2,233,590	\$1,640,160	\$1,046,670

Implementation Schedule

Figure ES-4 presents the project's proposed Implementation Schedule.

Tentative Schedule for Scott's Corner Near Term System Activities										DRAFT AS OF May 16, 2019	
Activity		Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19			
1	Site Testing/Modeling	█	█	█	█						
2	Aquarion Agreement				█	█	█				
3	Site Selection				█	█					
4	District Formation			█	█	█	█	█	█		

Tentative Schedule for Scott's Corner Long Term System Activities												DRAFT AS OF May 16, 2019									
Activity		2020				2021				2022				2023				2024			
5	Design & Permitting	█	█	█	█	█	█	█	█	█	█										
6	Bid Period											█	█	█	█						
7	Construction																				
8	Start-Up																				

Figure ES-4 Scotts Corner Wastewater + Water Supply Implementation Schedule

Acknowledgements

The valuable support of the Town Board, its staff and Water-Wastewater Task Force members is greatly appreciated.

Town Board

Kevin Hansan, Supervisor
Daniel S. Paschkes
Jody Sullivan
David Dow
Diane Briggs

Pound Ridge Water-Wastewater Task Force

Ellen Ivens, Co-chair
Alison Boak, Deputy Supervisor & Co-chair
Jim Perry
Jim Best
Stacy French
David Dow
Peter Marchetti
Paul Sears
Peter Vogel
Mark Mosolino
Tom Smith
Kevin Hansan , Supervisor
Sherene DePalma

ENGINEERING REPORT CERTIFICATION

During the preparation of this Engineering Report, I have studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is being sought from the New York State Clean Water State Revolving Fund. In my professional opinion, I have recommended for selection, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account the cost of constructing the project or activity, the cost of operating and maintaining the project or activity over the life of the project or activity, and the cost of replacing the project and activity.

This Engineering Report has been prepared in accordance with the NYSDEC New York State Design Standards for Intermediate Sized Wastewater Treatment Systems dated March 5, 2014 https://www.dec.ny.gov/docs/water_pdf/2014designstd.pdf

Title of Engineering Report: **Scotts Corner, Pound Ridge, NY Wastewater and Water Supply Engineering Report**
Date of Report: **June 25, 2019**
Professional Engineer's Name: **Pio S. Lombardo, P.E., NYS PE # 056900**

Signature:



Date: June 25, 2019



1. PROJECT OBJECTIVES & STUDY AREA CONDITIONS

1.1 PROJECT OBJECTIVES

Per the December 29, 2018 Agreement between the Town of Pound Ridge (Town), NY and Lombardo Associates, Inc. (LAI), LAI is to prepare a Scotts Corner, Pound Ridge, NY Wastewater Management & Water Supply Study (Study) that consists of the following Tasks:

<u>Task No.</u>	<u>Description</u>
1	Assess Flow Requirements for a Wastewater Disposal System
2	Identify Possible Location(s) for Wastewater Disposal
3	Preliminary Design(s) for a Comprehensive Wastewater Solution
4	Preliminary Design for Comprehensive Water Supply
5	Meetings
6	Final Report
7	Preliminary Financing Plan, User Charges & Implementation Plan

The primary objectives of the engineering efforts associated with the Study are:

- ✓ Prepare an Engineering Plan that would comply with NY State DEC Water Quality Improvement Program (WQIP) grant requirements by July 20, 2019
- ✓ Prepare a Preliminary Engineering Plan that would be the basis for preparation of the Map and Plan that would be required associated with the Town establishing Wastewater Management and Water Supply Management Districts.

1.2 STUDY AREA - CENSUS

Scotts Corner is the project study area and the main commercial area of Pound Ridge with three (3) planned business zones of PB-A, PB-B and PB-C, Figures 1-1 through 1-3. The Scotts Corners business districts encompass approximately 40 acres and 40 properties across blocks 9454, 9455, 9456, 9320, 9820, and 9816. Table 1-1 presents a list of District properties and their current use.

Water supply and wastewater management difficulties/challenges have existed since 1990s as documented in the December 2017 Scotts Corner Water Wastewater Task Force Existing Conditions Report (TF Report). That Report concluded:

- **Wastewater Management.** Due to lot sizes, site conditions, wastewater systems/practices and use of individual water supply wells, a long-term, sustainable Scotts Corner wide wastewater management system is needed for current and Town zoning allowed property uses. Also, the current configuration of individual wells and septic systems do not meet regulatory separation requirements. As Scotts Corner is in the Stamford, CT water supply watershed, treatment/disposal systems will need to address that environmental sensitivity. All wastewater discharges have to be subsurface disposal systems (SSDS).
- **Water Supply.** Due to legacy MTBE groundwater contamination and new wells requiring extensive water filtration systems, a Scotts Corner public water supply system is also needed. The TF noted that a 1973 contract between the Stamford Water Company and Pound Ridge for the construction of the Siscowit or other Reservoir to provide water to Scotts Corner.

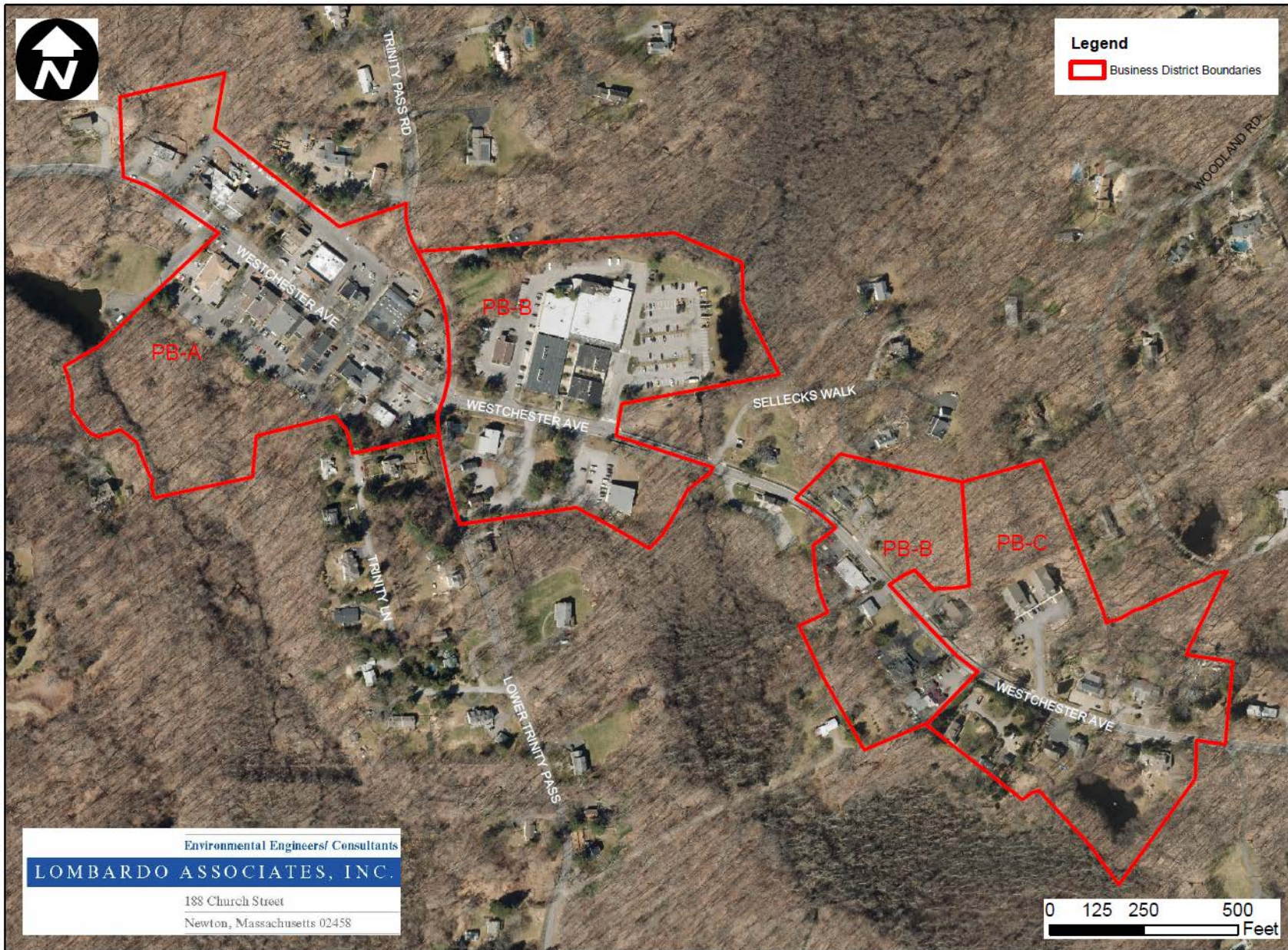


Figure 1-1 Scotts Corner Aerial Photograph with Business District Boundaries

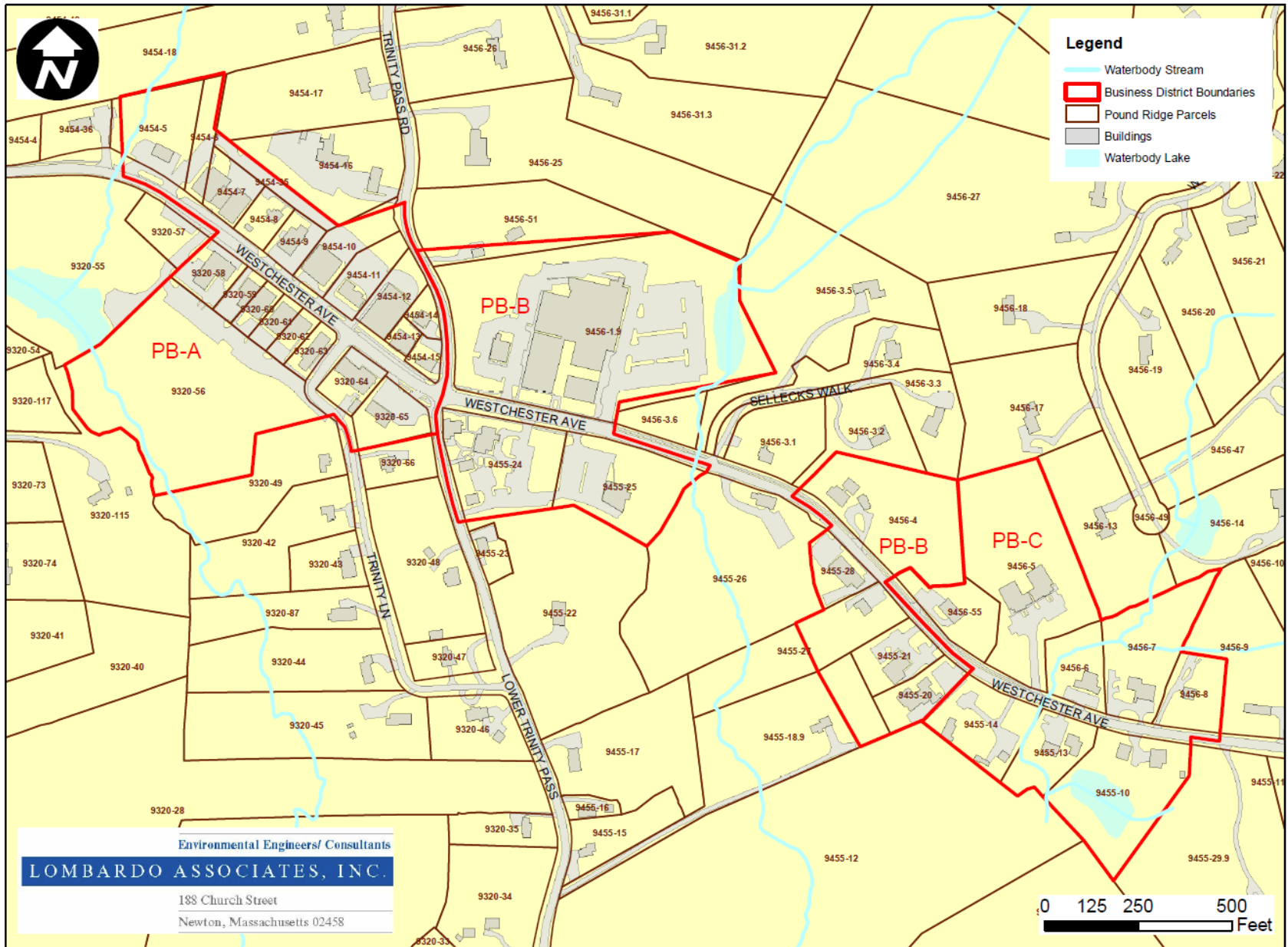


Figure 1-2 Scotts Corner Parcel Map – with PID

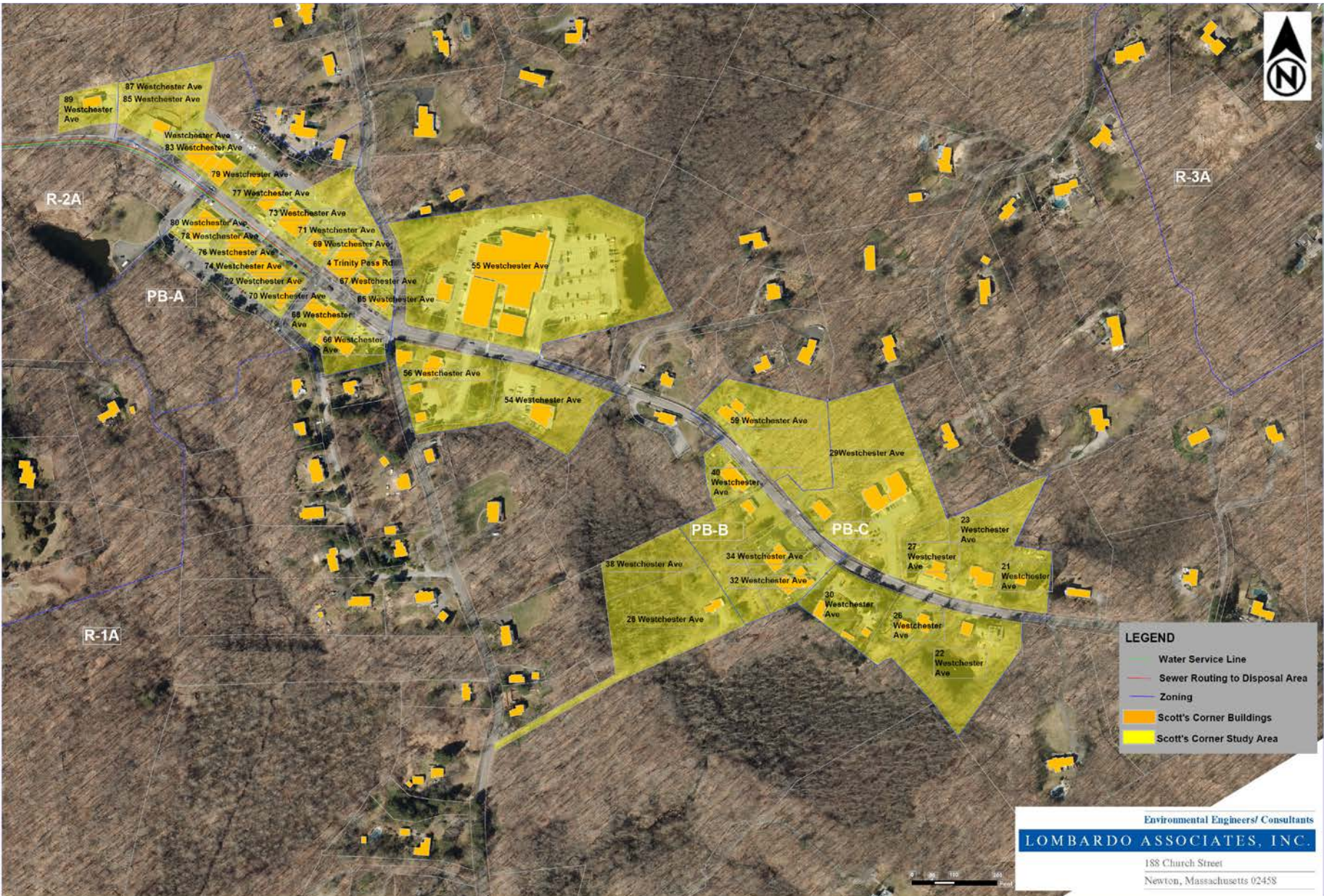


Figure 1-2a Scotts Corner Parcel Map – with addresses



Figure 1-3 Streams and Water Bodies in Scotts Corner

Table 1-1 Scotts Corner Property Data & Wastewater Design Flow

Property Address	Tenant	Use	Acreage	Building Square Footage	Use Quantity	Use Unit	Usage Rate (gpd/unit)	WW Design Flow (gpd)	Project Flow
89 Westchester Ave	PR Ambulance Corps	community facility	0.530	1,296	1,296	sq. ft.	0.1	129.6	129.6
87 Westchester Ave	Avant Garden	retail	1.131	1,444	1,444	sq. ft.	0.1	144.4	144.4
85 Westchester Ave	North Star	restaurant	0.415	4,122	50	seats	35.0	1,750.0	1,886.0
85 Westchester Ave	North Star	office	0.473		1,360	sq. ft.	0.1	136.0	
83 Westchester Ave	Albano Appliance	retail	0.473	9,161	6,138	sq. ft.	0.1	613.8	1,282.8
83, A, & B Westchester Ave	Albano Appliance	apartments			4	bedrooms	110.0	440.0	
83 C & D Westchester Ave	Albano Appliance	office			2,290	sq. ft.	0.1	229.0	
79 Westchester Ave	Dynax	office	0.345	1,872	1,872	sq. ft.	0.1	187.2	187.2
77 Westchester Ave	Vacant	Vacant	0.342	4,864	0	toilets	400.0	0.0	0.0
77A Westchester Ave	Vacant	Vacant			0	bedrooms	110.0		
NA	Parking	Parking	0.356	0	0	1	0.0	0.0	0.0
73 Westchester Ave	Healthy Home Foods	Retail / Food Prep	0.670	5,600	4,200	sq. ft.	0.1	420.0	670.0
73 Westchester Ave	Pound Ridge Dentistry	Medical Office			1	Chairs	250.0	250.0	
71 Westchester Ave	Kitchen Table	restaurant	0.631	3,878	25	seats	35.0	875.0	1,068.9
71 Westchester Ave	Wine Store	retail			1,939	sq. ft.	0.1	193.9	
69 Westchester Ave	La Familia	restaurant	0.493	12,285	40	seats	35.0	1,400.0	2,014.3
69 Westchester Ave	Martin House	Office			3,071	sq. ft.	0.1	307.1	
69 Westchester Ave	Summit Company	Office			3,071	sq. ft.	0.1	307.1	
67 Westchester Ave	Above Retail	apartments	0.147	3,368	2	bedrooms	110.0	220.0	501.6
67 Westchester Ave	The Cottage / Booksy	retail			2,816	sq. ft.	0.1	281.6	
4 Trinity Pass Rd.	Vacant	Vacant	0.181	1,012	0	sq. ft.	0.1	0.0	0.0
65A,B Westchester Ave	Kahlo	retail	0.185	65	1,174	sq. ft.	0.1	117.4	557.4
65A,B Westchester Ave	Above Kahlo	apartments	0.185		4	bedrooms	110.0	440.0	
Westchester Ave	Parking	parking w/2 shed	5.084	0	0	NA	0.0	0.0	0.0
80 Westchester Ave	Fire Department	community facility	0.449	7,076	7,076	sq. ft.	0.1	707.6	707.6
78 Westchester Ave	123 Dough	Food Prep	0.207	2,979	2,234	sq. ft.	0.1	223.4	357.9
		Employees			4	employees	15.0	60.0	
78 Westchester Ave	Miller's Landscape	office			745	sq. ft.	0.1	74.5	
76 Westchester Ave	Dinardos	restaurant	0.207	8,910	60	seats	35.0	2,100.0	2,540.0
76 Westchester Ave	Vacant	Vacant			0	sq. ft.	0.1	0.0	
76 Westchester Ave	above Dinardos	apartments			4	bedrooms	110.0	440.0	
74 Westchester Ave	Blind Charlies	restaurant	0.207	7,970	50	seats	35.0	1,750.0	2,809.3
74 Westchester Ave	Jacob Allen	Spa			10	Member	20.0	200.0	
74 Westchester Ave	O'Donnell	Retail			1,993	sq. ft.	0.1	199.3	
74 A, B, C, & D Westchester Ave	above Blind Charlies	apartments			6	bedrooms	110.0	660.0	
72 Westchester Ave	PR Dry Cleaners	retail	0.207	4,750	2,375	sq. ft.	0.1	237.5	755.0
72 Westchester Ave	Plum Plum's	Food Prep			1,188	sq. ft.	0.1	118.8	
					4	employees	15.0	60.0	
72 Westchester Ave	Nephawa	retail			1,188	sq. ft.	0.1	118.8	
72 A & B Westchester Ave	above PR Dry Cleaners	apartment			2	bedrooms	110.0	220.0	
70 Westchester Ave	above retail	apartments	0.207	3,120	2	bedrooms	110.0	220.0	573.0
70 Westchester Ave	Barber	Barber			1	Chair	250.0	250.0	
70 Westchester Ave	P. Queens, Avalon Ins, Hedg., PR Home	retail / Office			1,030	sq. ft.	0.1	103.0	
68 Westchester Ave	Chubby's	retail	0.418	6,923	3,462	sq. ft.	0.1	346.2	1,006.2
68 A, B, C, & D Westchester Ave	above Chubby's	apartments			6	bedrooms	110.0	660.0	
66 Westchester Ave	gas station	auto repair	0.642	2,130	2	toilets	400.0	800.0	800.0
PB-A Subtotal			14.185	92,825	NA	NA	NA	17,991	

Table 1-1, Continued

Property Address	Tenant	Use	Acreage	Building Square Footage	Use Quantity	Use Unit	Usage Rate (gpd/unit)	WW Design Flow (gpd)	Project Flow
26 Lower Trinity Pass	Joiquim Felice	Home	0.615	n/a	4	bedrooms	110.0	440	440.0
32 Westchester Ave	Wine Connection	retail	0.656	3,800	4,441	sq. ft.	0.1	444	554.1
32 Westchester Ave	Above Wine Connection	apartments		641	1	bedrooms	110.0	110	
34 Westchester Ave	above Antique	apartments	0.652	3,929	1	bedrooms	110.0	110	306.5
34 Westchester Ave	Antique	retail			1,965	sq. ft.	0.1	196	
38 Westchester Ave	Future Value Assoc	office	0.717	1,760	1,760	sq. ft.	0.1	176	176.0
40, 40A Westchester Ave	Wittus	retail	0.495	3,870	2,700	sq. ft.	0.1	270	1,110.0
40, 40A Westchester Ave	Helen Famulare Spa	Spa			20	Member	20.0	400	
40, 40A Westchester Ave	Private	apartment			4	bedrooms	110.0	440	
46 Westchester Ave	Roeco	office	4.589	1,837	1,837	sq. ft.	0.1	184	183.7
54 Westchester Ave	Asia Hamachi	restaurant	1.632	5,355	25	seats	35.0	875	1,405.0
54 Westchester Ave	Dragon Martial Arts	Health Club			15	Member	20.0	300	
54 Westchester Ave	Curry & Hovis	retail			1,200	sq. ft.	0.1	120	
54 Westchester Ave	above Curry & Hovis	apartments			1	bedrooms	110.0	110	
56, 60 Westchester Ave	above retail	apartments	1.698	10,388	7	bedrooms	110.0	770	1,549.1
56, 60 Westchester Ave	Key Bank, Toy Store	retail / Office	1.698		7,791	sq. ft.	0.1	779	
39 Westchester Ave	private	residential	2.196	0	6	bedrooms	110.0	660	660.0
55, 57 Westchester Ave	Market & post office, 5 Retail Stores, Office	retail / office	7.71	54,138	54,139	sq. ft.	0.1	5,414	5,413.9
PB-B Subtotal			22.655	85,718	NA	NA	NA	11,798	
22, 24 Westchester Ave	PR Organics	Retail	2.005	4,781	4,781	sq. ft.	0.1	478	478.1
26 Westchester Ave	Above Educators Alley	apartments	0.781	2,197	1	bedrooms	110.0	110	274.8
26 Westchester Ave	Qualities	retail			549	sq. ft.	0.1	55	
26 Westchester Ave	Educators Alley	office			1,099	sq. ft.	0.1	110	
30 Westchester Ave	private	residential	1.002	1,708	1	bedrooms	110.0	110	110.0
21 Westchester Ave	private	residential	0.656	2,342	4	bedrooms	110.0	440	440.0
23, 23 A, B Westchester Ave	Kende & London Joiner	retail	1.537	3,062	3,062	sq. ft.	0.1	306	306.2
27 Westchester Ave	above Lion Heart	apartments	0.693	3,036	1	bedrooms	110.0	110	261.8
27 Westchester Ave	Di Biase Filkoff Architects	Office			1,518	sq. ft.	0.1	152	
29 Westchester Ave	A Home	residential	3.195	11,018	16	bedrooms	110.0	1,760	1,760.0
35 Westchester Ave	PR Vet Center	retail	0.764	2,145	2,145	sq. ft.	0.1	214	214.5
PB-C Subtotal			10.633	30,289	NA	NA	NA	3,845	3,845
PB Total			32.525	177,252				33,635	33,635

- Stamford also includes a provision (item 13 in the contract) for Pound Ridge to access this water supply.

Previous Reports on Scotts Corner water/wastewater as described in the TF Report are briefly summarized as follows.

1992 Folchetti Report

Two areas for subsurface disposal near the point of generation in the Scotts Corners Business area were studied and neither was determined to be suitable. Pumping the effluent to the Town Park area (Parcel 9820-86), a distance of 6,300 or 9,000 feet depending on the selected route, was proposed as a potential solution.

1998 – 2000 Malcolm Pirnie

Alternatives examined with test pits dug and percolation tests performed behind lots 60, 61, 62.

2002 Folchetti Report

Town Park site is addressed and challenges for its use for wastewater disposal are presented. This report also discusses potable water solutions, water from Stamford, drilling wells and getting water from the golf course area. Table 1-2 presents the Folchetti 1992 Report estimated buildout flows based upon the 1990 Clark Associates Planning Study and zoning.

Table 1-2 Scotts Corner 1992 Buildout Estimated Flows

Folchetti 1992 Report Estimated Flows				
	1992 Existing	Add'l Build Out (Saturation)	Build Out (Saturation)	% of Total
Commercial	20,393	10,919	31,312	49%
Residential	4,250	28,500	32,750	51%
Total	24,643	39,419	64,062	

1.2 WASTEWATER FLOW ESTIMATES

LAI developed wastewater design flow estimates for each property, Table 1-1, based upon the TF Report data on property use characteristics, i.e. # restaurant seats, office sf, etc., and NYSDEC design criteria per 2014 New York State Design Standards for Intermediate Sized Wastewater Treatment Systems.

1.3 WATER USE DATA

Based upon a FOIL request, the Westchester County Department of Health provided monthly water use records for the period 2018-2019 for the 10 properties within Scotts Corner that are required to report their water use. Table 1-3 presents the average annual water use data for the ten properties.

Table 1-3 Annual Water Use Data for Scotts Corner

Location	Scott's Corner Water Use Summary - Annual Data			
	Ave. Daily Flow (GPD)	Max. Daily Flow (GPD)	Min. Daily Flow (GPD)	Buildout WW Flow (GPD)
83 Westchester Ave.	792	2,132	340	1,283
78 Westchester Ave.	33	55	20	298
76 Westchester Ave.	308	582	78	2,718
74 Westchester Ave.	447	2,790	0	2,609
73 Westchester Ave.	254	470	40	560
71 Westchester Ave.	77	100	50	1,651
69 Westchester Ave.	404	842	0	2,629
55/57 Westchester Ave.	1,600	12,200	100	5,414
54 Westchester Ave.	664	910	380	1,146

1.4 SUMMARY OF SCOTTS CORNER BUSINESS DISTRICT ZONING REGULATIONS

Planned Business A (PB-A) District

A. Intent

- The Planned Business A "District" is intended to be limited primarily to businesses serving the ordinary shopping needs of the residents. "Building" areas and "parking areas" are established in this "district", see Figure 1-4. Site plan approval by the Planning Board, and conformance to the approved site plan, are mandatory requirements of this "district."

B. Building Use

- All buildings or pedestrian use areas will be located within the 'building use' area located on each parcel and in conformance with Building Use Schedule, Table 1-4.

C. Permitted uses in Parking Area

- No building or structure shall be located within a parking area as well as no storage of vehicles
- Temporary Building - Zoning Board of Appeals may grant a variance permitting erection of a temporary building in the parking area.

D. Required Open Spaces

- No setbacks to the limits of the building area are required, except for the following case: if two separate buildings are built within one parcel's building area, minimum distance between buildings shall be no less than 6' or ½ height of tallest building, whichever is greater.

E. Off-street parking and loading

- Individual requirements to provide off-street parking shall be considered satisfied in PB-A, provided all parking space located on site has been improved for public parking use. Otherwise, off-street parking will be required.
- One off-street loading space shall be provided for the first 4,000 square feet of non-residential floor area, with an additional loading zone every 10,000 sq. ft.

F. Site plan approval

- For any change in building dimensions or use that increases water use, sewage generation, traffic or parking, a Planning Board Site Plan approval is required, in accordance with Article IX of the Town's Chapter 113 Zoning Code.
 - Any open space not required for pedestrian or vehicle traffic or for off-street parking or loading shall be permanently maintained with grass, trees or suitable plantings and maintained per § 113-24.
- G. Service Wires
- All power, telephone and other service wires shall be placed underground within the boundaries of any PB-A District Lot.

Planned Business B (PB-B) District

- A. Intent
- Primary use in District PB-B is retail servicing residents of Pound Ridge and shall be limited primarily to businesses.
- B. Required Open Space
- Building locations shall follow all minimum setbacks as written in the following sections. The Planning Board reserves the right to increase these setbacks to match the character and development of PB-B on a case by case basis.
- C. Minimum Building Separation
- Buildings shall have at least 10 feet or ½ the average height of the buildings between them, whichever is greater.
- D. Landscaping
- All areas of PB-B not covered by buildings, driveways, parking areas or walks will be suitably planted per provisions § 113-24.
 - Landscaped area abutting residential parcels shall be a landscape buffer, using evergreen plantings to provide privacy to each abutting parcel. Landscape buffer shall be needed along any lot line or portion directing across the street from a residential district, and shall be 15 feet in width. Non-evergreen plantings, or structures such as walls or fences may be used as appropriate per Planning Board approval.
 - Internal Landscaping within parking areas
 - For off-street parking areas containing 25 or more spaces, at least 10% of parking area space shall be used for landscaping. This area will contain at least one 3" caliper, 4' tall tree per 10 parking spaces.
 - Planning Board may require addition of 4" caliper, 4' tall trees along property lines bordering streets.
 - Street Trees – may be required as determined by the Planning Board
- E. Off street parking and loading
- All parking and loading req's in PB-B shall meet standards of Off-Street Parking and Loading requirements as stated in Article X of Chapter 113, Zoning.
- F. Site Plan Approval
- Site plan approval, per Article IX of Chapter 113, by Planning Board is mandatory for new, expanded or changed building development.

Planned Business C (PB-C) District

A. Intent

- Primary use in District PB-C is retail servicing residents of Pound Ridge (same as PB-B), and due to a variety of factors as stated in the Code, shall have a lesser intensity of use. As stated on Table 1-4, restaurant use is prohibited in the PB-C District.

B. Green spaces

- Areas denoted as 'green space areas' in PB-C shall be reserved as buffer zones. No building or structures, improvements or parking areas are permitted in green space buffer zones, unless acting for a subsurface septic system for new, existing or residential structures. In this case, no more than 20% of green space shall be used to meet area requirements for a subsurface septic system.

Figure 1-5 presents the Zoning Map for PB-A, PB-B & PB-C Districts.

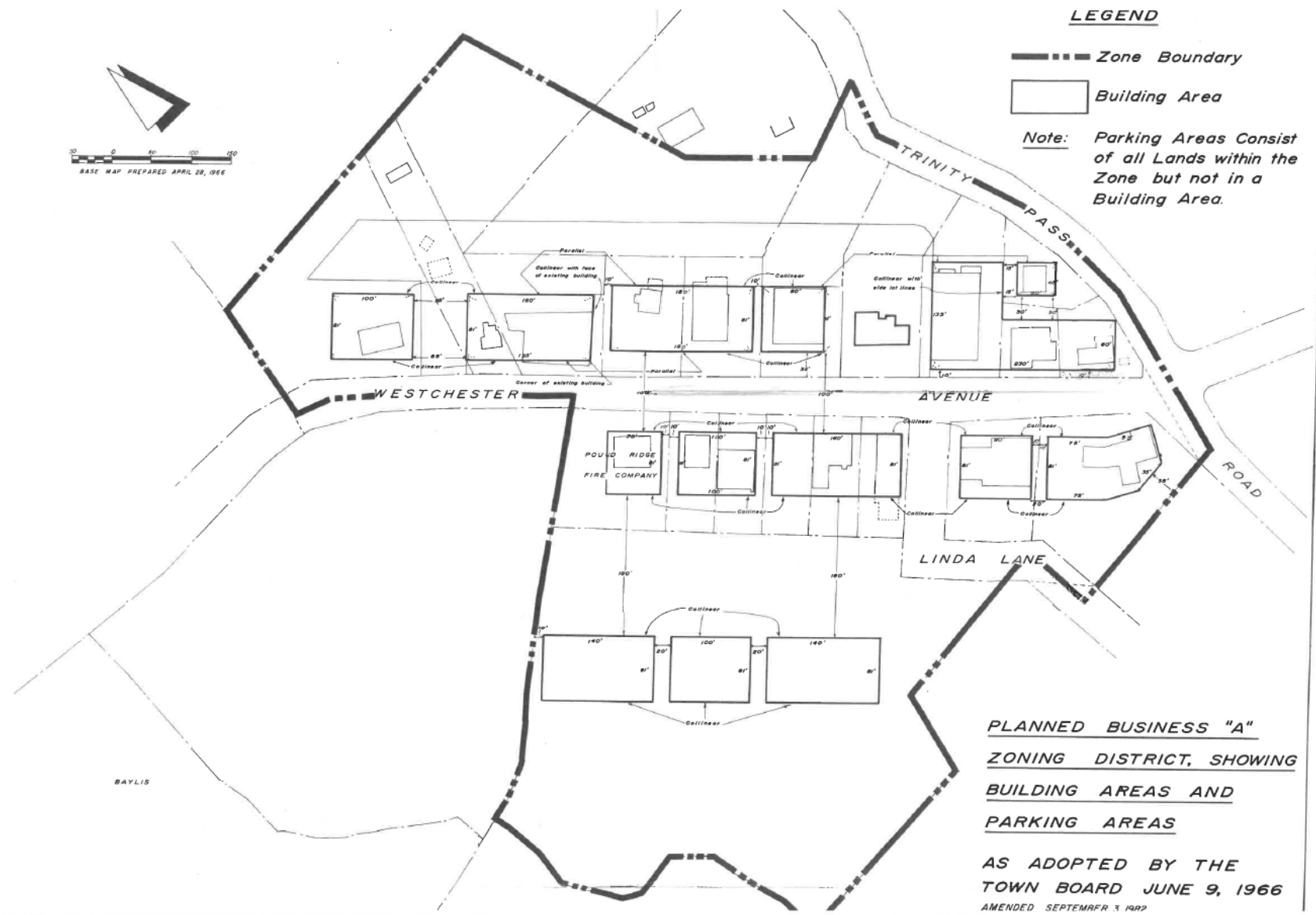


Figure 1-4 Zoning Map PB-A District

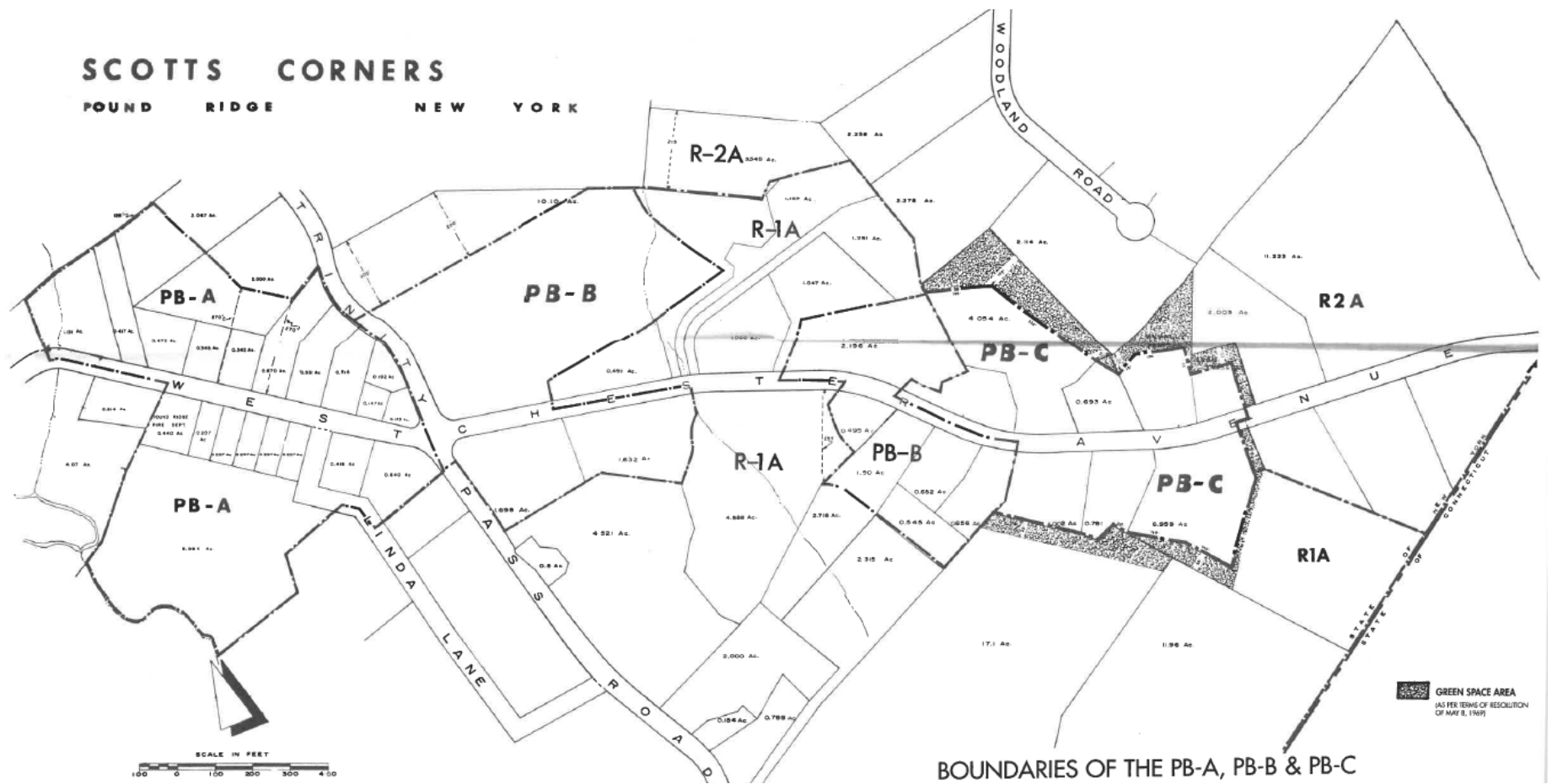


Figure 1-5 Zoning Map PB-A, PB-B & PB-C Districts

Table 1-4 PB-A, PB-B and PB-C Zoning Schedule of Use Regulations

ZONING

113 Attachment 3

SCHEDULE OF USE REGULATIONS

Nonresidential Districts

§ 113-41

Town of Pound Ridge, New York

[Amended 8-13-1998 by L.L. No. 7-1998]

District	Permitted Principal Uses	Special Permit Uses (Subject to conformance with additional standards as provided in Article VIII)	Permitted Accessory Uses
PB-A	<p>A. Stores, other than "restaurants," for the sale of goods at retail or performance of customary personal services or services clearly incident to retail sales. No fabrication or manufacturing shall be permitted, except that which is incident to, and on the same "premises" with, such retail sales, and further provided that such incidental fabrication or manufacturing is conducted entirely within a "building" and does not occupy more than 25% of such store's floor area.</p> <p>B. Business, professional or banking offices.</p> <p>C. Sit-down "restaurants."</p> <p>D. Telephone exchanges, not including outdoor service or storage yards.</p> <p>E. Churches and other places of worship.</p> <p>F. Governmental "buildings" and "uses," including water supply facilities.</p> <p>G. Residential "dwelling units," except not at the first floor level within 150 linear feet of Westchester Avenue.</p> <p>H. "Health, exercise or fitness clubs."</p>	<p>A. "Public utility" substations, transmission lines and facilities serving the area of the Town of Pound Ridge and/or immediately adjacent communities, provided that a compelling public need is demonstrated based upon preparation of an area service plan which minimizes the number of such facilities, maximizes collocation and shared "use" of said facilities, and which study analyzes alternatives to minimize the visual impacts and exposure levels. Where possible, such facilities shall be located on town-owned lands, then lands with commercial or nonresidential "uses," before locating on lands used exclusively for residential purposes.</p> <p>B. Automotive service stations, automotive "garages," automobile repair shops.</p> <p>C. The operation of a new or "used" automobile sales business, provided that all vehicles shall be kept or stored within completely enclosed "buildings."</p> <p>D. "Take-out food establishments," "bakeries," "delicatessens," "sandwich shops"</p> <p>E. "Wireless telecommunication services facilities."</p>	<p>See § 113-46C regarding permitted "uses" in "parking areas."</p> <p>A. "Dish antennas," subject to the requirements of § 113-20.</p>

In any "nonresidence district," no "building" or "premises" shall be "used," and no "building" or group of "buildings" or part of a "building" or "structure" shall be erected, constructed, enlarged, "altered," arranged, "used," in whole or in part, except for one or more of the "uses" set forth below. "Uses" in the PB-B and PB-C zoning "districts" may include a coordinated group of stores designed as a unit. Only those "uses" specifically listed shall be permitted, and any "use" not listed shall be deemed to be prohibited. No "use" shall be permitted which is noxious or offensive by reason of odor, dust, smoke, vibration, radiation, danger of explosion, flashing or excessive light or harmful discharge of waste materials. The "use" of an internal combustion engine shall not be permitted unless objectionable noise and vibration is eliminated and unless it is equipped and "used" with an effective muffler or silencer.

District	Permitted Principal Uses	Special Permit Uses (Subject to conformance with additional standards as provided in Article VIII)	Permitted Accessory Uses
PB-B	<p>A. Stores, other than "restaurants," for the sale of goods at retail or performance of customary personal services or services clearly incident to retail sales, except no automobile sales, service stations, "garages," auto repair shops or car washes. No fabrication or manufacturing shall be permitted, except that which is incident to and on the same "premises" with such retail sale, and further provided that such incidental fabrication or manufacturing is conducted entirely within a "building" and does not occupy more than 25% of such store's floor area.</p> <p>B. Business, professional or banking offices.</p> <p>C. Sit-down "restaurants."</p> <p>D. Telephone exchanges, not including outdoor service or storage yards.</p> <p>E. Places of worship.</p> <p>F. Governmental "buildings" or "uses."</p> <p>G. Residential "dwelling units" on the second and third floor levels only.</p> <p>H. "Health, exercise or fitness clubs."</p>	<p>A. Sewage treatment plants or water supply facilities.</p> <p>B. "Public utility" substations and transmission lines and facilities serving the area of the Town of Pound Ridge and/or immediately adjacent communities, as permitted and regulated in the PB-A "District."</p> <p>C. "Take-out food establishments," "bakeries," "delicatessens," "sandwich shops."</p> <p>D. "Wireless telecommunication services facilities."</p>	<p>A. Off-"street" parking and loading in accordance with Article X, which shall not be construed to include the storage, display, servicing or dismantling of automobiles or other vehicles.</p> <p>B. Signs as permitted by the Town Sign Law (Chapter 88).</p> <p>C. Fully enclosed refuse-storage facilities.</p> <p>D. Other "uses" customarily incidental and accessory to a permitted principal "use" in this "district" and located on the same "lot" therewith.</p> <p>E. "Dish antennas" subject to the requirements of § 113-20.</p>
PB-C	<p>As permitted and regulated in the PB-B "District," except that land in the PB-C "District" shall not be "used" for "restaurant" purposes.</p>	<p>As permitted and regulated in the PB-B "District," except that land in the PB-C "District" shall not be "used" for "restaurant," "take-out food establishment," "bakery," "delicatessen" or "sandwich shop" purposes.</p>	<p>As permitted and regulated in the PB-B "District."</p>

1.5 AGENCIES WITH JURISDICTIONS AND ASSOCIATED REGULATIONS

The regulatory agencies that have jurisdiction for wastewater management in Pound Ridge are:

- ✓ Westchester County Department of Health (WC DoH),
- ✓ New York State Department of Environmental Conservation (NYSDEC).

Westchester County Department of Health (WC DoH)

WC DoH's jurisdiction is based on Article VIII of the Laws of Westchester County which states in part that its purpose "relies upon requiring all onsite wastewater treatment systems constructed or installed in Westchester County conform to the standards established in the New York State Public Health Law, by the Board of Health and/or the Commissioner of Health. Per Chapter 873, Article XXII, Section 873.2202 of the Laws of Westchester County, permits are required from WC DoH for all, regardless of size, treatment and subsurface disposal systems.

On-site Systems

Westchester County Health Department's Rules and Regulations for the Design and Construction of Residential Subsurface Sewage Treatment System, last issued effective January 1, 2002, govern small flow wastewater systems. WC DoH may consider Advanced Alternative designs for the complete replacement of an Onsite Wastewater System (OWTS) on difficult sites that will not support conventional OWTS designs currently. Per Section 873.740 of Article VIII, Enhanced Treatment Units (ETUs), Aerobic Treatment Units (ATUs) and Other Equipment are required to be maintained by a service professional or contractor acceptable to WC DoH and have a Declaration prescribed by WC DoH recorded by the property owner in the office of the Westchester County Clerk, Division of Land Records.

Larger Flow Systems

WC DoH relies on NYSDEC New York State Design Standards for Intermediate Sized Wastewater Treatment Systems dated March 5, 2014 for permitting of commercial wastewater systems of all sizes and large residential systems.

Inspection & Septage Pumping

Westchester County and NYSDEC developed an ordinance effective May 2011 that requires all septic systems be pumped and inspected at least once every five (5) years by a Westchester County licensed service provider. The contractor is required to file a Septic System Data Form with the County.

The **NYS Department of Health** issued Wastewater Treatment Standards, via Appendix 75-A, https://www.health.ny.gov/regulations/nycrr/title_10/part_75/appendix_75-a.htm, effective March 16, 2016 for "on-site wastewater treatment systems serving residential properties and receiving sewage without the admixture of industrial wastes or other wastes, as defined in Environmental Conservation Law, Section 17-0701, in quantities of less than 1,000 gallons per day (gpd)." "The Appendix establishes the minimum standards acceptable in New York State. The local health departments may establish more stringent standards."

New York State Department of Environmental Conservation (NYSDEC)

NYSDEC issues permits for all wastewater systems greater than 1,000 gpd. For wastewater systems between 1,000 and 30,000 gpd, depending on the County, the County DoH may be

delegated to act as DEC's agent. In WC, NYSDEC has delegated its permitting of wastewater systems with subsurface discharge with flows $\leq 30,000$ gpd to WC DoH.

For larger flows, NYSDEC issues the permit.

Summary of Regulatory setbacks

Westchester County Department of Health (<1,000 GPD)

Design Flow

- Residential (1-3 family) = 200 GPD/bedroom + 25% for each additional kitchen.
- Commercial = Rely upon NYS DoH 75-A or NYSDEC New York State Design Standards for Intermediate Sized Wastewater Treatment Systems dated March 5, 2014

Table 1-5 presents WC DoH code required separation distances for Subsurface Treatment Systems (SSTS).

Table 1-5 Westchester County DHS Minimum SSTS Separation

Westchester County DHS - Required Separation from WW Sources						
Wastewater Source	Drilled Well (Higher Elev.)	Drilled Well (Lower Elev.)	Wetland / Stream / Lake / Watercourse	Dwelling	Prop. Line	Decks
House Sewer (Watertight) (CIP or similar)	25'	25'	25'	-	10'	-
Septic Tank	50'	50'	50'	10'	10'	5'
Effluent Line to D-Box	50'	50'	50'	10'	10'	-
D-Box	100'	100'	100'	20'	10'	-
Absorption Field	100'	200'	100'	20'	10'	10'
Seepage Pit	150'	200'	100'	20'	10'	10'
Dry Well (Roof/Footing)	50'	50'	25'	20'	10'	-

- No trees within 10' of absorption system
- Additional Setbacks from SSTS:
 - Dry Well: 50' (horizontal & vertical)
 - Piped Drainage: 25'
 - Open Channel Drainage: 50'
 - Upgrade Curtain Drain: 15'
 - Downgrade Curtain Drain: 50'
 - Upgrade Swimming Pool: 20'
 - Downgrade Swimming Pool: 50'

Area Usability Standards

- Twice proposed system area
- 5' min. separation to groundwater
- >60 min./in. perc rate unsuitable for septic system design

Table 1-6 presents WC DoH code required absorption trench lengths for various percolation rates and number of bedrooms.

Table 1-6 WC DoH SSTS Required Absorption Trench Lengths

Westchester County DHS - Required Absorption Trench Length						
Perc. Rate (min./in.)	Appl. Rate (GPD/ft ²)	# of Bedrooms (200 GPD/BR)				
		1	2	3	4	5
1-5	1.2	84	168	252	336	420
6-7	1	100	200	300	400	500
8-10	0.9	112	224	336	448	560*
11-15	0.8	125	250	375	500	625*
16-20	0.7	144	288	432	576*	720*
21-30	0.6	168	336	504*	672*	840*
31-45	0.5	200	400	600*	800*	1000**
45-60	0.45	222	444	666*	888*	1110**

* requires one pressure dosing device

** requires multiple alternating pressure dosing devices (1/500')

- Absorption Trench Construction
 - Trench width = 24". No allowance shall be made for wider trenches. Distance between trenches shall be no less than 5'.
 - Center to center spacing shall be 7'.
 - Stone bed shall be 12-18" in depth. This includes pipe diameter and 2" of stone above pipe.
 - Overall trench depth shall be 18-30". This includes 4" of topsoil, and trench cover, which shall measure 6-12".

NYS DEC

NYS DEC's aerial separation requirements for wastewater treatment facilities are presented on Table 1-7. Table 1-8 presents NYS DEC's Septic System Minimum Horizontal Setbacks

Table 1-7 NYS DEC WWTP Separation Requirements

NYS DEC - Minimum Aerial Separation from WWTF		
Wastewater Source	Radial Distance from Downwind Dwellings (ft)	Distance to Property Line (ft)
Enclosed WWTP (Facility Building, Buried Sand Filters)	200 ¹	150

¹: NYSDEC will consider proposed site specific setbacks.

Table 1-8 NYS DEC SSTS Minimum Horizontal Setbacks

NYS DEC - Minimum Horizontal Separation from Septic System Fields					
Feature	Watertight Septic Tank	Sewer Line	Absorp. Field / Unlined Sand Filter (w/ Reserve Area)	Absorp. Field in Gravel Soils (w/ Reserve Area)	Seepage Pits (w/ Reserve Area)
Required Minimum Separation per Public Health Law					
Drilled Well - Public	100'	50'	200'	200'	200'
Drilled Well - Private	50'	50'	100'	200'	150'
Water Line (Pressure)	10'	10'	10'	10'	10'
Recommended Minimum Horizontal Separation Distances					
Water Line (Suction)	50'	50'	100'	100'	150'
Dug Well/Spring	75'	50'	150'	200'	150'
Surface Water	50'	25'	100'	100'	100'
Water Supply Reservoir - Private	50'	50'	100'	100'	100'
Water Supply Reservoir - Public	100'	100'	200'	200'	200'
Interceptor/Open drainage Diversion to GW	25'	25'	50'	50'	50'
Stormwater Infiltration Mgmt. Practive	25'	25'	50'	50'	50'
Stormwater Mgmt. Practice Discharging to GW	50'	25'	100'	100'	100'
Culvert (Tight Pipe)	25'	10'	35'	35'	35'
Culvert Opening	25'	25'	50'	50'	50'
Catch Basin	25'	N/A	50'	50'	50'
Swimming Pool (In-Ground)	20'	10'	35'	35'	50'
Foundation	10'	N/A	20'	20'	20'
Property Line	10'	10'	10'	10'	10'
Top of Embankment	25'	25'	50'	50'	50'
Wetland	100'	100'	100'	100'	100'

1.6 PERMITTING REQUIREMENTS

Permitting of a Study Area wide wastewater system is performed by NYSDEC. Permitting of a Study Area wide water system is performed by NYSDoH. Figure 1-6 presents the NYSDEC stream classifications in the Study Area. As can be seen, all streams are classified as AA-S, which means it is a water body best usage for a source of drinking water, swimming and other recreation, and fishing. No direct discharges are allowed in these streams and no waivers are allowed. Consequently, it is proposed that the wastewater treatment system achieve Tertiary Treatment with Disinfection effluent quality prior to subsurface disposal.

The **Tertiary Treatment with Disinfection Standard** has the following effluent quality.

pH	6.5 – 8.5
BOD/TSS	< 10 mg/L
Oil & Grease	< 15 mg/L
Total Nitrogen (TN)	< 10 mg/L
Fecal Coliform	Average < 24 & Maximum < 200 MPN / 100 ml
Enterococcus	Average < 24 & Maximum < 104 MPN / 100 ml

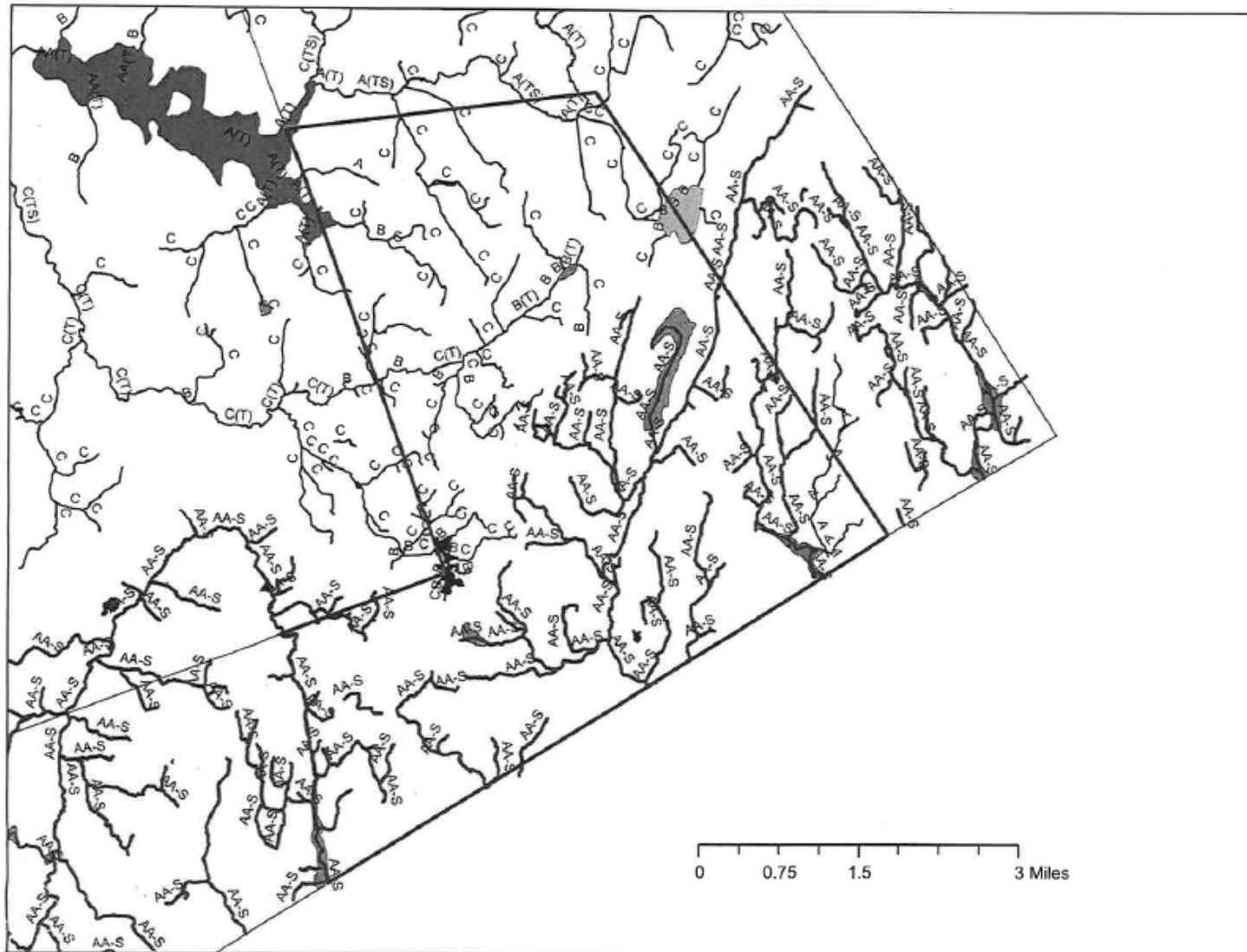


Figure 1-6 NYSDEC Stream Classification in Pound Ridge

2. WASTEWATER MANAGEMENT OPTIONS

2.1 ON-SITE TECHNOLOGIES

In Westchester County, only conventional septic tank – absorption trench designs are allowed for new construction. For sites with a failing system where the site will not support a conventional OWTS design currently specified in the 2002 Rules, WCDoH will consider an alternate design on a case by case basis per Section 7.0 of the 2002 Rules and Nov. 7, 2008 OWTS Remediations and Repairs Rule. Due to the evolution of viable technologies, WC DoH addresses these matters on a case by case basis.

As demonstrated in Chapter 3, the on-site approach is not technically viable in the Study Area. Consequently, on-site technologies are not relevant.

2.2 CLUSTER/SMALL & LARGE NEIGHBORHOOD SYSTEMS

Cluster/Small neighborhood wastewater systems are defined as systems that serve a small number of properties with localized treatment and disposal. In many applications, small neighborhood systems are used in conjunction with on-site systems to address a community's wastewater needs. As demonstrated in Chapter 3, small neighborhood wastewater systems are not technically viable in the study area.

Large neighborhood wastewater systems are similar to small ones with scale being the difference.

Small and large neighborhood systems consist of the following components:

- ✓ Collection
- ✓ Treatment
- ✓ Dispersal / reuse

The collection system options are:

- Conventional, minimum 8" gravity sewer with pump stations as needed
- Grinder pump (GP)– low pressure
- Septic tank effluent (STE) with pump (STEP) as needed. Typical minimum pipe size for STE systems is 4' and 2" for STEP
- Vacuum sewer

Treatment systems consist of:

- Activated Sludge (AS) – with various types
- Fixed Film (FF) systems
- Integrated Fixed Film-Activated Sludge (IFAS)

Nutrient removal – Nitrogen

- Biological removal
- Denitrification filters

Nutrient removal – Phosphorus

- Chemical precipitation
- Biological removal

Disposal / Reuse

- Subsurface
- Direct discharge
- Reuse for non-potable purposes, such as landscape irrigation

The various technologies are described in numerous public documents, including:

- USEPA On-Site Wastewater Management Design Manual, 2002
https://www.epa.gov/sites/production/files/2015-06/documents/2004_07_07_septics_septic_2002_osdm_all.pdf
- USEPA, "It's Your Choice, A Guidebook for Local Officials on Small Community Wastewater Management Options", (EPA-625/9-87-006)
- Cluster Wastewater Systems Planning Handbook. Project No. WU-HT-01-45. Prepared for the National Decentralized Water Resources Capacity Development Project, Washington University, St. Louis, MO, by Lombardo Associates, Inc., Newton, MA, 2004
- Alternative Sewer Systems Manual of Practice FD-12, 2008, Water Environment Federation <https://www.e-wef.org/Default.aspx?TabID=251&productId=6930>

Information on the various technical options is available from the following national organizations:

- ✓ US EPA (<https://www.epa.gov/septic>)
- ✓ Water Environment Federation <https://www.wef.org/resources/publications/books/>
- ✓ Water Environment Research Foundation <http://www.ndwrcdp.org/research.asp>
- ✓ Water Research Foundation
http://www.werf.org/i/c/DecentralizedCost/Decentralized_Cost.aspx

Over the years numerous States have published technology evaluation documents including:

- Review of Technologies for the Onsite Treatment of Wastewater in California, 2002
https://www.waterboards.ca.gov/sandiego/water_issues/programs/wine_country/docs/updates081910/owts_review.pdf

A review of wastewater management technologies prepared by Lombardo Associates for the Town of East Hampton NY in 2015 can be found at <http://www.ehamptonny.gov/DocumentCenter/View/1744/East-Hampton-Town-Wide-Wastewater-Management-Plan?bidId=>

Table 2-1 lists the types of treatment systems that are typically applicable at various wastewater flow ranges. Figure 2-1 illustrates the components and options for wastewater collection, treatment and disposal / reuse.

Table 2-1 Typical Wastewater Treatment Technologies Used for Various Flow Rates

Pretreatment Needed	Technology*	Design Flows (gpd)			
		<2,000	2,000–10,000	10,000–20,000	20,000–50,000+
	Pretreatment				
	Septic Tank ⁺⁺	✓	✓	✓	✓
✓	Anaerobic Upflow Filter	✓	✓	✓	✓
	Secondary Treatment				
	<i>Fixed Film Growth</i>				
	Rotating Biological Contactor		✓	✓	✓
	Trickling Filter ⁺⁺⁺	✓	✓	✓	✓
✓	Subsurface Wetlands— Vegetated Submerged Beds	✓	✓	✓	✓
✓	Constructed Wetlands (FWS)			✓	✓
✓	Recirculating Media Filters	✓	✓	✓	✓
✓	Intermittent Media Filters	✓	✓	✓	
	<i>Suspended Film Growth</i>				
	Oxidation Ditch				✓
	Activated Sludge Systems	✓	✓	✓	✓
	Sequencing Batch Reactor	✓	✓	✓	✓
	Membrane Bioreactor			✓	✓
	Integrated Fixed Film- Suspended Growth	✓	✓	✓	✓
	Advanced Treatment				
✓	Nitrogen Removal	✓	✓	✓	✓
✓	Phosphorus Removal	✓	✓	✓	✓

Notes:

+ Depending on method of dispersal, disinfection systems may or may not be required.

++ Tank may be part of collection system or located at treatment site.

+++ Various media, usually with recirculation.

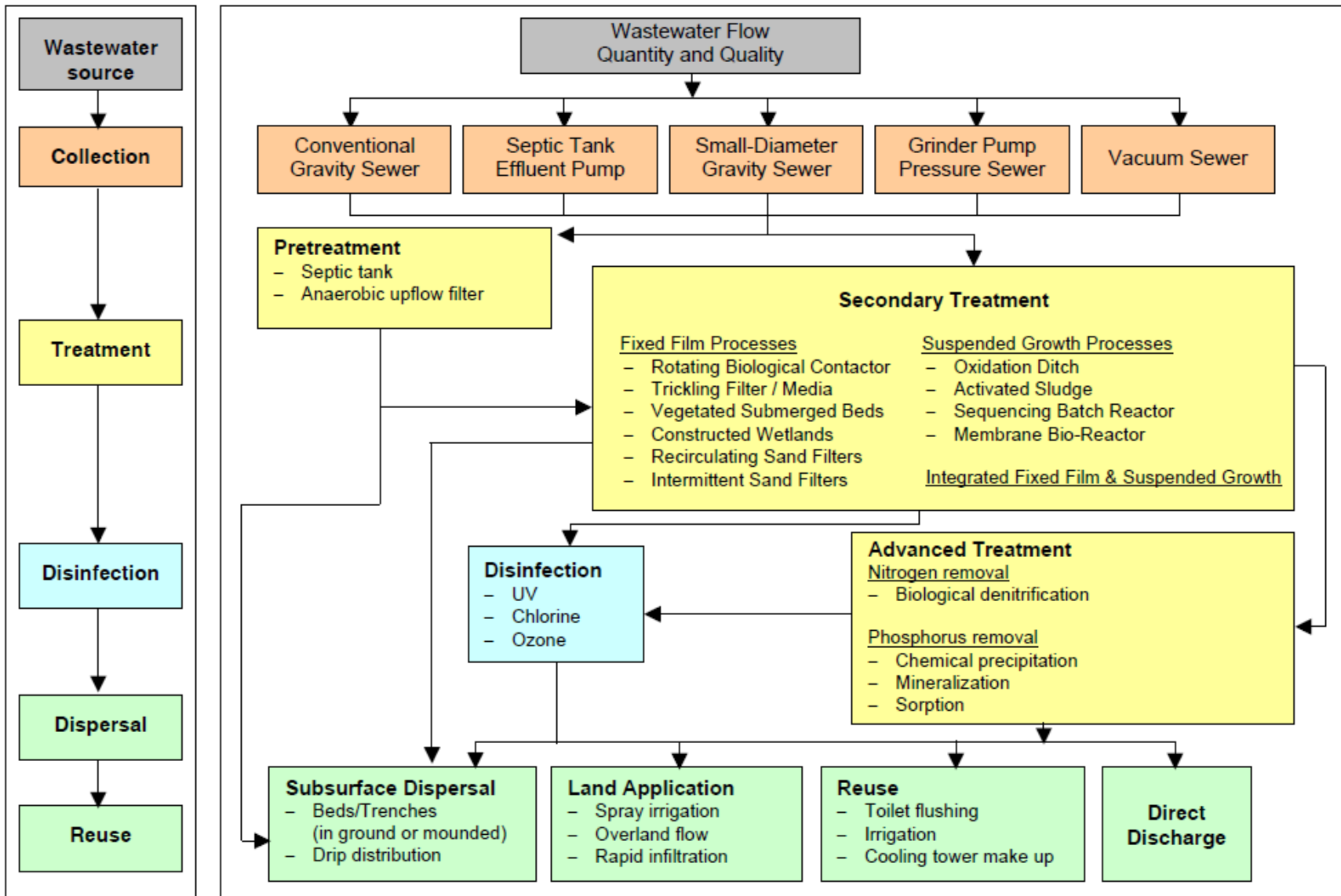


Figure 2-1 Overview of Neighborhood Wastewater Collection, Treatment, and Dispersal / Reuse Technologies

3 EVALUATION OF ON-SITE & NEIGHBORHOOD OPTIONS

3.1 METHODOLOGY AND EXISTING DATA

The area in which an on-site wastewater system can be located on any given parcel is the area that does not fall within:

- 100-ft of a wetland
- 10-ft from a property line
- 10-ft from a building
- 100-ft from an upgradient well, 200-ft from a downgradient well
- Areas with slopes >20%. *It is noted that published slope information designates areas as < 15%, 15% - 25% and > 25% slopes. Consequently areas < 15% are noted as being viable, recognizing that this is being conservative and is taken into account when a detailed site analysis is performed.*

For the purposes of this report, the remaining area on a parcel, after all the above areas have been subtracted out, is termed the “**Available Area**”. Figure 3-1 and Table 3-1 present the available area for the Scotts Corner Study Area parcels. Figures 3-2 through 3-4 illustrate the location of existing septic systems and water supply wells.

For an on-site wastewater solution to be viable, the required area (treatment + disposal + reserve area) must be less than the available area. Once available space has been determined, NCRS soils data and available test pit data are used to estimate if the available area is suitable for use for wastewater treatment and disposal. If determined positive for on-site systems, then footprint requirements for each parcel’s wastewater flow as determined in Section 1.3 are developed. Parcels that have insufficient space and / or inadequate subsurface conditions are labeled as “Off-Site Solution Required”.

Soils test pit and percolation rate data are presented on Tables 3-2 through 3-4, with locations shown on Figures 3-5 and 3-6.

3.2 ON-SITE OPTION

25 of the 40 parcels listed in the study area, or 63% of all Scotts Corner Parcels, have no available area due primarily to wetlands and water supply well setbacks. 7 parcels, or 18% of parcels, have 5,000 or less sq. ft. of area available for treatment and disposal systems. The remaining 8 parcels possess 5,000 or more sq. ft.

With more than half of all parcels possessing no available area for treatment and disposal, the on-site option for Scotts Corner is not viable.

3.3 CLUSTER OPTION

The Cluster wastewater treatment option relies on large Available Areas within or near the Study Area to host the treatment and disposal system for, at a minimum, the parcels requiring an Off-Site Solution. A sewer system to pipe the effluent from the neighborhood parcels to the treatment area will be needed.

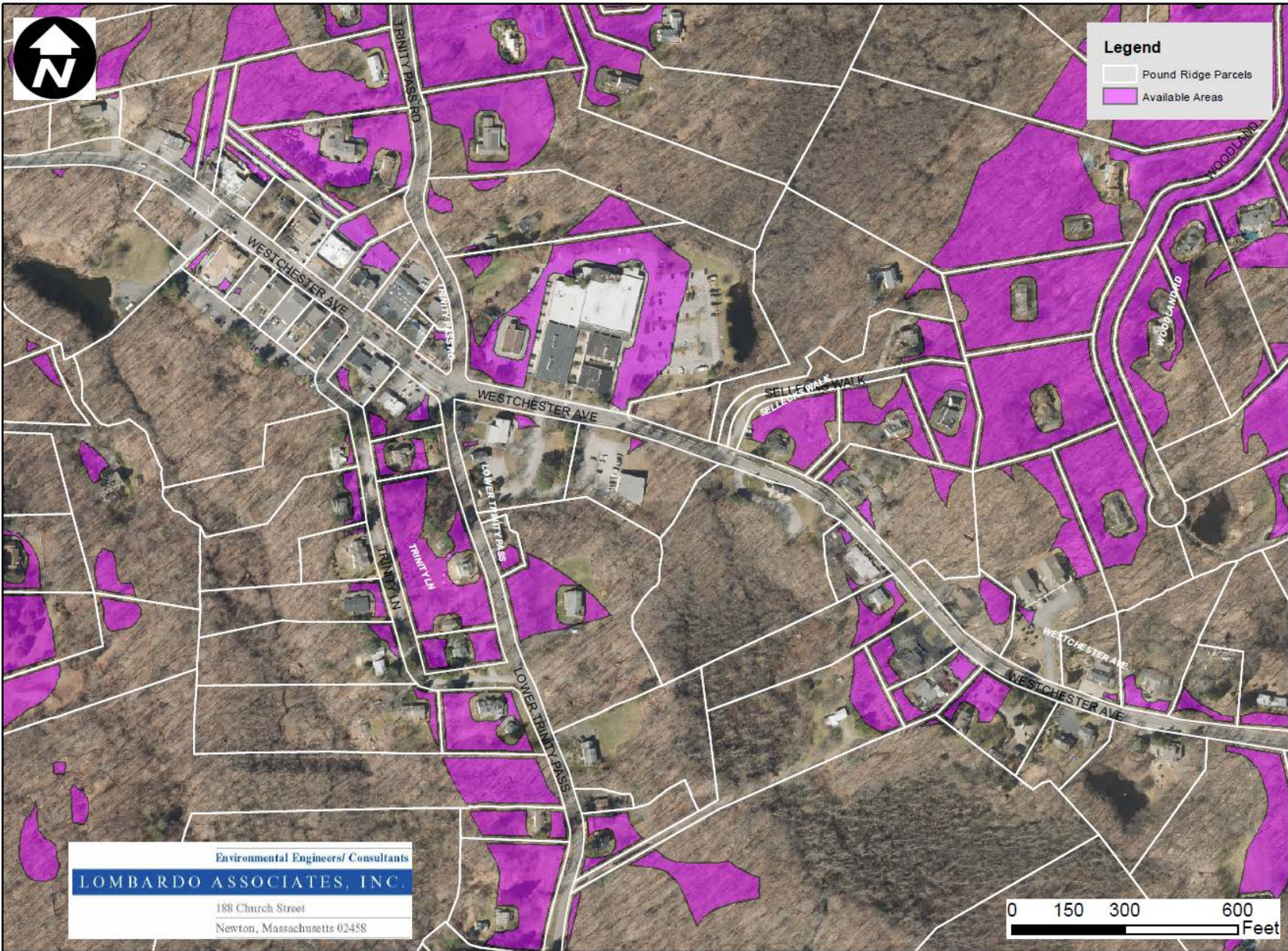


Figure 3-1 Available Area Map – Scotts Corner Study Area

Table 3-1 Scotts Corner Available Area Summary

Scott's Corner Available Area Analysis			
#	Address	District	Avail. Area (SF)
1	89 Westchester Ave	PB-A	0
2	87 Westchester Ave	PB-A	6,120
3	85 Westchester Ave	PB-A	8,130
4	83 Westchester Ave	PB-A	2,480
5	79 Westchester Ave	PB-A	0
6	77 Westchester Ave	PB-A	0
7	Westchester Ave	PB-A	0
8	73 Westchester Ave	PB-A	
9	71 Westchester Ave	PB-A	5,090
10	69 Westchester Ave	PB-A	0
11	67 Westchester Ave	PB-A	0
12	4 Trinity Pass Road	PB-A	0
13	65 A & B Westchester Ave	PB-A	0
14	Westchester Ave	PB-A	0
15	80 Westchester Ave	PB-A	1,850
16	78 Westchester Ave	PB-A	0
17	76 Westchester Ave	PB-A	0
18	74 Westchester Ave	PB-A	0
19	72 Westchester Ave	PB-A	0
20	70 Westchester Ave	PB-A	0
21	68 Westchester Ave	PB-A	0
22	66 Westchester Ave	PB-A	0
23	26 Lower Trinity Pass Road	PB-B	14,775
24	32 Westchester Ave (& 32A/B)	PB_B	2,465
25	34 Westchester Ave	PB-B	2,875
26	46 Westchester Ave	PB-B	0
27	38 Westchester Ave	PB-B, R-1A	0
28	40 Westchester Ave (& 40A)	PB-B	0
29	54 Westchester Ave	PB-B	0
30	56 Westchester Ave	PB-B	0
31	39 Westchester Ave	PB-B	3,715
32	55 Westchester Ave	PB-B	
33	22 Westchester Ave	PB-C	0
34	26 Westchester Ave (& 28)	PB-C	0
35	21 Westchester Ave	PB-C	
36	23 Westchester Ave (& 23A/B)	PB-C	
37	30 Westchester Ave	PB-C	11,020
38	27 Westchester Ave	PB-C	0
39	29 Westchester Ave	PB-C	18,840
40	35 Westchester Ave	PB-C	2,550



Figure 3-2 Scotts Corner Study Area Existing Septic and Well Locations – Northeast



Figure 3-3 Scotts Corner Study Area Existing Septic and Well Locations – Center



Figure 3-4 Scotts Corner Study Area Existing Septic and Well Locations – Southwest

Table 3-2 Pound Ridge Task Force Records – Scotts Corner Percolation Test and Test Pit Summary

Pound Ridge Task Force - Scott's Corner Perc. Test Results			
Prop. #	Property	Perc. Test #	Perc. Rate (min./in.)
3	85 Westchester	-	N/A
4	83 Westchester	-	N/A
5	79 Westchester	-	N/A
8	73 Westchester	1	5
		2	5
9	71 Westchester	-	N/A
10	69 Westchester	-	N/A
15	80 Westchester	1	4
16	78 Westchester	-	N/A
17	76 Westchester	-	N/A
18	74 Westchester	-	N/A
19	70 Westchester	-	N/A
25	34 Westchester	1	4
		2	4
27	38 Westchester	1	8.33
		2	8.67
		3	8.67
29	54 Westchester	1	20
30	56 Westchester	1	12
		2	13
32	55 Westchester	-	N/A
33	22 Westchester	1	10
36	29 Westchester	1	17.1
		2	15
		3	7.3
		4	9.6
37	27 Westchester	-	N/A
38	23 Westchester	-	N/A
40	35 Westchester	1	6.2
		2	4.1
		3	6.6

Pound Ridge Task Force - Scott's Corner Test Pit Results			
Prop. #	Property	Test Pit #	Depth to Bedrock/GW
3	85 Westchester	-	N/A
4	83 Westchester	-	N/A
5	79 Westchester	-	N/A
8	73 Westchester	DH 1	No Bedrock/GW
		DH 2	No Bedrock/GW
9	71 Westchester	-	N/A
10	69 Westchester	-	N/A
15	80 Westchester	DH 1	No Bedrock/GW
16	78 Westchester	-	N/A
17	76 Westchester	-	N/A
18	74 Westchester	-	N/A
19	70 Westchester	-	N/A
25	34 Westchester	DH 1	No Bedrock/GW
27	38 Westchester	DH 1	GW @ 72"
		DH 2	GW @ 72"
		DH 3	GW @ 72"
29	54 Westchester	DH1	No Bedrock/GW
30	56 Westchester	DH1	GW @ 108"
32	55 Westchester	-	No Bedrock/GW
33	22 Westchester	DH 1	No Bedrock/GW
		DH 2	GW @ 48"
		DH 3	Hard Packed Clay @ 27"
36	29 Westchester	DH 1	Rock @ 72"
		DH 2	Mottling @ 60", GW @ 78"
		DH 3	Mottling @ 78"
		DH 4	No Bedrock/GW
		DH 5	No Bedrock/GW
		DH 6	No Bedrock/GW
		DH 7	No Bedrock/GW
		DH 8	No Bedrock/GW
37	27 Westchester	-	N/A
38	23 Westchester	-	N/A
40	35 Westchester	P 1	No Bedrock/GW
		P 2	No Bedrock/GW
		P 3	No Bedrock/GW
		DH 1	No Bedrock/GW

Table 3-3 Pound Ridge Task Force – Scotts Corner Test Pit Records 1

Pound Ridge Task Force - Scott's Corner Test Pit Records																				
Hole Depth	80 Westchester	73 Westchester		56 Westchester	54 Westchester	38 Westchester			35 Westchester											
	DH 1	DH 1	DH 2	DH 1	DH 1	DH 1	DH 2	DH 3	P1	P2	P3	DH 1								
G.L.	Black Top	Top Soil	Top Soil	Top Soil	6" Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil								
6"																				
12"			Sandy Loam	Sandy Loam	Sandy Loam	Yellow Sub Soil	Sandy Loam	Sandy Loam	Sandy Loam	Sand Clay Mix	Sand Clay Mix	Sand Clay Mix	Sand Clay Mix							
18"		Sandy Loam	Sandy Loam																	
24"		Sandy Loam & Gravel	Sandy Loam & Gravel																	
30"		Sand & Gravel; Pit Bottom	Sand & Gravel; Pit Bottom																	
36"	Sand & Gravel			Sandy Loam w/ Clay	Compact Sand & Gravel	Fine Graded Sand w/ small to medium stones	Fine Graded Sand w/ small to medium stones	Fine Graded Sand w/ small to medium stones	Sand, Some Stone	Sand, Some Stone	Sand, Some Stone	Sand, Some Stone								
42"																				
48"																				
54"																				
60"																				
66"																				
72"								Pit Bottom	GW	GW	GW									
78"																				
84"	Pit Bottom			GW @ 108"								Pit Bottom								

Table 3-4 Pound Ridge Task Force – Scotts Corner Test Pit Records 2

Pound Ridge Task Force - Scott's Corner Test Pit Records												
Hole Depth	34 Westchester	29 Westchester								22 Westchester		
	DH 1	DH 1	DH 2	DH 3	DH 4	DH 5	DH 6	DH 7	DH 8	DH 1	DH 2	DH 3
G.L.	Top Soil	Old PKG Lot	Old PKG Lot	Old PKG Lot	Old PKG Lot	Light Woods	Light Woods	Light Woods	Light Woods	Sod		
6"	Bank Run Gravel	Subbase Gravel	Subbase Gravel	Subbase Gravel	Subbase Gravel	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Probed to 54"	Probed to 27"
12"		Gravelly Loam Fill	Gravelly Sand	Sandy Loam, Some Silts	Sandy Loam, Some Silts	Sandy Loam, Some Silts	Sandy Loam, Some Silts	Sandy Loam, Some Silts	Sandy Loam, Some Silts	Loam		
18"												Sands / Gravel
24"		Fine Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand	Fine Sand				
30"									Very Rocky	Gravelly Loam Fill; Mottling @ 60"; GW / Seepage @ 78"		Large Boulders
36"		Large Stones	Gravelly	Very Rocky, Gravelly	Large Stones	Pit Bottom						
42"							Rock	Fine Dense Sand	Gravelly	Very Rocky		Large Stones
48"		Mottling	Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom						
54"							Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom		Pit Bottom
60"		Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom						
66"							Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom		Pit Bottom
72"		Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom						
78"							Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom		Pit Bottom
84"		Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom						

Figure 3-5 Scotts Corner Percolation Test and Test Pit Locations – Aerial Overlay



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SCALE: AS NOTED DPW #: _____ DHS #: _____ DATE: MARCH 26, 2019
PROJECT: SCOTT'S CORNER POUND RIDGE, NEW YORK PROJECT NO.: 6682
DESIGNED BY: JJC DRAWN BY: JJC APPROVED BY: PSL

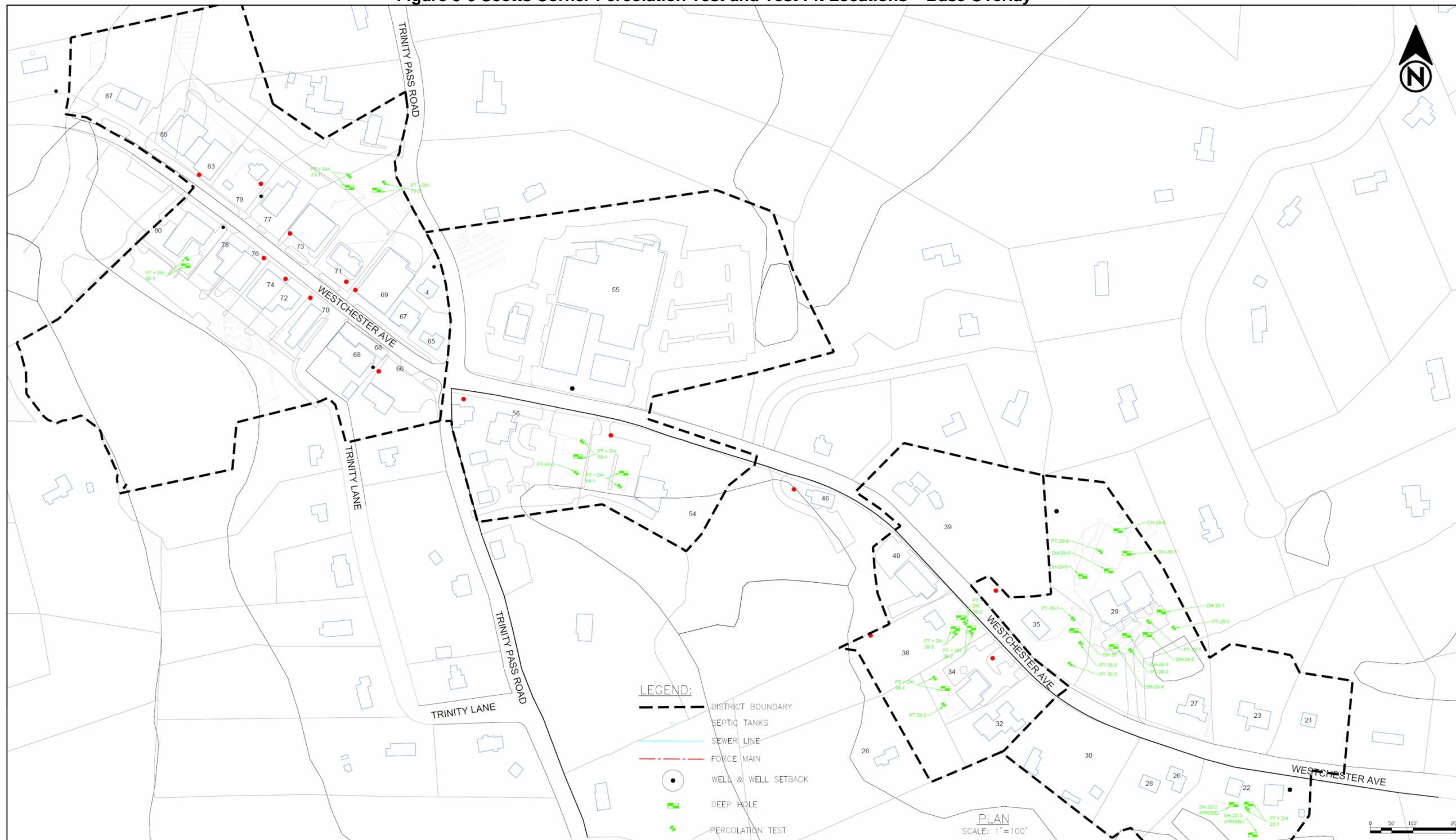
1

SHEET 1 OF 2

**SCOTT'S CORNER
POUND RIDGE TASK FORCE
PERC. TEST AND TEST PIT
LOCATIONS**

PREPARED FOR:
TOWN OF POUND RIDGE

Figure 3-6 Scotts Corner Percolation Test and Test Pit Locations – Base Overlay



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1
SHEET 1 OF 2

**SCOTT'S CORNER
POUND RIDGE TASK FORCE
PERC. TEST AND TEST PIT
LOCATIONS**

PREPARED FOR:
TOWN OF POUND RIDGE

While 55 Westchester Avenue, possesses 81,840 sq. ft. of “available area”, the private site has plans for expansion and due to environmental (i.e. flood plain, etc.), considerations is not viable for use for treatment and disposal. This is all prior to consideration of soils, depth to groundwater, etc. that affect the viability of sites.

Therefore, with a wastewater management demand of a minimum of 40,000 gpd and buildout of 80,000 gpd, the small neighborhood/cluster option is also not technically feasible.

Since both the on-site option and small neighborhood / cluster option are not viable, a Scotts Corner Study Area wide wastewater treatment option is required. Section 4 presents candidate sites and a preliminary screening on Available Area and soil conditions. Section 5 presents engineering layouts for 4 candidate sites deemed most favorable.

4. CANDIDATE SITES FOR WASTEWATER TREATMENT / DISPOSAL

4.0 OVERVIEW

As stated in Section 1.3, the following three wastewater design flow scenarios are being evaluated:

- I. 40,000 gpd – existing conditions maximum use with some intensity of use increases
- II. 60,000 gpd – Scenario I plus 20,000 gpd at Parcel or
- III. 80,000 gpd -- Scenario II plus 20,000 gpd at Parcel or

Table 4.0-1 lists the properties that have been identified as candidates for wastewater treatment and/or disposal for the above scenarios. Near Study Area Town owned properties and private parcels known by the Town to be willing to be considered for the project are listed on Table 4.0-1.

Table 4.0-1 Candidate Properties for Scotts Corner Wastewater Treatment / Disposal

Status as of March 28, 2019				
Candidate Disposal Site		Soils Data	Comments	Parcel IDs
1	Town Park	Yes		9820-1, 9820-2.2, 9820-8, 9820-86
2	Pine Drive -Lower Trinity Rd	Yes, partial		9320-28
3	Oceanus	Yes		9320-13.9-12, 9320-13.9-13 & 9320-13.9-15
4	Old Pound Rd	Qualitative		9820-16
5	Elementary School	Yes		9816-46 & 9816-47
6	Town Land adjacent to School	No data exists		9816-64
7	Golf Course	No		9316-18.9
8	169 Barnegat Road	Yes	27.17 acres	9457-12
Wastewater Treatment System Site(s)				
1	Clark - 12 & 16 Trinity Pass Rd	No data known to exist	WWTP site	9454-16 & 9454-17
2	169 Barnegat Road		27.17 acres	9457-12

Figures 4.0-1a and 4.0-1b illustrate the location of the candidate parcels and the watershed within which they are located. The available area (defined in Section 3) on each property that could be used for treatment and/or wastewater disposal is presented on Figures 4.0-2 and 4.0-3.

Available Area was calculated for each Parcel and soils suitability examined. The following setbacks were considered:

- 100-ft from wetland
- 10-ft from a property line
- 20-ft from a building
- 200-ft from public wells, 100-ft from private wells

- 200-ft from public water supply reservoir, 100-ft from private water supply reservoir
- Areas with slopes >20%

For each candidate site, Tables and maps of the following features are provided, when data is available:

- ✓ Soils / Percolation Rate Data
- ✓ Slope
- ✓ Wetlands & Setbacks
- ✓ Floodplains

Table 4.0-2 provides a list of existing data for each Table 4.0-1 candidate site.

Table 4.0-2 Candidate Sites Existing Information Summary

Candidate Site Existing Information Summary*						
Candidate Site Name	Soils Map	Test Pit Results	Slope / Elevations	Wetlands & Setbacks	Flood Plains	
1	Town Park	Yes	Yes	Yes	Yes	Yes
2	Lower Trinity Pass	Yes	Yes	Yes	Yes	Yes
3	Oceanus	Yes	Yes	Yes	Yes	Yes
4	Old Pound Road	Yes	Yes	Yes	Yes	Yes
5	Elementary School	Yes	Yes	Yes	Yes	Yes
6	School Adjacent Land	Yes	None	Yes	Yes	Yes
7	Golf Course	Yes	TBD	Yes	Yes	Yes
8	Clark - 12 & 16 Trinity Pass Road	Yes	None	Yes	Yes	Yes
9	169 Barnegat Road	Yes	Yes	Yes	Yes	Yes

*TBD = To Be Determined.

It is noted that published slope information designates areas as < 15%, 15% - 25% and > 25% slopes. Consequently areas < 15% are designated as being viable, recognizing that this is being conservative and is taken into account when a detailed site analysis is performed.

Explanation of soil types is presented in Appendix B.

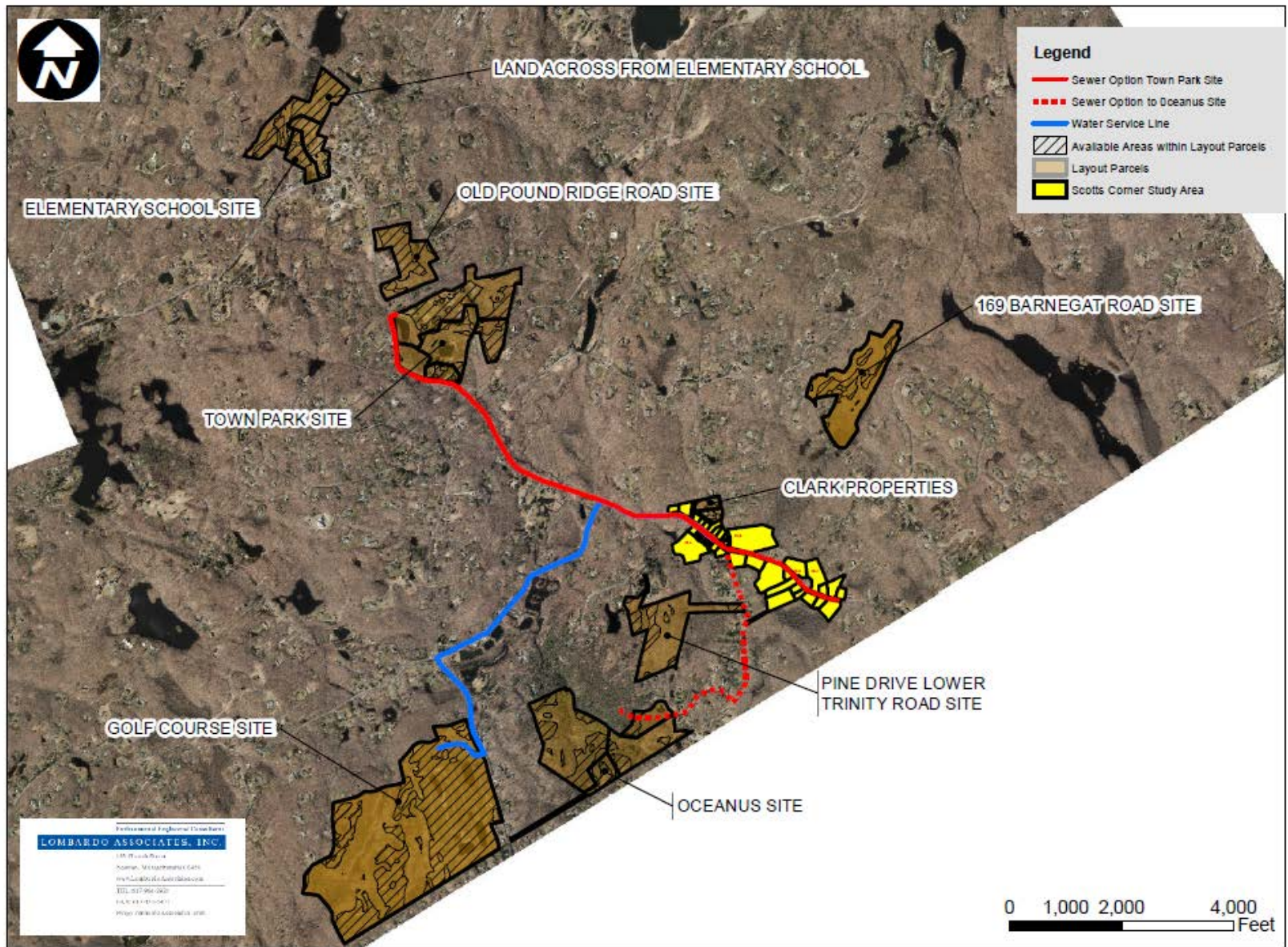


Figure 4.0-1a Candidate Sites – Location Map

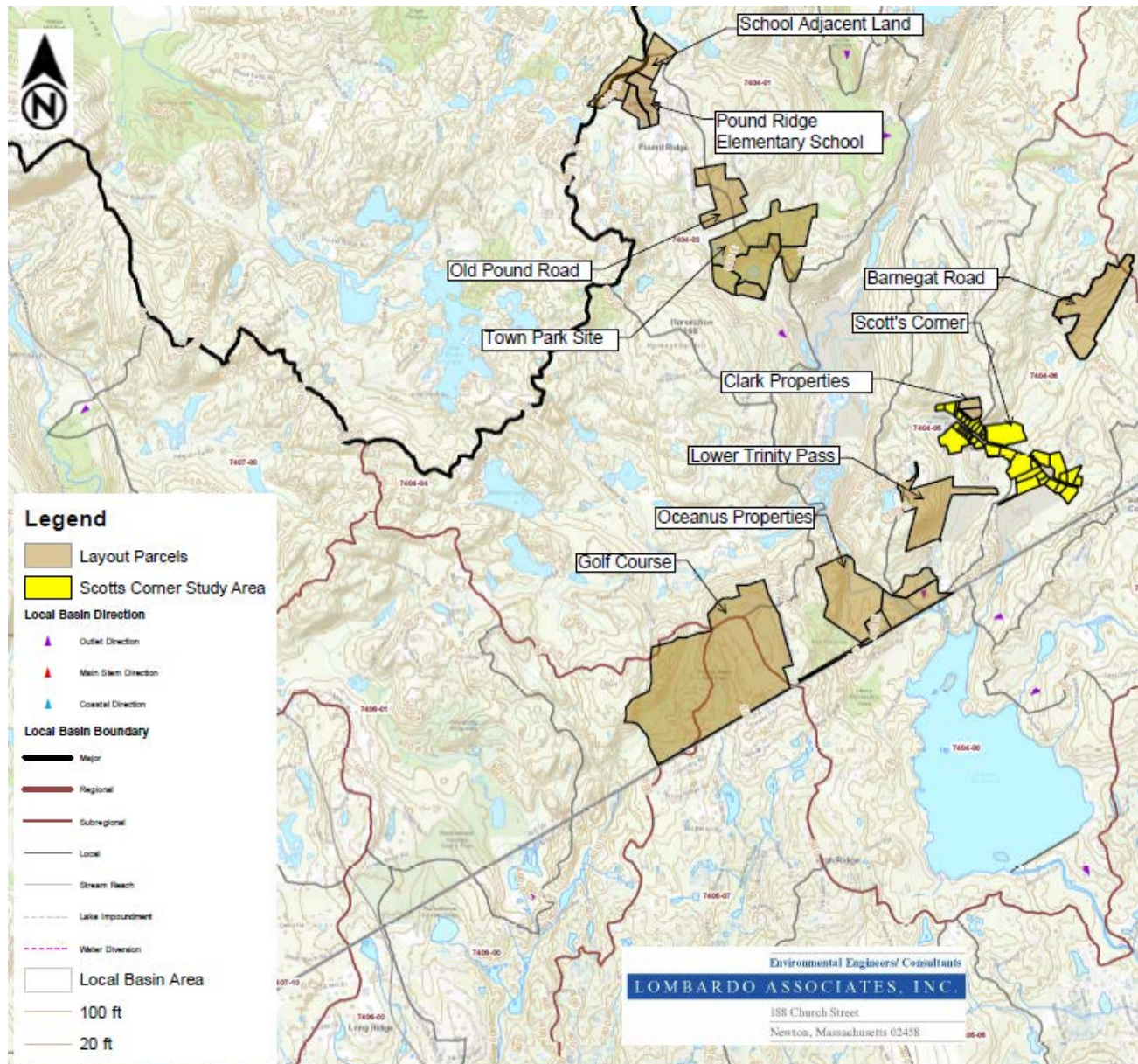


Figure 4.0-1b Candidate Sites – Location Map with Watershed Boundaries

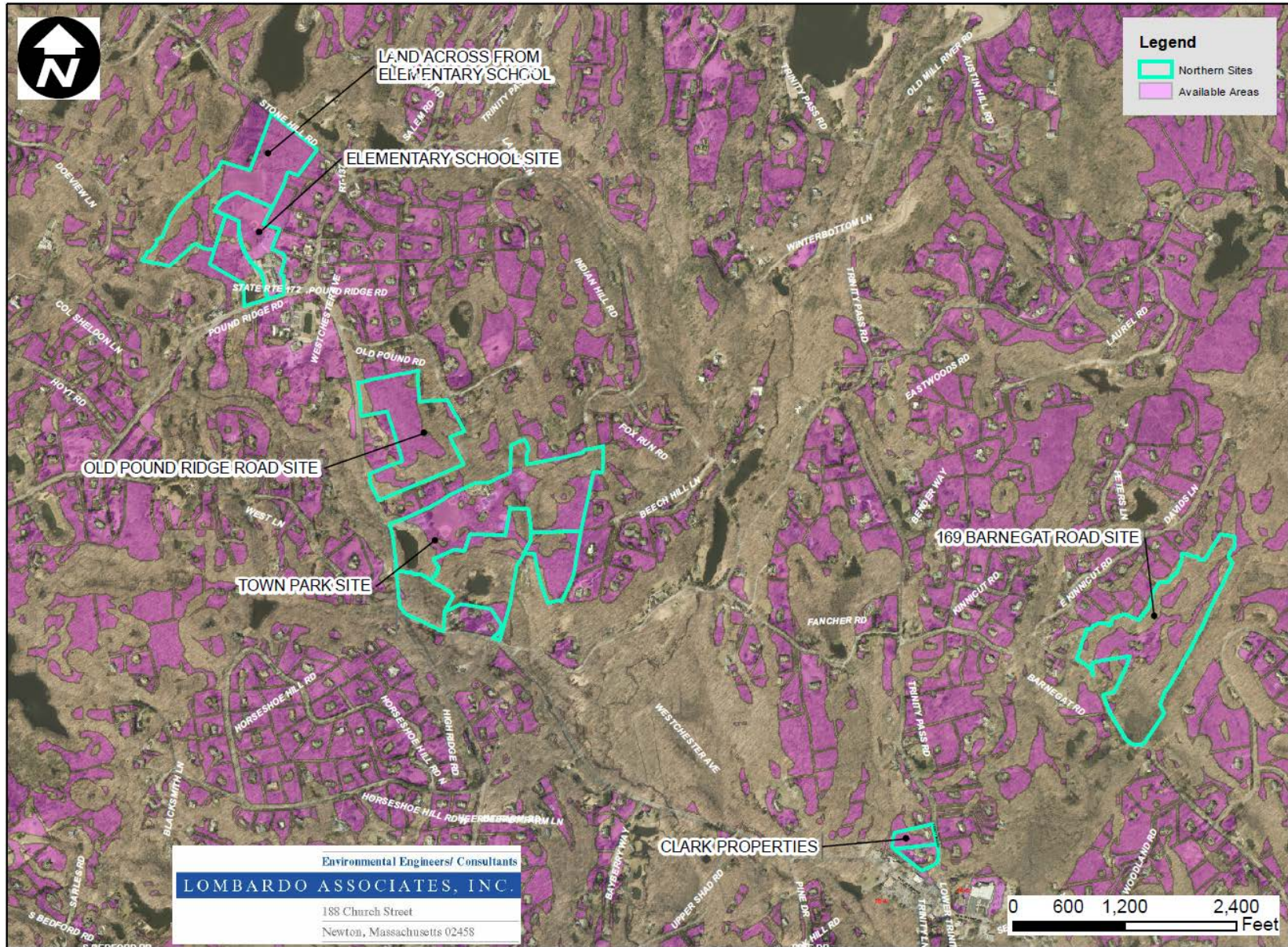


Figure 4.0-2 Available Area Map – Northern Sites

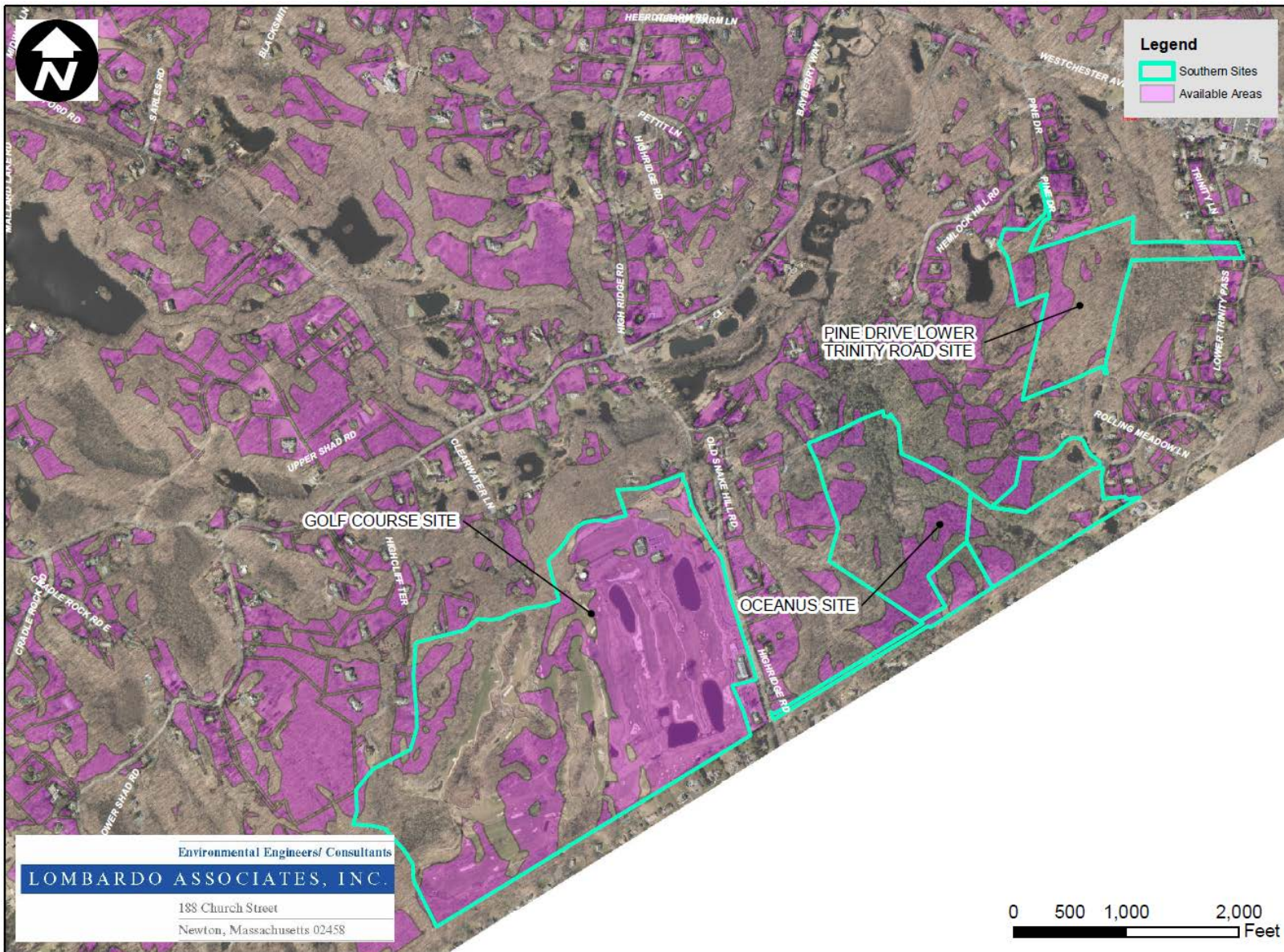


Figure 4.0-3 Available Area Map – Southern Sites

4.1 TOWN PARK SITE

The Town Park site consists of six parcels, listed below, located off Westchester Avenue just north of Town offices. The parcels are owned by the Town of Pound Ridge, and serve as a municipal park and recreation area, with swimming pools, tennis and basketball courts, and walking trails. The Town Recreation Department is located on the Town Park site. Parcel information according to the town of Pound Ridge is as follows:

- Parcel #: 9820-1
- Parcel #: 9820-2.2
- Parcel #: 9820-8
- Parcel #: 9820-147
- Parcel #: 9820-153

Table 4.1-1 presents the Town Park Site percolation test and Test Pit results that were provided by the WC DoH.

Table 4.1-1 Town Park Perc Test & Depth to Bedrock / GW Data

Pound Ridge Town Park Perc. Test Results		Pound Ridge Town Park Test Pit Summary	
Perc. Test #	Perc. Rate (min./in.)	Test Pit #	Depth to Bedrock/GW
A	DNP	DH 1	84" Seepage
B	DNP	DH 2	-
C	0.33	DH 3	72" Seepage
D	24	DH 4	57" Seepage
E	8.7	DH 5	45" Seepage
G	3.3	DH 6	-
H	5.7	DH 7	80" Shale
I	3.3	DH 8	-
J	8	DH 9	44" Seepage
K	10	DH 10	55" Seepage
L	30	DH 11	-
M	4.9	DH 12	-
N	20	DH 13	36" Seepage
O	4.7	DH 14	71" Seepage
P	4.7		
Q	6.3		

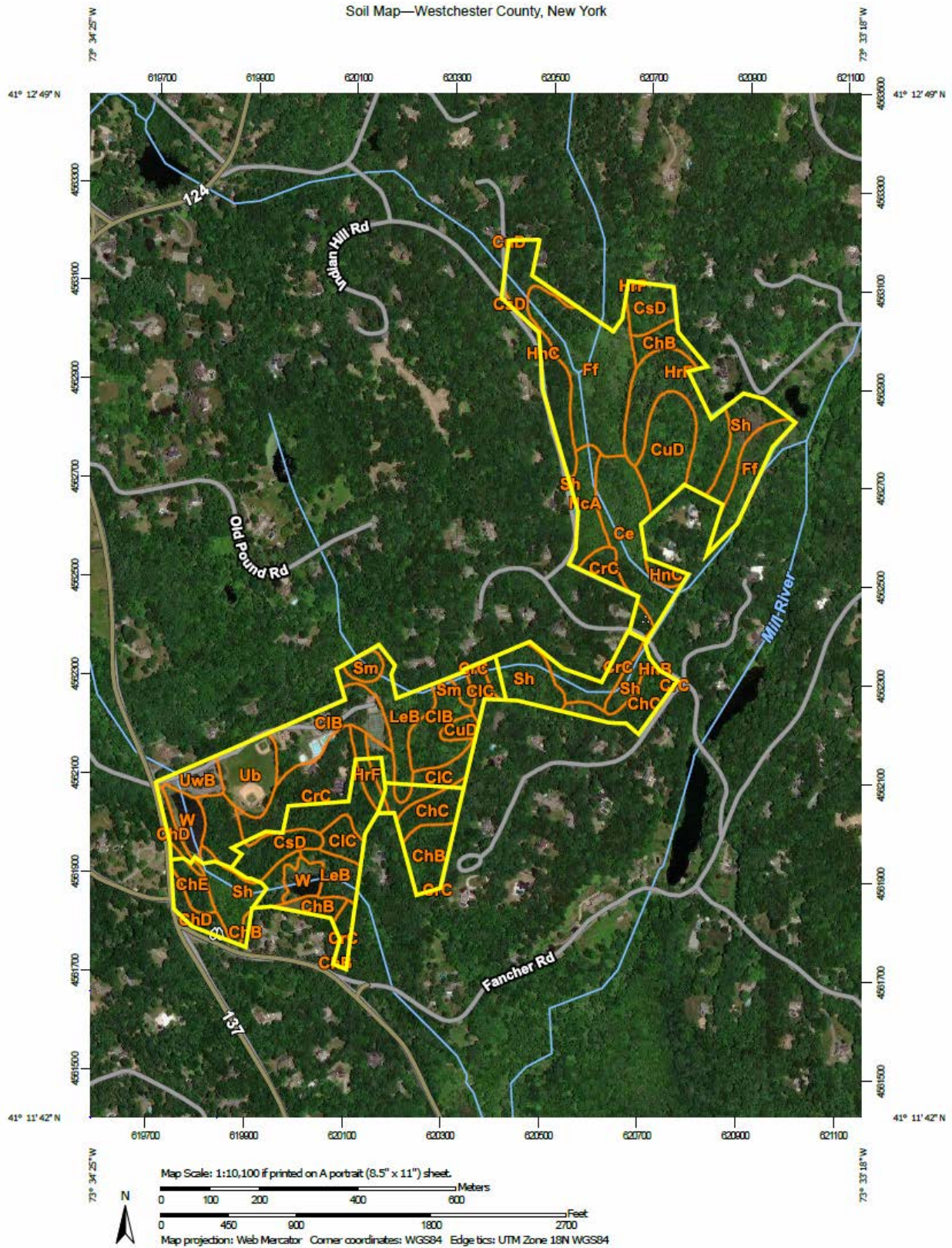


Figure 4.1-1 Town Park Soils Map

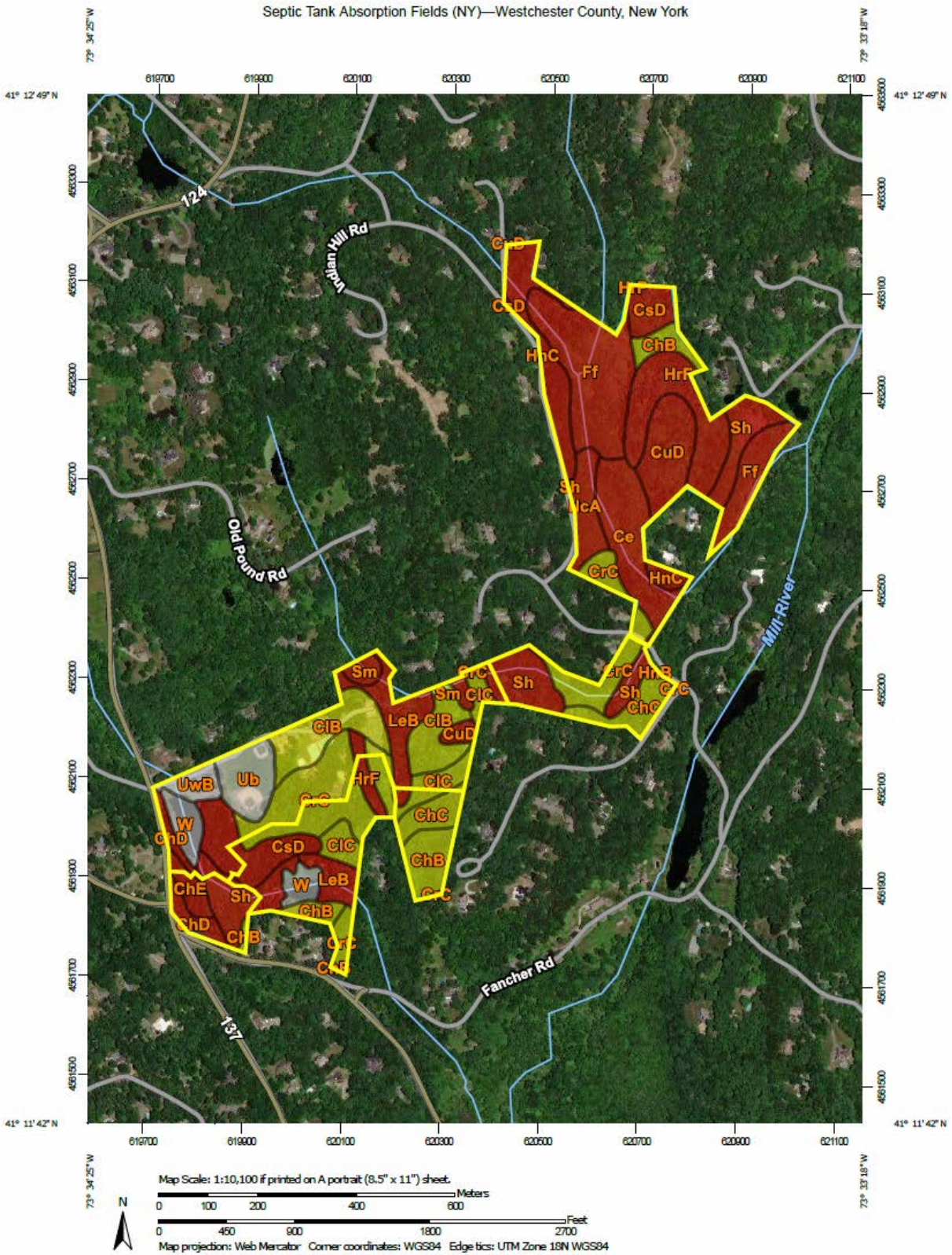


Figure 4.1-2 Town Park Soils Rating Map

Soils Description

- ChB – Charlton Fine Sandy Loamy, 3 to 8 percent slopes
- ChC – Charlton Fine Sandy Loam, 8 to 15 percent slopes
- CIB - Charlton Fine Sandy Loamy, 3 to 8 percent slopes, very stony
- CIC - Charlton Fine Sandy Loamy, 3 to 15 percent slopes, very stony
- CrC – Charlton-Chatfield complex, 0 to 15 percent slopes, very stony

Charlton fine sandy loam

1. Typical profile

Ap - 0 to 7 inches: fine sandy loam

Bw - 7 to 22 inches: gravelly fine sandy loam

C - 22 to 65 inches: gravelly fine sandy loam

2. Properties and qualities

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Low

Capacity most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)

Depth to water table: More than 80 inches

Hydrologic Soil Group: B

Charlton-Chatfield complex

1. Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material

A - 2 to 4 inches: fine sandy loam

Bw - 4 to 27 inches: gravelly fine sandy loam

C - 27 to 65 inches: gravelly fine sandy loam

2. Properties and qualities

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Low

Capacity most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)

Depth to water table: More than 80 inches

Hydrologic Soil Group: B

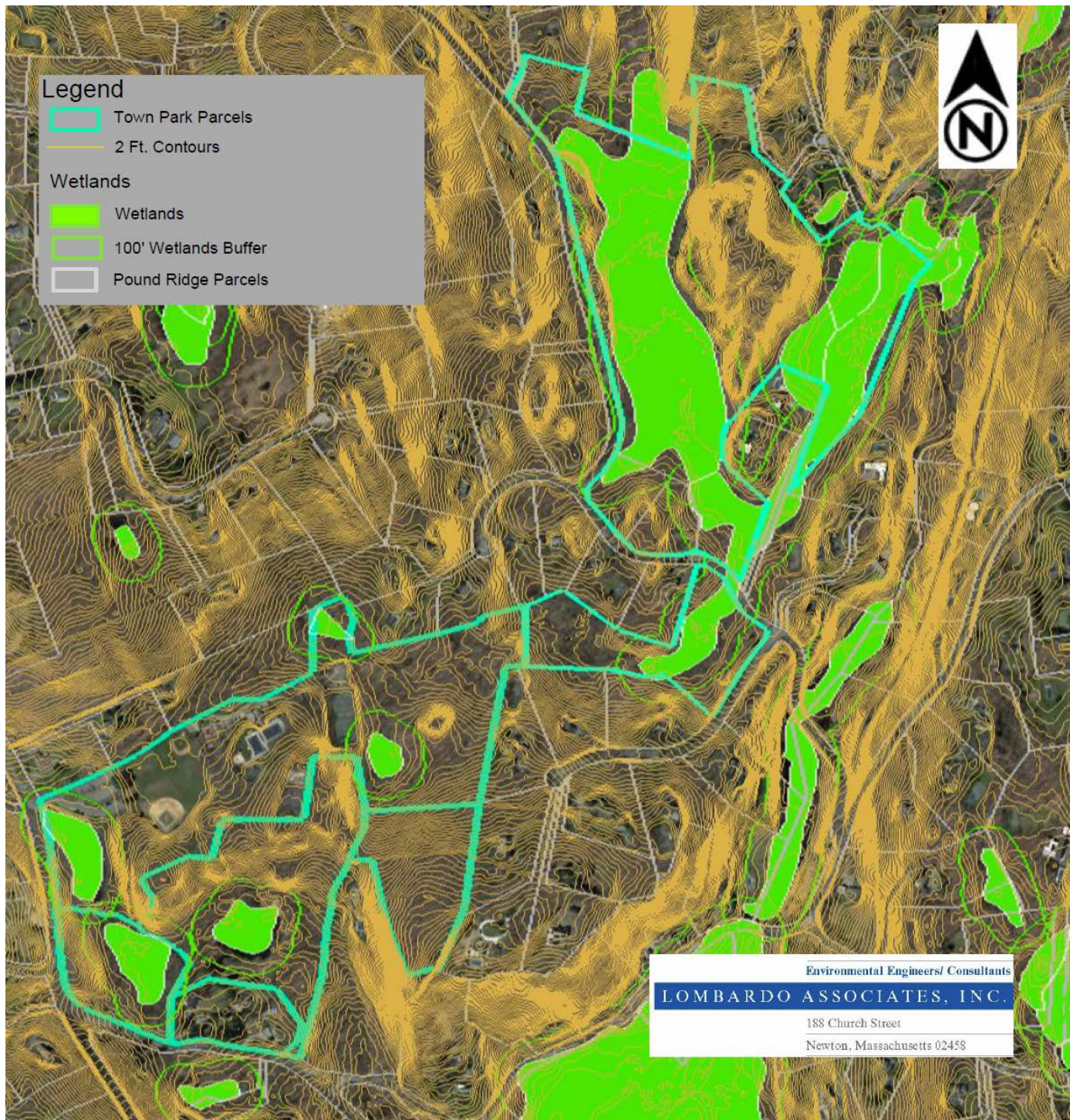


Figure 4.1-3 Town Park Wetlands Map

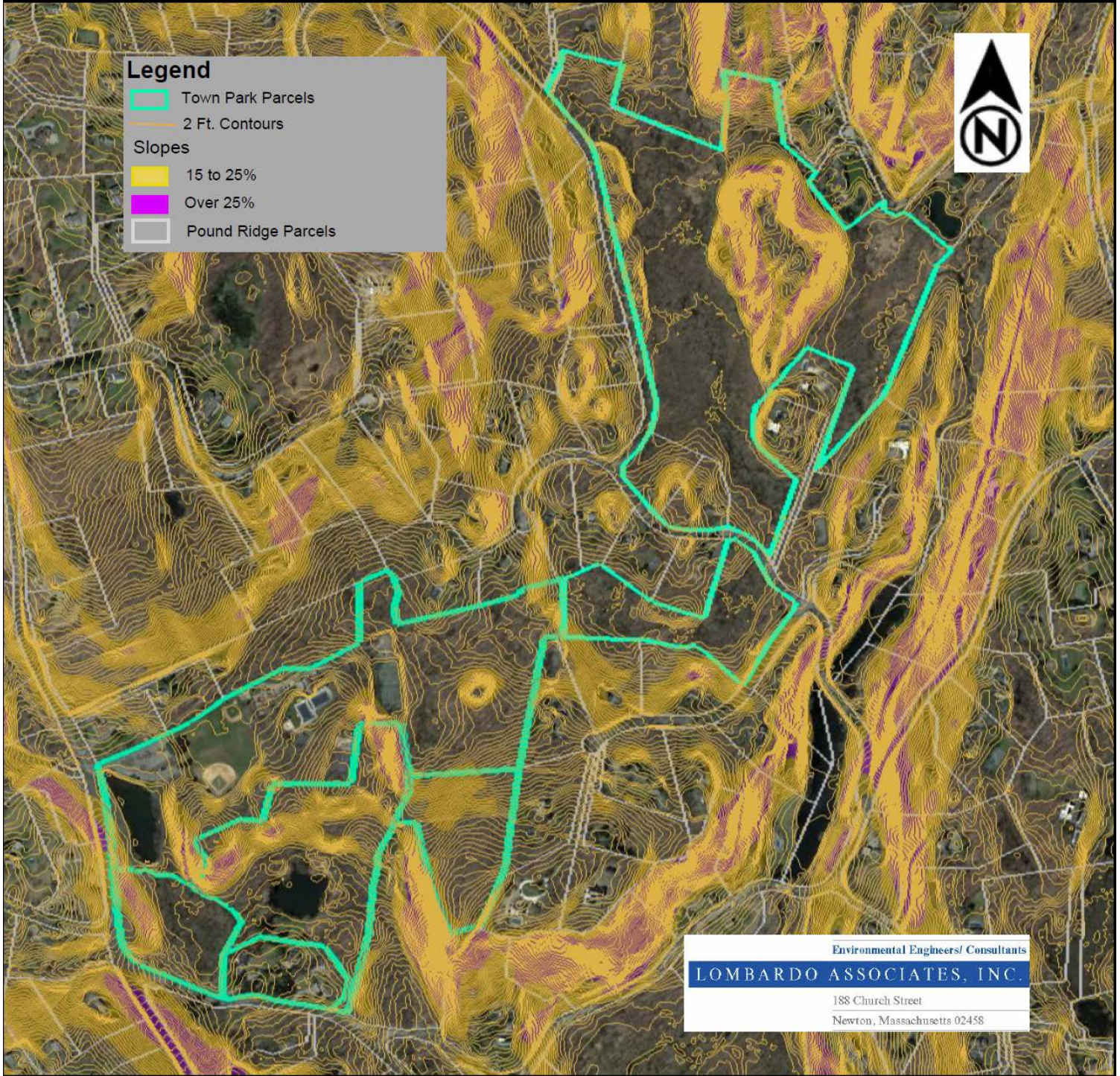


Figure 4.1-4 Town Park Slopes Map

Table 4-1-2 Town Park Test Pit Records

Pound Ridge Town Park Test Pit Records														
TP Depth	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9	TP 10	TP 11	TP 12	TP 13	TP 14
G.L.	4" Top Soil	4" Top Soil	4" Top Soil	6"	4" Top Soil	4" Top Soil	4" Top Soil	4" Top Soil	10" Top Soil	10" Top Soil	4" Top Soil	10" Top Soil	10" Top Soil	4" Top Soil
6"	Sandy Loam	Sandy Loam						Sandy Loam				Sandy Loam; 30" Roots	Sandy Loam; Seepage @ 36" to 48"	Sandy Loam w/ decayed rock
12"														
18"														
24"	Compact Sandy Loam	Mixed Sands w/ decayed rock	Fine Sandy Loam	Sandy Loam	Wet Sandy Loam w/ Cobbles; 45" Seepage	Sandy Loam; 50" Roots	Sandy Loam	Mixed Sand pocket - runs 24"	Sandy Loam; 44" Seepage	Sandy Loam; 55" Seepage	Fine Sandy Loam	Mixed Sands	Silty Clay	Silty Clay
30"														
36"														
42"														
48"														
54"														
60"														
66"														
72"														
78"														
84"	Seepage													
90"	Pit Bottom		Pit Bottom						82" Sandy Loam	Pit Bottom				
96"		94" Pit Bottom			Pit Bottom	92" Pit Bottom		92" Pit Bottom	92" Pit Bottom		Pit Bottom	Pit Bottom	Pit Bottom	

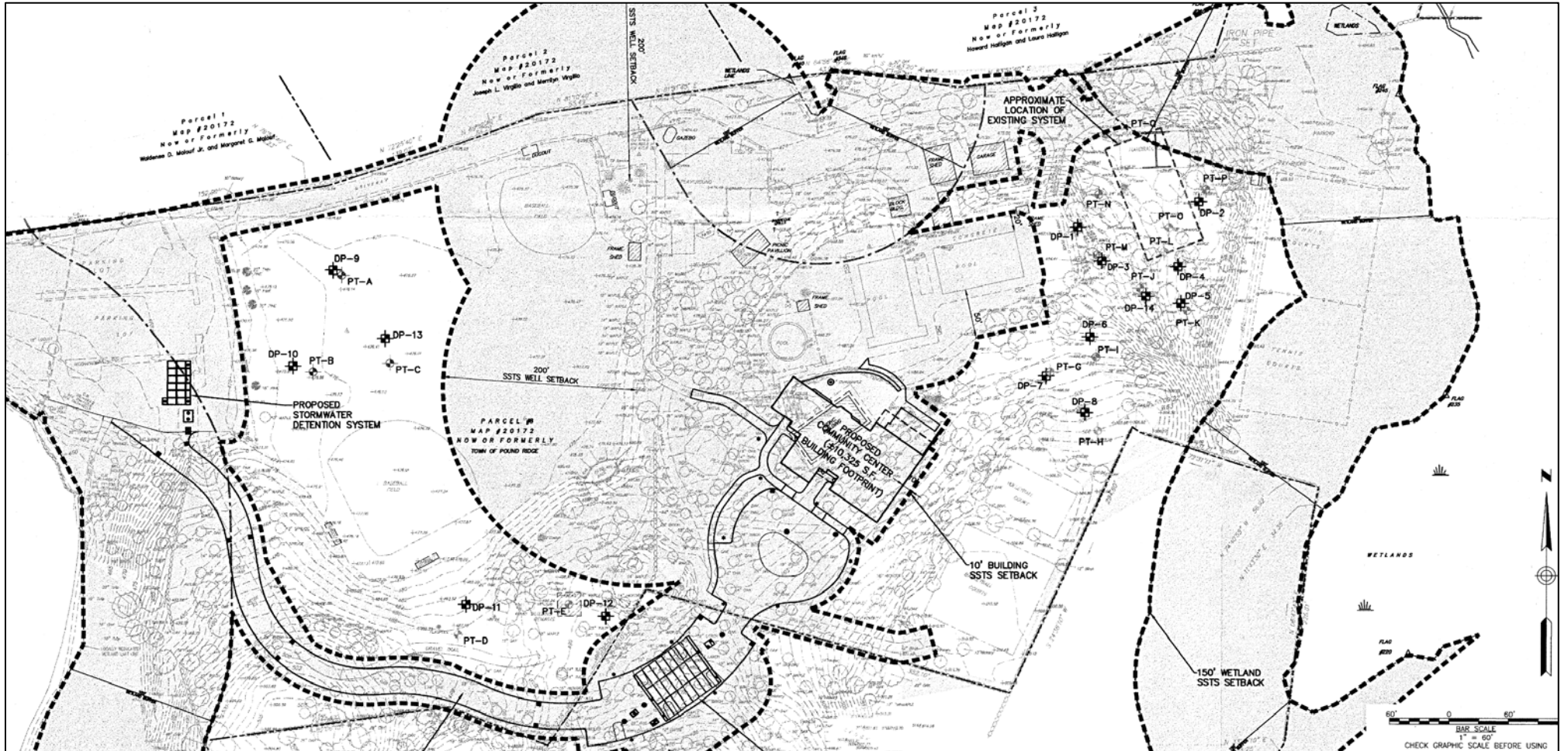


Figure 4.1-5 Town Park Test Boring Locations

4.2 PINE DRIVE – LOWER TRINITY PASS

The candidate site consists of one parcel, listed as 9320-28 according to the Pound Ridge Assessors Office. The parcel is a vacant, mostly wooded residential lot owned by CH State Holdings LLC, and is surrounded by occupied residential lots on Lower Trinity Pass and Hemlock Hill Road.

Table 4.2-1 presents the Lower Trinity Pass Site percolation test and Test Pit results that were provided by the Owner as performed by their engineer, Langan.

Table 4.2-1 Lower Trinity Pass Test Pit & Depth to Bedrock / GW Data

Lower Trinity Pass Test Pit Summary - Bibbo Associates		
Test Pit #	Test Pit Depth	Depth to Bedrock/GW
DH 2	36"	Ledge @ 36"
DH 3	126"	No BR/GW
DH 4	120"	Ledge @ 84"
DH 5	132"	GW @ 108"
DH 6	120"	No BR/GW
DH 7	126"	GW @ 120"
DH 8	144"	GW @ 144"
DH 9	144"	Seepage @ 48"
DH 10	120"	GW @ 108"
DH 11	78"	BR/GW @ 78"
DH 12	N/A	N/A
DH 13	120"	GW @ 114"
DH 14	120"	No BR/GW
DH 15	90"	BR @ 90"
DH 16	108"	No BR/GW
DH 17	132"	No BR/GW
DH 18	132"	No BR/GW

Lower Trinity Pass Test Pit Summary - Peak Construction	
Test Pit #	Depth to Bedrock/GW
TP-A	No BR/GW
TP-B	No BR/GW
TP-C	Mottles @ ~60"
TP-D	Mottles @ ~60"
TP-E	No BR/GW
TP-F	No BR/GW



Figure 4.2-1 Lower Trinity Pass Soils Map



Figure 4.2-2 Lower Trinity Pass Soil Ratings Map

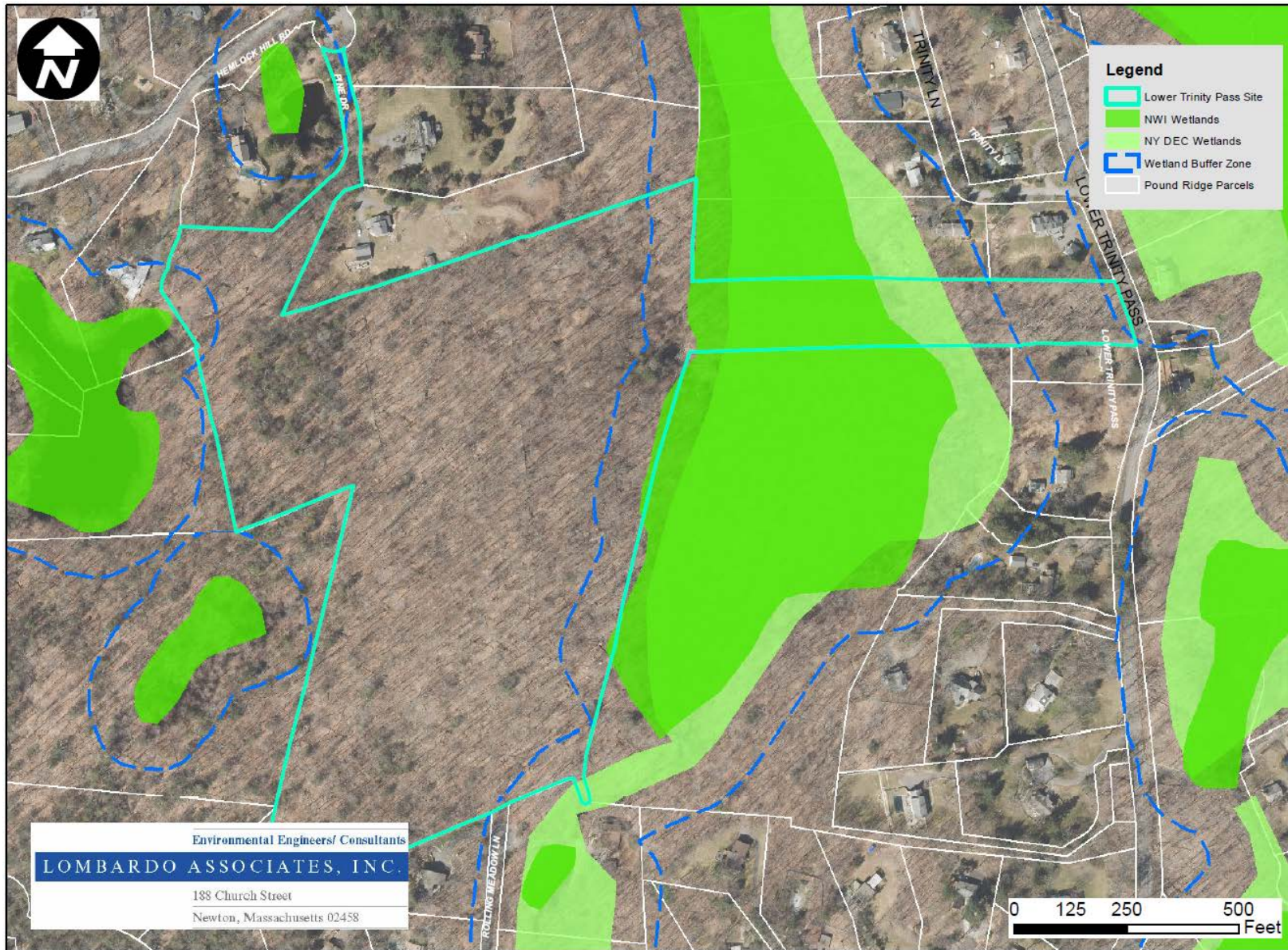


Figure 4.2-3 Lower Trinity Pass Wetlands Map

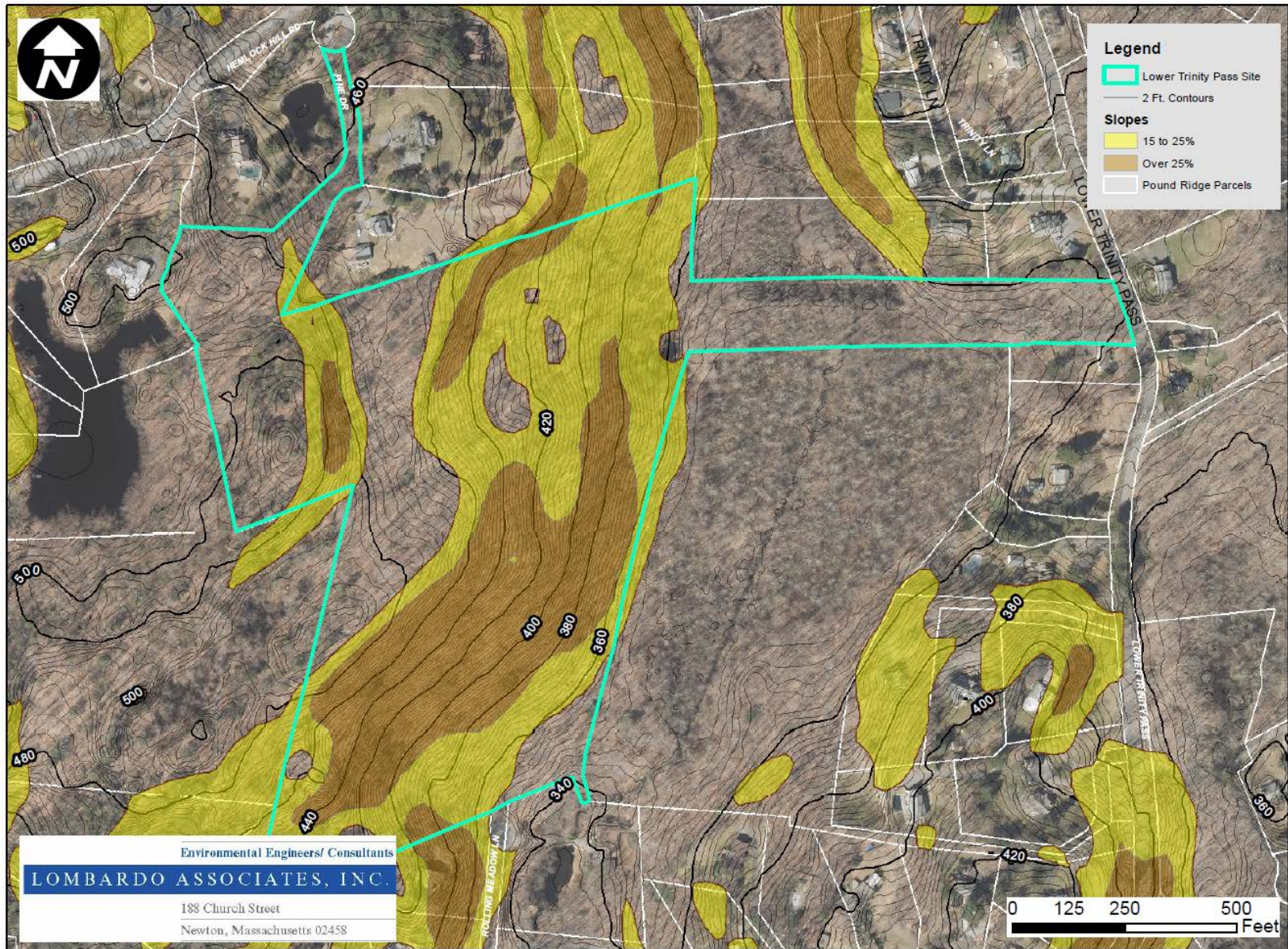


Figure 4.2-4 Lower Trinity Pass Slopes + Contours Map

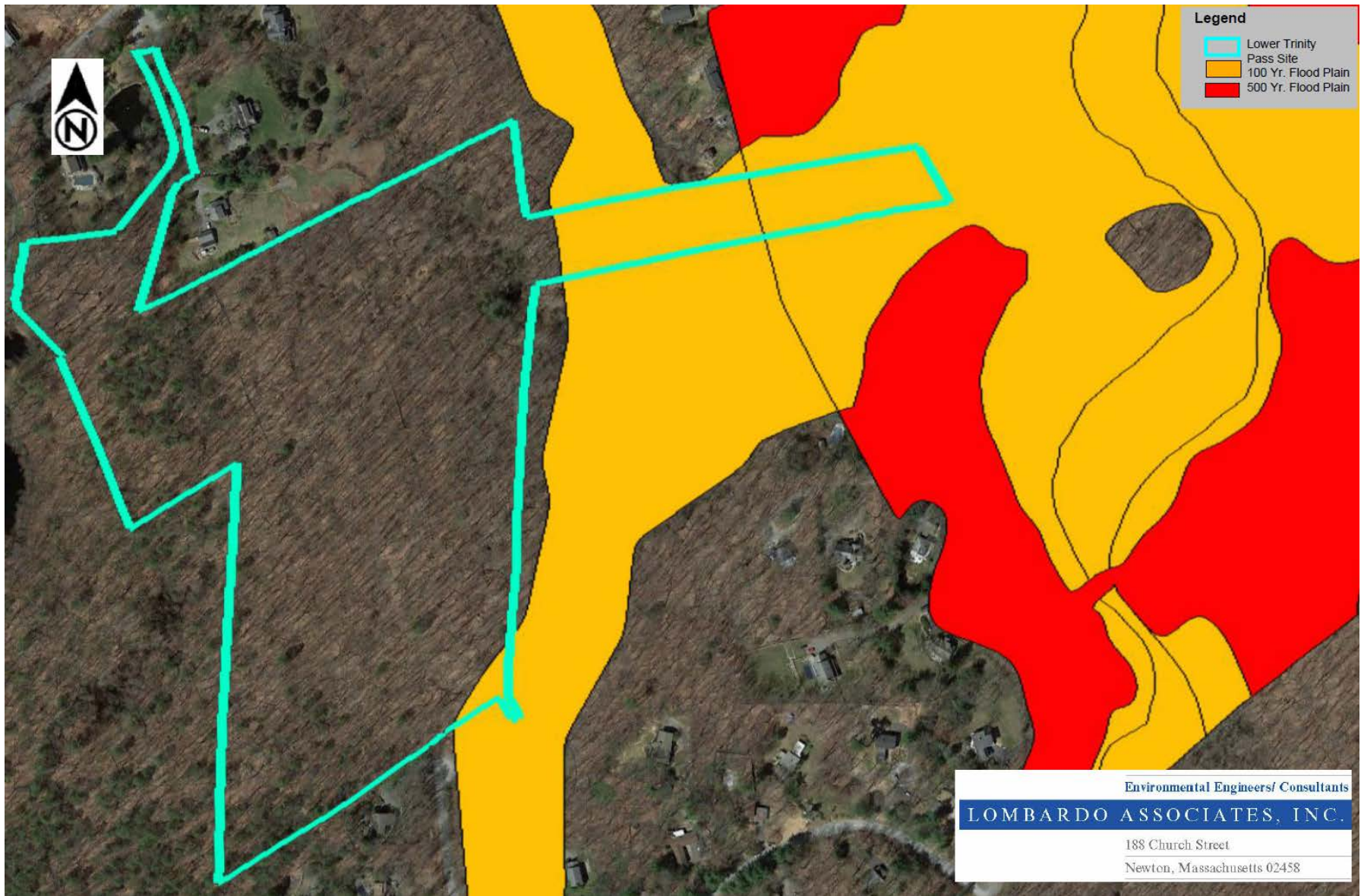
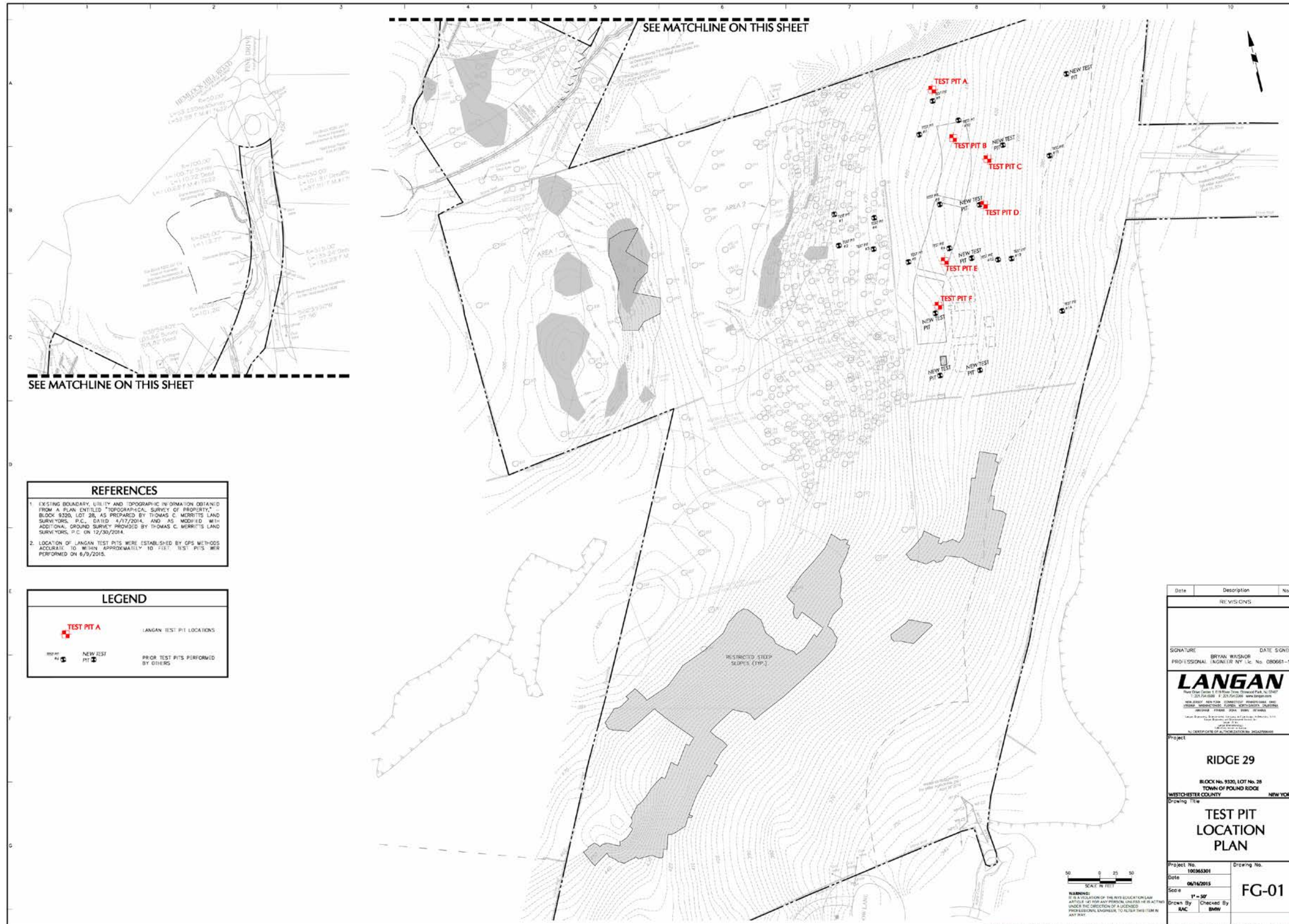


Figure 4.2-5 Lower Trinity Pass Floodplains Map

Table 4.2-2 Lower Trinity Pass Test Pit Records

Lower Trinity Pass Test Pit Records - Peak Construction						
TP Depth	TP-A	TP-B	TP-C	TP-D	TP-E	TP-F
G.L.	16" Loam (10YR 3/3); common fine roots	16" Loam (10YR 2/2); common fine roots; 25% cobbles and boulders	20" Loam (10YR 2/2); common fine roots; 15% cobbles and boulders	16" Loam (10YR 3/3); common fine roots; 30% boulders	20" Loam (10YR 2/2); common fine roots; 15% cobbles and boulders	20" Loam (10YR 3/3); common fine roots; 30% cobbles and boulders
6"						
12"						
18"	16"-36" sandy loam (10YR 4/6); 15% coarse gravel and cobbles	16"-40" sandy loam (10YR 3/6); 20% coarse gravel and cobbles	20-36" Sandy Loam (10YR 3/6); 20% coarse gravel and cobbles	16"-36" sandy loam (10YR 5/8); 10% coarse gravel and cobbles		20"-40" sandy loam (10YR 5/8); 10% coarse gravel and cobbles
24"						
30"						
36"						
42"	36-96" loamy sand (5 YR 5/2); 60% cobbles and boulders; Pit Bottom @ 96"	40"-96" Loamy Sand (5YR 6/2); 60% cobbles and boulders; Pit Bottom @ 96"	40"-90" Loamy Sand (5YR 6/2); 40% cobbles and boulders; Mottling @ ~60", Pit Bottom @ 90"	36-96" loamy sand (5 YR 5/2); 20% cobbles and boulders; Mottling @ ~60"; Pit Bottom @ 96"	16"-90" Loamy Sand (10YR 3/4); 40% cobbles and boulders; Pit Bottom @ 90"	40"-84" Loamy Sand (5YR 6/2); 75% cobbles and boulders; Pit Bottom @ 84"
48"						
54"						
60"						
66"						
72"						
78"						
84"						
90"						
96"						



REFERENCES	
1.	EXISTING BOUNDARY, UTILITY AND TOPOGRAPHIC INFORMATION OBTAINED FROM A PLAN ENTITLED "TOPOGRAPHICAL SURVEY OF PROPERTY," - BLOCK 9320, LOT 28, AS PREPARED BY THOMAS C. MERRITT'S LAND SURVEYORS, P.C., DATED 4/17/2014, AND AS MODIFIED WITH ADDITIONAL GROUND SURVEY PROVIDED BY THOMAS C. MERRITT'S LAND SURVEYORS, P.C. ON 12/28/2014.
2.	LOCATION OF LANGAN TEST PITS WERE ESTABLISHED BY GPS METHODS ACCURATE TO WITHIN APPROXIMATELY 10 FEET. TEST PITS WERE PERFORMED ON 6/9/2015.

LEGEND	
	LANGAN TEST PIT LOCATIONS
	NEW TEST PIT
	PRIOR TEST PITS PERFORMED BY OTHERS

Date	Description	No.
REVISIONS		
SIGNATURE: BRYAN WASKOB DATE SIGNED: 06/16/2015		
PROFESSIONAL ENGINEER NY Lic. No. 080661-1		
LANGAN		
<small>LANGAN ASSOCIATES, INC. 1000 WEST 10TH STREET, SUITE 200, CHICAGO, IL 60606-7000 LANGAN ASSOCIATES, INC. 1000 WEST 10TH STREET, SUITE 200, CHICAGO, IL 60606-7000 LANGAN ASSOCIATES, INC. 1000 WEST 10TH STREET, SUITE 200, CHICAGO, IL 60606-7000 LANGAN ASSOCIATES, INC. 1000 WEST 10TH STREET, SUITE 200, CHICAGO, IL 60606-7000 LANGAN ASSOCIATES, INC. 1000 WEST 10TH STREET, SUITE 200, CHICAGO, IL 60606-7000</small>		
Project No. 100363301		
Date 06/16/2015		
Scale 1" = 50'		
Drawing No. FG-01		
Drawn By: KAC Checked By: BMW		

Figure 4.2-6 Lower Trinity Pass Test Pit Locations Map

4.3 OCEANUS

The candidate site consists of up to 11 parcels which are vacant and mostly wooded owned by Oceanus Navigation Corp Ltd, and is surrounded by occupied residential lots on Lower Trinity Pass and Rolling Meadows Road.

Table 4.3-1 presents the Oceanus Site percolation test and Test Pit results that are on the Site drawings that were submitted to the Pound Ridge Planning Board.

Table 4.3-1 Oceanus Site Percolation Test and Test Pit Summary

Pound Ridge - Oceanus Site Perc. Test Results		Pound Ridge - Oceanus Test Pit Results Summary	
Perc. Test #	Perc. Rate (min./in.)	Test Pit #	Depth to Bedrock/GW
TP-1-1	9	DH 1-1	Bedrock @ 66"
TP-1-2	15	DH 1-2	Bedrock @ 66"
TP-1-3	9.33	DH 1-3	Bedrock @ 72"
TP-2-1	15	DH 2-1	Bedrock @ 60"
TP-2-2	10.33	DH 2-2	Bedrock @ 72"
TP-2-3	15	DH 2-3	Bedrock @ 60"
TP-3-1	6.67	DH 3-1	Bedrock @ 60"
TP-3-2	11.67	DH 3-2	Bedrock @ 66"
TP-3-3	4.67	DH 3-3	Bedrock @ 60"
TP-5-1	15	DH 5-1	Bedrock @ 72"
TP-5-2	16.5	DH 5-2	Bedrock @ 72"
TP-5-3	6	DH 5-3	Bedrock @ 78"
TP-6-1	6	DH 6-1	Bedrock @ 78"
TP-6-2	5.33	DH 6-2	Bedrock @ 60"
TP-6-3	5.67	DH 6-3	Bedrock @ 60"
TP-7-1	8.33	DH 7-1	No Bedrock/GW
TP-7-2	7	DH 7-2	No Bedrock/GW
TP-7-3	6.33	DH 7-3	No Bedrock/GW
TP-8-1	12.33	DH 8-1	Bedrock @ 60"
TP-8-2	6.33	DH 8-2	Bedrock @ 66"
TP-8-3	7	DH 8-3	Bedrock @ 66"
TP-9-1	4.33	DH 9-1	Bedrock @ 66"
TP-9-2	7	DH 9-2	Bedrock @ 72"
TP-9-3	16.5	DH 9-3	Bedrock @ 72"
TP-10-1	4	DH 10-1	No Bedrock/GW
TP-10-2	13	DH 10-2	No Bedrock/GW
TP-10-3	4	DH 10-3	No Bedrock/GW
TP-12-1	4	DH 12-1	No Bedrock/GW
TP-12-2	9.67	DH 12-2	No Bedrock/GW
TP-12-3	8.67	DH 12-3	No Bedrock/GW
TP-13-1	18	DH 13-1	Bedrock @ 60"
TP-13-2	10	DH 13-2	Bedrock @ 60"
TP-13-3	8.67	DH 13-3	Bedrock @ 60"
TP-14-1	6.33	DH 14-1	Bedrock @ 60"
TP-14-2	6.67	DH 14-2	Bedrock @ 66"
TP-14-3	6.33	DH 14-3	Bedrock @ 54"
TP-14-4	8.33		

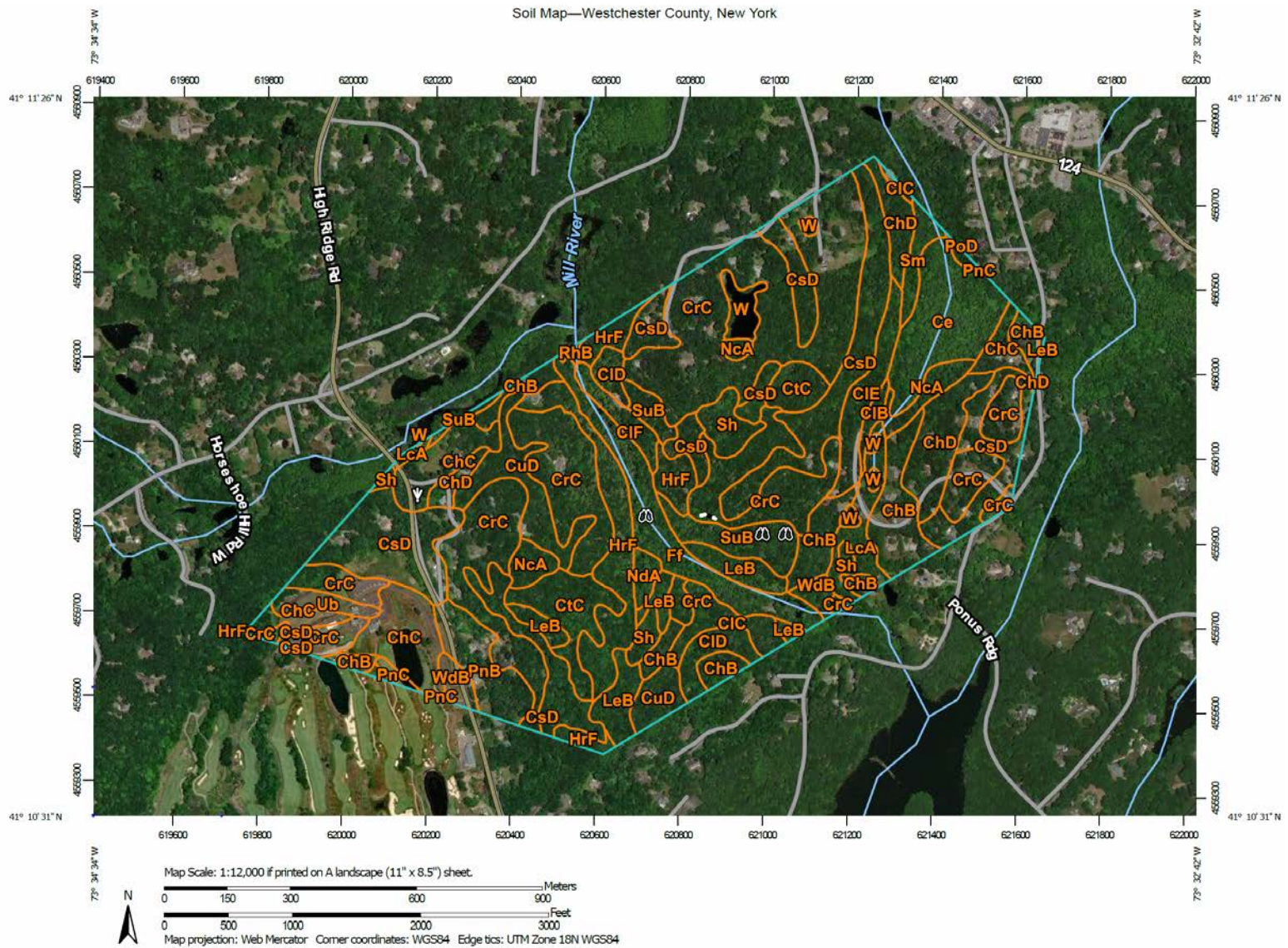


Figure 4.3-1 Oceanus Soils Map

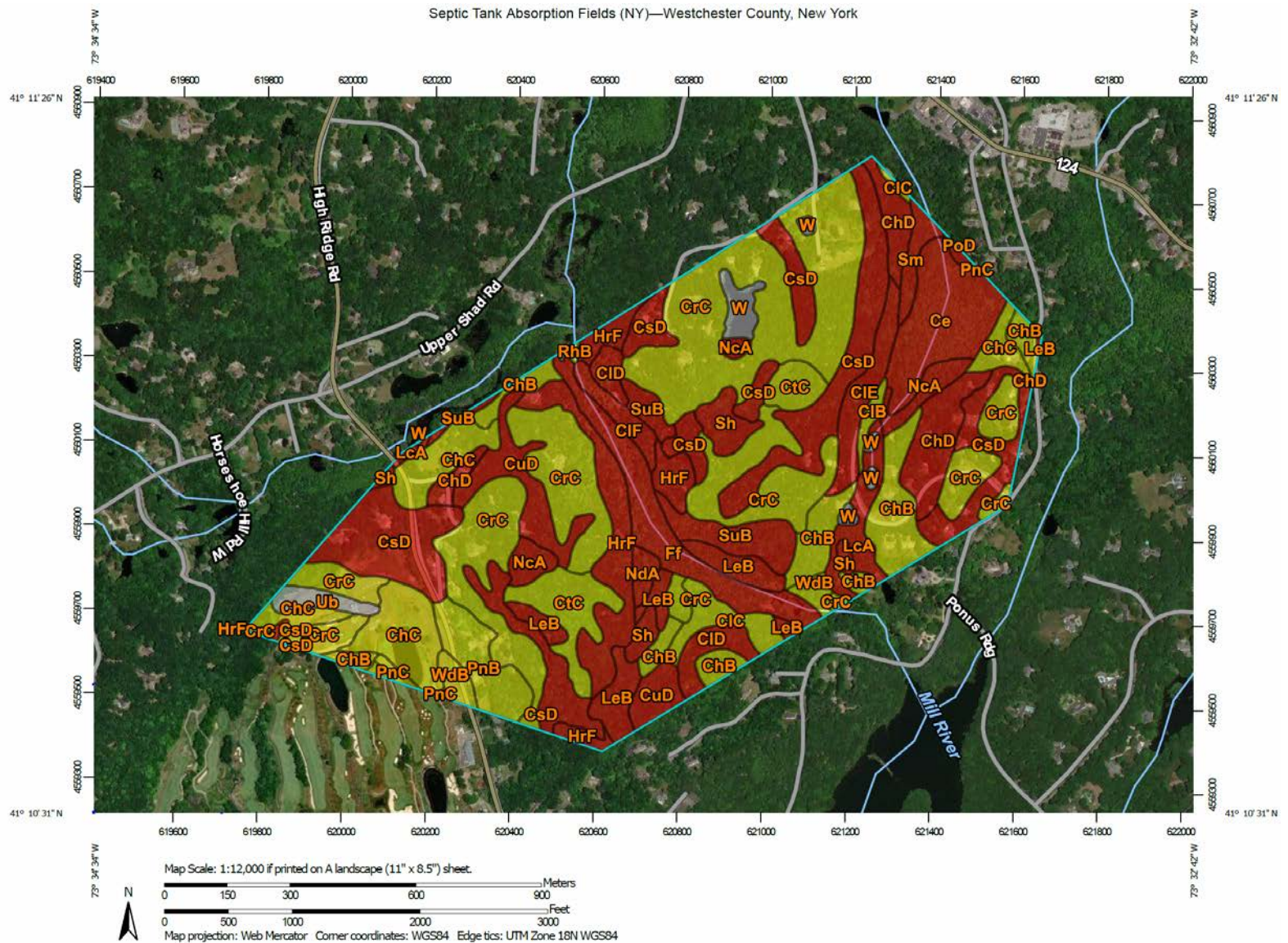


Figure 4.3-2 Oceanus Soil Ratings Map

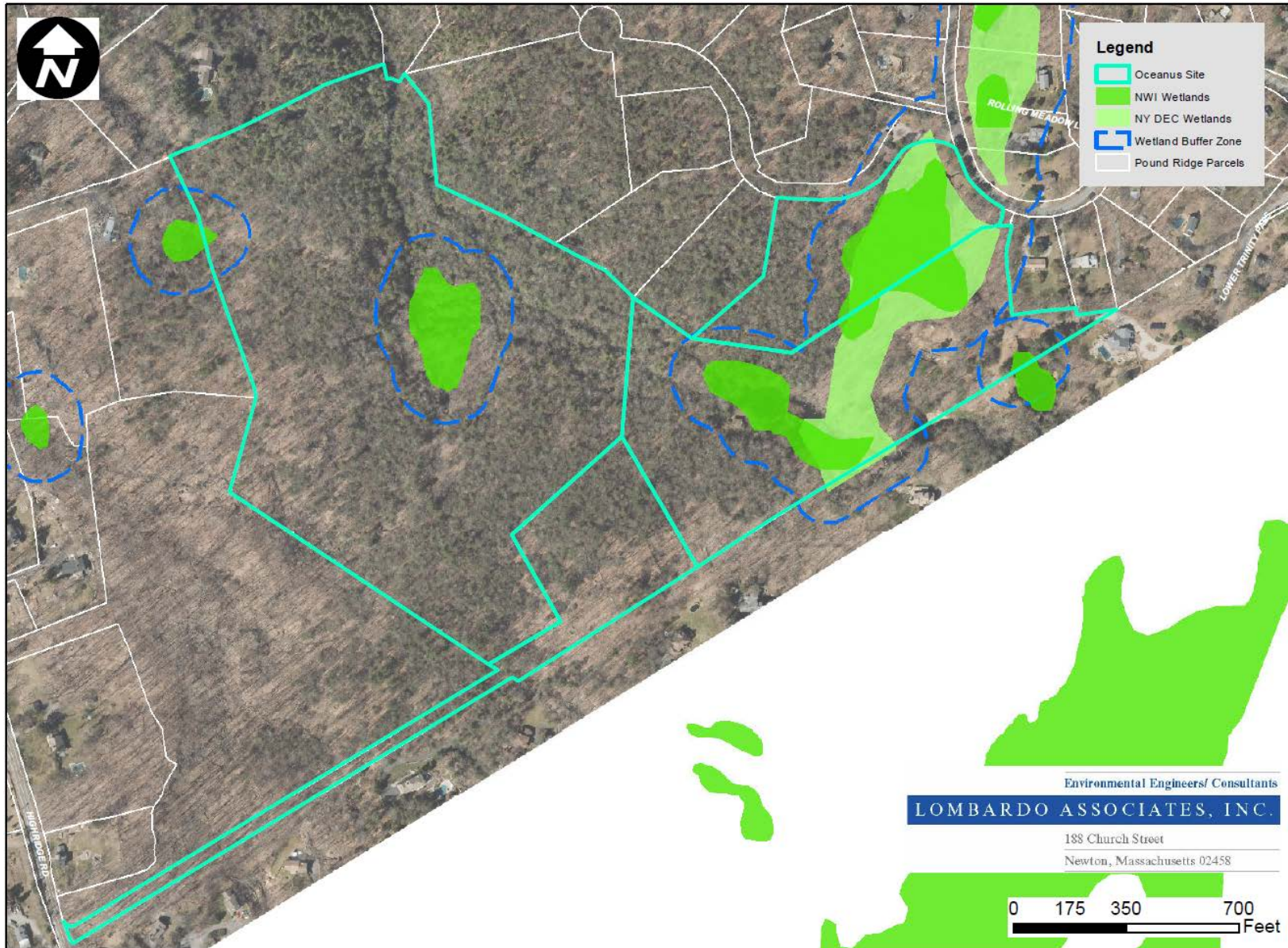


Figure 4.3-3 Oceanus Site Wetlands + Buffer Zones Map

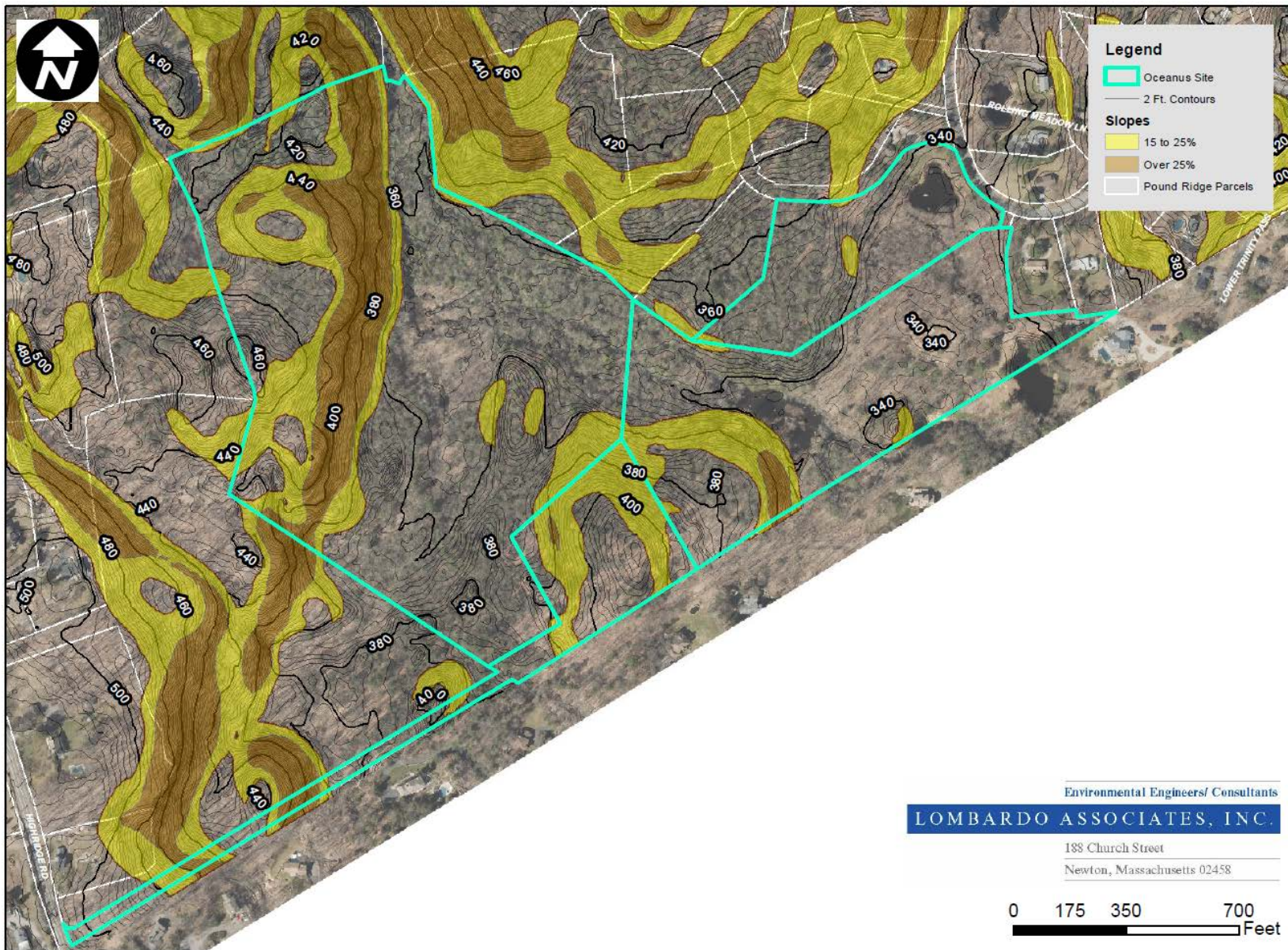


Figure 4.3-4 Oceanus Site Slopes + Contours Map

Table 4.3-2 Oceanus Site Test Pit Summary 1

Pound Ridge Oceanus Site Test Pit Records												
Hole Depth	DH 1-1	DH 1-2	DH 1-3	DH 2-1	DH 2-2	DH 2-3	DH 3-1	DH 3-2	DH 3-3	DH 5-1	DH 5-2	DH 5-3
G.L.	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil
6"	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil
12"	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam
18"				Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam				
24"				Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam				
30"				Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam				
36"	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Some Stone	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Sands w/ Stone	Moderately Compacted Coarse Sands w/ Some Gravel	Moderately Compacted Medium Coarse Sands w/ Stone	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stones	Moderately Compacted Medium Fine Sands w/ Stones
42"				Moderately Compacted Medium Fine Sands								
48"				Moderately Compacted Medium Fine Sands								
54"				Moderately Compacted Medium Fine Sands								
60"				Rock / Pit Bottom								
66"	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom
72"			Rock / Pit Bottom		Rock / Pit Bottom					Rock / Pit Bottom	Rock / Pit Bottom	
78"												Rock / Pit Bottom
84"												

Table 4.3-3 Oceanus Site Test Pit Summary 2

Pound Ridge Oceanus Site Test Pit Records																
Hole Depth	DH 6-1	DH 6-2	DH 6-3	DH 7-1	DH 7-2	DH 7-3	DH 8-1	DH 8-2	DH 8-3	DH 9-1	DH 9-2	DH 9-3				
G.L.	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil				
6"	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil				
12"	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam				
18"				Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam					
24"				Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam		Moderately Compacted Medium Sandy Loam			
30"				Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam		Moderately Compacted Medium Sandy Loam			
36"	Moderately Compacted Medium Sands	Moderately Compacted Medium Sands	Moderately Compacted Medium Fine Sands w/ Stones	Moderately Compacted Coarse Sands w/ Gravel	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands				
42"				Moderately Compacted Medium Fine Sands			Moderately Compacted Medium Fine Sands						Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands
48"				Moderately Compacted Medium Fine Sands			Moderately Compacted Medium Fine Sands						Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands
54"				Moderately Compacted Medium Fine Sands			Moderately Compacted Medium Fine Sands						Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands
60"	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Moderately Compacted Medium Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom				
66"	Rock / Pit Bottom	Rock / Pit Bottom					Moderately Compacted Medium Sands						Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	
72"							Moderately Compacted Medium Fine Sands						Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	
78"							Moderately Compacted Medium Fine Sands						Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	
84"	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom	Rock / Pit Bottom				
84"				Pit Bottom	Pit Bottom	Pit Bottom										

Table 4.3-4 Oceanus Site Test Pit Summary 3

Pound Ridge Oceanus Site Test Pit Records																																											
Hole Depth	DH 10-1	DH 10-2	DH 10-3	DH 12-1	DH 12-2	DH 12-3	DH 13-1	DH 13-2	DH 13-3	DH 14-1	DH 14-2	DH 14-3																															
G.L.	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil																															
6"	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil	Top Soil																															
12"	Moderately Compacted Sands w/ Some Stone	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Fine Sands w/ Some Stone	Moderately Compacted Sands w/ Some Cobbles	Moderately Compacted Medium Fine Sands w/ Some Cobbles	Moderately Compacted to Loose Compacted Medium Sands w/ Stones	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam	Moderately Compacted Medium Sandy Loam																															
18"		Moderately Compacted Medium Coarse Sands w/ Some Gravel											Moderately Compacted Medium Fine Sands w/ Some Silt	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone																						
24"																						Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone														
30"																														Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone							
36"																																					Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone
42"																																											
48"	Moderately Compacted Medium Fine Sands		Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone																																			
54"		Moderately Compacted Medium Fine Sands							Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone																													
60"															Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone																						
66"																						Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone															
72"																													Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone								
78"																																				Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Coarse Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands	Moderately Compacted Medium Fine Sands w/ Stone	Moderately Compacted Medium Fine Sands w/ Stone	
84"	Pit Bottom		Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom	Pit Bottom																																			Pit Bottom

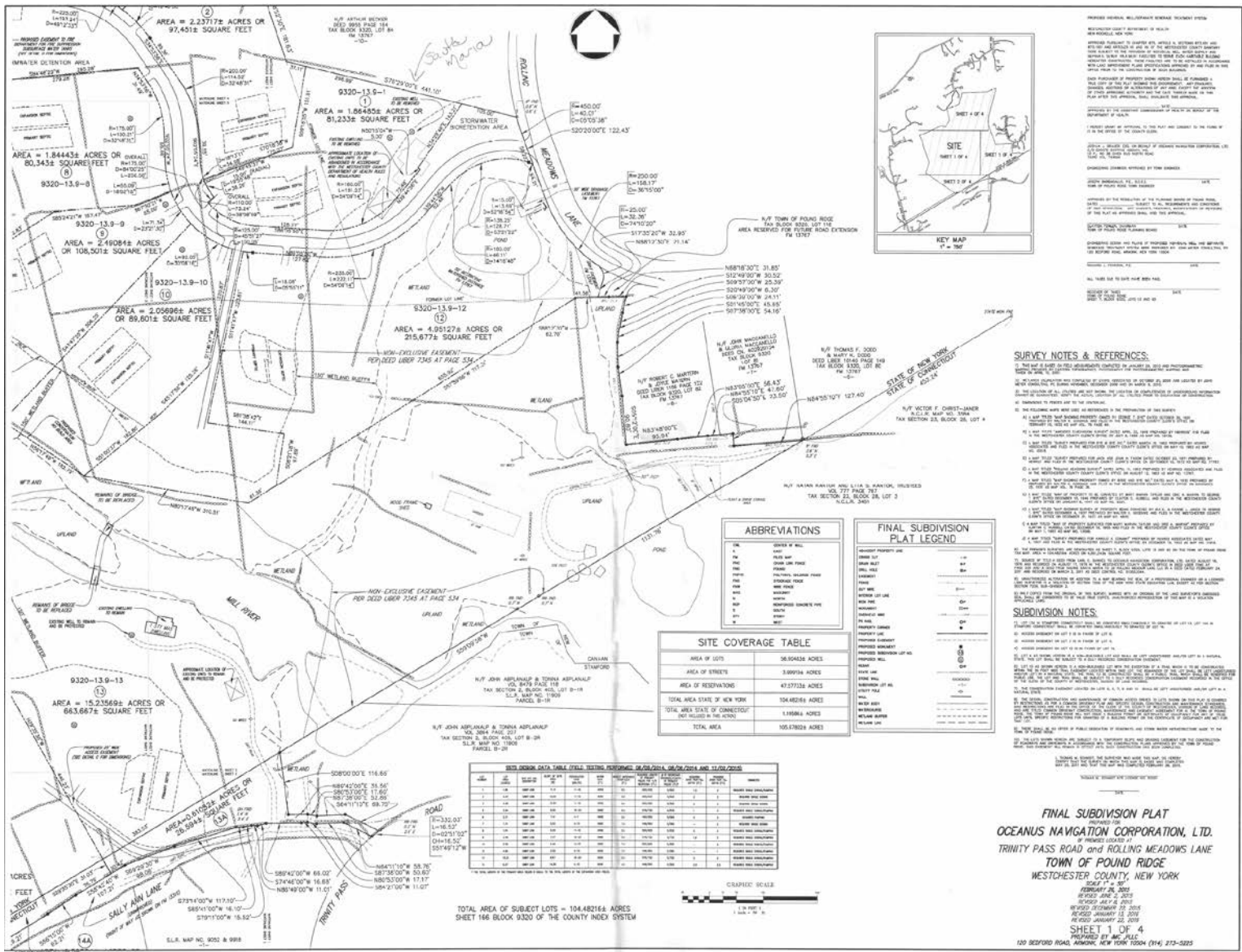


Figure 4.3-5 Oceanus Site Location Map 1

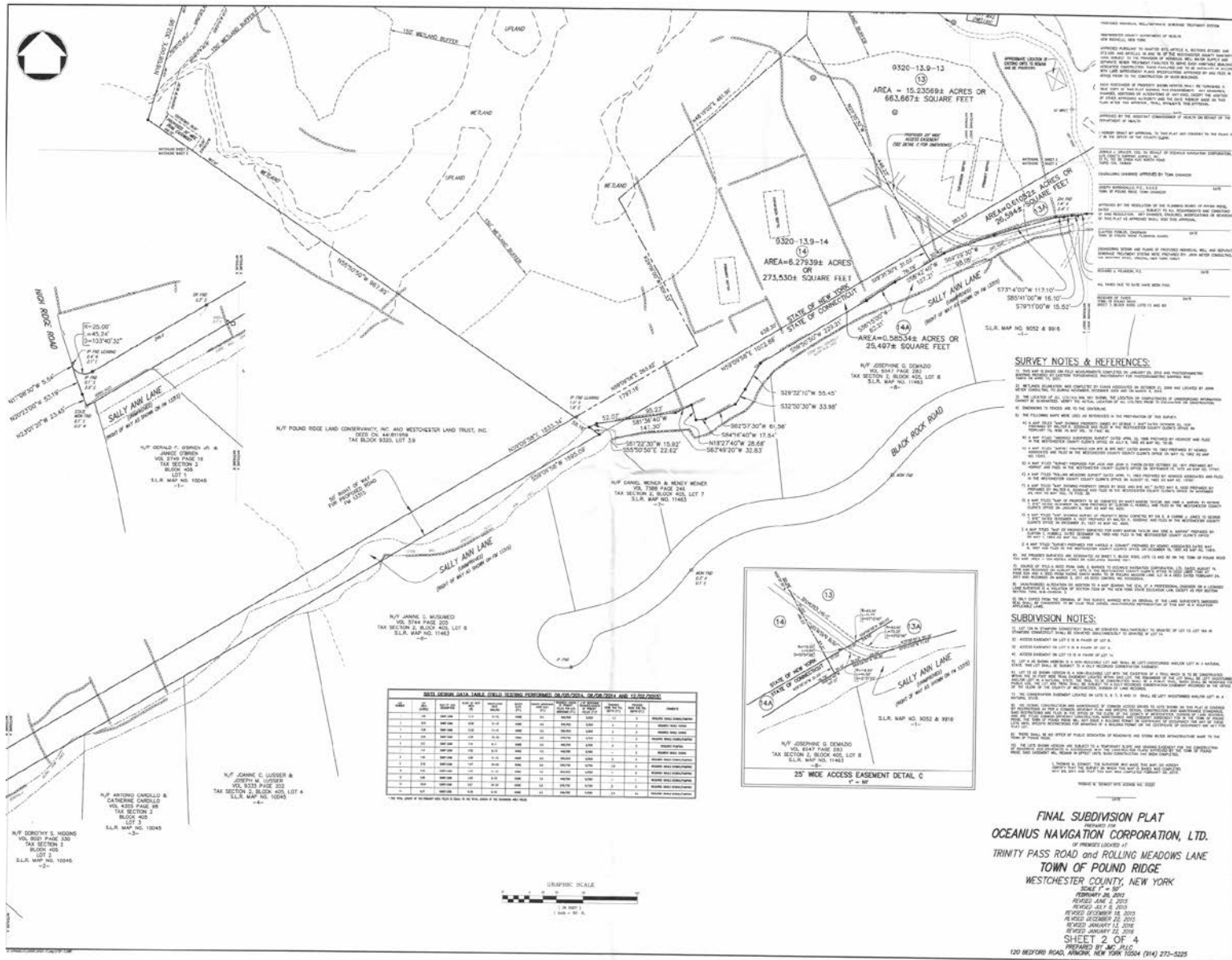


Figure 4.3-6 Oceanus Site Location Map 2

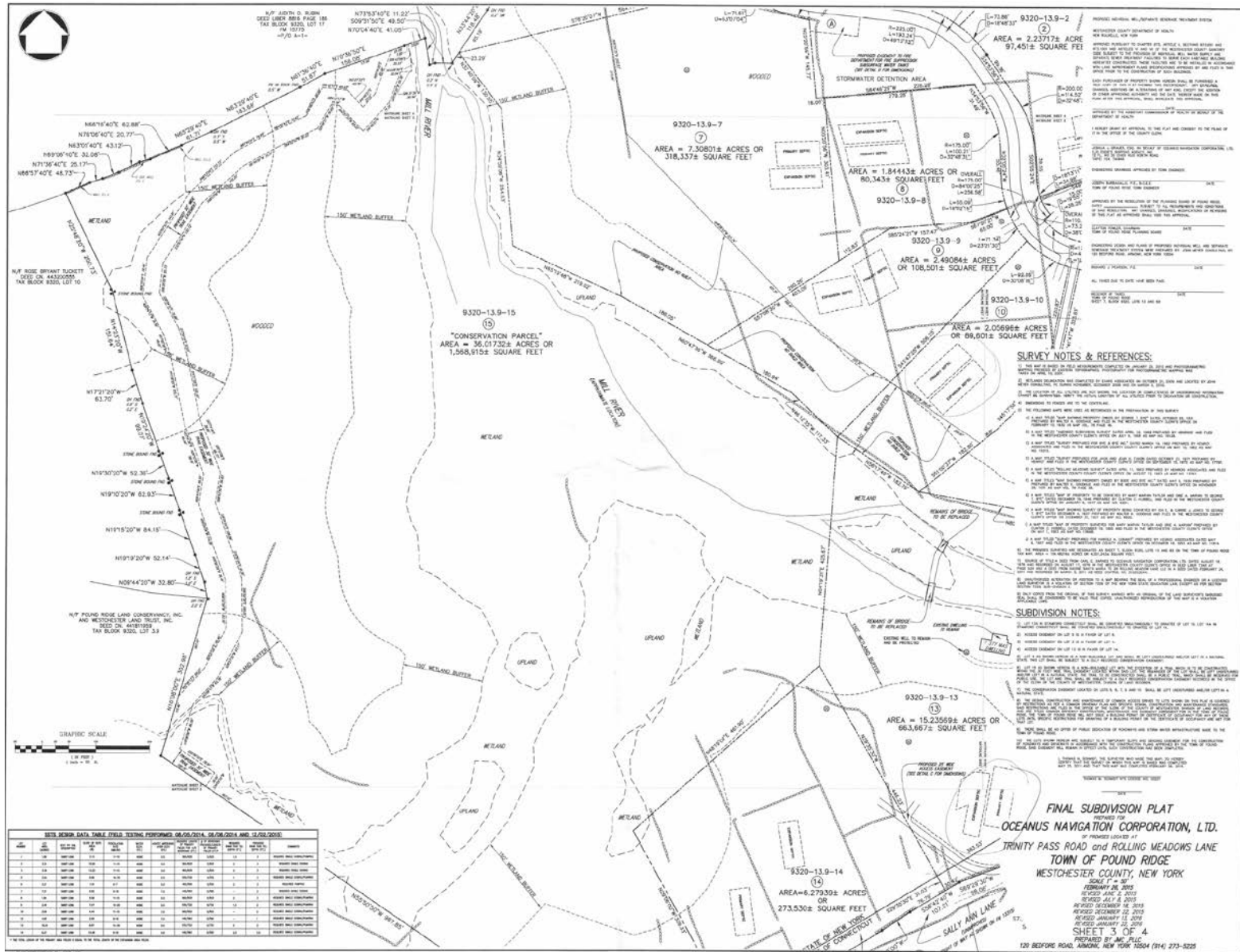


Figure 4.3-7 Oceanus Site Location Map 3

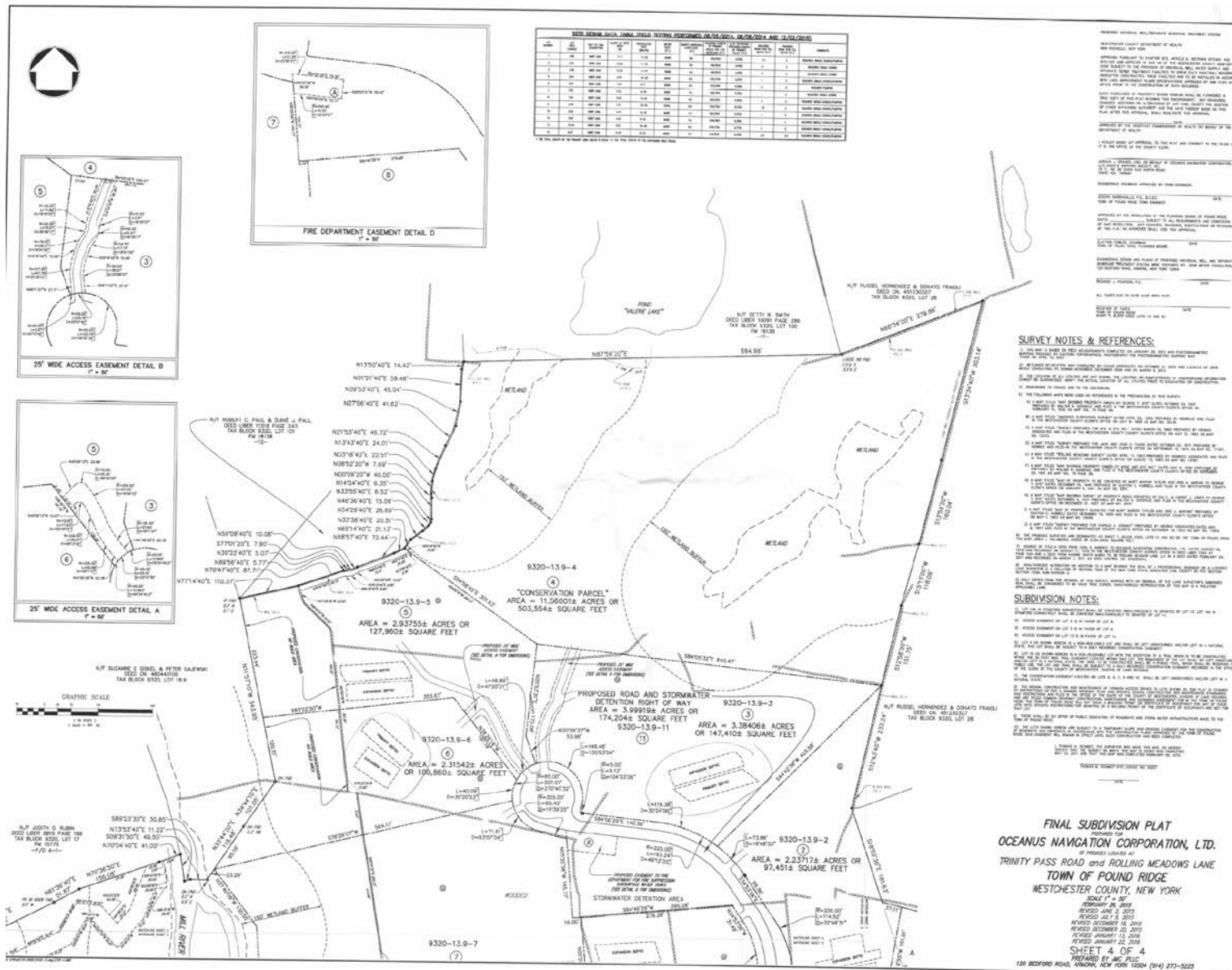


Figure 4.3-8 Oceanus Site Location Map 4

4.4 OLD POUND ROAD

The candidate site consists of one parcel, listed as 9820-16 according to the Pound Ridge Assessors Office and located adjacent to 7 Pound Road. The parcel is a vacant residential lot owned by David Kerr.

No portion of Old Pound Road lies within floodplain.

The following Test Pits and Percolation Test results were provided by the property Owner through their consultant Insite Engineering, Surveying & Landscape Architecture, P.C.

12 deep holes throughout the site and 6 preliminary percolation tests were performed. The majority of the deep test holes were 7' with no rock or groundwater encountered. Rock was encountered at 6' in a couple of the holes. The preliminary percolation tests indicated a perc rate at 10 min/in and under. Northern portion of the site was not tested.

Soil Map—Westchester County, New York

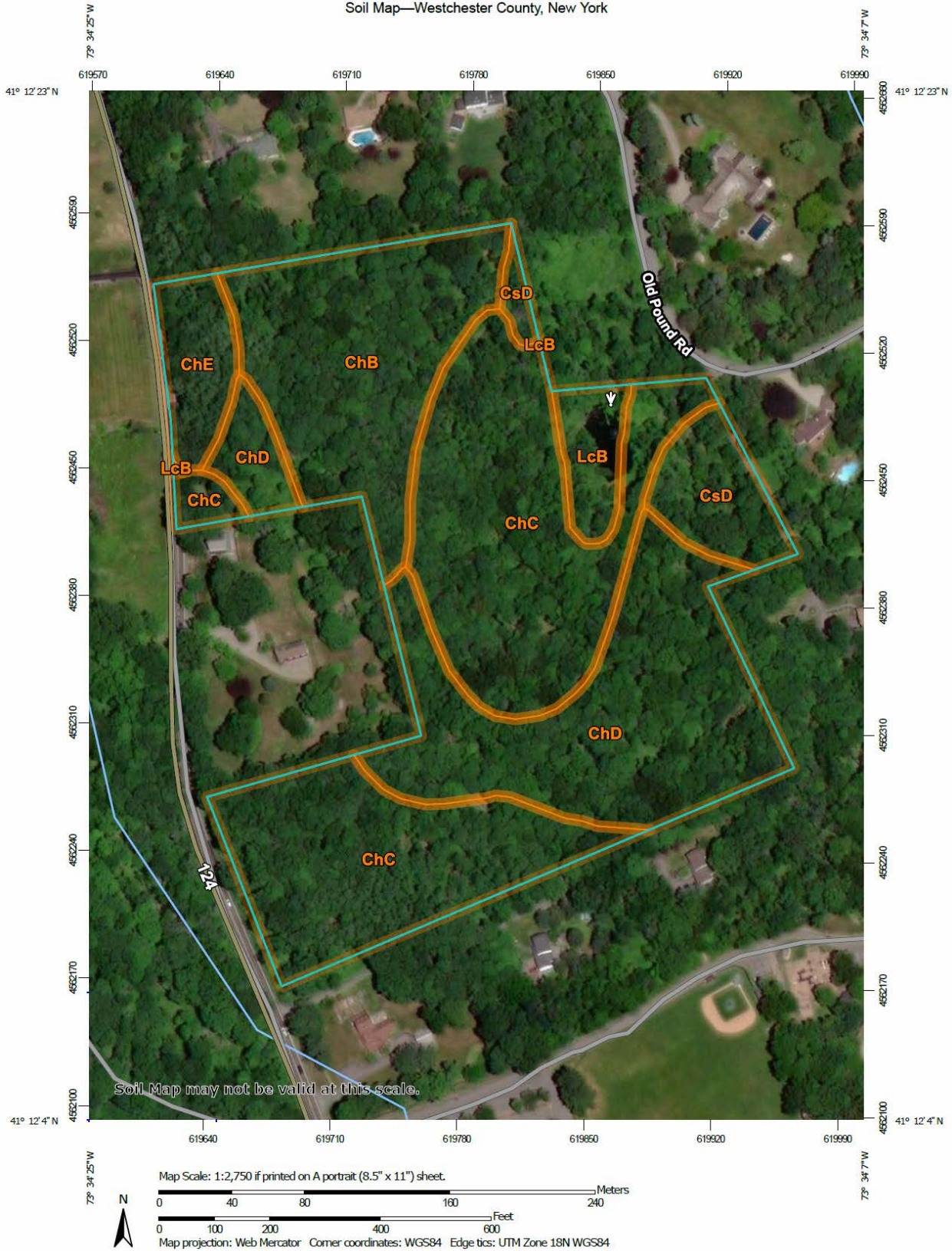


Figure 4.4-1 Old Pound Road Soils Map

Septic Tank Absorption Fields (NY)—Westchester County, New York

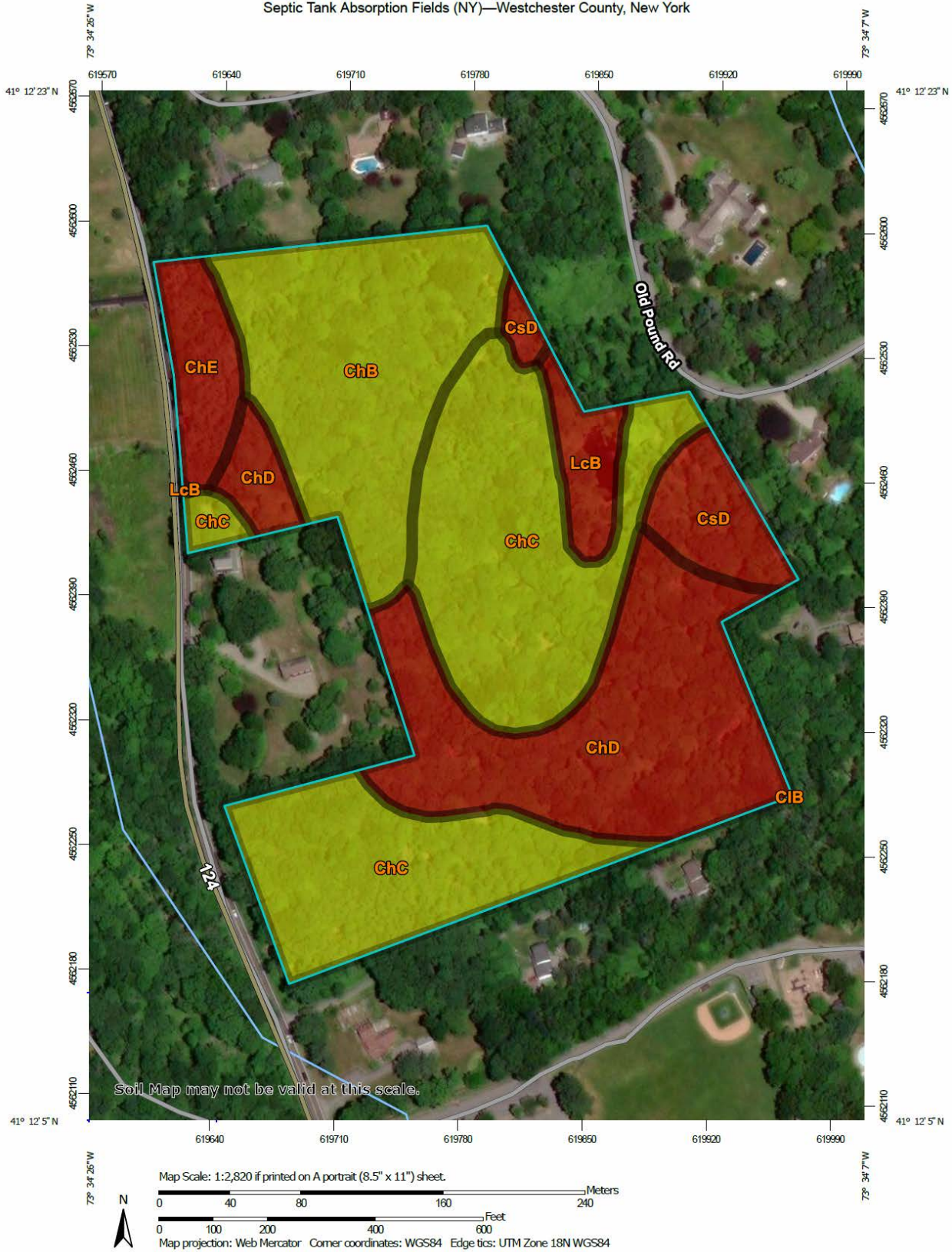


Figure 4.4-2 Old Pound Road Soils Rating Map

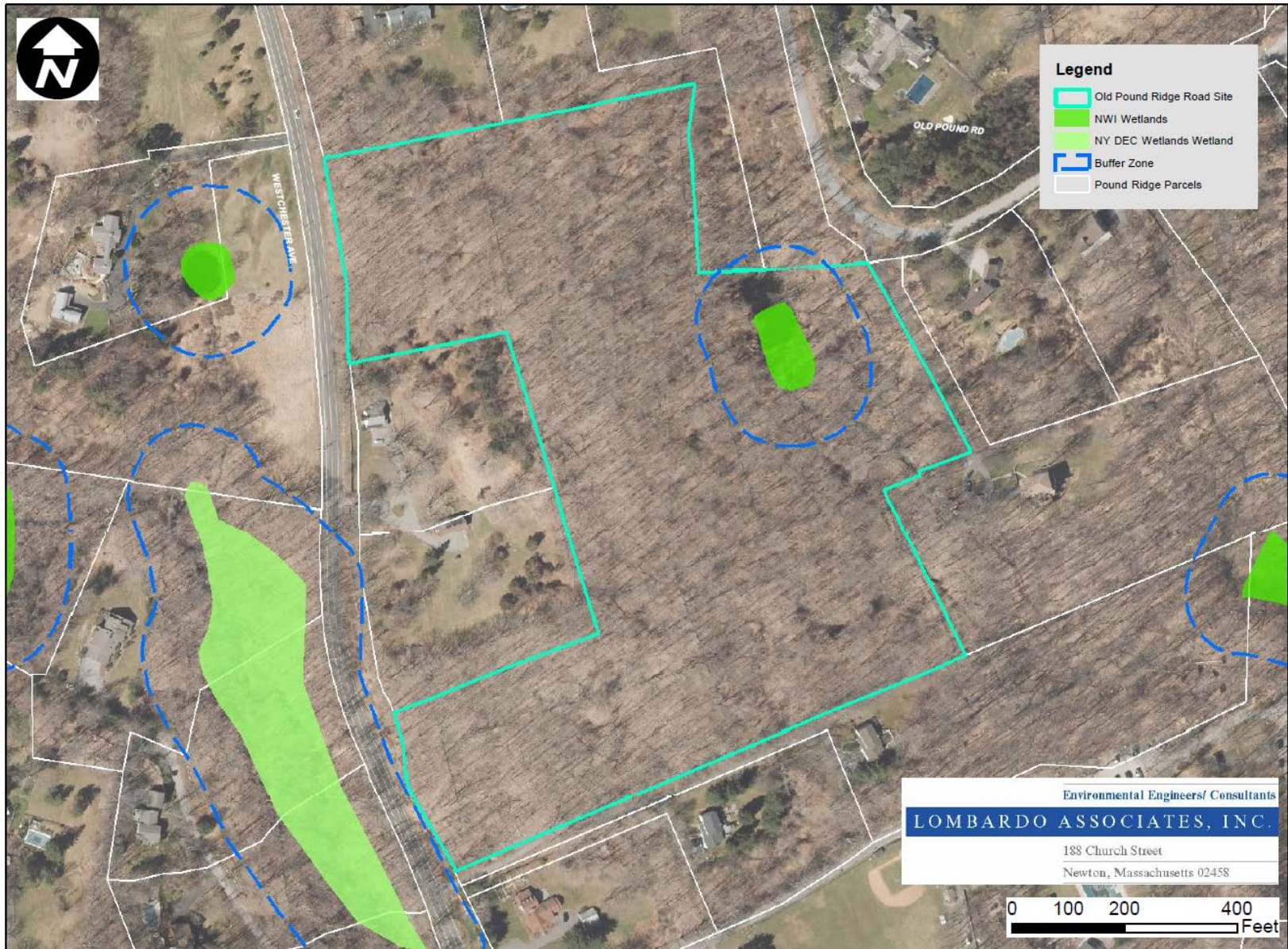


Figure 4.4-3 Old Pound Road Wetlands Map

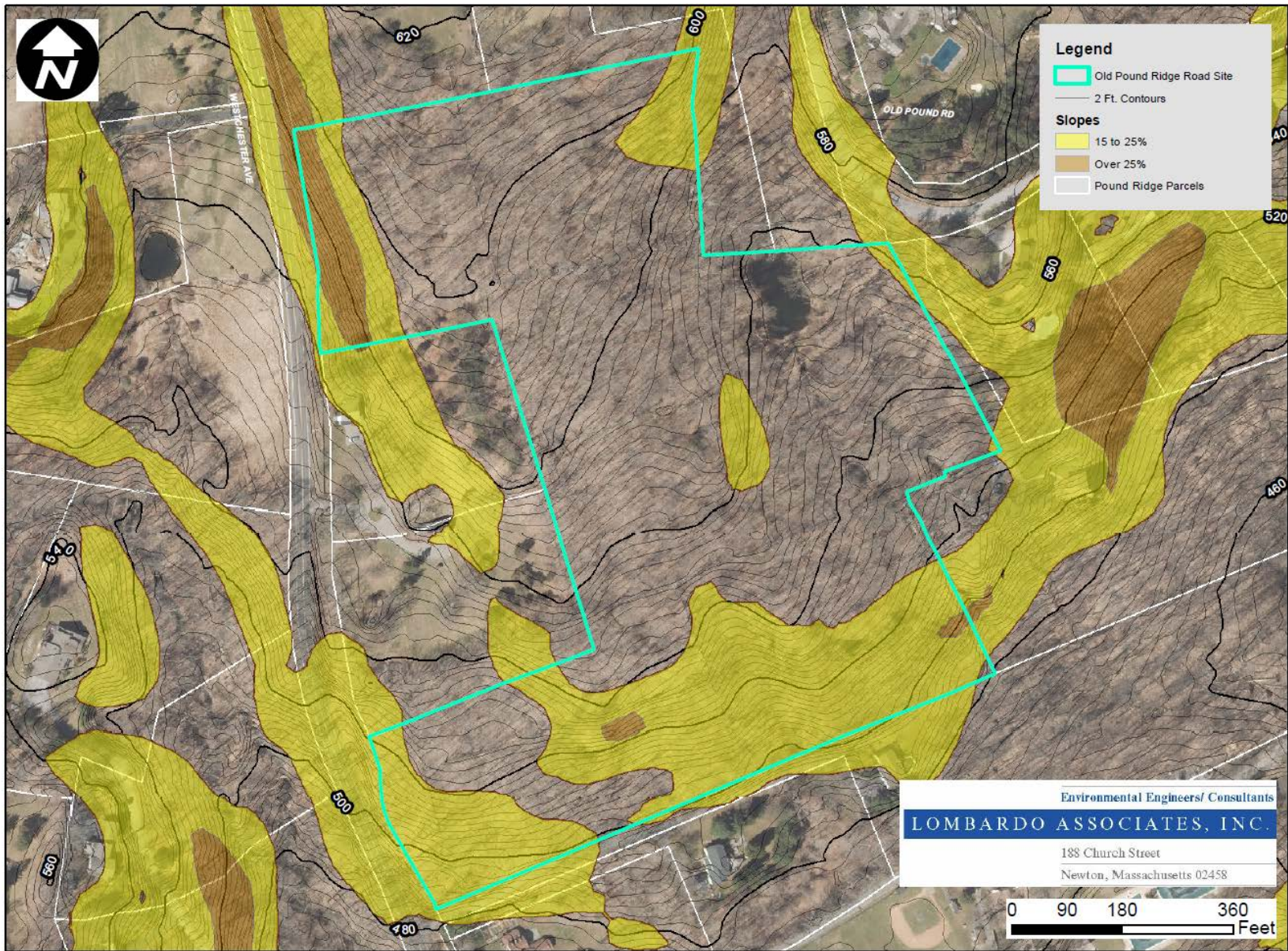


Figure 4.4-4 Old Pound Road Slopes Map

4.5 ELEMENTARY SCHOOL

The candidate site consists of two parcels, listed as 9816-46 & 9816-47 according to the Pound Assessors Office and located at 7 Pound Ridge Road. The parcel is the Pound Ridge Elementary School, owned by the Bedford Central School District. Information regarding the parcel has been collected below from Town of Pound Ridge Property Cards:

No portion of the Elementary School site lies within floodplain.

Table 4.5-1 Pound Ridge Elementary School Percolation Test and Test Pit Summary

Pound Ridge - Elementary School Site Perc. Test		Pound Ridge Elementary School Test Pit Results	
Perc. Test #	Perc. Rate (min./in.)	Test Pit #	Depth to Bedrock/GW
PT-1A	7.7	TP-1A	Ledge @ 84"
PT-2A	5.7	TP-2A	Ledge @ 72"
PT-3A	7	TP-3A	No GW/Bedrock
PT-4A	6.2	TP-1	No GW/Bedrock
PT-1	3	TP-2	No GW/Bedrock
PT-2	4	TP-3	No GW/Bedrock
PT-3	4	TP-4	GW @ 114"
PT-4	3	TP-5	No GW/Bedrock
PT-5	3	TP-6	GW @ 84"
PT-6	5	TP-7	No GW/Bedrock
PT-7	4	TP-8	GW @ 96"
PT-8	10	TP-9	No GW/Bedrock
		TP-10	No GW/Bedrock
		TP-11	No GW/Bedrock



Figure 4.5-1 Elementary School Soils Map

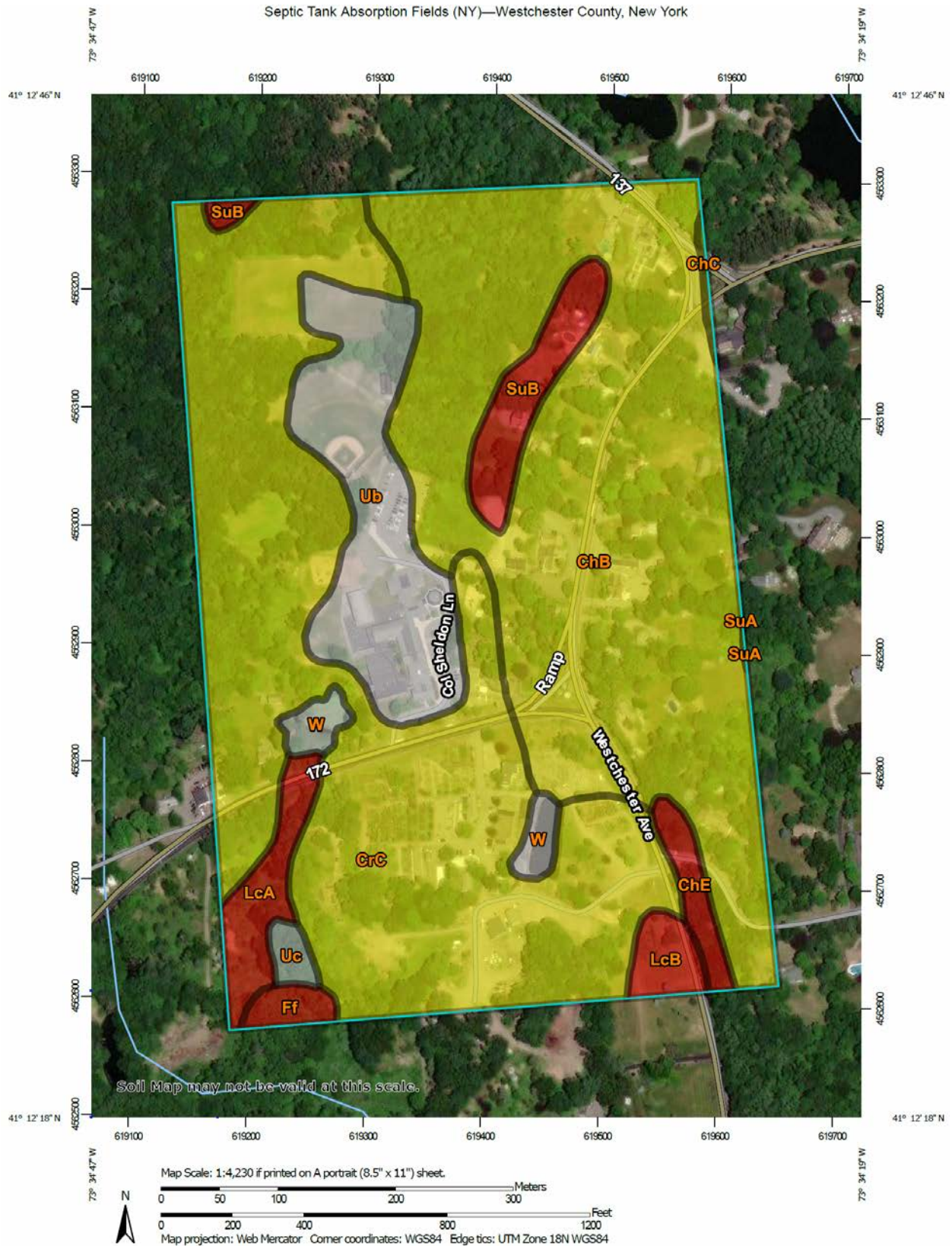


Figure 4.5-2 Elementary School Soil Ratings Map

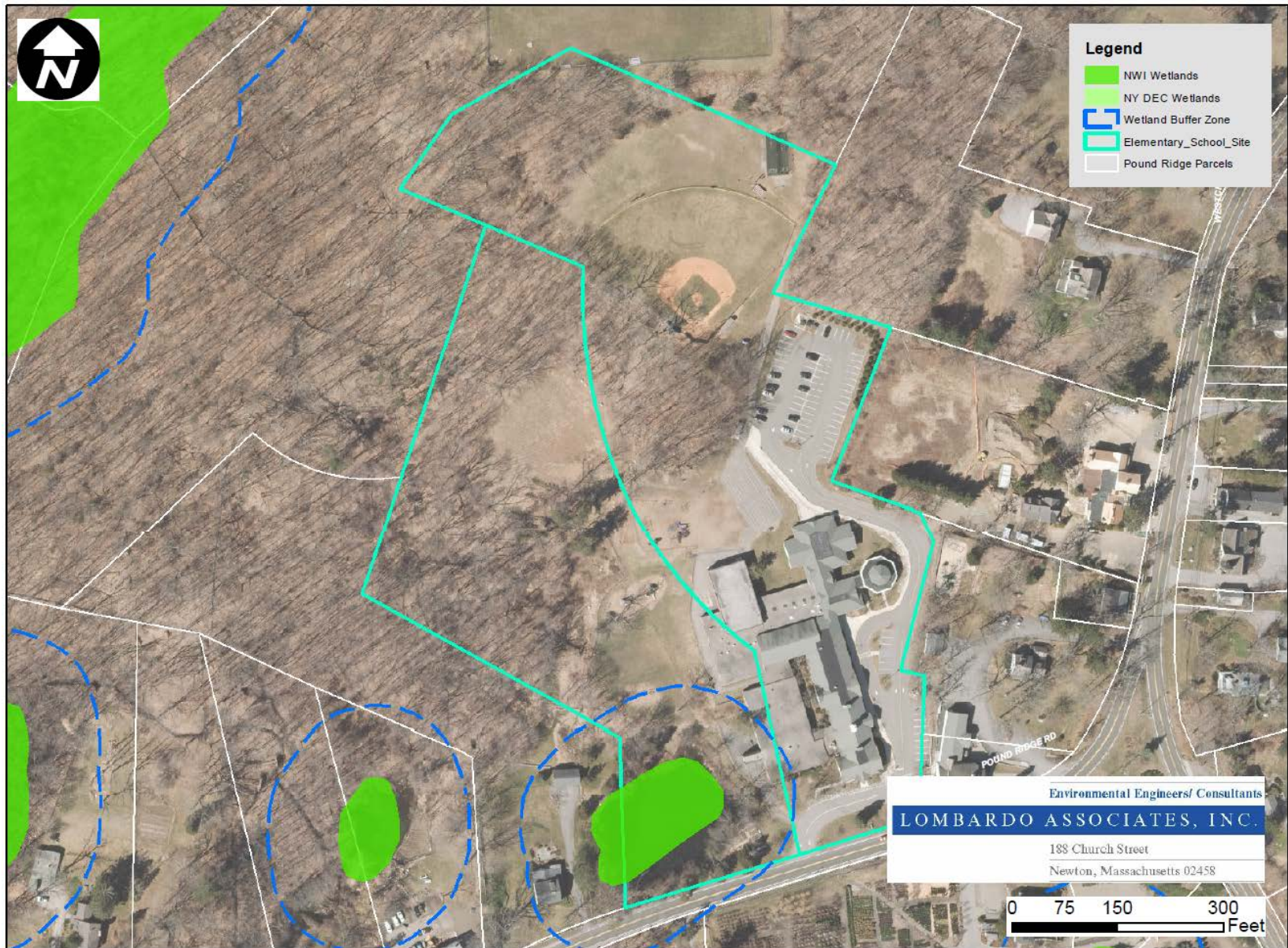


Figure 4.5-3 Elementary School Wetlands Map

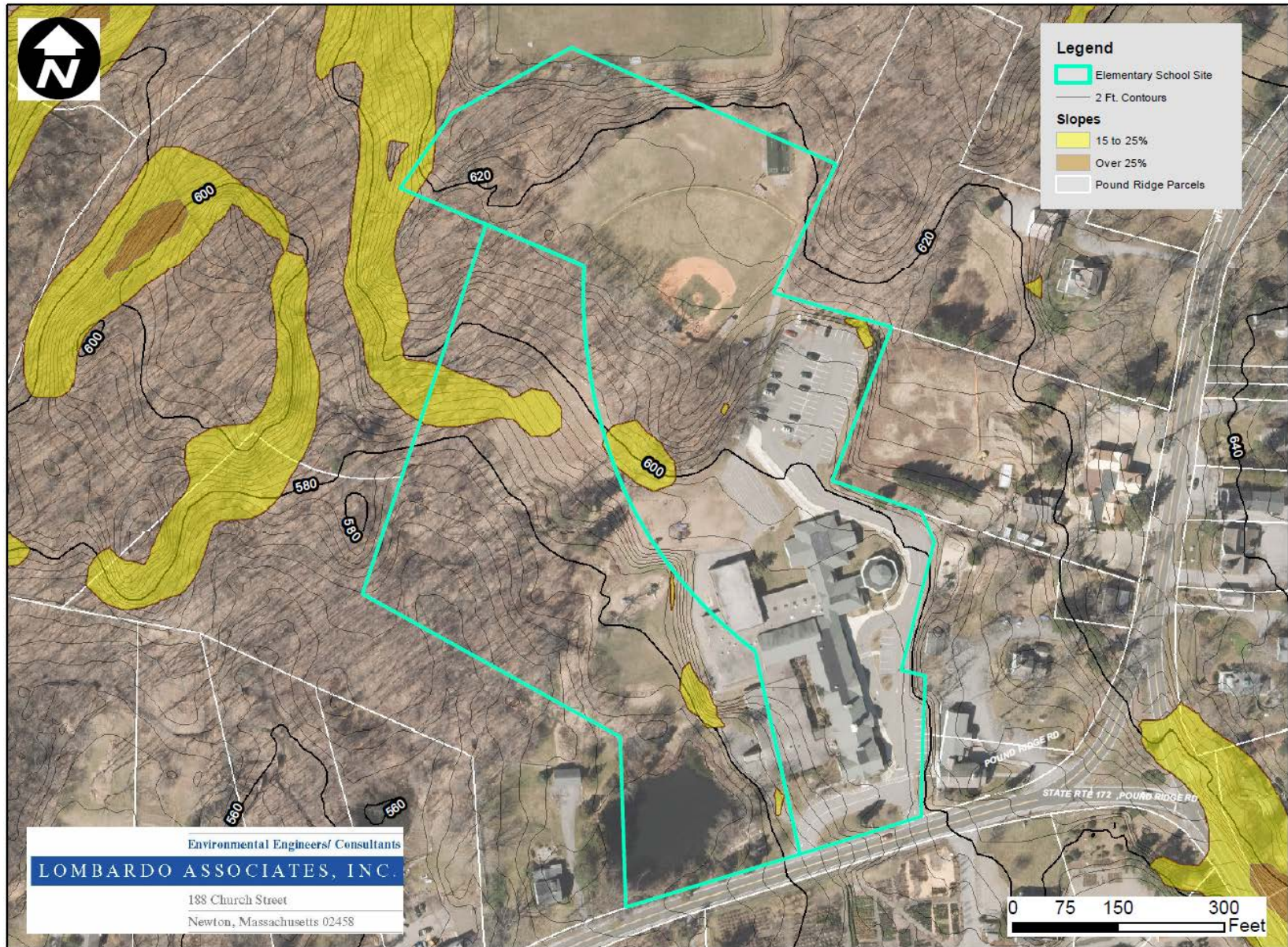


Figure 4.5-4 Elementary School Slope + Contours Map

Table 4.5-2 Pound Ridge Elementary School Test Pit Records

Pound Ridge Elementary School Test Pit Records														
Hole Depth	TP-1	TP-2	TP-3	TP-4	TP-5	TP-6	TP-7	TP-8	TP-9	TP-10	TP-11	TP-1A	TP-2A	TP-3A
G.L.	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots	Top Soil + Roots
6"														
12"	Brown f-c Sand, Some Silt	Brown f-c Sand and Silt, little f-c Gravel	Brown Silt, Some f-c Sand	Brown Silt, little f-c Sand	Brown Silt, little f-c Sand	Brown Silt, little f-c Sand	Brown Silt, little f-c Sand	Brown Silt, f-c Sand	Brown Silt, little f-c Sand	Brown Silt, little f-c Sand	Brown Silt, little f-c Sand	Brown Silt, little f-c Sand, trace Silt	Brown f-c Sand, trace Silt	Brown f-c Sand, some Silt
18"														
24"														
30"														
36"	Brown / grey Sand, Some f-c Gravel, trace Silt	Brown / grey Sand, Some Silt, trace f-c Gravel	Brown / grey Sand, Some Silt, trace f-c Gravel	Brown / grey Sand, Some f-c Gravel, trace Silt, cobbles (decomp. rock)	Brown Silt, little f-c Gravel	Brown Silt, little f-c Gravel	Brown / grey Silt, Some f-c Sand, little f-c Gravel; 42" Mottling	Grey Decomp. Rock	Pit Bottom	Brown / grey f-c Sand, some f-c Gravel, little Silt, cobbles	Brown / grey Sand, some f-c Gravel, little Silt, Decomp. Rock	Brown / grey Sand, Some Silt, little f-c Gravel	Brown / grey Sand, some f-c Gravel, little Silt, Decomp. Rock	Brown / grey Sand, Some f-c Gravel, trace Silt
42"														
48"														
54"														
60"	Pit Bottom	Pit Bottom	Pit Bottom	Brown / grey Sand, Some f-c Gravel, trace Silt, cobbles (decomp. rock)	Brown / grey Sand, Some Silt, little f-c Gravel	Brown / grey Silt, Some f-c Sand, little f-c Gravel	Brown / grey Silt, Some f-c Sand, little f-c Gravel; 42" Mottling	Pit Bottom	Brown / grey f-c Sand, some f-c Gravel, little Silt, cobbles	Brown / grey Sand, some f-c Gravel, little Silt, Decomp. Rock	Brown / grey Sand, Some Silt, little f-c Gravel	Brown / grey Sand, some f-c Gravel, little Silt, Decomp. Rock	Brown / grey Sand, Some f-c Gravel, trace Silt	Pit Bottom, Ledge
66"														
72"														
78"														
84"	Pit Bottom	Pit Bottom	Pit Bottom	114" GW, 120" Pit Bottom	96" Pit Bottom	84" GW, 102" Pit Bottom	96" GW, 96" Decomp. Rock, 102" Pit Bottom	90" Decomp. Rock, 90" Pit Bottom	96" Pit Bottom	Pit Bottom	Pit Bottom, Ledge	Pit Bottom, Ledge	Pit Bottom	

4.6 TOWN LAND ADJACENT TO SCHOOL

The candidate site consists of one parcel, listed as 9816-142, according to the Pound Ridge Assessors Office and located behind the Pound Ridge Elementary School. The parcel is a vacant lot owned by the Town.

No portion of the School Adjacent site lies within Floodplain.

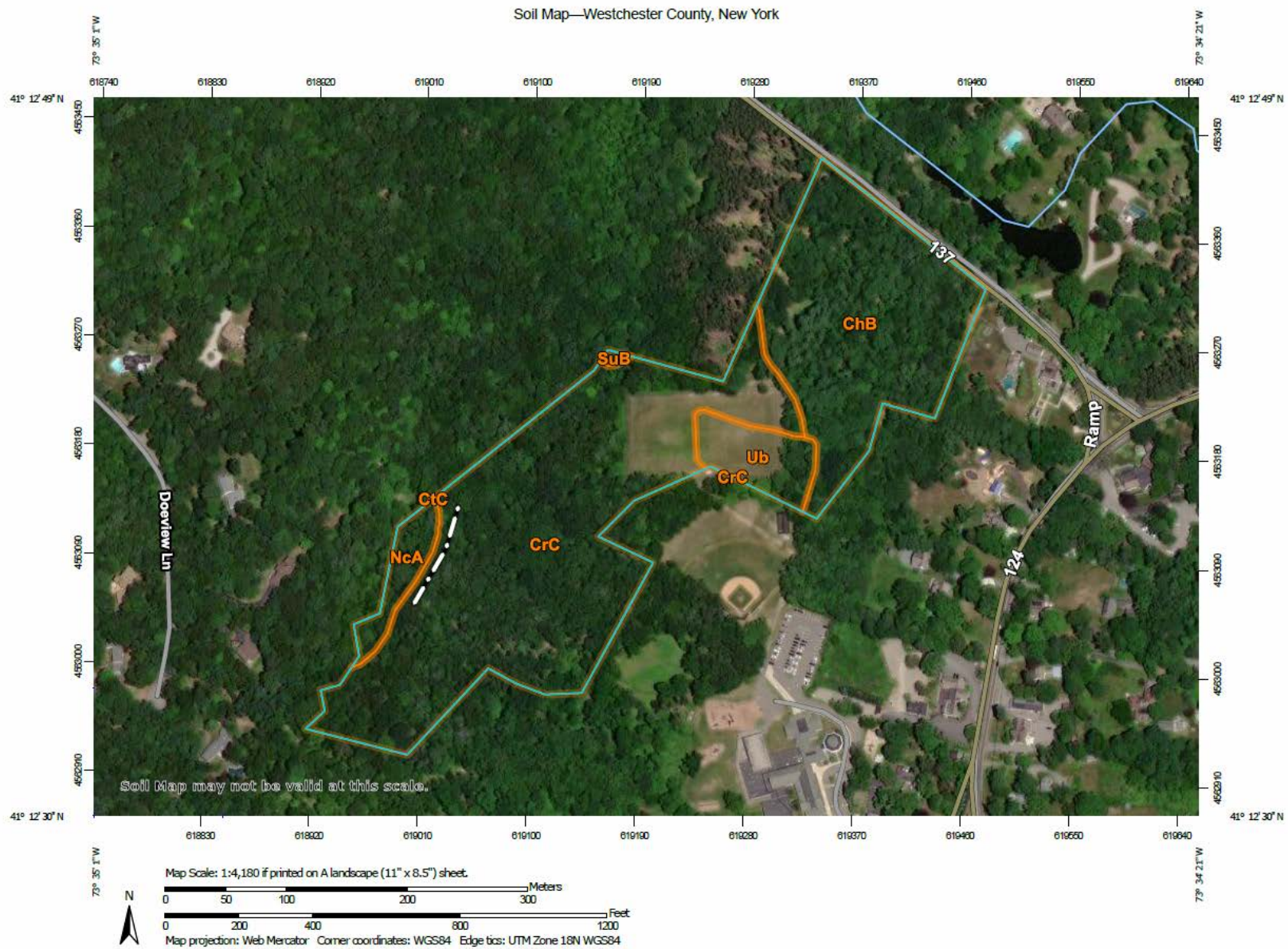


Figure 4.6-1 School Adjacent Land Soils Map

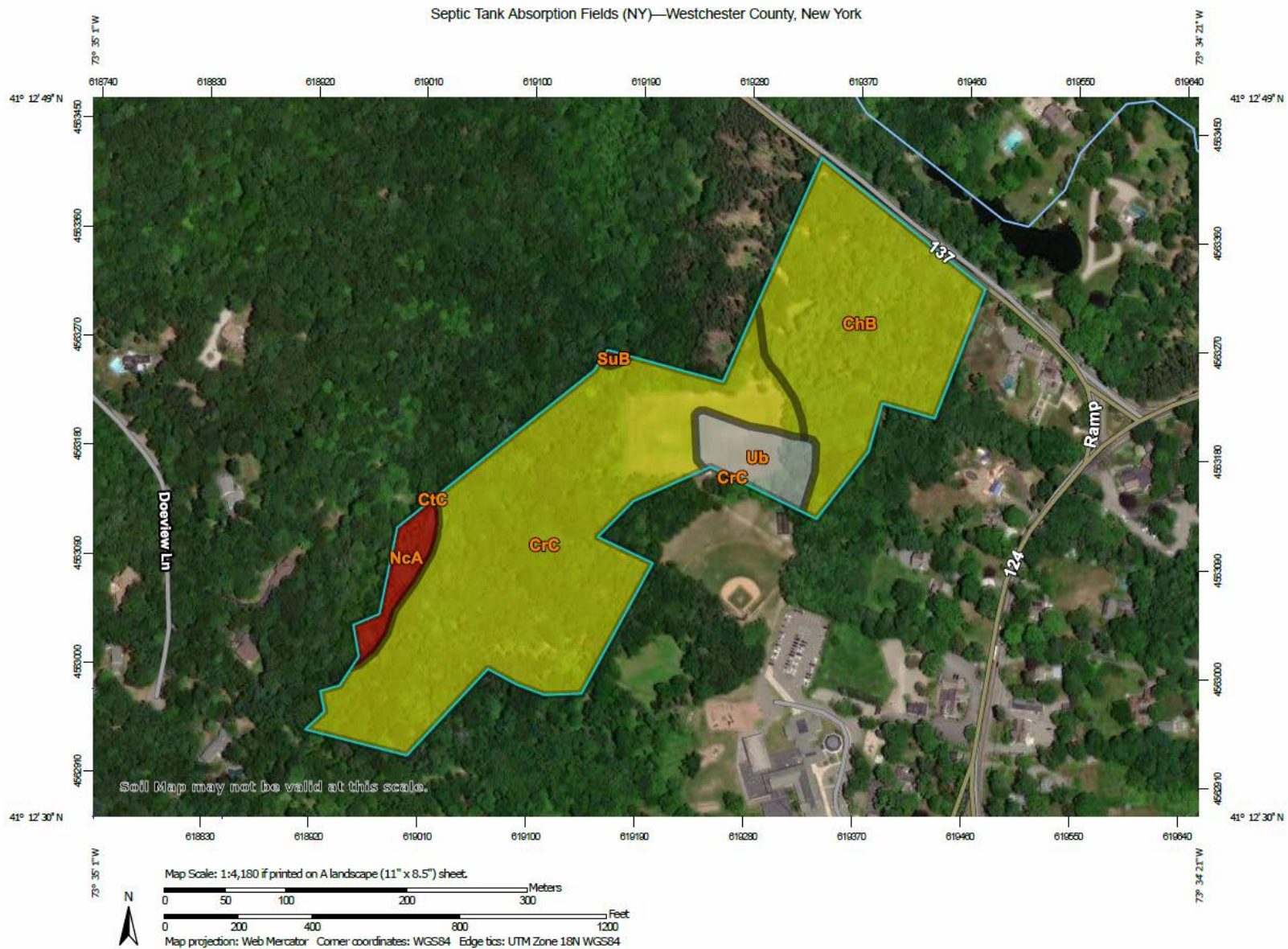


Figure 4.6-2 School Adjacent Land Soils Map

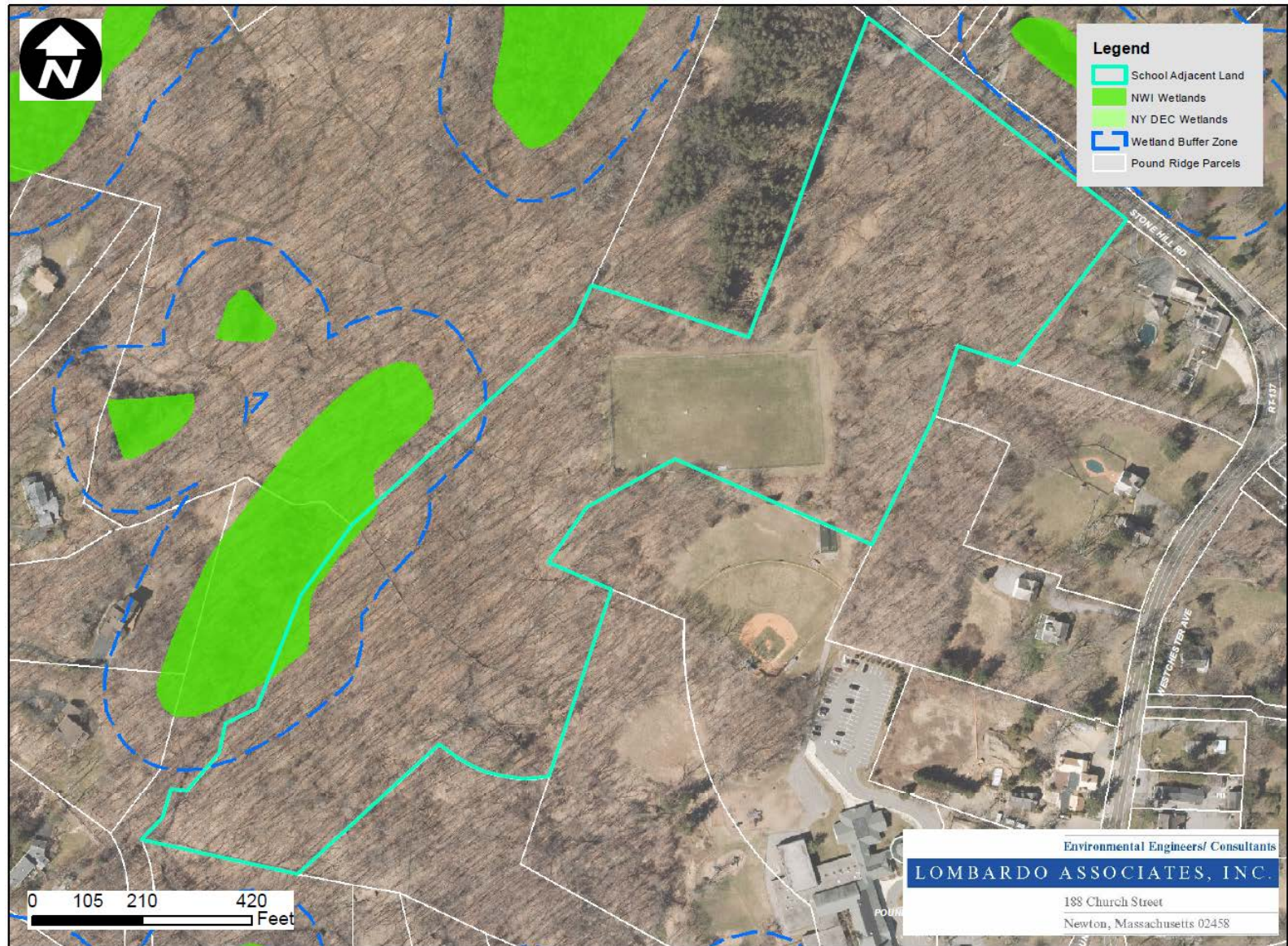


Figure 4.6-3 School Adjacent Land - Wetlands Map

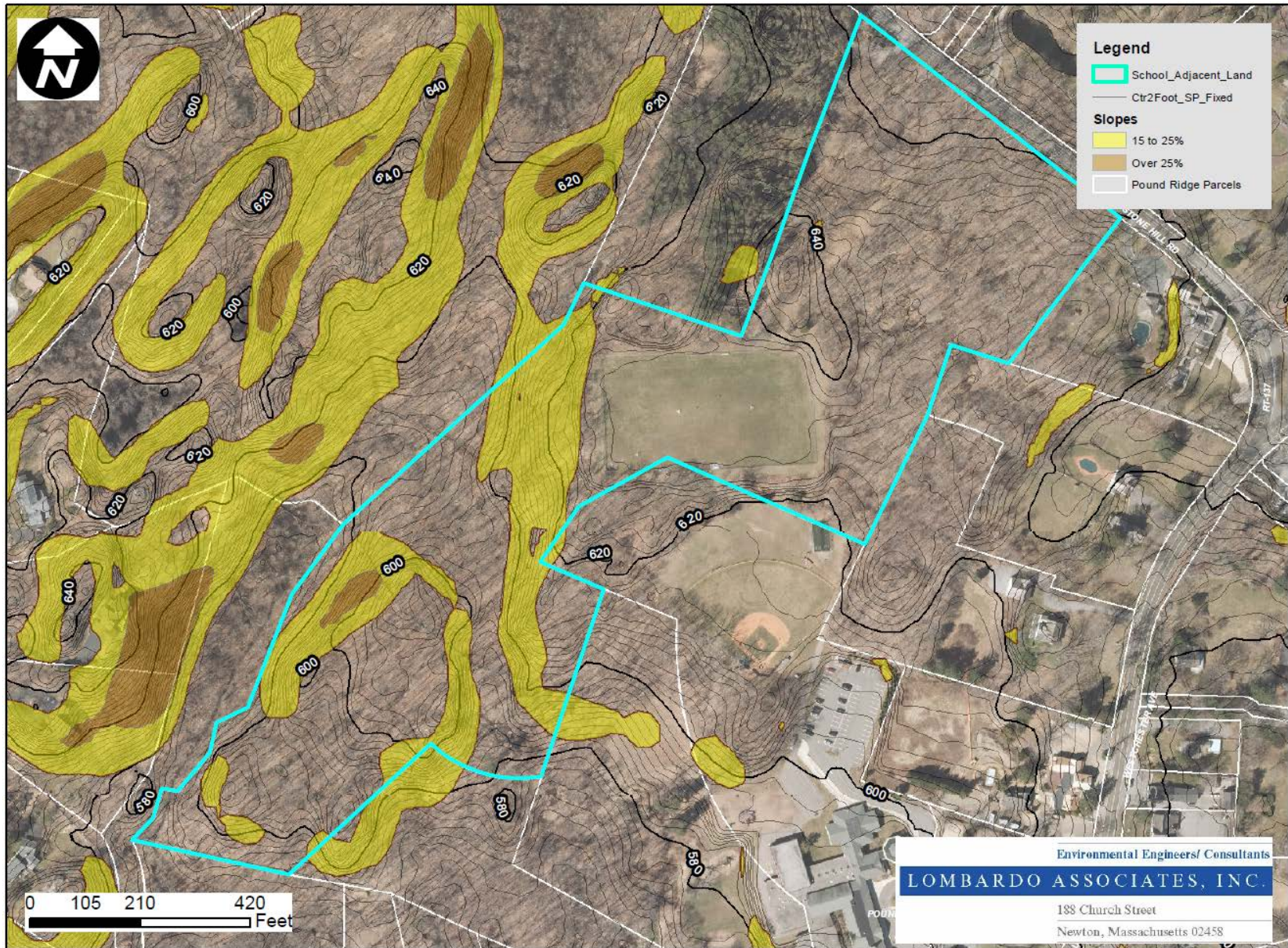


Figure 4.6-4 School Adjacent Land - Slopes + Contours Map

4.7 CLARK PROPERTY

The candidate site consists of two parcels, listed as 9454-16 & 9454-17 according to the Pound Ridge Assessors Office and located, respectively, at 12 (1.73 acres) and 16 (2.04 acres) Trinity Pass Road. The parcels are owned by Mary Clark.

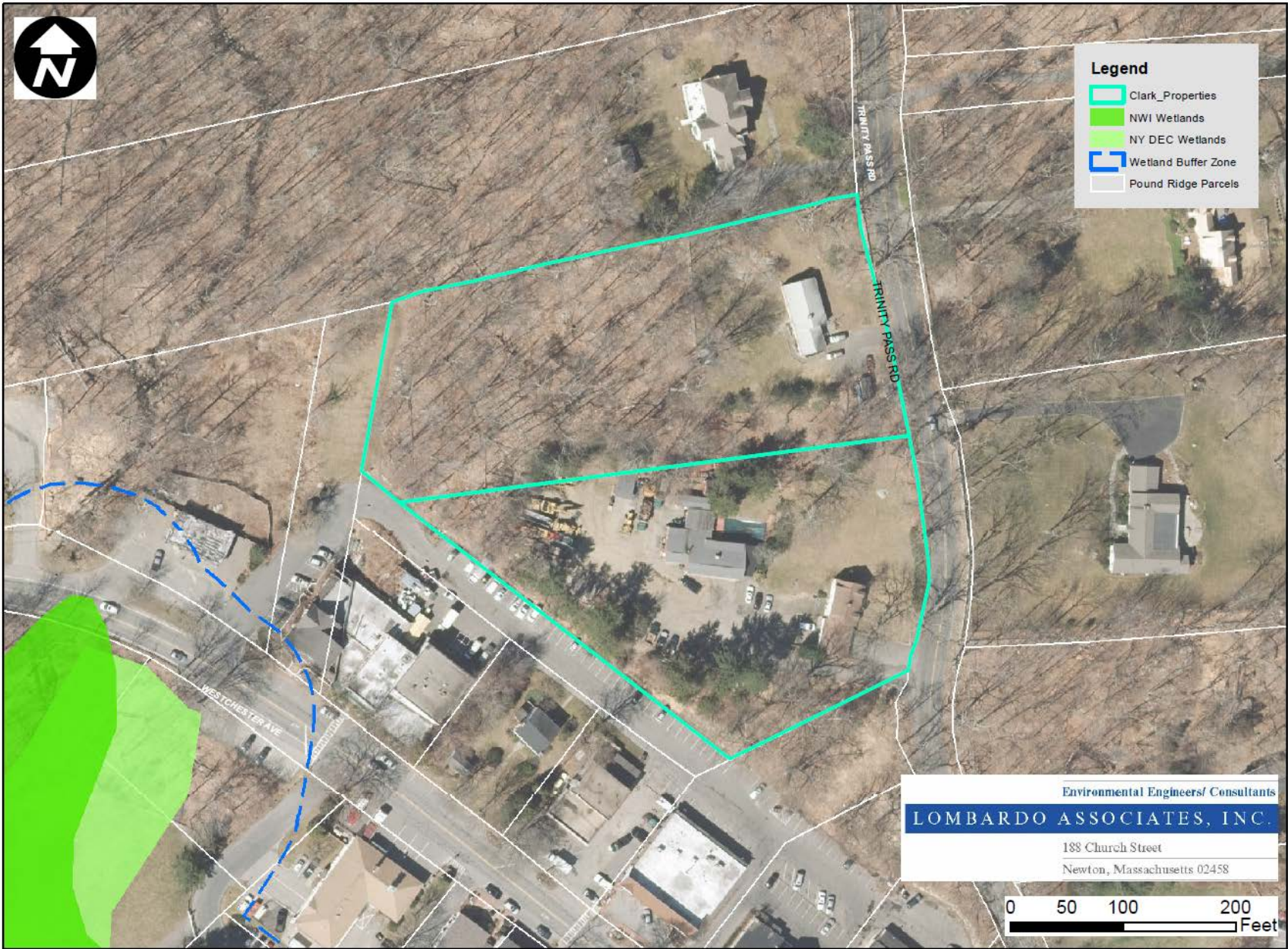


Figure 4.7-1 Clark Properties Wetlands Map

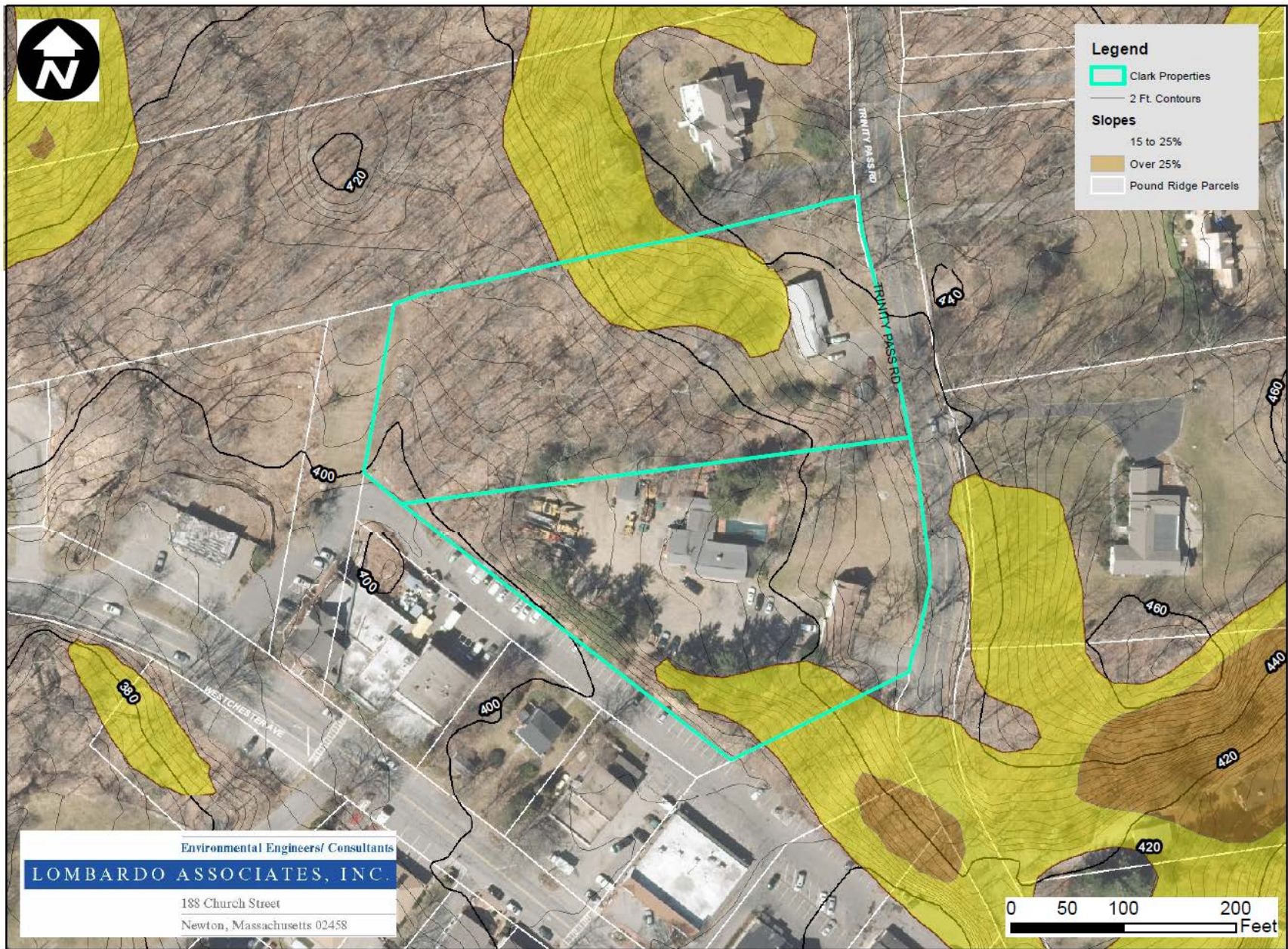


Figure 4.7-2 Clark Properties Slopes & Contours Map

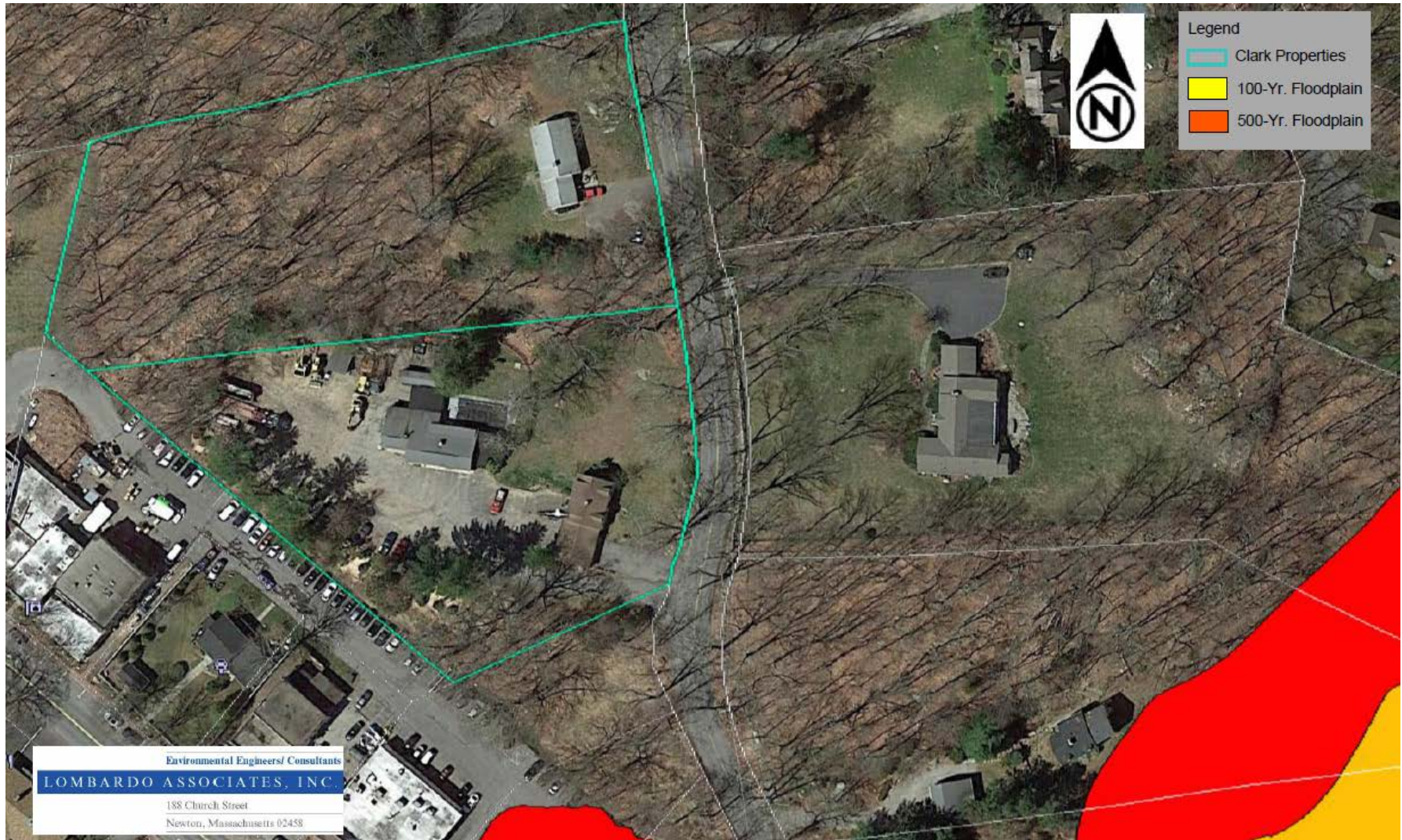


Figure 4.7-3 Clark Properties Floodplains Map

4.8 BARNEGAT ROAD SITE

The candidate site consists of one parcel, listed as 9457-12 according to the Pound Ridge Assessors Office and located at 169 (27.17 acres) Barnegat Road. The parcel is owned by Zinman Family LLC.

Table 4.8-1 presents Test Pits and Percolation Test results that was provided by the property Owner through their Engineer Kellard Sessions Consulting.

Table 4.8-1 Barnegat Road Test Pit Summary

Pound Ridge Barnegat Road Percolation Test Summary			Pound Ridge Barnegat Road Test Pit Summary	
Percolation Test #	Percolation Test Depth	Percolation Rate (min./in.)	Test Pit #	Depth to Bedrock/GW
PT 1-1	28"	5.3	TP 1-1	Ledge @ 44"
PT 1-2	28"	5.0	TP 1-2	Ledge @ 44"
PT 1-3	29"	4.0	TP 1-3	Ledge @ 53"
PT 1-4	28"	4.0	TP 1-4	Ledge @ 45"
PT 1-6	28"	4.3	TP 1-6	Ledge @ 55"
PT 2-2	30"	3.3	TP 1-7	Ledge @ 44"
PT 2-3	27"	3.6	TP 1-8	Ledge @ 52"
PT 2-4	28"	4.0	TP 2-2	Ledge @ 50"
PT 2-6	27"	4.3	TP 2-3	Ledge @ 48"
PT 2-7	28"	4.0	TP 2-4	Ledge @ 57"
PT 2-8	28"	3.3	TP 2-5	Ledge @ 48"
PT 2-9	29"	4	TP 2-6	Ledge @ 46"
			TP 2-7	Ledge @ 44"
			TP 2-8	Ledge @ 50"
			TP 2-9	Ledge @ 48"
			TP 11	BR @ 44"
			TP 12	BR @ 44"
			TP 13	BR @ 53"
			TP 16	BR @ 55"
			TP 17	BR @ 44"
			TP 18	BR @ 52"
			TP 19	BR @ 44"
			TP 22	BR @ 50"
			TP 23	BR @ 42"
			TP 24	BR @ 57"
			TP 25	BR @ 47"
			TP 26	BR @ 46"
			TP 27	BR @ 47"
			TP 28	BR @ 50"
			TP 29	BR @ 45"



Figure 4.8-1 Barnegat Road Soils Map

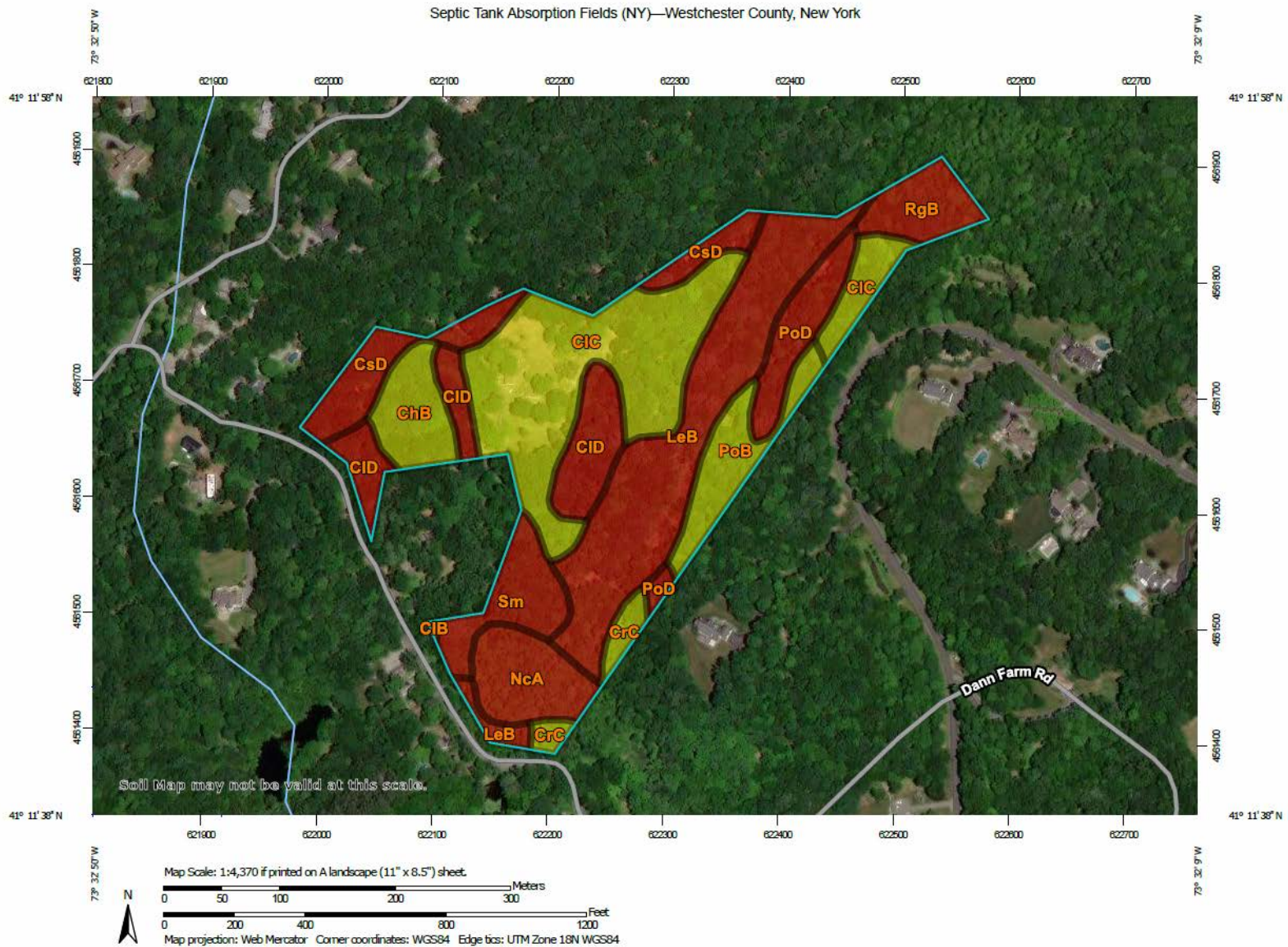


Figure 4.8-2 Barnegat Road Soils Map

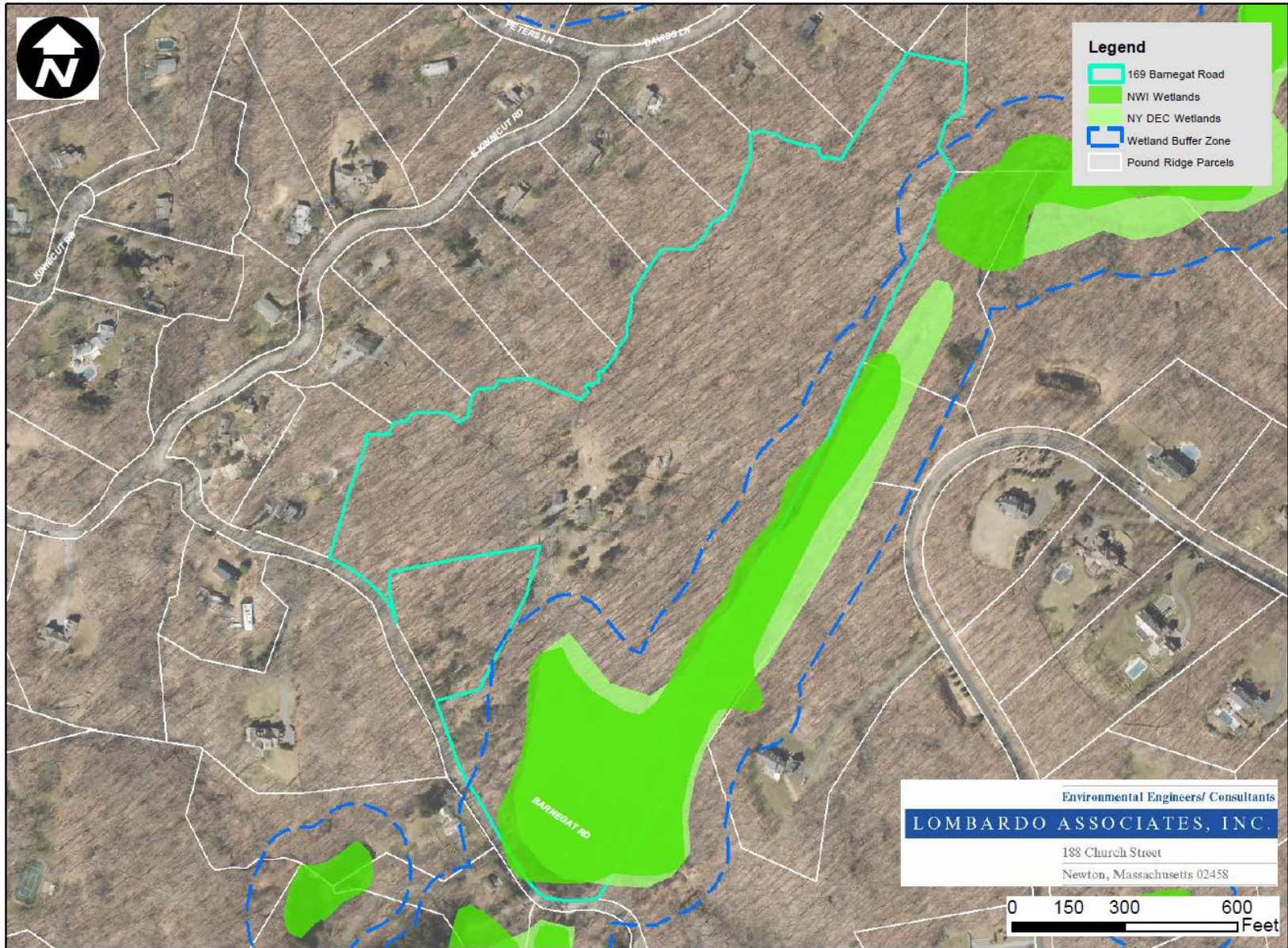


Figure 4.8-3 Barnegat Road Wetlands and Wetlands Buffer Map

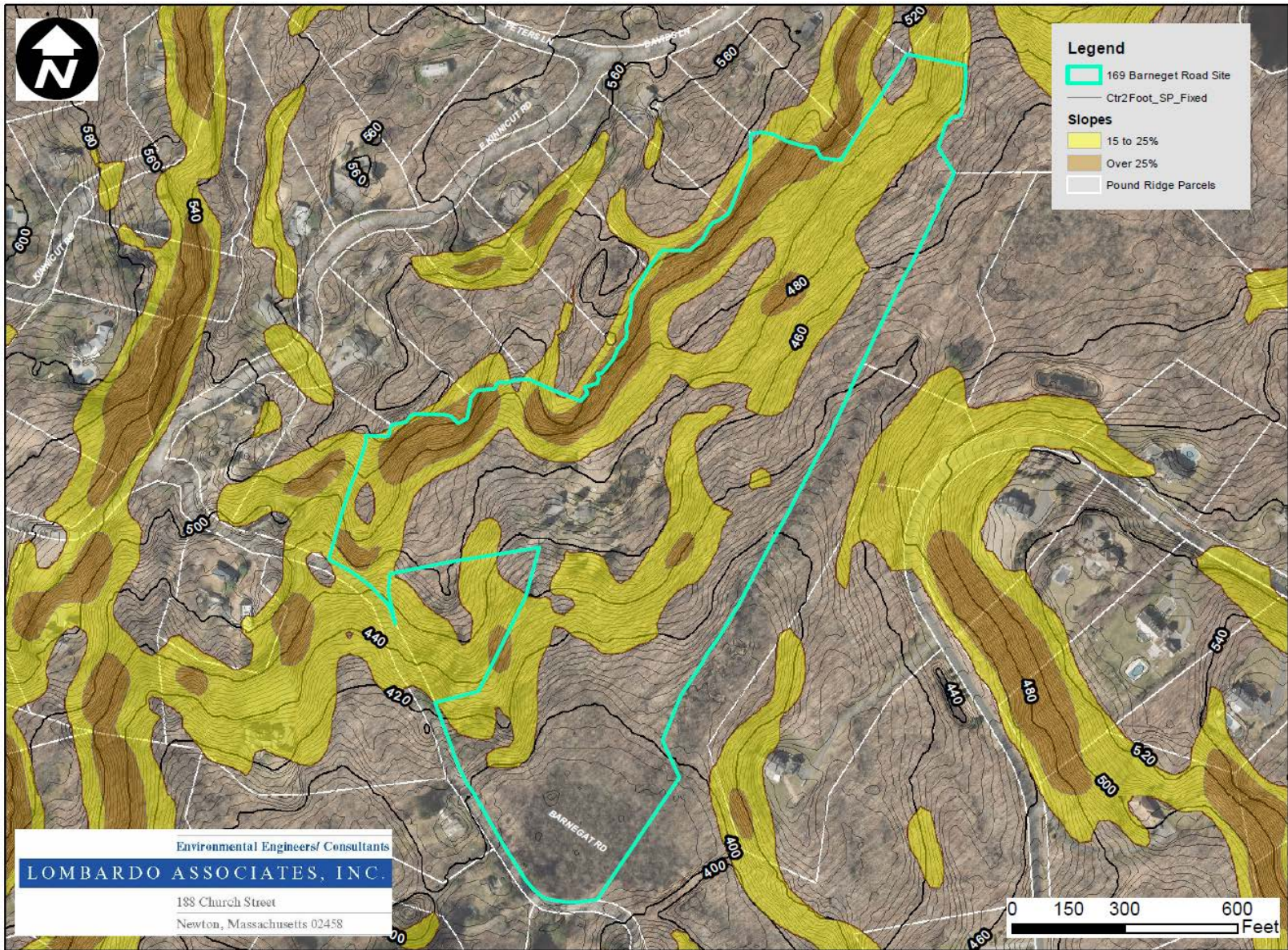


Figure 4.8-4 Barneget Road Slopes and Contours Map

Table 4.8-2 Barnegat Road Test Pit Summary 1

Barnegat Road Test Pit Records															
TP Depth	TP 1-1	TP 1-2	TP 1-3	TP 1-4	TP 1-6	TP 1-7	TP 1-8	TP 2-2	TP 2-3	TP 2-4	TP 2-5	TP 2-6	TP 2-7	TP 2-8	TP 2-9
G.L.	6" Top Soil	8" Top Soil	6" Top Soil	8" Top Soil	6" Top Soil	8" Top Soil	8" Top Soil	6" Top Soil	6" Top Soil	6" Top Soil	6" Top Soil	6" Top Soil	2" Top Soil	2" Top Soil	2" Top Soil
6"	6-38" Silty Loam	8-27" Silty Loam	6-38" Silty Loam	8-45" Silty Loam; Ledge @ 45"	8-55" Silty Loam; Ledge @ 55"	8-34" Silty Loam	8-30" Silty Loam	6-29" Silty Loam w/ cobbles	6-36" Silty Loam w/ cobbles	6-44" Silty Loam w/ cobbles	6-36" Silty Loam w/ cobbles	6-40" Silty Loam w/ cobbles	2-44" Silty Loam w/ cobbles; Ledge @ 44"	2-24" Silty Loam w/ cobbles	2-24" Silty Loam w/ cobbles
12"															
18"															
24"															
30"															
36"															
42"	38-44" Sands; Ledge at 44"	27-44" Sands; Ledge @ 44"	38-53" Sands; Ledge @ 53"			34-44" Sands; Ledge @ 44"	30-52" Sands; Ledge @ 52"	29-50" Sands; Ledge @ 50"	36-48" Sands; Ledge @ 48"	44-57" Sands; Ledge @ 57"	36-48" Sands; Ledge @ 48"	40-46" Sands; Ledge @ 46"	24-50" Sands; Ledge @ 50"	24-48" Silty Loam w/ cobbles; Ledge @ 48"	
48"															
54"															
60"															
66"															
72"															
78"															
84"															
90"															
96"															

Table 4.8-3 Barnegat Road Test Pit Summary 2

Barnegat Road Test Pit Records																			
TP Depth	TP 11	TP 12	TP 13	TP 16	TP 17	TP 18	TP 19	TP 22	TP 23	TP 24	TP 25	TP 26	TP 27	TP 28	TP 29				
G.L.	6" Top Soil / Organic	8" Top Soil / Organic	6" Top Soil / Organic	6" Top Soil / Organic	6" Top Soil / Organic	8" Top Soil / Organic	10" Top Soil / Organic	6" Top Soil	6" Top Soil	6" Top Soil	6" Top Soil	6" Top Soil	2" Top Soil	2" Top Soil	2" Top Soil				
6"	6-38" Sand + Silts	8-27" Sands + Silts	6-38" Sand + Silts	6-55 Sand + Silts; BR @ 55"	6-34" Sand + Silts	8-30" Sand + Silts	10-30" Sand + Silts	6-24" Sand + Silts	6-36" Sand + Silts	6-44" Sand + Silts	6-36" Sand + Silts	6-40" Sand + Silts	2-47" Silty Loam; BR @ 47"	2-24" Silty Loam	2-45" Silty Loam				
12"																			
18"																			
24"																			
30"																			
36"																			
42"		27-44" Mixed Sands; BR @ 44"	38-53" Mixed Sands; BR @ 53"		34-44" Mixed Sands; BR @ 44"	30-52" Mixed Sands; BR @ 52"	30-44" Mixed Sands; Br @ 44"	24-50" Mixed Sands; BR @ 50"	36-42" Mixed Sands; BR @ 42"		36-47" Mixed Sands; BR @ 47"	40-46" Mixed Sands; BR @ 46"	24-50" Sands; BR @ 50"						
48"		38-44" Mixed Sands; BR @ 44"											44-57" Mixed Sands; BR @ 57"						
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60"																			
66"																			
72"																			
78"																			
84"																			
90"																			
96"																			

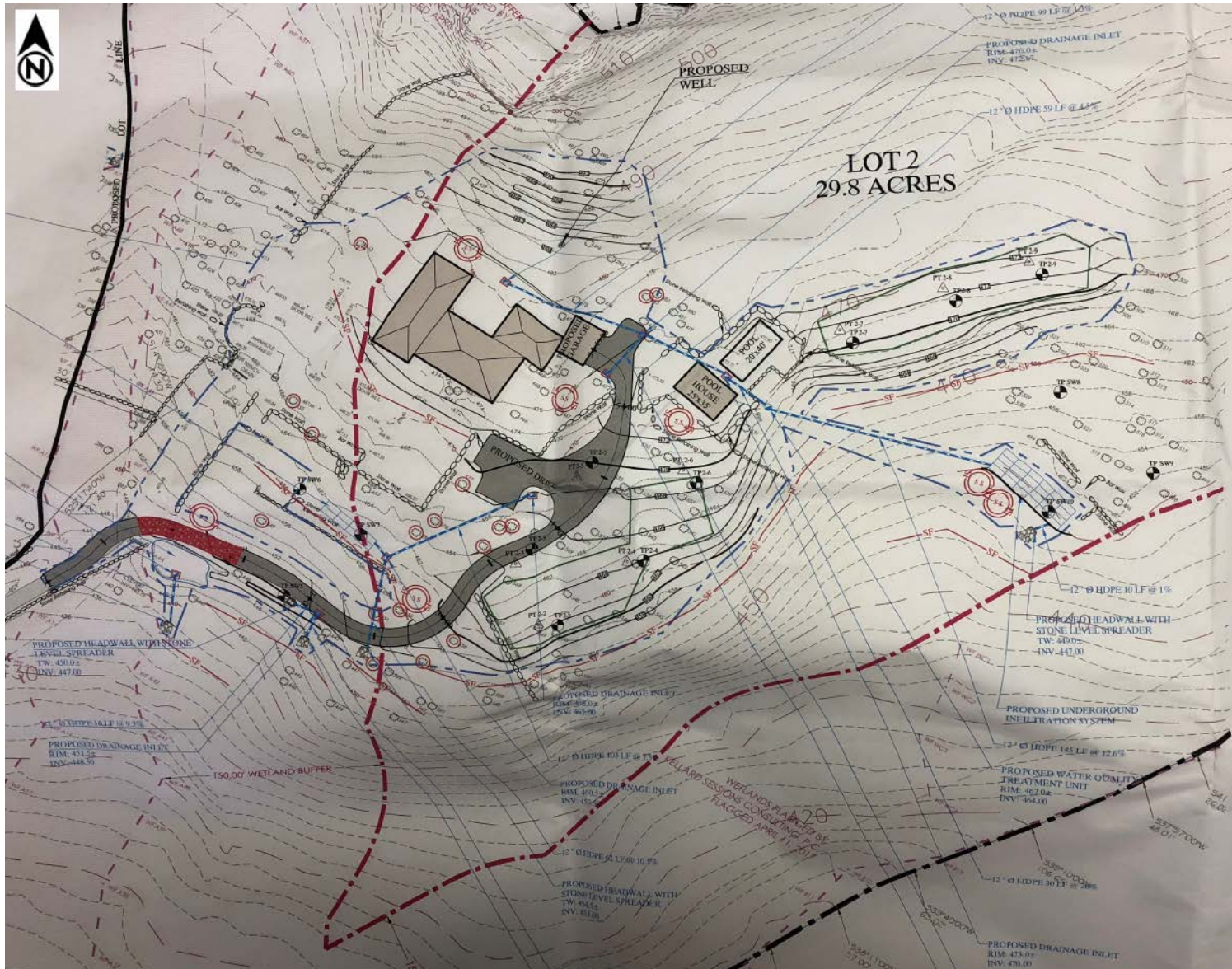


Figure 4.8-5 Barnegat Road Test Pit Locations Map 2

5. PRELIMINARY CANDIDATE SITES DISPOSAL CAPACITY ANALYSIS

Due to the additional distance and cost to the Elementary School and Town land adjacent to the School those two sites are not being further evaluated. Due to the lack of interest of property owners, the Golf Course and Clark properties are not being further evaluated. The Golf Course is also not attractive as disposal at that location would not recharge the Laurel Reservoir. Recharging the Laurel Reservoir is a critical aspect to secure the water supply commitment from Aquarion.

Disposal capacity of final preferred site(s) will be determined by use of the USGS Groundwater Flow computer model MODFLOW. For analytical purposes only, Darcy's Law capacity estimates are prepared in this chapter to provide initial insights to the disposal capacities of the candidate sites.

DARCY'S LAW CAPACITY ESTIMATES METHODOLOGY

The treated wastewater disposal capacity of candidate sites was estimated in the following manner:

1. Available Area determined as discussed in Section 4
2. Viable zones within the available area were identified based upon topography (work with contours) and preliminary disposal system layout considerations.
3. Darcy's Law disposal capacity of the drainfield zones was calculated at the downgradient face of the zone as follows, see Figures 5.0-1 through 5.0-3:

$$Q = K \cdot A \cdot i, \quad \text{where} \quad \begin{array}{l} Q = \text{volumetric flow (cf/day)}, \\ K = \text{Hydraulic conductivity (ft/day) of unsaturated zone,} \\ A = \text{cross sectional area (sf) of discharge cross sectional area} \\ i = \text{groundwater slope} \end{array}$$

- i. Hydraulic conductivity (K) of soils estimated based upon NCRS soils data;
 - ii. Test pit data (as presented in Section 4) reviewed to estimate depth to groundwater(GW)/bedrock,
 - iii. Cross Sectional area computed by:
 - ✓ Length measured as the furthest downgradient face of zone
 - ✓ Depth calculated by subtracting from depth to GW/BR (ii above)
 - 1 foot separation between grade and bottom of drainfield;
 - 1 foot separation between drainfield bottom and max mounded GW elevation
4. Darcy's Law flow estimates calculated
 5. Preliminary drainfield layouts prepared based upon NYS DEC and WC DoH code
 6. Darcy's Law flow estimates calculations revised based upon drainfield layout loadings.

Depth to bedrock and/or groundwater was determined based on the following, in order of priority:

1. Nearby boring or test pit data
2. Table 18 from the Soil Survey of Putnam and Westchester Counties (1994) provides groundwater and bedrock depth below grade by soil types

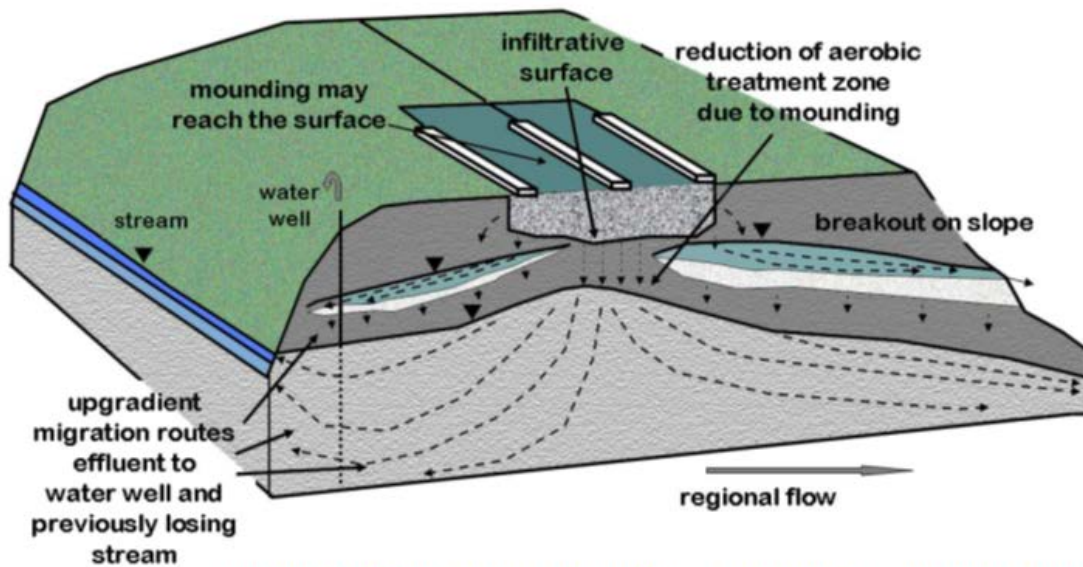
Where boring data was available, those values were used. If no nearby boring data was available, the Soil Survey data was used to assign depth to groundwater / bedrock.

Saturated hydraulic conductivity was estimated by taking the midpoint of the permeability range presented in Table 17 of the Soil Survey referenced above.

All calculations and preliminary drainfield layouts are presented in the following sections, with a summary presented on Table 5.0-1.

Table 5.0-1 Candidate Sites Preliminary Darcy's Law Capacity Estimates

Candidate Disposal site Summary		
Site #	Site Name	Flow - Darcy's (GPD)
1	Town Park	69,031
2	Old Pound Ridge Rd	42,897
3	Lower Trinity Pass	55,976
4	Barnegat Rd	18,007
5	Oceanus	29,428



NDWRCDP (2005) Guidance for Evaluation of Potential Groundwater Mounding

Figure 5.0-1 Mounding Schematic

Darcy Applied to Groundwater Mounding Analysis

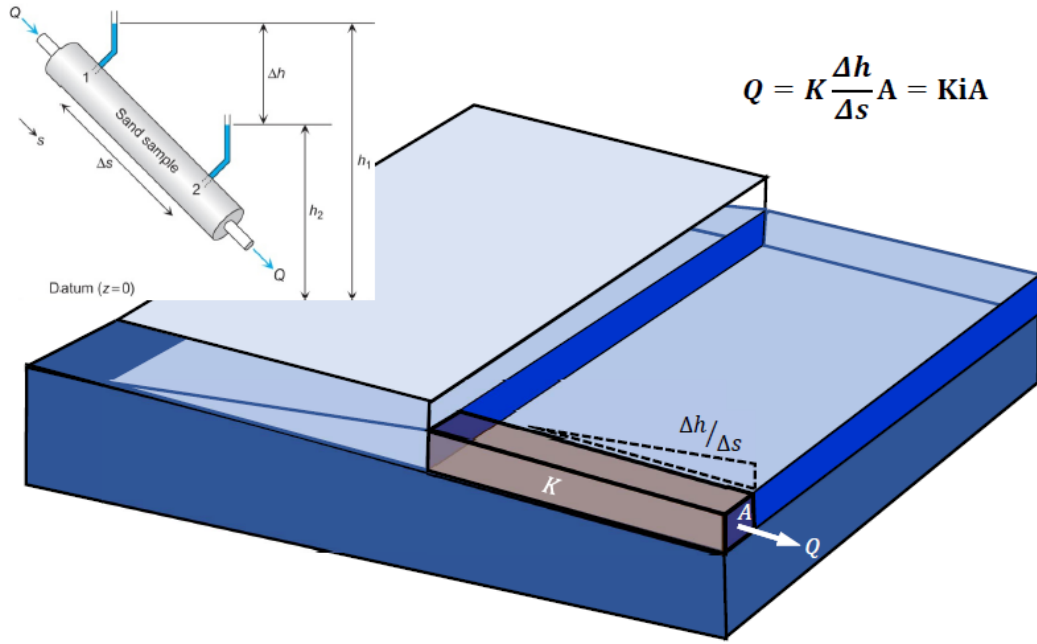
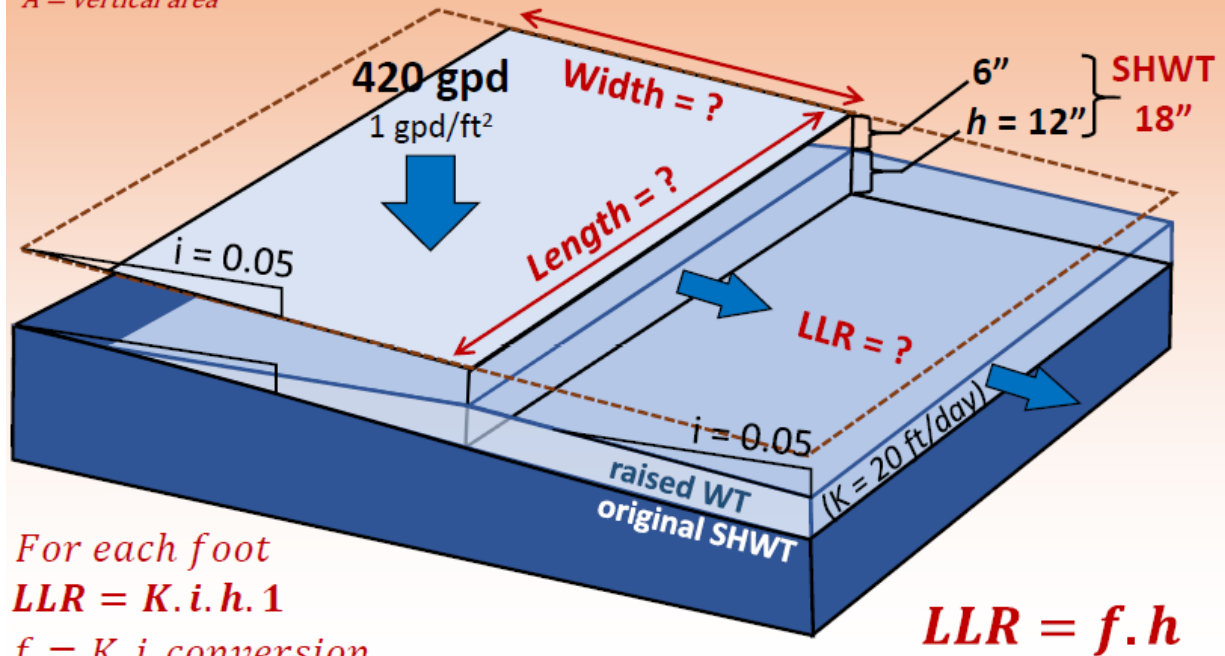


Figure 5.0-2 Simplified Darcy's Law Applied to Mounding Analysis

From Bradley et al, 2019

Darcy's Law $Q = K \cdot i \cdot A$
 $Q = K \cdot i \cdot h \cdot L$
Q = flow rate,
K = hydraulic conductivity
i = hydraulic gradient
A = vertical area

Darcy's Law Method for Drainfield Mounding Analysis



For each foot
 $LLR = K \cdot i \cdot h \cdot 1$
f = *K* · *i* · conversion

$LLR = f \cdot h$

Figure 5.0-3 Simplified Darcy's Law Mounding Analysis-Example

From Bradley et al, 2019

5.1 TOWN PARK BALLFIELD SITE

Figure 5.1-1 presents the available areas and preliminary disposal zones within the Town-owned parcels at the ballfield site. Figure 5.1-2 presents the preliminary drainfield layout. Table 5.1-1 presents the Darcy's Law Disposal Capacity Analysis for Town Park.

Table 5.1-1 Darcy's Law Disposal Capacity Estimates – Town Park

Town Park Potential Drainfield Zones Capacity Analysis												
DF Zone #	GW Flux Length (ft)	Nearby Boring Data Depth to GW / BR (ft)	Soil Type	Soil Based Depth to GW / BR ⁽¹⁾ (ft)	Assumed Depth to GW / BR (ft)	Disp. Sys. Depth Below Grade (ft)	Max. Mound Height ⁽²⁾ (ft)	Hyd. Cond. ⁽³⁾ (ft/d)	Slope (%)	Flux Area (ft ²)	Flow - Darcy	
											(ft ³ /day)	(gpd)
1	700	>8	CrC, CsD	>5	8.0	1.0	6.0	6.6	10.0%	4,200	2,772	20,735
2	375	>8	CrC	>5	8.0	1.0	6.0	6.6	7.0%	2,250	1,040	7,775
3	500	>7.7	CrC	>5	8.0	1.0	6.0	6.6	10.0%	3,000	1,980	14,810
4	220	6	ClB	>5	5.0	1.0	3.0	6.6	8.0%	660	348	2,607
5	900	None	ChB, CrC, ChC	>5	6.0	1.0	4.0	6.6	6.0%	3,600	1,426	10,663
6	700	None	ChB, CrC, ChC	>5	6.0	1.0	4.0	6.6	9.0%	2,800	1,663	12,441

⁽¹⁾ From Table 18 - Westchester County Soil Survey

69,031

⁽²⁾ Assumes drip disposal @ 1-ft below grade and 1-ft minimum separation from max mounded groundwater

⁽³⁾ Average Value from Table 17 - Westchester County Soils Survey

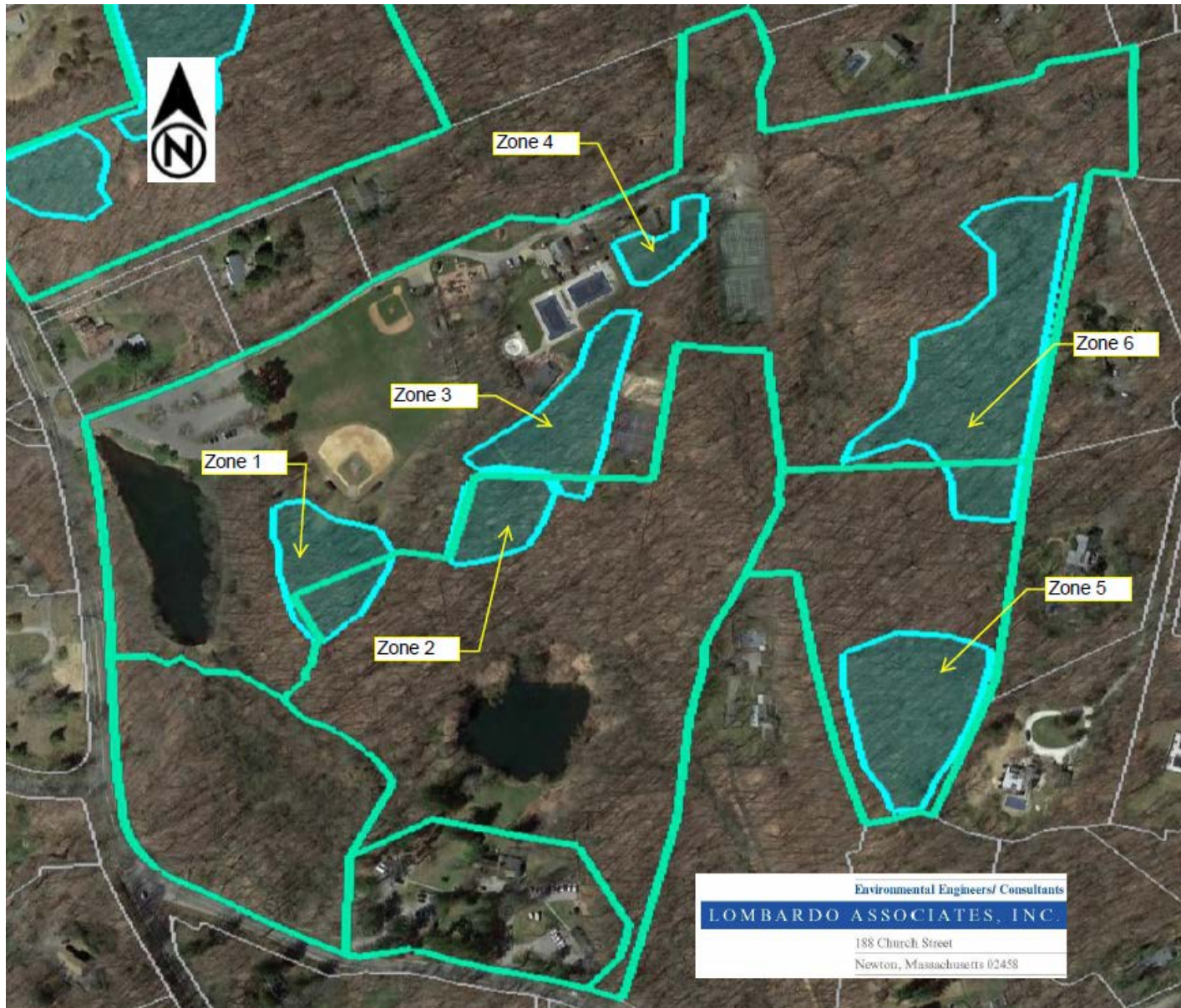


Figure 5.1-1 Town Park Available Areas and Potential Disposal Zones

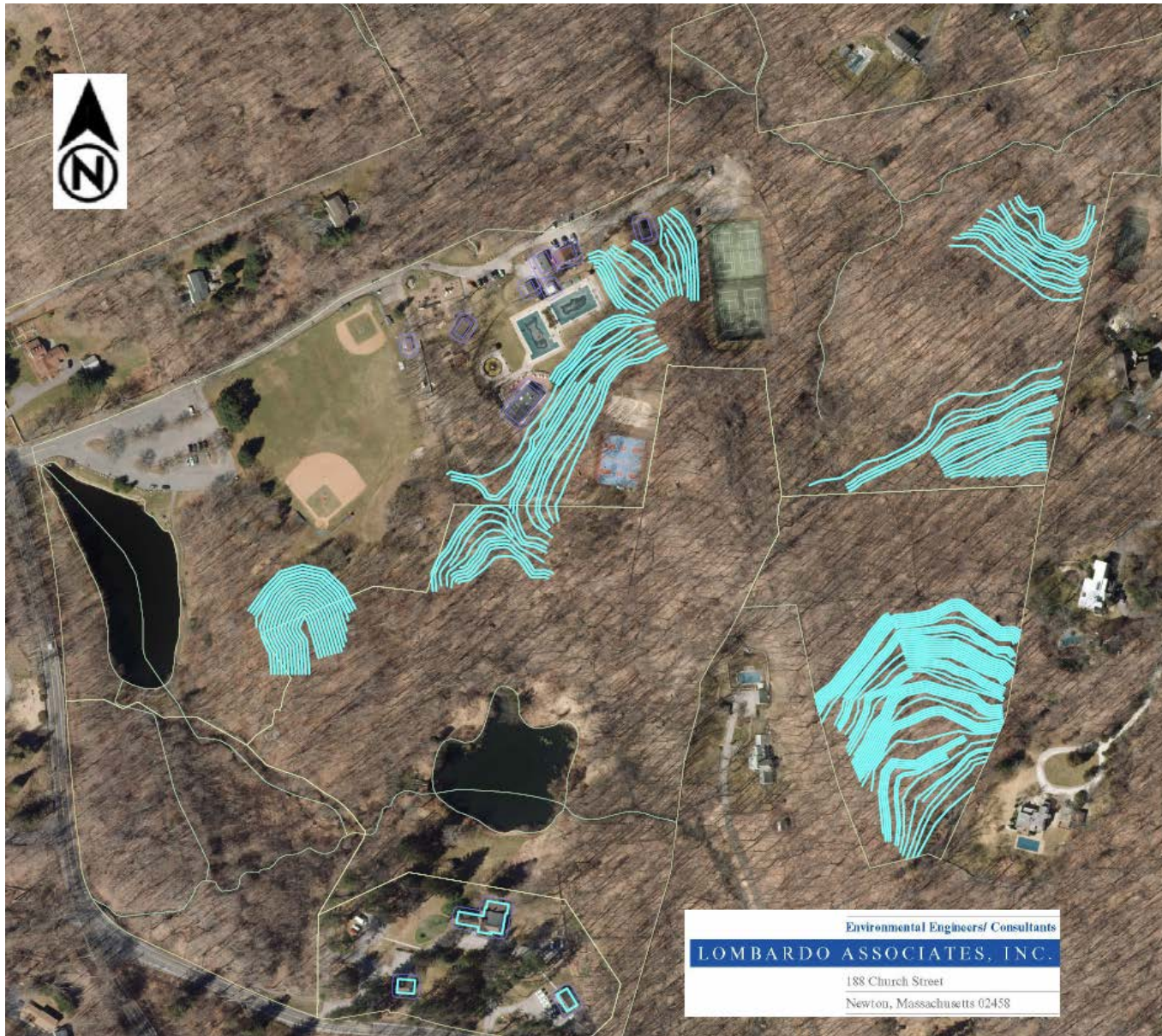


Figure 5.1-2 Example of Trench Layout – Town Park

5.2 OLD POUND ROAD SITE

Figure 5.2-1 presents the available areas and preliminary disposal zones within the Kerr property across from the ballfield site.

Table 5.2-1 presents the Darcy's Law Disposal Capacity Analysis for the Old Pound Road site.

Table 5.2-1 Disposal Capacity Estimates – Old Pound Road

Old Pound Road Potential Drainfield Zones Capacity Analysis												
DF Zone #	GW Flux Length (ft)	Nearby Boring Data Depth to GW / BR (ft)	Soil Type	Soil Based Depth to GW / BR ⁽¹⁾ (ft)	Assumed Depth to GW / BR (ft)	Disp. Sys. Depth Below Grade (ft)	Max. Mound Height ⁽²⁾ (ft)	Hyd. Cond. ⁽³⁾ (ft/d)	Slope (%)	Flux Area (ft ²)	Flow - Darcy	
											(ft ³ /day)	(gpd)
1	430	None	ChB	>5	6.0	1.0	4.0	6.6	7.0%	1,720	795	5,944
2	450	None	ChB	>5	6.0	1.0	4.0	6.6	8.0%	1,800	950	7,109
3	650	None	ChC, ChD	>5	6.0	1.0	4.0	6.6	8.0%	2,600	1,373	10,269
4	330	None	ChD, ChC	>5	6.0	1.0	4.0	6.6	7.0%	1,320	610	4,562
											27,883	

⁽¹⁾ From Table 18 - Westchester County Soil Survey

27,883

⁽²⁾ Assumes drip disposal @ 1-ft below grade and 1-ft minimum separation from max mounded groundwater

⁽³⁾ Average Value from Table 17 - Westchester County Soils Survey

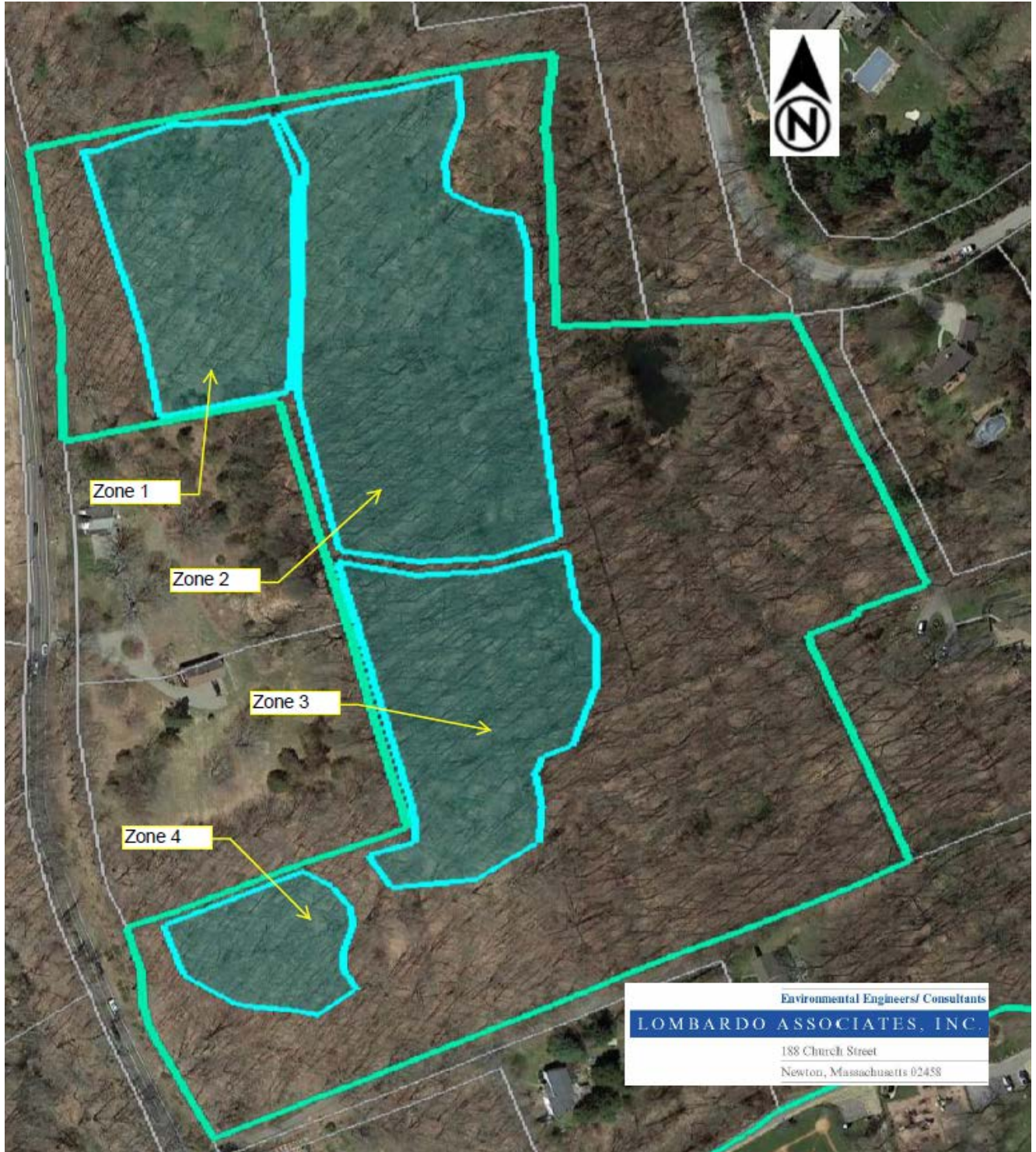


Figure 5.2-1 Old Pound Road Site Available Area and Potential Disposal Zones

5.3 LOWER TRINITY PASS ROAD SITE

Figure 5.3-1 presents the available areas and preliminary disposal zones for the Lower Trinity Pass Road site.

Table 5.3-1 presents the Darcy's Law Disposal Capacity Analysis for the Lower Trinity Pass Road site.

Table 5.3-1 Disposal Capacity Estimates –Lower Trinity Pass Road Site

Lower Trinity Pass Potential Drainfield Zones Capacity Analysis												
DF Zone #	GW Flux Length (ft)	Nearby Boring Data Depth to GW / BR (ft)	Soil Type	Soil Based Depth to GW / BR ⁽¹⁾ (ft)	Assumed Depth to GW / BR (ft)	Disp. Sys. Depth Below Grade (ft)	Max. Mound Height ⁽²⁾ (ft)	Hyd. Cond. ⁽³⁾ (ft/d)	Slope (%)	Flux Area (ft ²)	Flow - Darcy	
											(ft ³ /day)	(gpd)
1	1,750	None	CrC, CsD	>5	5.5	1.0	3.5	6.6	5.0%	6,125	2,021	15,119
2	300	None	CrC	>5	5.5	1.0	3.5	6.6	4.0%	1,050	277	2,073
3	500	None	CrC	>5	5.5	1.0	3.5	6.6	10.0%	1,750	1,155	8,639
4	500	10	CsD	>5	10.0	1.0	8.0	6.6	15.0%	4,000	3,960	29,621
5	500	None	LeB	>5	3.0	1.0	1.0	2.0	7.0%	500	70	524
											55,976	

⁽¹⁾ From Table 18 - Westchester County Soil Survey

⁽²⁾ Assumes drip disposal @ 1-ft below grade and 1-ft minimum separation from max mounded groundwater

⁽³⁾ Average Value from Table 17 - Westchester County Soils Survey

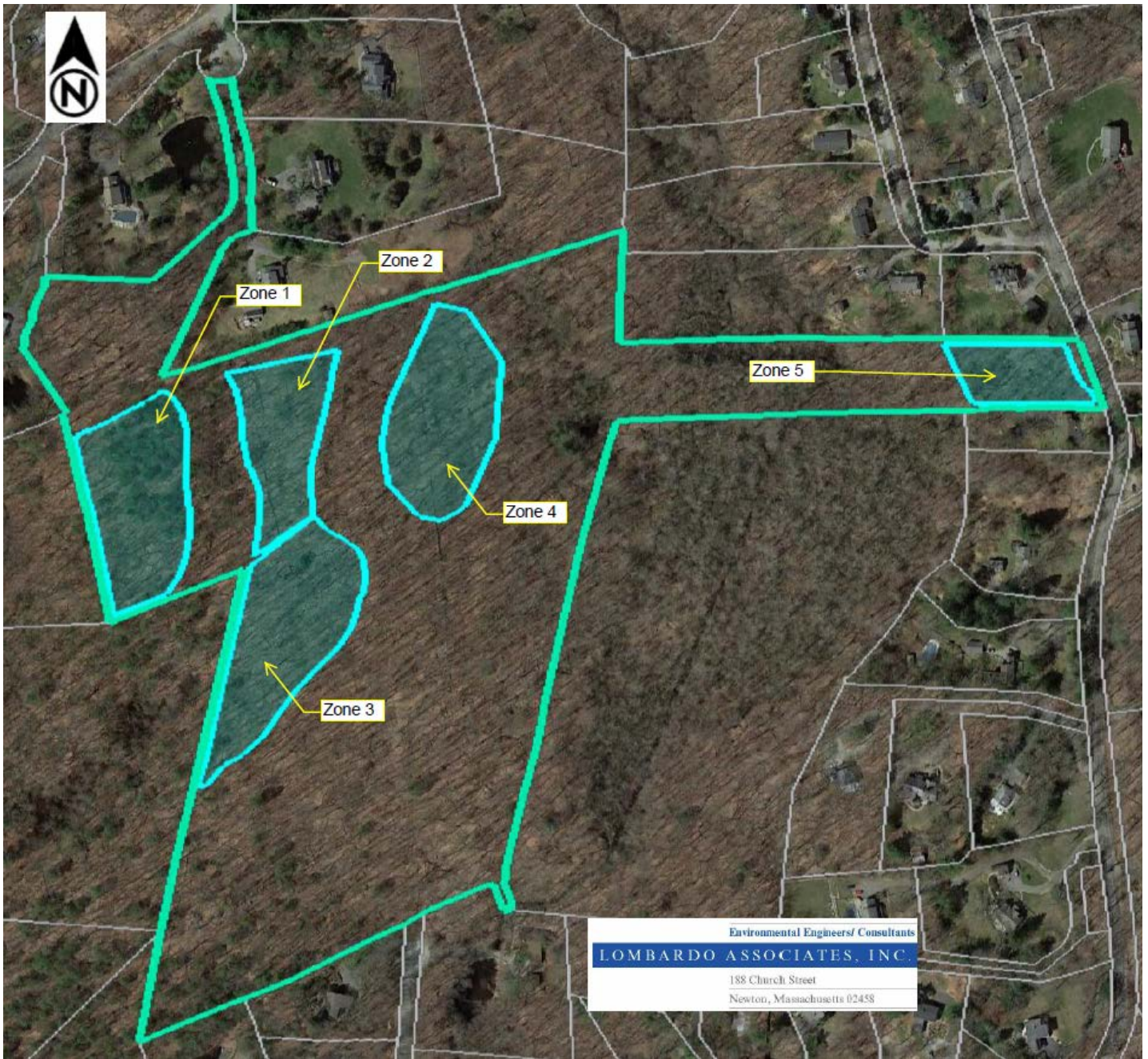


Figure 5.3-1 Lower Trinity Pass Road Site Available Area and Potential Disposal Zones

5.4 BARNEGAT ROAD SITE

Figure 5.4-1 presents the available areas and preliminary drainfield sites for the Barnegat Road site, located between the area of Scotts Corner and the Siscowit Reservoir.

Table 5.4-1 presents the Darcy's Law Disposal Capacity Analysis for the Barnegat Road site.

Table 5.4-1 Disposal Capacity Estimates – Barnegat Road Site

Barnegat Road Potential Drainfield Zones Capacity Analysis												
DF Zone #	GW Flux Length (ft)	Nearby Boring Data Depth to GW / BR (ft)	Soil Type	Soil Based Depth to GW / BR ⁽¹⁾ (ft)	Assumed Depth to GW / BR (ft)	Disp. Sys. Depth Below Grade (ft)	Max. Mound Height ⁽²⁾ (ft)	Hyd. Cond. ⁽³⁾ (ft/d)	Slope (%)	Flux Area (ft ²)	Flow - Darcy	
											(ft ³ /day)	(gpd)
1	500	3.9	ChB, CID	>5	3.9	1.0	1.9	6.6	6.0%	950	376	2,814
2	830	4	CIC	>5	3.9	1.0	1.9	6.6	8.0%	1,577	833	6,228
3	1,100	None	CIC, LeB	3	3.0	1.0	1.0	6.6	8.0%	1,100	581	4,344
4	520	None	CsD	>5	5.0	1.0	3.0	6.6	6.0%	1,560	618	4,621

⁽¹⁾ From Table 18 - Westchester County Soil Survey

18,007

⁽²⁾ Assumes drip disposal @ 1-ft below grade and 1-ft minimum separation from max mounded groundwater

⁽³⁾ Average Value from Table 17 - Westchester County Soils Survey

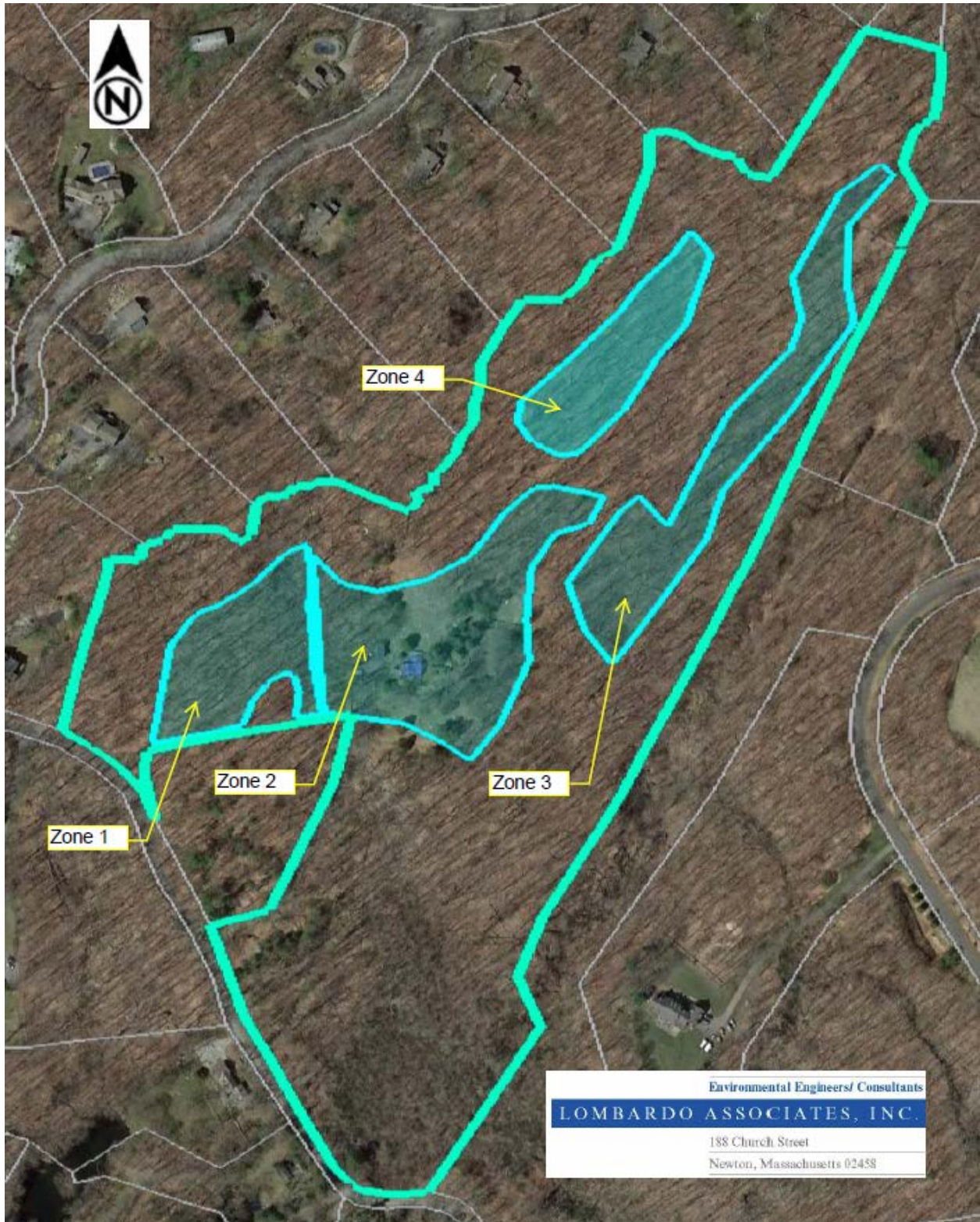


Figure 5.4-1 Barnegat Road Site Available Area and Potential Disposal Zones

5.5 OCEANUS SITE

Figure 5.5-1 presents the available areas and preliminary drainfield sites for the Oceanus site, located along the border between New York and Connecticut.

Table 5.5-1 presents the Darcy's Law Disposal Capacity Analysis for the Oceanus site.

Table 5.5-1 Disposal Capacity Estimates – Oceanus Site

Oceanus Potential Drainfield Zones Capacity Analysis												
DF Zone #	GW Flux Length (ft)	Nearby Boring Data Depth to GW / BR (ft)	Soil Type	Soil Based Depth to GW / BR ⁽¹⁾ (ft)	Assumed Depth to GW / BR (ft)	Disp. Sys. Depth Below Grade (ft)	Max. Mound Height (ft)	Hyd. Cond. ⁽²⁾ (ft/d)	Slope (%)	Flux Area (ft ²)	Flow - Darcy	
											(ft ³ /day)	(gpd)
1	540	4.5	CuD, CiD	0-5+	4.5	2.0	2.5	6.6	6.0%	1,350	535	3,999
2	600	4.5	ChB	>5	5.0	2.0	3.0	6.6	6.0%	1,800	713	5,332
3	580	none	CiC, CrC	2-5+	5.0	2.0	3.0	6.6	8.0%	1,740	919	6,872
4	410	none	CiC, Ff	2-5+	5.0	2.0	3.0	6.6	4.0%	1,230	325	2,429
5	350	7.0	SuB, Ff	0.5-6	7.0	2.0	5.0	6.6	3.0%	1,750	347	2,592
6	560	none	CrC, HrF, CuD	1-5+	5.0	2.0	3.0	6.6	4.0%	1,680	444	3,318
7	660	none	CrC, HrF	1-5+	5.0	2.0	3.0	6.6	5.0%	1,980	653	4,887
											29,428	

⁽¹⁾ From Table 18 - Westchester County Soil Survey

⁽²⁾ Average Value from Table 17 - Westchester County Soils Survey

⁽³⁾ Assumes drip disposal @ 1-ft below grade and 1-ft minimum separation from max mounded groundwater

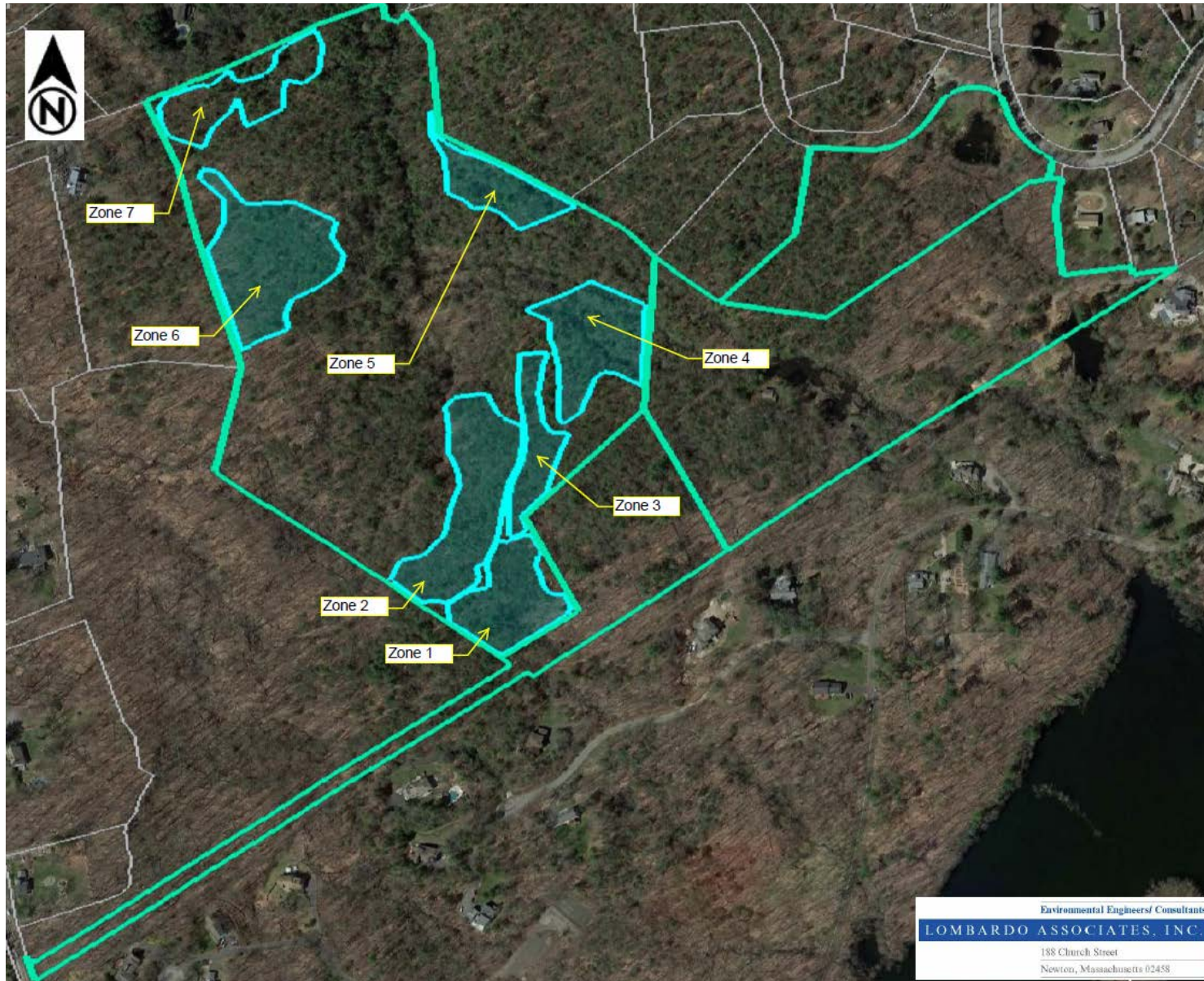


Figure 5.5-1 Oceanus Site Available Area and Potential Disposal Zones

6. SITE TESTING PLAN

6.1 SITE EVALUATION AND TESTING OVERVIEW

Of the five (s) sites examined in Section 5, LAI ranked the sites in terms of likely ability to have the groundwater disposal capacity and/or favorable costs into two Tiers of Highly Favorable and Favorable.

Highly Favorable

- ✓ Pine Drive – Lower Trinity Road
- ✓ 169 Barnegat Road

Favorable

- ✓ Town Park
- ✓ Old Pound Road

For a site to be deemed acceptable for project treated effluent disposal for a design flow of 40,000 gpd, 60,000 gpd or 80,000 gpd, computer modeling of the treated wastewater discharge will need to be performed using the USGS MODFLOW groundwater model computer program. Disposal capacity will be determined by the computer model demonstrating that the discharge will comply with the **Disposal Criteria** of:

- **Minimum 2 feet separation from the bottom of the disposal system to maximum groundwater elevation** – with the mound. Disposal system initially assumed to be drip irrigation, which would be 6” below ground surface thereby maximizing the depth of the unsaturated zone. Drip also would minimize tree removal.

After initial computer modeling and if determined to be important for site selection, this requirement may be reviewed with WC DoH and NYSDEC.

- **Avoidance of disposal discharge surface breakout** prior to reaching surface water

This will be accomplished in the following order / manner:

Phase I Site Characterization

On the Highly Favorable Sites, Test Pits will be performed to define for the proposed disposal areas (i.e. defined as Zones on maps presented in Section 4), depth to groundwater and bedrock and soil samples taken for sieve analysis. The Town has authorized this work.

For site characterization results that are positive, a determination will be made if additional field data needs to be collected prior to MODFLOW model application.

Phase II Computer Modeling

For the Town selected site(s), a MODFLOW computer model of treated effluent groundwater flow will need to be performed to determine a site’s capacity to accept the treated wastewater discharge.

The site characterization results will be published in an addendum to this Plan.

The primary objective of the Phase I is step is to eliminate non-viable sites which do not have the minimum soil mantle thickness required along the discharged treated wastewater flow path to prevent breakout. Soil thickness is a heavy determinant of site capacity.

The number of test pit locations at each site was determined by:

- a. Feasibility of one full day of site testing with two machines – maximum number of test pit locations is 16 per site
- b. Test pits not conducted in areas where previous test pit data exists
- c. Bottom of slope (downgradient) areas were prioritized to maximize data in areas passing highest amounts of discharged effluent
- d. Remaining test pits distributed throughout potential disposal areas to characterize entire areas as best as possible within the budget limitations.

For each of the 4 sites, maps of the following information are presented in the following subsections:

1. Test Pit Location Map with topography, zones delineated, subwatershed boundaries and estimated groundwater flow direction.
2. Area Watershed Map with estimated groundwater flow direction and streams illustrating where the effluent would likely emerge into a surface water and showing ultimate discharge to Laurel Reservoir. Figure 6-1-1 illustrates the 4 sites, their subwatershed and creeks that drain the sites and their flow paths.

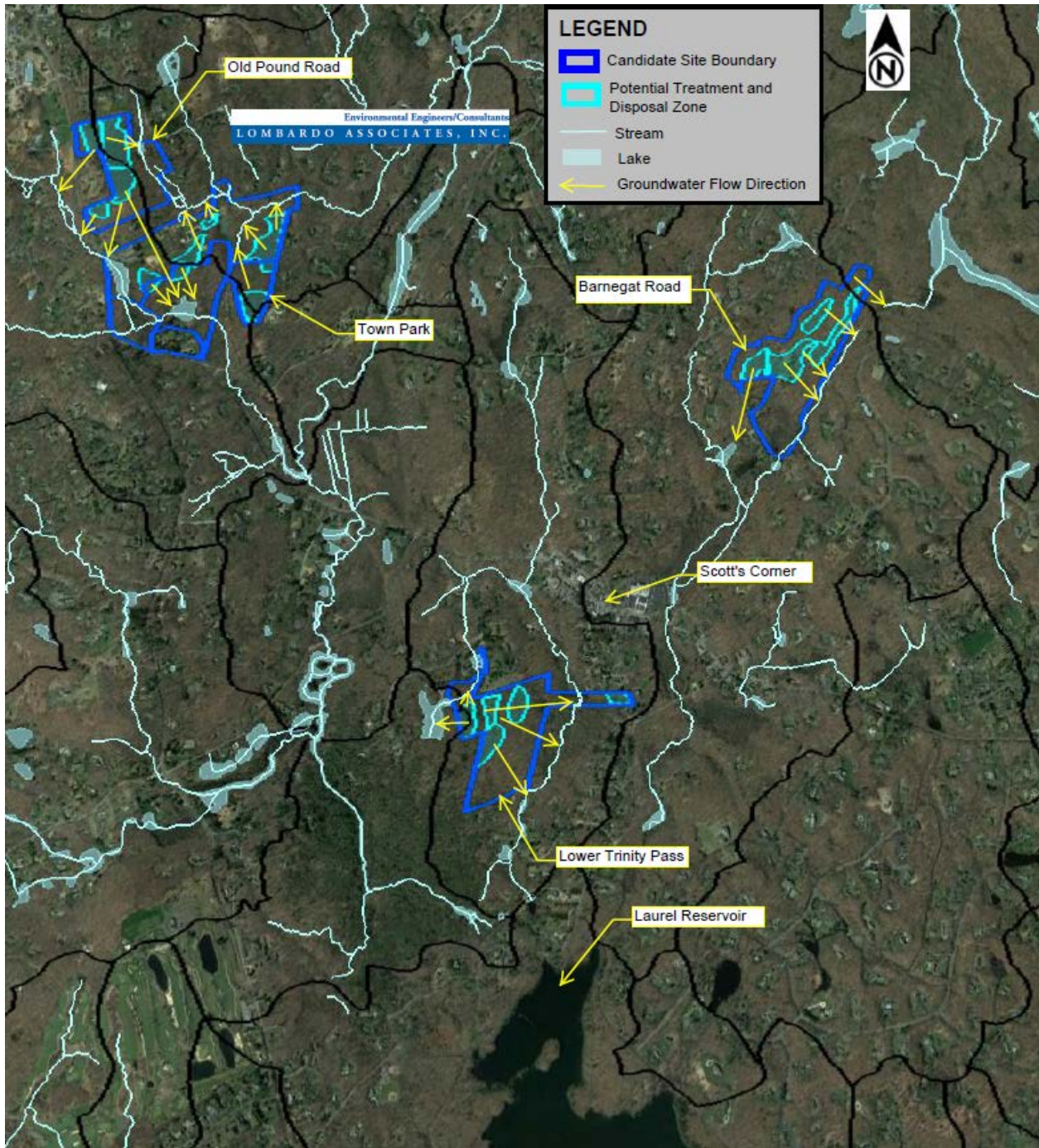


Figure 6-1-1 Candidate Sites, Subwatershed Locations and Creeks

6.2 PINE DRIVE – LOWER TRINITY ROAD

Test Pit Location Map is presented on Figure 6-2-1.

Area Watershed Map is presented on Figure 6-2-2.

Test Pits Locations and Form for Field Data is presented on Table 6-2-1.

Cross sections (see Figure 6-2-1) of the property illustrating test pit data previously collected are presented on Figures 6-2-3 through 6-2-5.

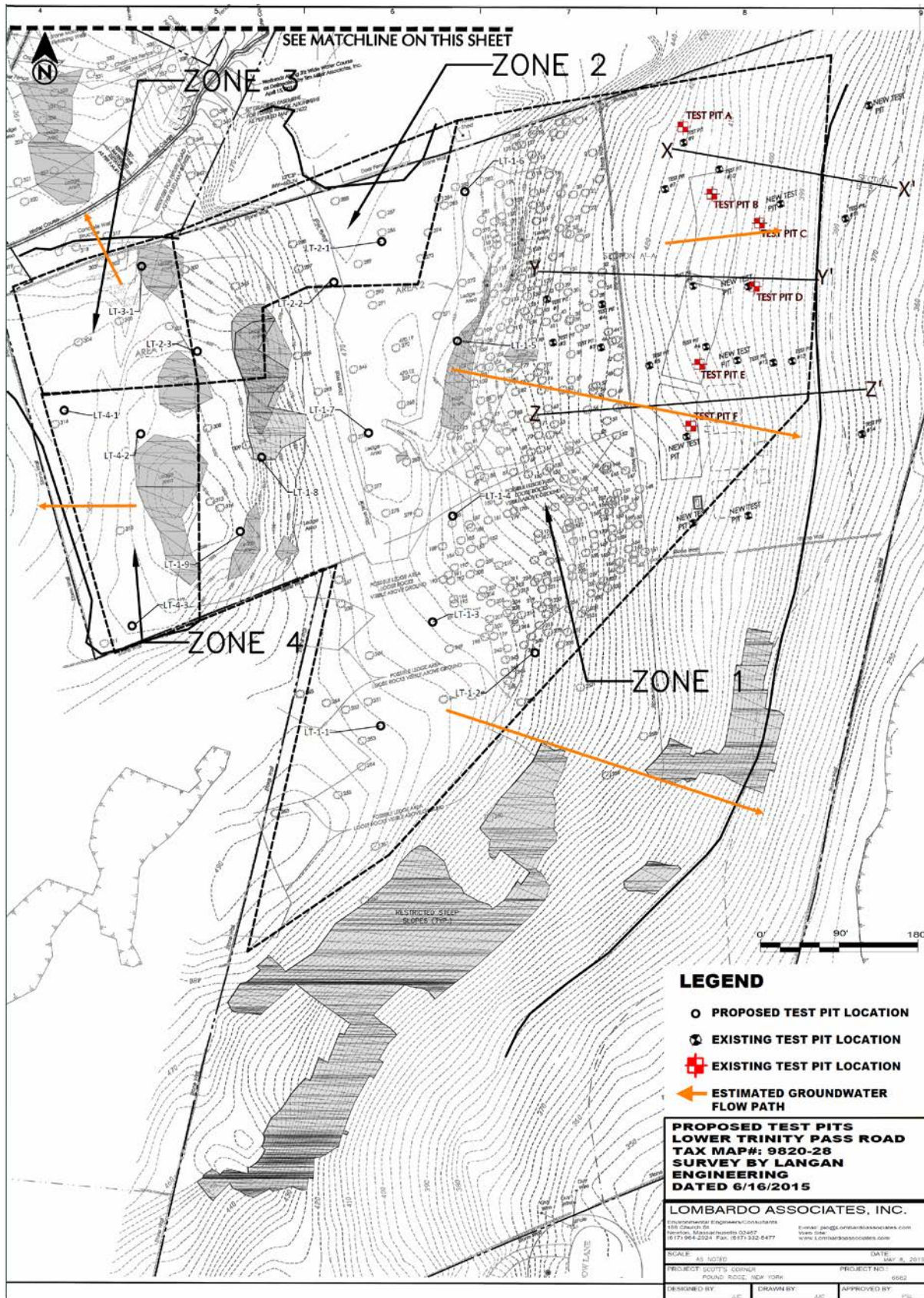


Figure 6-2-1 Lower Trinity Pass, Test Pit Locations Map

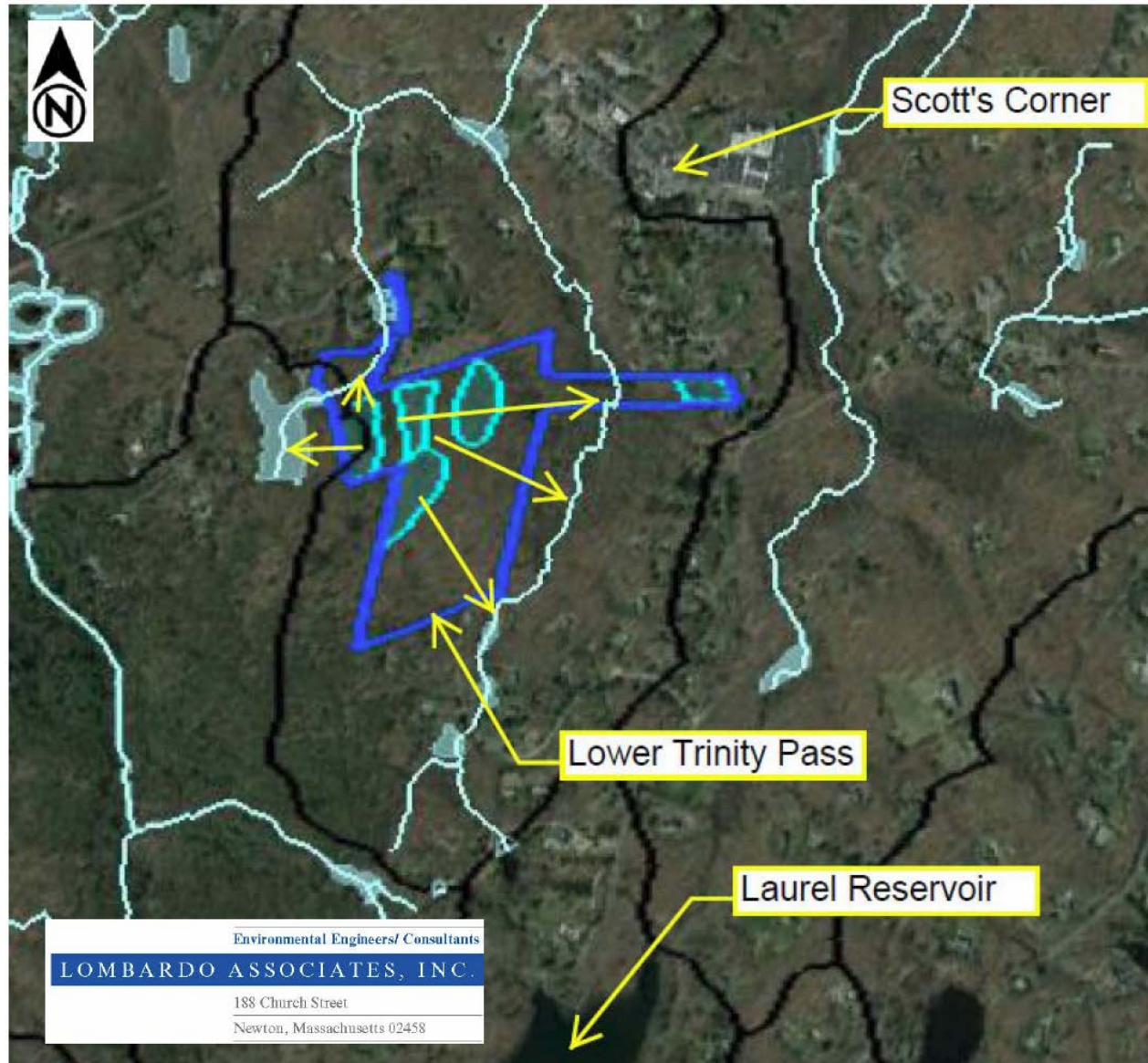


Figure 6-2-2 Lower Trinity Pass, Area Watershed Map

Table 6-2-1 Lower Trinity Pass, Test Pit Locations and Form for Field Data

Lower Trinity Road - New Test Pits by Zone							
Zone	TP #	GIS #	TP Location		Depth to		Soils Description
			Longitude	Latitude	BR	GW	
1	LT-1-1	19	-73.55564463	41.18528481			
	LT-1-2	16	-73.55500474	41.18550727			
	LT-1-3	18	-73.55542554	41.18560687			
	LT-1-4	17	-73.55533814	41.18593675			
	LT-1-5	13	-73.55531041	41.18648177			
	LT-1-6	14	-73.55527331	41.18694726			
	LT-1-7	20	-73.55568157	41.1861983			
	LT-1-8	27	-73.55612387	41.18612598			
	LT-1-9	28	-73.55621509	41.18589573			
2	LT-2-1	15	-73.55561873	41.18679428			
	LT-2-2	21	-73.55581771	41.18666947			
	LT-2-3	26	-73.55638451	41.18645849			
3	LT-3-1	24	-73.55661022	41.18672572			
4	LT-4-1	23	-73.55693585	41.18627887			
	LT-4-2	25	-73.55662131	41.18620317			
	LT-4-3	22	-73.55666576	41.18560507			
Total TPs	16						

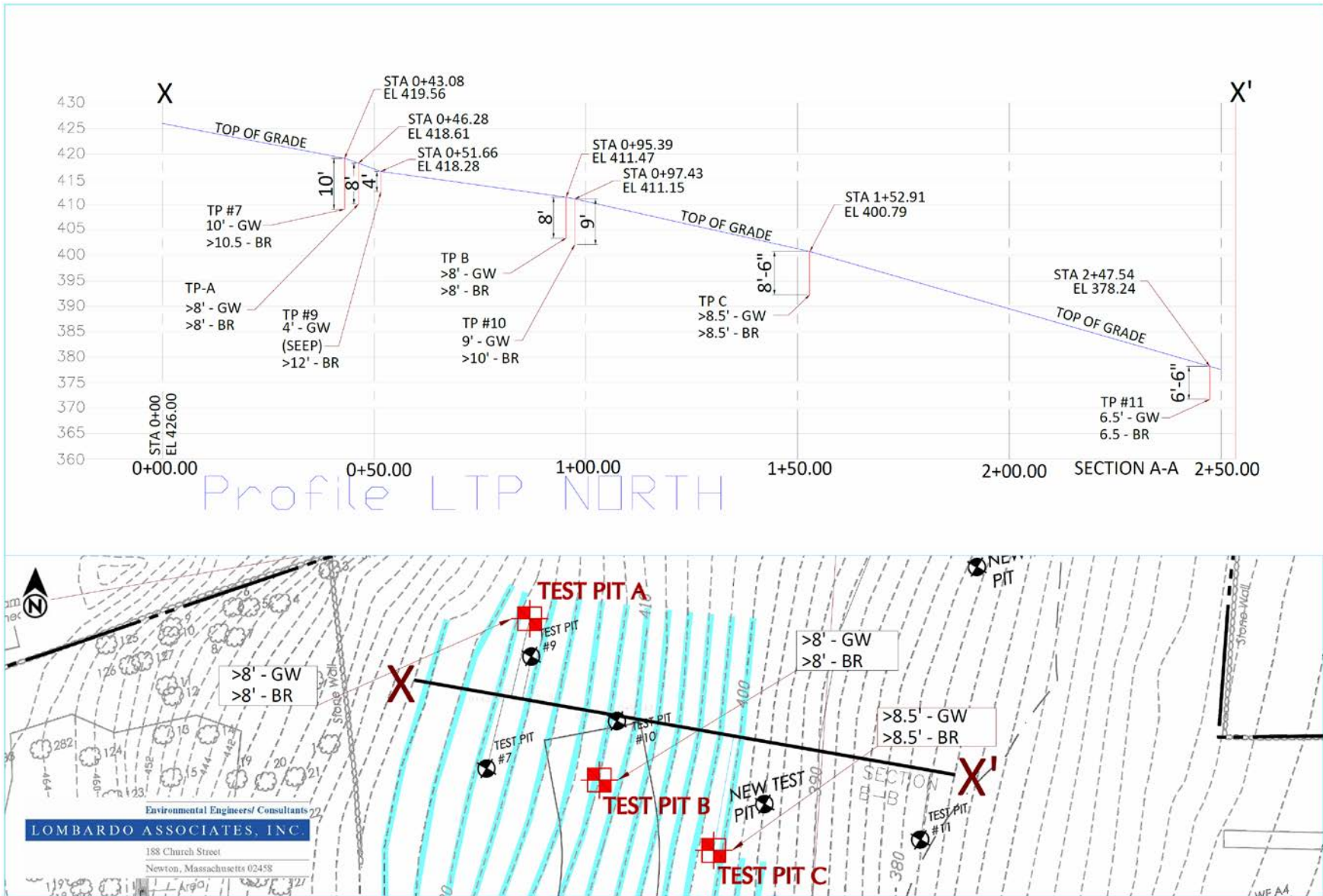


Figure 6-2-3 Lower Trinity Pass, North Test Pits Cross-Section

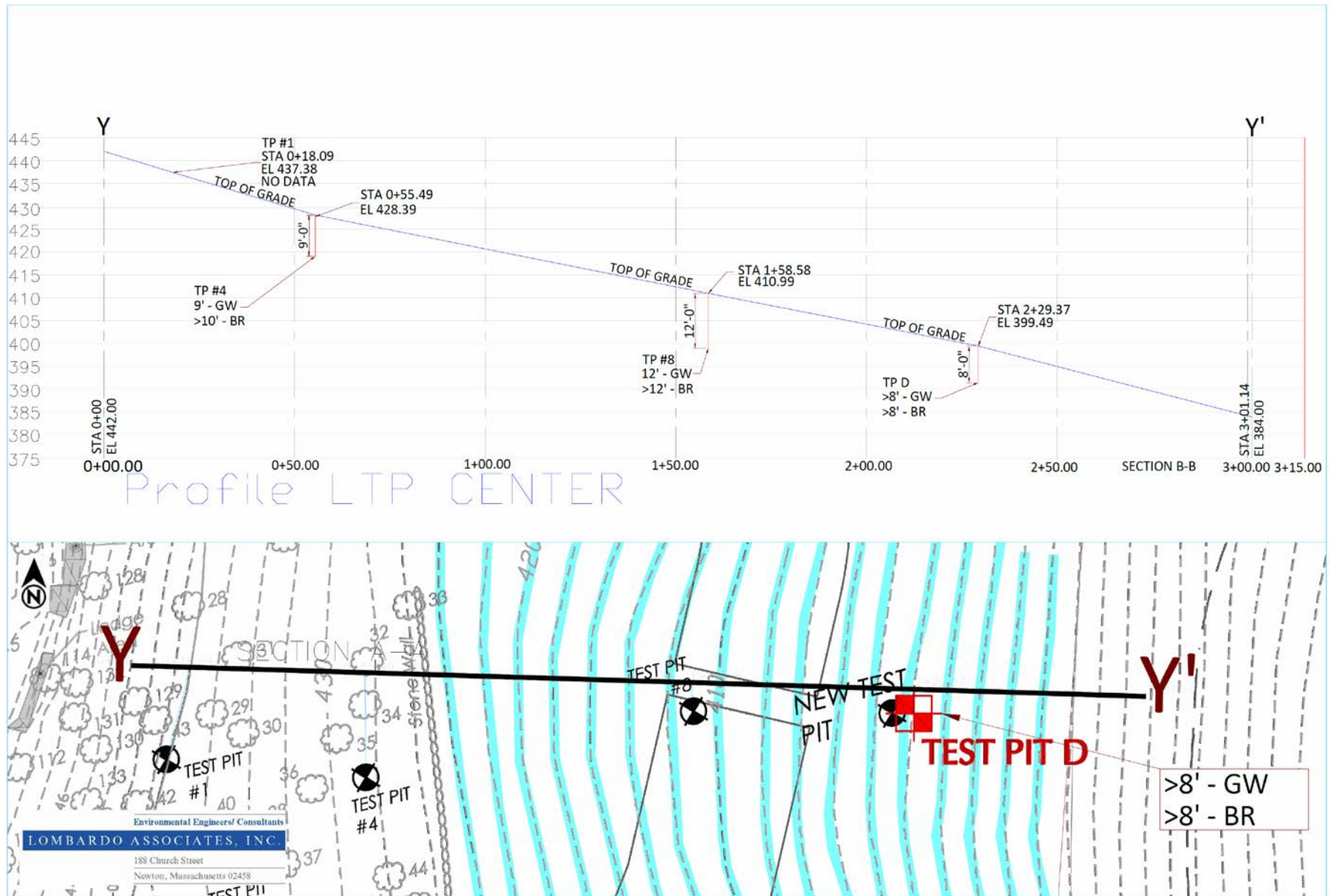


Figure 6-2-4 Lower Trinity Pass, Center Test Pits Cross-Section

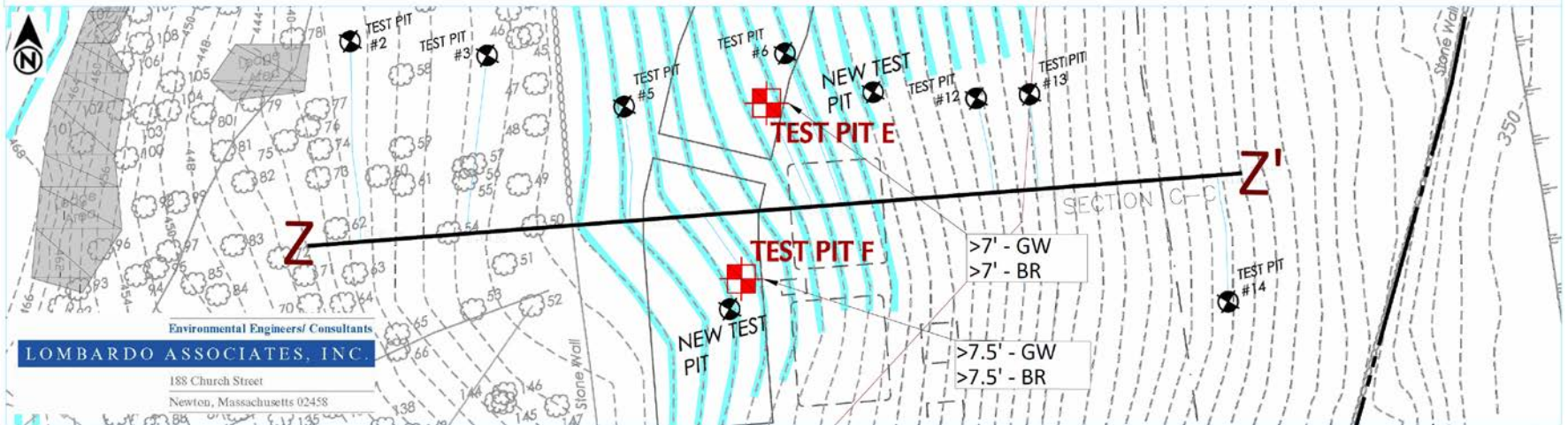


Figure 6-2-5 Lower Trinity Pass, South Test Pits Cross-Section

6.3 169 BARNEGAT ROAD

Test Pit Location Map is presented on Figure 6-3-1.

Area Watershed Map is presented on Figure 6-3-2.

Test Pits Locations and Form for Field Data is presented on Table 6-3-1.

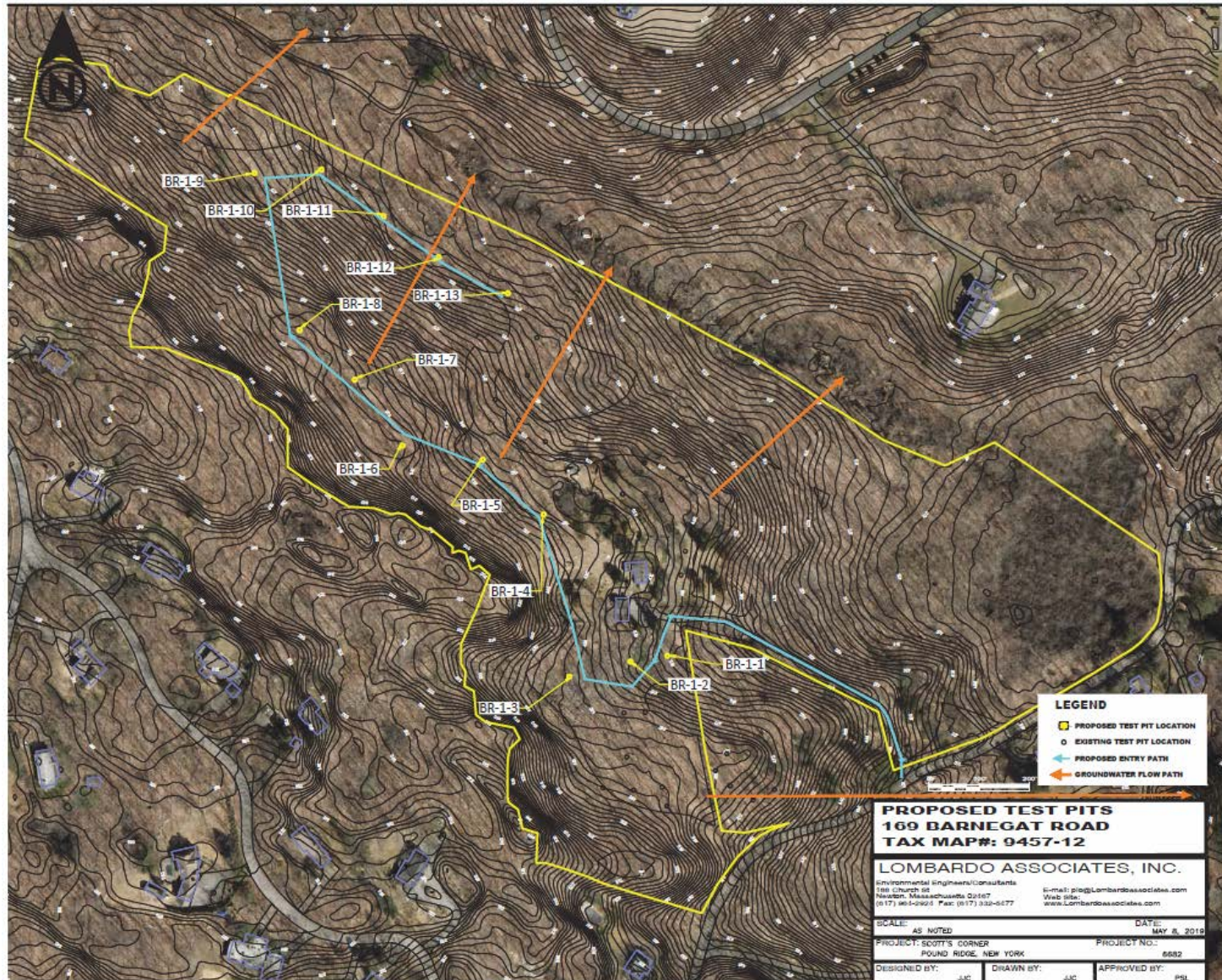


Figure 6-3-1 Barnegat Road, Test Pit Locations

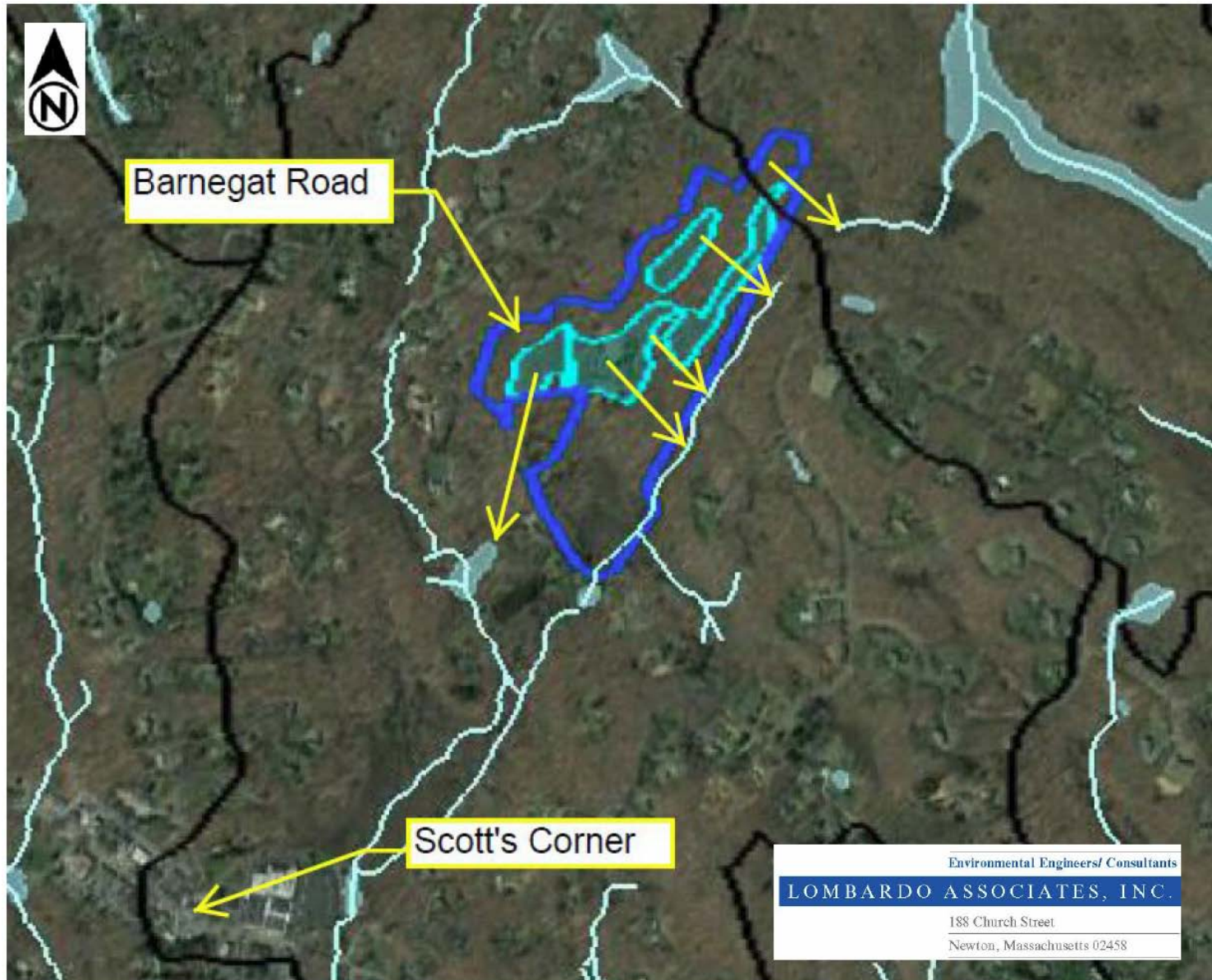


Figure 6-3-2 Barnegat Road, Area Watershed Map

Table 6-3-1 Barnegat Road, Test Pit Locations and Form for Field Data

Barnegat Road - New Test Pits by Zone							
Zone	TP #	GIS #	TP Location		Depth to		Soils Description
			Longitude	Latitude	BR	GW	
1	BR-1-1	12	-73.54352	41.197257			
	BR-1-2	11	-73.54356	41.197459			
	BR-1-3	10	-73.54367	41.197794			
	BR-1-4	9	-73.54249	41.197924			
	BR-1-5	8	-73.54209	41.198253			
	BR-1-6	7	-73.54198	41.198689			
	BR-1-7	6	-73.5415	41.198946			
	BR-1-8	5	-73.54114	41.199243			
	BR-1-9	4	-73.54	41.19948			
	BR-1-10	3	-73.53998	41.199115			
	BR-1-11	2	-73.54033	41.198779			
	BR-1-12	1	-73.54062	41.198481			
	BR-1-13	64	-73.54089	41.198105			
Total TPs	13						

6.4 TOWN PARK

Test Pit Location Map is presented on Figure 6-4-1.

Area Watershed Map is presented on Figure 6-4-2.

Test Pits Locations and Form for Field Data is presented on Table 6-4-1.

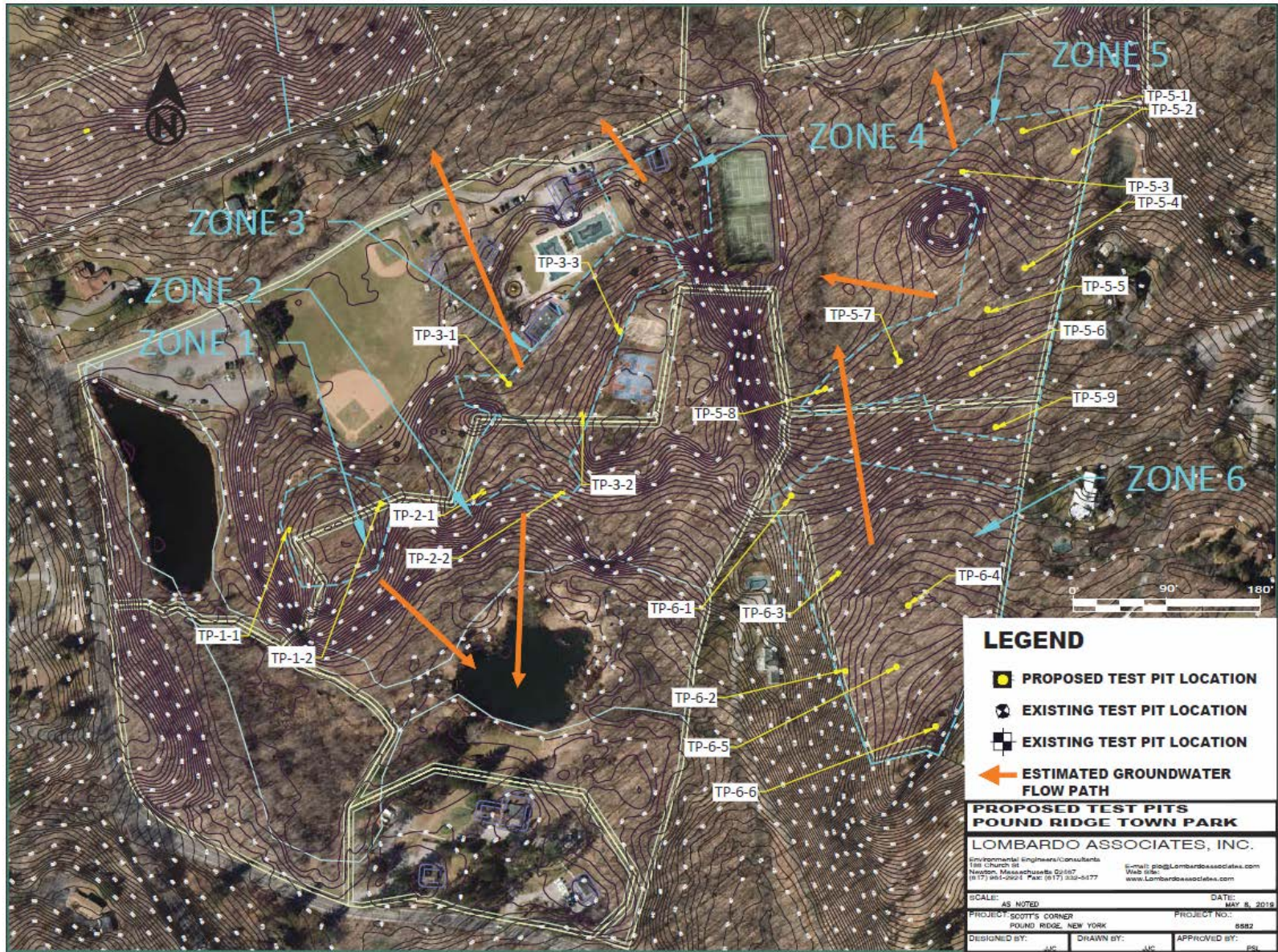


Figure 6-4-1 Town Park, Test Pit Locations

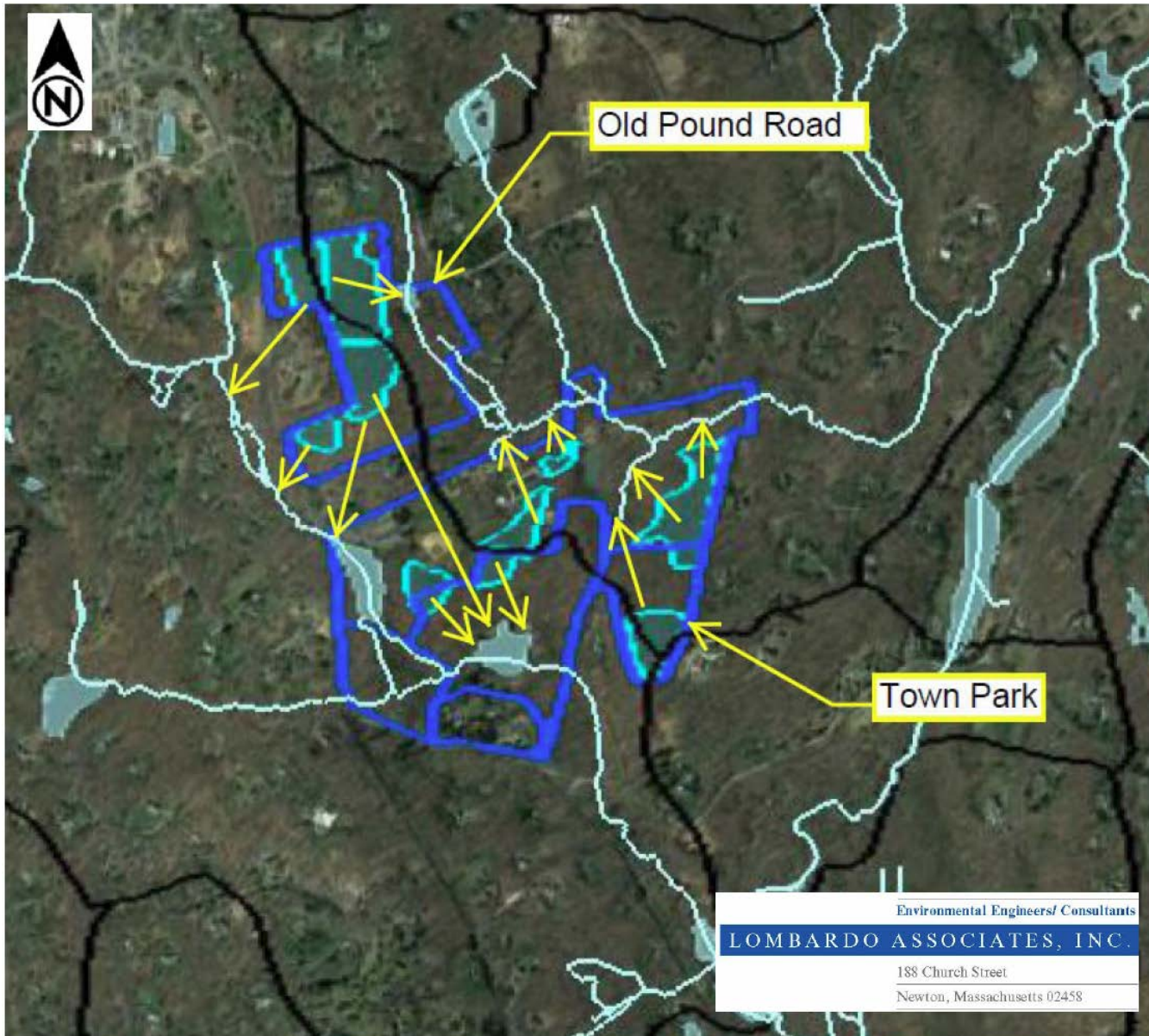


Figure 6-4-2 Town Park, Area Watershed Map

Table 6-4-1 Town Park, Test Pit Locations and Form for Field Data

Pound Ridge Town Park - New Test Pits by Zone							
Zone	TP #	GIS #	TP Location		Depth to		Soils Description
			Longitude	Latitude	BR	GW	
1	TP-1-1	42	-73.5704834	41.2003183			
	TP-1-2	43	-73.5697662	41.2004689			
2	TP-2-1	44	-73.568976	41.2005303			
	TP-2-2	45	-73.5683623	41.2005177			
3	TP-3-1	46	-73.5687679	41.2011606			
	TP-3-2	47	-73.5681984	41.200976			
	TP-3-3	48	-73.5678986	41.201462			
5	TP-5-1	50	-73.5647546	41.2026123			
	TP-5-2	49	-73.5643568	41.2024872			
	TP-5-3	51	-73.5652267	41.2023783			
	TP-5-4	52	-73.5647507	41.201809			
	TP-5-5	53	-73.5651674	41.201193			
	TP-5-6	56	-73.5650447	41.2015677			
	TP-5-7	54	-73.5657304	41.2012682			
	TP-5-8	55	-73.5663107	41.2011133			
	TP-5-9	57	-73.5649875	41.200876			
6	TP-6-1	58	-73.5665827	41.2004882			
	TP-6-2	62	-73.5662212	41.200027			
	TP-6-3	59	-73.5656835	41.1998373			
	TP-6-4	60	-73.5661764	41.1994562			
	TP-6-5	61	-73.5657809	41.1994786			
	TP-6-6	63	-73.5654811	41.1991267			
Total DHs	22						

6.5 OLD POUND ROAD

Test Pit Location Map is presented on Figure 6-5-1.

Area Watershed Map is presented on Figure 6-5-2.

Test Pits Locations and Form for Field Data is presented on Table 6-5-1.



Figure 6-5-1 Old Pound Ridge, Test Pit Locations

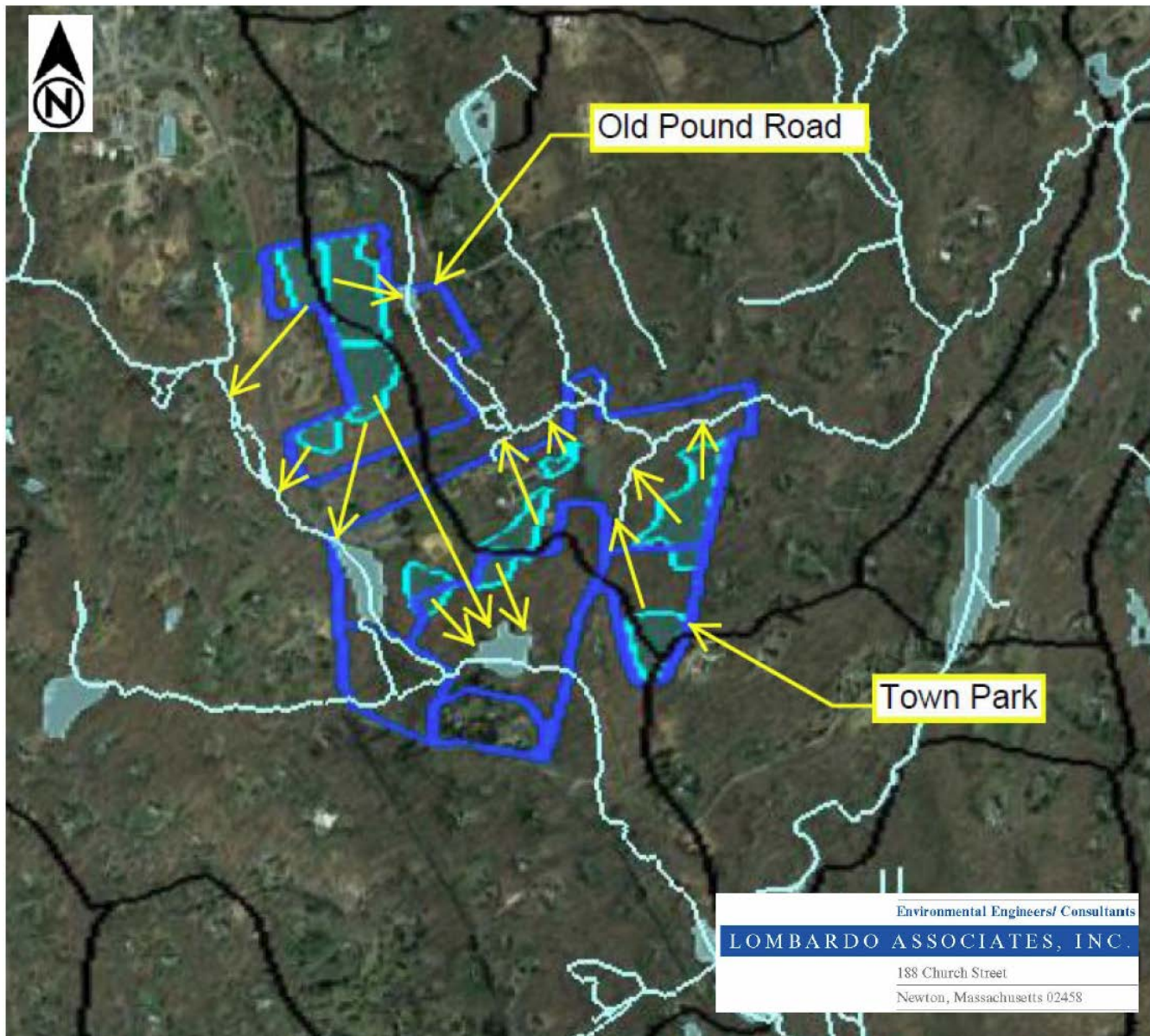


Figure 6-5-2 Old Pound Road, Area Watershed Map

Table 6-5-1 Old Pound Road, Test Pit Locations and Form for Field Data

Old Pound Road - New Test Pits by Zone							
Zone	TP #	GIS #	TP Location		Depth to		Soils Description
			Longitude	Latitude	BR	GW	
1	OP-1-1	29	-73.572025	41.2026706			
	OP-1-2	30	-73.571005	41.2035675			
	OP-1-3	32	-73.571562	41.203873			
	OP-1-4	31	-73.571178	41.2039795			
	OP-1-5	40	-73.572519	41.2046631			
	OP-1-6	41	-73.572327	41.2051266			
2	OP-2-1	33	-73.571411	41.2043884			
	OP-2-2	36	-73.571859	41.204531			
	OP-2-3	37	-73.571714	41.2049082			
	OP-2-4	34	-73.571185	41.2047505			
	OP-2-5	38	-73.571558	41.2054022			
	OP-2-6	35	-73.571128	41.2051909			
	OP-2-7	39	-73.572039	41.2055283			
Total TPs	13						

7. WASTEWATER SYSTEM – GROUNDWATER MODELING AND SITE SELECTION

To be completed after Town authorization of the work

8. WASTEWATER SYSTEM–PRELIMINARY ENGINEERING + OPINIONS ON COSTS

8.1 PRELIMINARY ENGINEERING

The process flow diagram for the proposed wastewater management system (WWMS), which consists of wastewater collection, treatment and disposal systems, is presented on Figure 8-1.

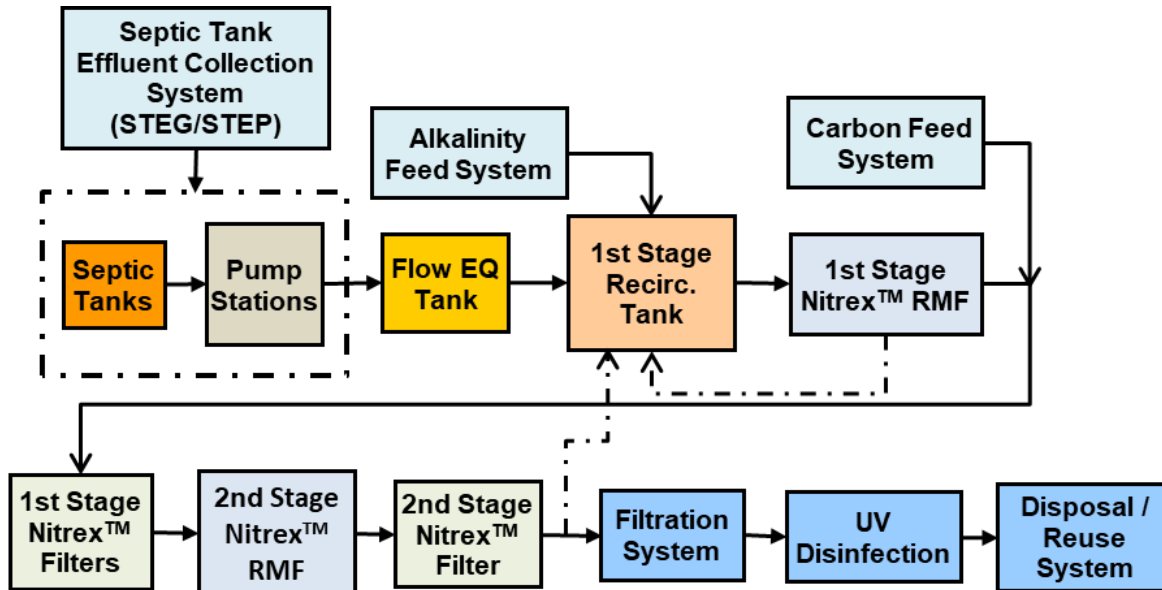


Figure 8-1 WWMS Process Flow Diagram

The treatment process has been selected as it can achieve Tertiary Disinfection Treatment, defined as the following effluent quality.

pH	6.5 – 8.5
BOD/TSS	< 10 mg/L
Oil & Grease	< 15 mg/L
Total Nitrogen (TN)	< 10 mg/L
Fecal Coliform	Average < 24 & Maximum < 200 MPN / 100 ml
Enterococcus	Average < 24 & Maximum < 104 MPN / 100 ml

The preliminary design and layouts for the Scotts Corner:

- ✓ Wastewater collection system. A septic tank effluent (STE) collection system, Figure 8-1, is proposed for Scotts Corner in which a new septic tank will serve each property, with grease trap as needed.
- ✓ Wastewater treatment and disposal system – initially located at Barnegat Road site

are presented on

- Figure 8-2 Sewer Layout
- Figure 8-3 Pump Station Plan Views
- Figure 8-4 Transmission Line Layout

Figure 8-5 Wastewater Treatment and Disposal Site Layout at Barnegat Road Site
 Figure 8-6 80,000-gpd Wastewater Treatment System Preliminary Layout

Due to Scotts Corner topography, a predominately gravity wastewater collection system is possible with drainage from northwest to the southeast boundaries of the proposed Service Area. Two pump stations are needed in the system:

- At the natural low point of the Service Area between 30 and 26 Westchester Avenue, which would discharge wastewater through a transmission pipe to the treatment and disposal site.
- At 80 Westchester Avenue to receive wastewater from the south side of Westchester Ave properties, 66 – 80 Westchester Avenue to avoid excessive deep installations due to a climb in elevation from 80 to 66 Westchester Avenue. Pump station would discharge to gravity line at 56 Westchester Avenue.

8.2 PROJECT CAPITAL COST AND BUDGET

Table 8-1 presents the capital costs of the conceptualized wastewater collection treatment and disposal system and the water supply system. Costs associated with the various candidate location options for treatment and disposal system are also presented on Table 8-1.

8.3 ANNUAL O&M COSTS

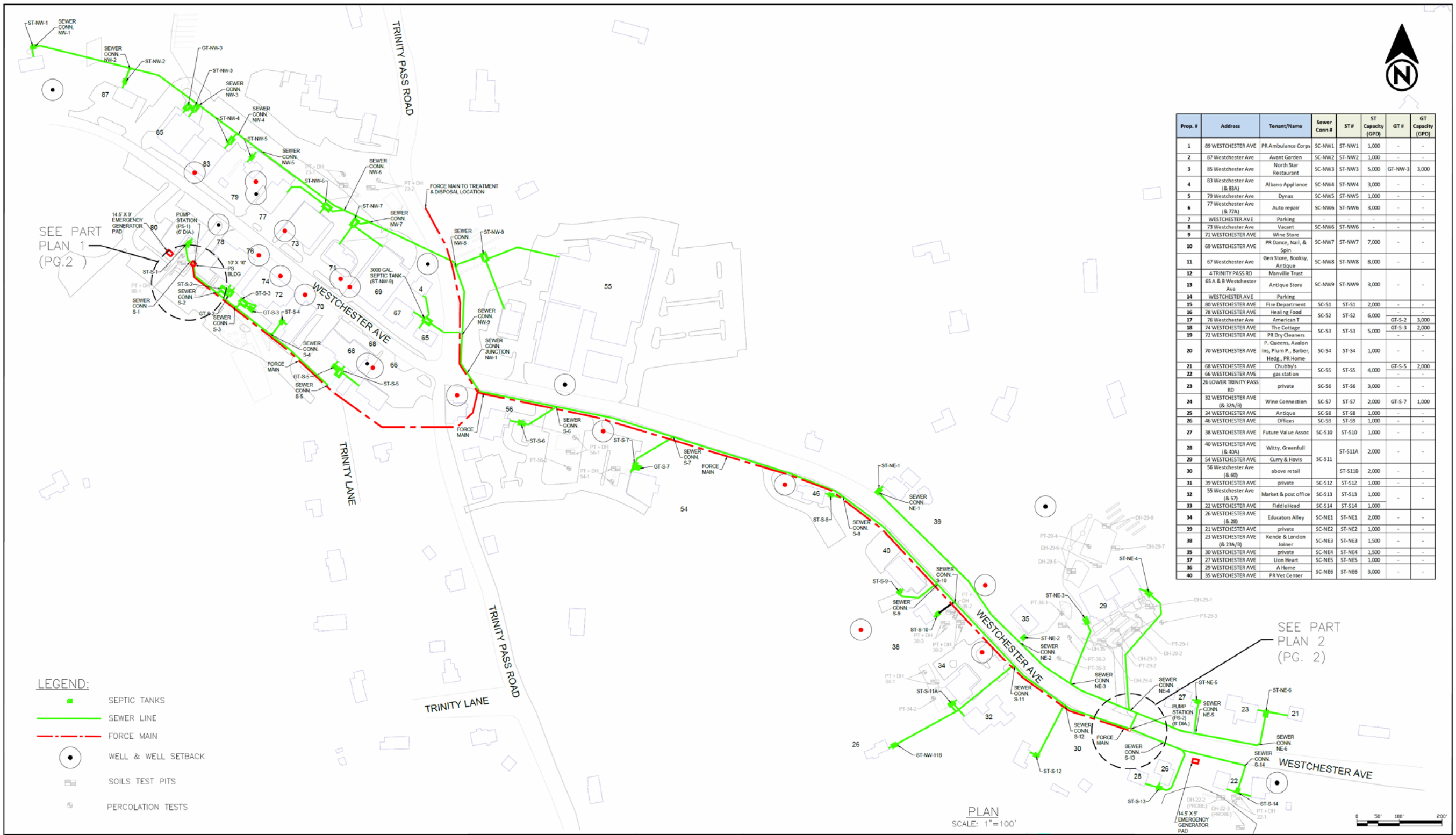
An Equivalent Dwelling Unit (EDU) is defined as a typical residential property with 300 gpd of wastewater flow. EDUs are used to normalize properties that have non-residential flows. Due to the significant variability associated with estimating O&M costs, Table 8-2 presents the probable revenue associated with assuming an annual O&M fee of \$850/EDU – which is in the typical range for wastewater systems. The level of revenue would be sufficient, on a preliminary analysis for 2 operators and expected electricity, materials and annual equipment replacement costs.

Table 8-2 Scotts Corner Wastewater System Opinion of Probable O&M Revenue

Scott's Corner Annual O&M Revenue Estimate		
Cost/EDU	# EDUs	Total O&M Revenue
\$850	261	\$ 221,624

8.4 WASTEWATER AND WATER SUPPLY IMPLEMENTATION / CONNECTION ISSUES

Existing water supply and wastewater facilities will be abandoned in place in accordance with WCDoH and NYSDEC standards/requirements. A water supply and wastewater systems connection plan will be developed during design to ensure that properties have continuous service during construction. For instance, treatment plant/disposal system and transmission line is built first, then the common collection system, then property connections are made. When existing wastewater or water facilities will be affected, properties will be able to immediately connect to the sewer and water supply system.



Prop. #	Address	Tenant/Name	Sewer Conn #	ST #	ST Capacity (GPD)	GT #	GT Capacity (GPD)
1	89 WESTCHESTER AVE	PR Ambulance Corps	SC-NW1	ST-NW1	1,000	-	-
2	87 Westchester Ave	Avant Garden	SC-NW2	ST-NW2	1,000	-	-
3	85 Westchester Ave	North Star Restaurant	SC-NW3	ST-NW3	5,000	GT-NW-3	3,000
4	83 Westchester Ave (& 83A)	Albano Appliance	SC-NW4	ST-NW4	3,000	-	-
5	79 Westchester Ave	Dynax	SC-NW5	ST-NW5	1,000	-	-
6	77 Westchester Ave (& 77A)	Auto repair	SC-NW6	ST-NW6	3,000	-	-
7	WESTCHESTER AVE	Parking	-	-	-	-	-
8	73 Westchester Ave	Vacant	SC-NW5	ST-NW5	-	-	-
9	71 WESTCHESTER AVE	Wine Store	-	-	-	-	-
10	69 WESTCHESTER AVE	PR Dance, Nail, & Spin	SC-NW7	ST-NW7	7,000	-	-
11	67 Westchester Ave	Gen Store, Booksy, Antique	SC-NW8	ST-NW8	8,000	-	-
12	4 TRINITY PASS RD	Manville Trust	-	-	-	-	-
13	65 A & B Westchester Ave	Antique Store	SC-NW9	ST-NW9	3,000	-	-
14	WESTCHESTER AVE	Parking	-	-	-	-	-
15	80 WESTCHESTER AVE	Fire Department	SC-S1	ST-S1	2,000	-	-
16	78 WESTCHESTER AVE	Healing Food	SC-S2	ST-S2	6,000	-	-
17	76 Westchester Ave	American T	-	-	-	GT-S-2	3,000
18	74 WESTCHESTER AVE	The Cottage	-	-	-	GT-S-3	2,000
19	72 WESTCHESTER AVE	PR Dry Cleaners	SC-S3	ST-S3	5,000	-	-
20	70 WESTCHESTER AVE	P. Queens, Avalon Ins, Plum P., Barber, Hdg., PR Home	SC-S4	ST-S4	1,000	-	-
21	68 WESTCHESTER AVE	Chubby's	SC-S5	ST-S5	4,000	GT-S-5	2,000
22	66 WESTCHESTER AVE	gas station	-	-	-	-	-
23	26 LOWER TRINITY PASS RD	private	SC-S6	ST-S6	3,000	-	-
24	32 WESTCHESTER AVE (& 32A/B)	Wine Connection	SC-S7	ST-S7	2,000	GT-S-7	1,000
25	34 WESTCHESTER AVE	Antique	SC-S8	ST-S8	1,000	-	-
26	46 WESTCHESTER AVE	Offices	SC-S9	ST-S9	1,000	-	-
27	38 WESTCHESTER AVE	Future Value Assoc	SC-S10	ST-S10	1,000	-	-
28	40 WESTCHESTER AVE (& 40A)	Witty, Greenfull	SC-S11A	ST-S11A	2,000	-	-
29	54 WESTCHESTER AVE	Curry & Hovis	SC-S11	ST-S11	-	-	-
30	56 Westchester Ave (& 60)	above retail	SC-S12	ST-S12	2,000	-	-
31	39 WESTCHESTER AVE	private	SC-S12	ST-S12	1,000	-	-
32	55 Westchester Ave (& 57)	Market & post office	SC-S13	ST-S13	1,000	-	-
33	22 WESTCHESTER AVE	FiddieHead	SC-S14	ST-S14	1,000	-	-
34	26 WESTCHESTER AVE (& 28)	Educators Alley	SC-NE1	ST-NE1	2,000	-	-
35	21 WESTCHESTER AVE	private	SC-NE2	ST-NE2	1,000	-	-
38	23 WESTCHESTER AVE (& 23A/B)	Kende & London Joiner	SC-NE3	ST-NE3	1,500	-	-
35	30 WESTCHESTER AVE	private	SC-NE4	ST-NE4	1,500	-	-
37	27 WESTCHESTER AVE	Lion Heart	SC-NE5	ST-NE5	1,000	-	-
36	29 WESTCHESTER AVE	A Home	SC-NE5	ST-NE5	1,000	-	-
40	35 WESTCHESTER AVE	PR Vet Center	SC-NE6	ST-NE6	3,000	-	-

- LEGEND:**
- SEPTIC TANKS
 - SEWER LINE
 - - - FORCE MAIN
 - WELL & WELL SETBACK
 - ⊠ SOILS TEST PITS
 - ⊕ PERCOLATION TESTS

PLAN
SCALE: 1"=100'

SEE PART
PLAN 2
(PG. 2)

NO.	DATE	DESCRIPTION	BY	APPR.

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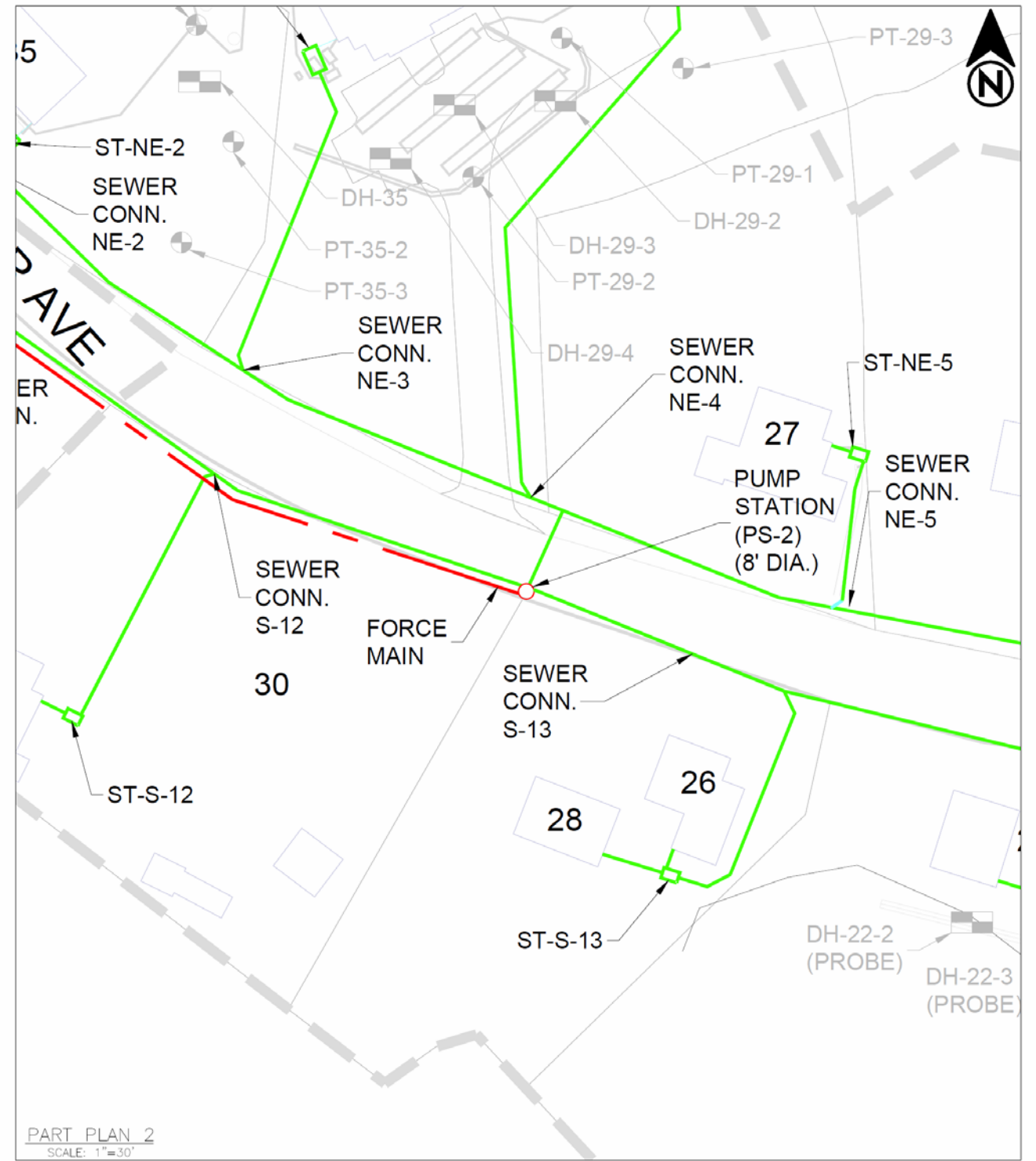
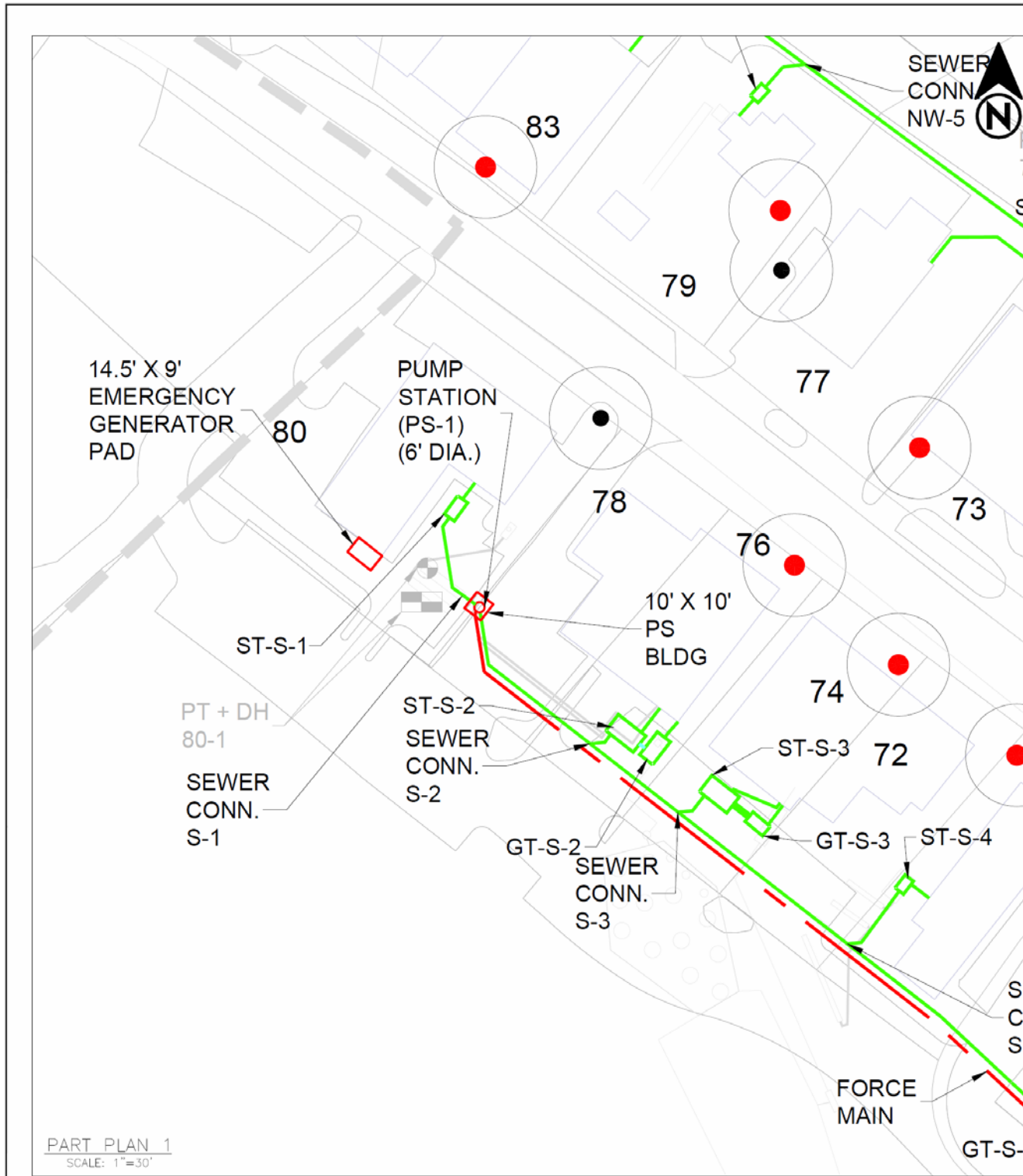
SCALE: AS NOTED DPW #: DHS #: DATE: MARCH 29, 2019
PROJECT: SCOTT'S CORNER PROJECT NO.: 6682
POUND RIDGE, NEW YORK
DESIGNED BY: JJC DRAWN BY: JJC APPROVED BY: PSL

1
SHEET 1 OF 3

**SCOTT'S CORNER
PRELIMINARY SEWER LAYOUT**

PREPARED FOR:
TOWN OF POUND RIDGE

Figure 8-2 Scotts Corner Preliminary Sewer Layout Plan



REVISIONS				
NO.	DATE	DESCRIPTION	BY	APPR.

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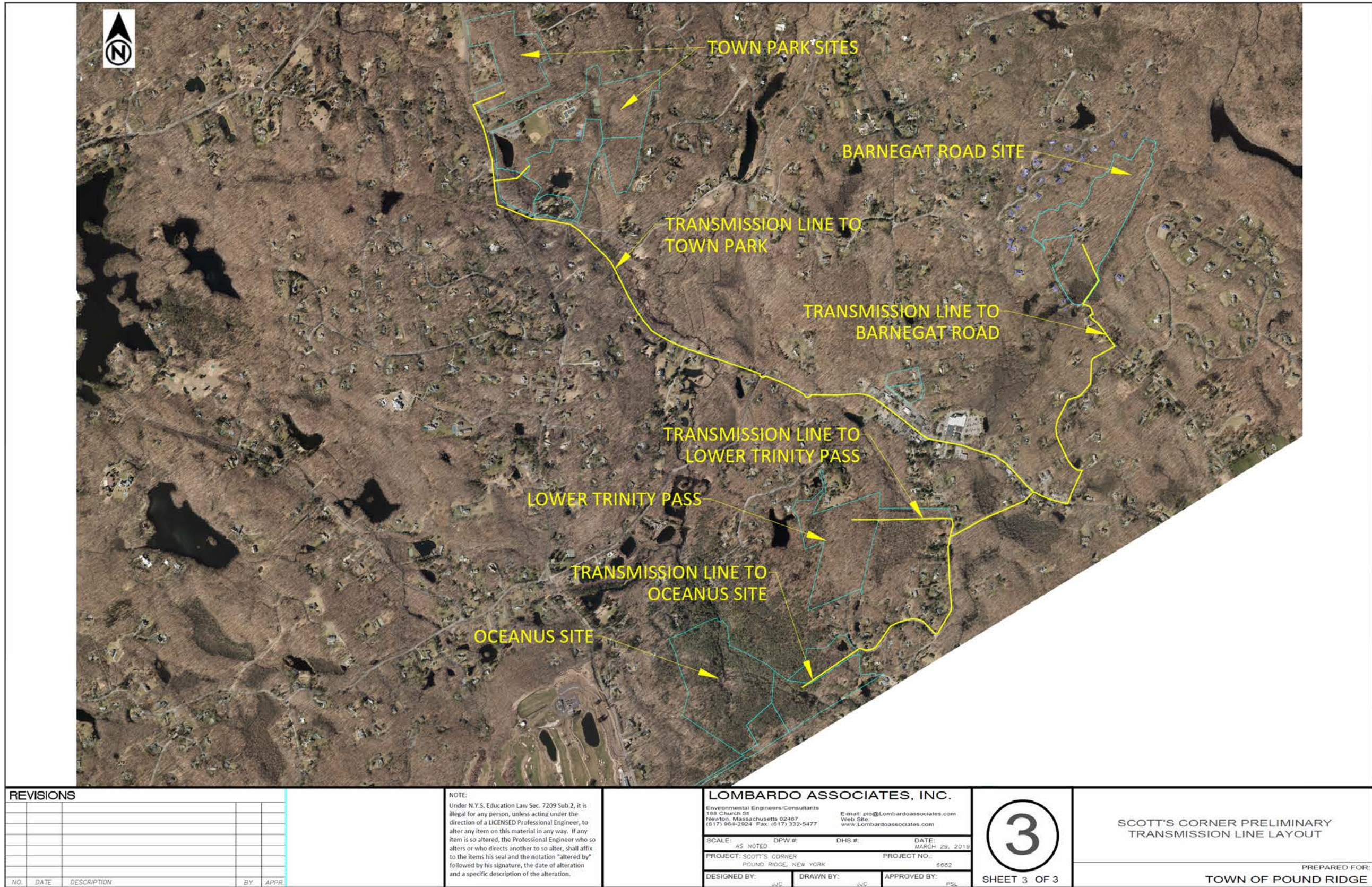
2

SHEET 2 OF 3

**SCOTT'S CORNER
PUMP STATIONS PS-1
& PS-2 VIEWS**

PREPARED FOR:
TOWN OF POUND RIDGE

Figure 8-3 Scotts Corner Pump Station Plan Views



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SCALE: AS NOTED DPW #: DHS #: DATE: MARCH 29, 2018
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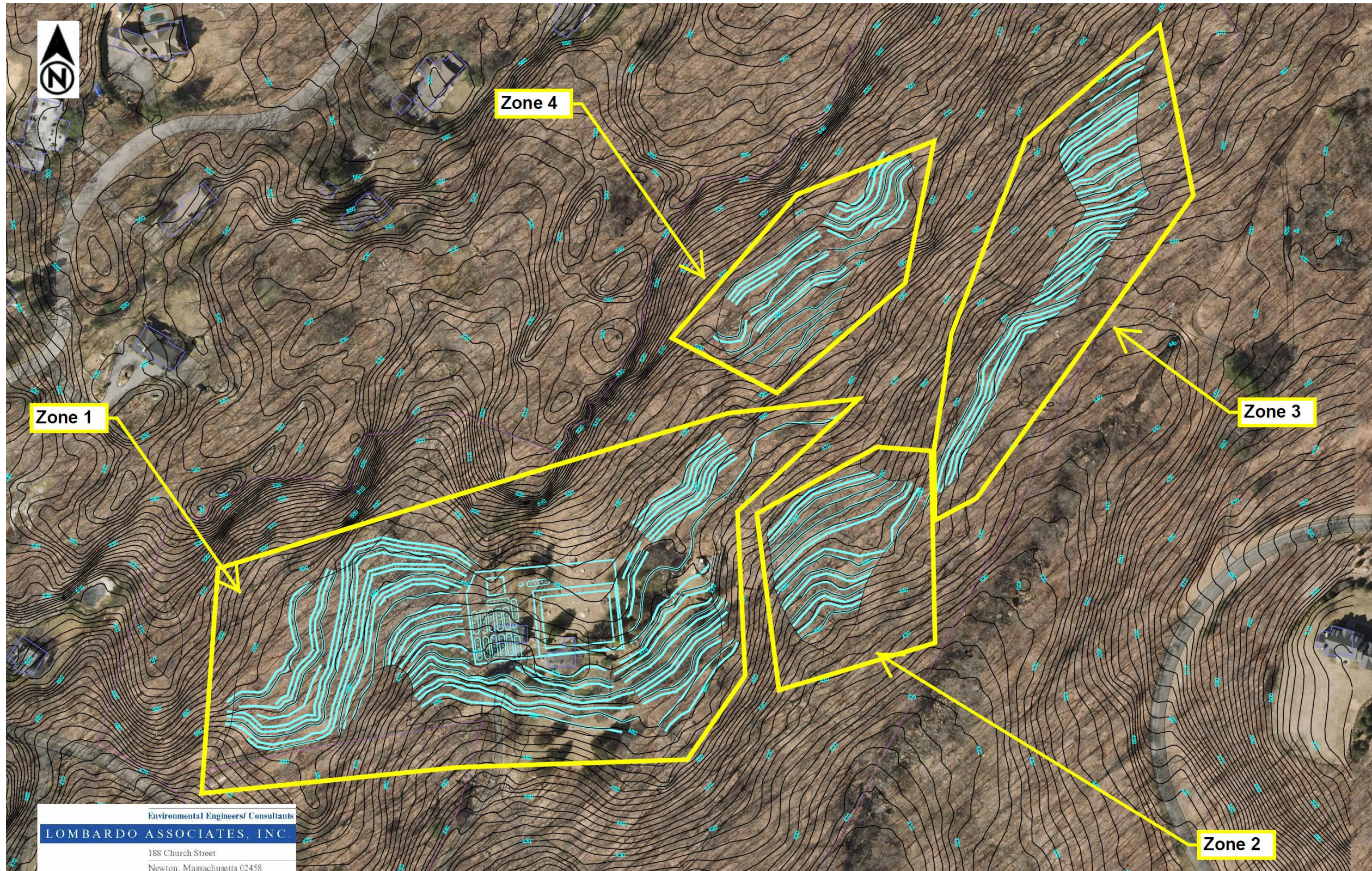
3

SHEET 3 OF 3

SCOTT'S CORNER PRELIMINARY
 TRANSMISSION LINE LAYOUT

PREPARED FOR:
 TOWN OF POUND RIDGE

Figure 8-4 Scotts Corner Preliminary Transmission Line Layout



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LOMBARDO ASSOCIATES, INC.
 188 Church Street
 Newton, Massachusetts 02458

Figure 8-5 Barnegat Road Preliminary Wastewater Treatment and Disposal Site Layout

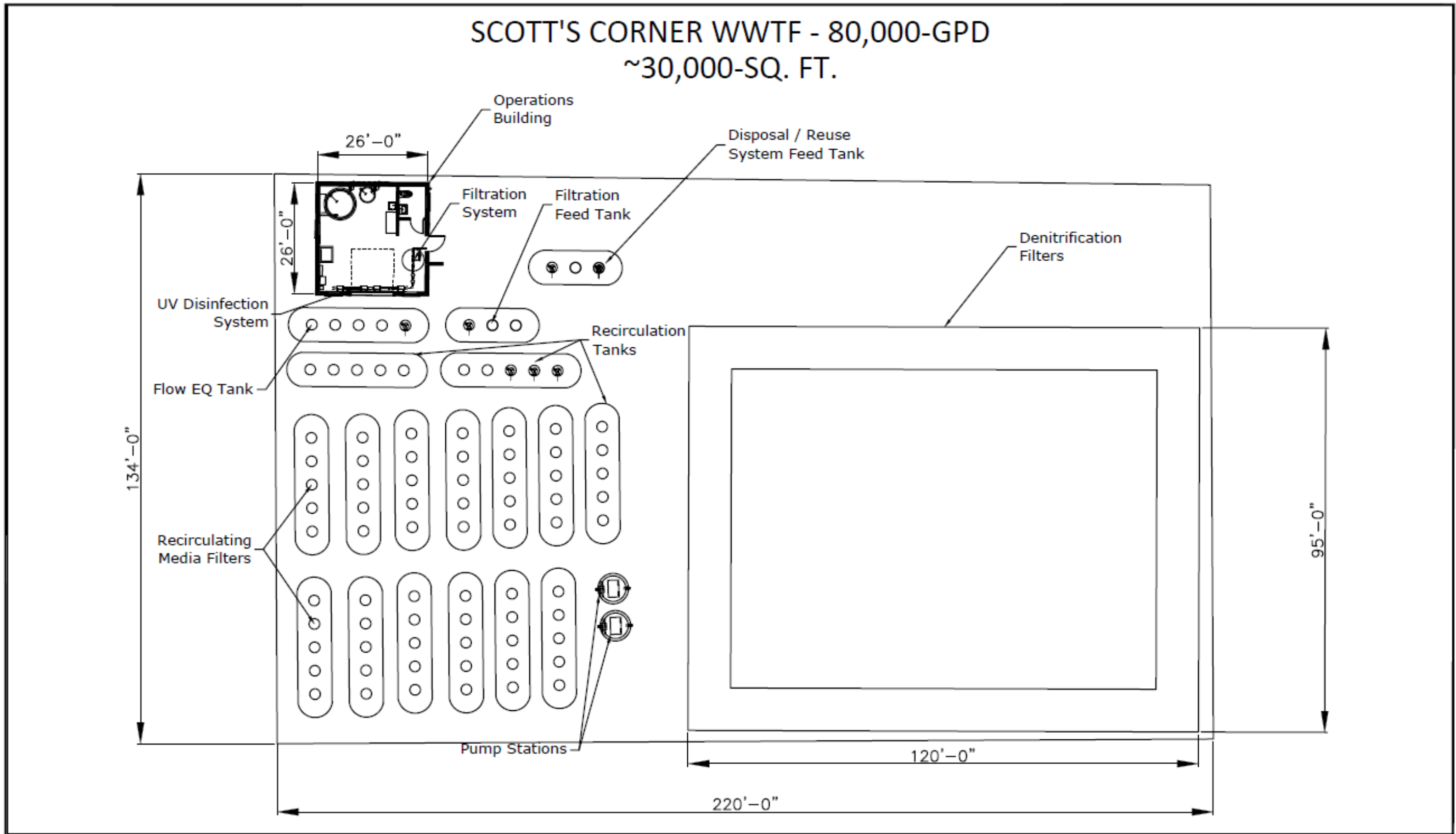


Figure 8-6 80,000-gpd Wastewater Treatment System Preliminary Layout

Table 8-1 Scotts Corner Wastewater System Opinion of Probable Cost

Scott's Corner Wastewater System Opinion on Probable Cost						
Study Area						
# of Dev. Prop.	40					
WW Design Flow (gpd)	80,000	1 EDU = 300 GPD				
Equivalent EDUs	267					
Item	Size		Qty.	Unit	Unit Cost	Total Cost
Septic Tanks			30	#		
Septic Tank Cost Subtotal			75,000	gallons	\$4.00	\$300,000
Grease Traps			5	#		
Grease Trap Cost Subtotal			11,000	gallons	\$4.00	\$44,000
Property Connections			1,005	LF	\$40.00	\$40,216
Property Laterals - UnPaved			1,187	LF	\$40.00	\$47,480
Property Laterals - Paved			679	LF	\$55.00	\$37,345
Main Sewer		4" gravity	3,253	LF	\$60.00	\$195,204
		6" gravity	1,820	LF	\$70.00	\$127,400
		2" FM	3,109	LF	\$40.00	\$124,376
STE Pumps			5	#	\$15,000	\$75,000
Cleanouts		1 per 200 ft sewer	71	#	\$900	\$63,900
STE Pump Station	PS-1 : 8,000 / PS-2: 80,000	gpd	2	#	\$100,000	\$200,000
Asphalt cut, remove and replace	2.5	ft wide	1,137	SF	\$40.00	\$45,500
Rock Excavation Quantity	Assumes 3' trench, 2' below surface ¹		3,531	CY	\$200	\$706,204
Collection System Construction Costs						\$2,050,625
Treatment System	60	\$/gpd	80,000	gpd	\$65	\$5,200,000
Disposal System	5	\$/gpd	80,000	gpd	\$7.00	\$560,000
Basic System Construction Costs - Subtotal						\$7,810,625
Misc					25%	\$1,952,656
Contingency					35%	\$3,417,149
Engineering / Special Services					25%	\$3,295,108
Total Capital Costs						\$16,476,000
Total Capital Cost / EDU						267 \$61,790

Wastewater System - Location Options Cost Estimate with Water Supply Costs						
	Site Name	Barnegat	Oceanus	Town Park	Old Pound Rd	Lower Trinity
Item	Unit	9457-12	9320-13.9-12, 9320-13.9-13 & 9320-13.9-15	9820-1, 9820-2.2, 9820-8, 9820-86	9820-16	9320-28
Basic WW System Capital Cost (from above)	\$	\$16,476,000	\$16,476,000	\$16,476,000	\$16,476,000	\$16,476,000
Land Cost	\$	\$0	\$0	\$0	\$0	\$0
Land Area	acres					
Transmission Pipe Length	LF	5,000	4,200	10,500	11,000	2,800
Transmission Pipe Unit Cost	\$/LF	\$80	\$80	\$80	\$80	\$80
Transmission Pipe Cost	\$	\$400,000	\$336,000	\$840,000	\$880,000	\$224,000
Additional Route Unit Costs	\$/LF	\$30	\$20	\$30	\$30	\$20
Additional Route Costs	\$	\$150,000	\$84,000	\$315,000	\$330,000	\$56,000
Site Development	LS	\$400,000	\$300,000	\$500,000	\$400,000	\$400,000
Contingency	25%	\$237,500	\$180,000	\$413,750	\$402,500	\$170,000
WW Site Option Sub-Total	\$	\$1,187,500	\$900,000	\$2,068,750	\$2,012,500	\$850,000
Total WW Option Total	\$	\$17,663,500	\$17,376,000	\$18,544,750	\$18,488,500	\$17,326,000
Water Supply		\$9,251,000	\$9,251,000	\$9,251,000	\$9,251,000	\$9,251,000
Uncertainty Allowance		\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000
Grand Total	\$	\$30,914,500	\$30,627,000	\$31,795,750	\$31,739,500	\$30,577,000
Increase above lowest Cost		\$337,500	\$50,000	\$1,218,750	\$1,162,500	\$0
Change vs Town Park		-\$881,250	-\$1,168,750	\$0	-\$56,250	-\$1,218,750
Total \$ / EDU	\$	\$115,929	\$114,851	\$119,234	\$119,023	\$114,663

8.5 ENERGY EFFICIENCY CONSIDERATIONS

The wastewater collection system is predominately a gravity collection system. The wastewater treatment system uses low energy – passive techniques for wastewater purification.

8.6 IMPACT OF CLIMATE CHANGE / RESILIENCY

Climate change is not expected to impact the project as the properties are well above flood plain elevations and not near coastal areas.

8.7 RISK CONSIDERATIONS

As the proposed wastewater and water supply infrastructure will be new, there will be little risk to critical infrastructure. Existing facilities will be abandoned in place in accordance with County / State regulations. A wastewater and water supply connection plan will be developed so that properties have continuous service.

9. WATER SYSTEM – PRELIMINARY ENGINEERING AND COST ESTIMATES

9.1 PRELIMINARY ENGINEERING

This section presents the preliminary engineering design and layout for a water supply system to serve the Scotts Corner Study Area. The water supply options are:

- ✓ Connection to Aquarion Water Company system – which has a water tank at the Pound Ridge Golf Course. That is the only location that Aquarion can supply from.
- ✓ Scotts Corner Water Supply Treatment System – According to the December 21, 1973 Agreement, Section 13) between the Town and Stamford Water Company (now Aquarion), the Town has “the right, privilege and priority to draw water from the Siscowit Reservoir.....For that limited purpose the Town shall be deemed to have a perpetual easement over the Water Company property to locate pump house, pipes and other equipment...”

Pending negotiations with Aquarion for the Town to tap into the Aquarion water supply system at / near the water tank, the proposed water supply system would be fed from the Aquarion Water Company water tank located at the Pound Ridge Golf Course, then north along High Ridge Road to Upper Shad Road east to Westchester Avenue and then south to end at 21 Westchester Avenue.

Figure 9-1 presents the preliminary water system layout from the Pound Ridge Golf Course to the end of Scotts Corner. An 8” water supply line is assumed, pending information from Aquarion on supply pressure and ability to supply fire flows. Figure 9-2 is a magnified view of the water system layout within Scotts Corner, including all house connections and street crossings within Scotts Corner.

The Pound Ridge Volunteer Fire Department has indicated that it needs 5,000 gpm for two (2) hours for fire flow requirements. The degree to which this is addressed by the Aquarion connection at the Golf Course or a new Water Treatment Plant supplied by the Siscowit Reservoir or a Fire Flow Water Storage Facility or a combination of sources is to be determined during design.



REVISIONS				
NO.	DATE	DESCRIPTION	BY	APPR

NOTE:
Under N.Y.S. Education Law Sec. 7209 Sub.2, it is illegal for any person, unless acting under the direction of a LICENSED Professional Engineer, to alter any item on this material in any way. If any item is so altered, the Professional Engineer who so alters or who directs another to so alter, shall affix to the items his seal and the notation "altered by" followed by his signature, the date of alteration and a specific description of the alteration.

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SCALE: AS NOTED DPW #: DHS #: DATE: MARCH 29, 2019

PROJECT: SCOTT'S CORNER PROJECT NO.: 6682
POUND RIDGE, NEW YORK

DESIGNED BY: JJC DRAWN BY: JJC APPROVED BY: PSL

1

SHEET 1 OF 2

Scott's Corner Preliminary
Water System Layout

PREPARED FOR:
TOWN OF POUND RIDGE

Figure 9-1 Scotts Corner Preliminary Water System Layout



REVISIONS					
NO.	DATE	DESCRIPTION	BY	APPR	

NOTE:
Under N.Y.S. Education Law Sec. 7209 Sub.2, it is illegal for any person, unless acting under the direction of a LICENSED Professional Engineer, to alter any item on this material in any way. If any item is so altered, the Professional Engineer who so alters or who directs another to so alter, shall affix to the items his seal and the notation "altered by" followed by his signature, the date of alteration and a specific description of the alteration.

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 POUND RIDGE, NEW YORK 6682

DESIGNED BY: JJC DRAWN BY: JJC APPROVED BY: PSL

2

SHEET 2 OF 2

Scott's Corner Preliminary
Water System

PREPARED FOR:
TOWN OF POUND RIDGE

Figure 9-2 Scotts Corner Preliminary Water System Layout

9.2 SYSTEM CAPITAL COST

Table 9-1 presents our opinion of capital cost for the water supply system.

Table 9-1 Scotts Corner Water System Opinion of Probable Capital Cost

Scott's Corner Water System Opinion of Probable Cost						
# of Dev. Prop.	40					
Average Water Demand (gpd)	40,000	150	per EDU			
Equivalent EDUs	267					
Item	Size		Qty.	Unit	Unit Cost	Total Cost
Hook Up Charge			1	LS	\$100,000	\$100,000
System Improvements			1	LS	\$500,000	\$500,000
Water Main	8" - 10"		12,000	ft.	\$125	\$1,500,000
Street Crossings			550	ft.	\$200	\$110,000
House Connections			3,100	ft.	\$75	\$232,500
Hydrants	1/200 ft.		60	hydrants	\$10,000	\$600,000
Pavement Removal and replacement	3' trench excavations		4,000	SY	\$40	\$160,000
Rock Excavation Quantity	Assumes 4' trench, 2' below surface ¹		5,333	CY	\$200	\$1,066,667
Start Up Cost			1	LS	\$200,000	\$200,000
				Misc	35%	\$1,564,208
				Contingency	40%	\$1,787,667
				Legal, Financing & Management / Admin	7%	\$312,842
				Engineering / Special Services	25%	\$1,117,292
				Total Capital Costs		\$9,251,000
				Total Capital Cost / EDU	267	\$34,690

¹Results in 3' of rock excavation

9.3 ANNUAL O&M COSTS

Table 9-2 presents our opinion of annual O&M cost for the water supply system

Table 9-2 Scotts Corner Water Supply System Opinion of Probable Annual O&M Cost

Scott's Corner Annual O&M Estimate		
Cost/EDU	# EDUs	Total O&M Costs
\$750	267	\$ 200,000

10. FINANCING, USER CHARGES, PUBLIC PARTICIPATION & IMPLEMENTATION PLAN

10.1 LEGAL & FINANCING

It is proposed that Water Supply and Wastewater Districts (individually or combined) would be established by the Town for the Study Area under Town Law Article 12, Section 190-C for Water District and Town Law Article 12. While different options exist, pertinent Sections of the enabling law are presented below.

Town Law Section 190-C Preparation of maps and plans

Upon a petition signed, and acknowledged or proved in the same manner as a deed to be recorded, or authenticated in the manner provided by the election law for the authentication of nominating petitions, by at least twenty-five owners of taxable real property situated within each water district or water supply district proposed to be included in a water storage and distribution district or by five per centum of the owners of taxable real property situated within each such district, whichever shall be less, or, in the case of a water district governed by a separate board of commissioners, by a majority of such board, the town board shall, or on its own motion, after a public hearing, may, make a study of the proposal and for such purpose it may assemble data relating to the water resources available to the town and

Section 190-D Procedure for establishment of a sewage disposal district

All of the provisions of section one hundred ninety-c of this chapter, relating to the preparation of maps and plans and establishment of a water storage and distribution district, shall apply to the preparation of maps and plans and establishment of a sewage disposal district, except that in the case of a sewage disposal district, the map and plan shall show the mode of constructing the proposed sewer facilities and the location thereof, including trunk, interceptor and outfall sewers, pumping stations and sewage treatment and disposal works.

The Districts are proposed to be Enterprise Funds in which the users pay all costs and the District is a separate legal and financial entity. At this time there are no financials on the to be formed District(s).

As there are numerous financing options for the District(s), for simplicity purposes financing will be perceived as:

- ✓ Grants from outside of Service Areas Users.
- ✓ Bond financing of the balance and payment by users based upon their allocated capacity, using a 30 year bond at 4%, which results in an annual amortization factor of 0.0578

10.2 USER CHARGES

Table 10-1 presents, by property, the prorated (based upon flow capacity allocation) wastewater system capital costs and annual wastewater system user charges:

- Assuming various level of grant assistance from 0% to 75%
- No connect fees

- No variation to existing vs future flows

Table 10-2 presents typical user charges for several property use options, such as seats/restaurant, store floor area, and apartments.

Tables 10-3 presents the water system estimated capital costs and user charges by property at various grant levels.

Table 10-4 presents the estimated user charges of the combined water and wastewater systems by property at various grant levels.

10.3 IMPLEMENTATION PLAN & DRAFT SCHEDULE

The Project Implementation consists of the major activities, some of which are done concurrently, as listed and illustrated on Figure 10-5 Draft - Implementation Schedule.

10.4 PUBLIC PARTICIPATION

Throughout the preparation of the Engineering Plan, the Town's Water / Wastewater Task Force (WWTF) has interacted with the Lombardo Associates, Inc. Engineers preparing this Engineering Plan. In addition to meetings, the WWTF provided review comments on the draft April 15, 2019 and May 20, 2019 Reports.

Appendix C contains the Smart Growth and Sexual Harassment Forms.

Table 10-1 Property Wastewater System Capital Costs & User Charges By Address

Parcel #	Property Address	Tenant	Use	Usage Rate (gpd/unit)	WW Design Flow	# of EDU's	Flow Based Annual O&M Cost	Total Capital Cost				Flow-Based Annual User Charge			
								No Grant	25% Grant	50% Grant	75% Grant	No Grants	25% Grant	50% Grant	75% Grant
9454-36	89 Westchester Ave	PR Ambulance Corps	community facility	0.1	130	0.43	\$367	\$51,509	\$38,632	\$25,755	\$12,877	\$3,350	\$2,600	\$1,860	\$1,110
9454-5	87 Westchester Ave	Avant Garden	retail	0.1	144	0.48	\$409	\$57,391	\$43,043	\$28,696	\$14,348	\$3,730	\$2,900	\$2,070	\$1,240
9454-6	85 Westchester Ave	North Star	restaurant	35.0	1,750	5.83	\$4,958	\$695,532	\$521,649	\$347,766	\$173,883	\$45,180	\$35,130	\$25,070	\$15,010
9454-6	85 Westchester Ave	North Star	office	0.1	136	0.45	\$385	\$54,063	\$40,547	\$27,032	\$13,516	\$3,510	\$2,730	\$1,950	\$1,170
9454-7	83 Westchester Ave	Albano Appliance	retail	0.1	614	2.05	\$1,739	\$243,948	\$182,961	\$121,974	\$60,987	\$15,850	\$12,320	\$8,790	\$5,270
9454-7	83A, & B Westchester Ave	Above Albano Appliance	apartments	110.0	440	1.47	\$1,247	\$174,877	\$131,157	\$87,438	\$43,719	\$11,360	\$8,830	\$6,300	\$3,770
9454-7	83C&D Westchester Ave	Albano Appliance	office	0.1	229	0.76	\$649	\$91,025	\$68,269	\$45,513	\$22,756	\$5,910	\$4,600	\$3,280	\$1,960
9454-8	79 Westchester Ave	Dynax	office	0.1	187	0.62	\$530	\$74,402	\$55,802	\$37,201	\$18,601	\$4,830	\$3,760	\$2,680	\$1,610
9454-9	77 Westchester Ave	Vacant	Vacant	400.0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-9	77A Westchester Ave	Vacant	Vacant	110.0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-35	NA	Parking	Parking	0.0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-10	73 Westchester Ave	Healthy Home Foods	Retail / Food Prep	0.1	420	1.40	\$1,190	\$166,928	\$125,196	\$83,464	\$41,732	\$10,840	\$8,430	\$6,020	\$3,600
9454-10	73 Westchester Ave	Pound Ridge Dentistry	Medical Office	250.0	250	0.83	\$708	\$99,362	\$74,521	\$49,681	\$24,840	\$6,450	\$5,020	\$3,580	\$2,140
9454-11	71 Westchester Ave	Kitchen Table	restaurant	35.0	875	2.92	\$2,479	\$347,766	\$260,825	\$173,883	\$86,942	\$22,590	\$17,560	\$12,530	\$7,510
9454-11	71 Westchester Ave	Wine Store	retail	0.1	194	0.65	\$549	\$77,065	\$57,799	\$38,532	\$19,266	\$5,010	\$3,890	\$2,780	\$1,660
9454-11	69 Westchester Ave	La Familia	restaurant	35.0	1,400	4.67	\$3,967	\$556,426	\$417,319	\$278,213	\$139,106	\$36,140	\$28,100	\$20,060	\$12,010
9454-11	69 Westchester Ave	Martin House	Office	0.1	307	1.02	\$870	\$122,066	\$91,549	\$61,033	\$30,516	\$7,930	\$6,160	\$4,400	\$2,630
9454-12	69 Westchester Ave	Summit Company	Office	0.1	307	1.02	\$870	\$122,066	\$91,549	\$61,033	\$30,516	\$7,930	\$6,160	\$4,400	\$2,630
9454-13	67 Westchester Ave	Above Retail	apartments	110.0	220	0.73	\$623	\$87,438	\$65,579	\$43,719	\$21,860	\$5,680	\$4,420	\$3,150	\$1,890
9454-13	67 Westchester Ave	The Cottage / Booksy	retail	0.1	282	0.94	\$798	\$111,921	\$83,941	\$55,961	\$27,980	\$7,270	\$5,650	\$4,030	\$2,420
9454-14	4 Trinity Pass Rd.	Vacant	Vacant	0.1	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-15	65A, B Westchester Ave	Kahlo	retail	0.1	117	0.39	\$332	\$46,640	\$34,980	\$23,320	\$11,660	\$3,030	\$2,360	\$1,680	\$1,010
9454-15	65A, B Westchester Ave	Above Kahlo	apartments	110.0	440	1.47	\$1,247	\$174,877	\$131,157	\$87,438	\$43,719	\$11,360	\$8,830	\$6,300	\$3,770
9320-56	Westchester Ave	Parking	parking w/2 shed	0.0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9320-58	80 Westchester Ave	Fire Department	community facility	0.1	708	2.36	\$2,005	\$281,233	\$210,925	\$140,617	\$70,308	\$18,270	\$14,200	\$10,140	\$6,070
9320-59	78 Westchester Ave	123 Dough	Food Prep	0.1	223	0.74	\$633	\$88,800	\$66,600	\$44,400	\$22,200	\$5,770	\$4,480	\$3,200	\$1,920
9320-59	78 Westchester Ave	123 Dough	Employees	15.0	60	0.20	\$170	\$23,847	\$17,885	\$11,923	\$5,962	\$1,550	\$1,200	\$860	\$510
9320-59	78 Westchester Ave	Miller's Landscape	office	0.1	74	0.25	\$211	\$29,600	\$22,200	\$14,800	\$7,400	\$1,920	\$1,490	\$1,070	\$640
9320-60	76 Westchester Ave	Dinardos	restaurant	35.0	2,100	7.00	\$5,950	\$834,638	\$625,979	\$417,319	\$208,660	\$54,220	\$42,150	\$30,080	\$18,020
9320-60	76 Westchester Ave	Vacant	Vacant	0.1	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9320-60	76 Westchester Ave	above Dinardos	apartments	110.0	440	1.47	\$1,247	\$174,877	\$131,157	\$87,438	\$43,719	\$11,360	\$8,830	\$6,300	\$3,770
9320-61	74 Westchester Ave	Blind Charlies	restaurant	35.0	1,750	5.83	\$4,958	\$695,532	\$521,649	\$347,766	\$173,883	\$45,180	\$35,130	\$25,070	\$15,010
9320-61	74 Westchester Ave	Jacob Allen	Spa	20.0	200	0.67	\$567	\$79,489	\$59,617	\$39,745	\$19,872	\$5,160	\$4,010	\$2,870	\$1,720
9320-61	74 Westchester Ave	O'Donnell	Retail	0.1	199	0.66	\$565	\$79,191	\$59,393	\$39,596	\$19,798	\$5,140	\$4,000	\$2,850	\$1,710
9320-61	74 A, B, C, & D Westchester Ave	above Blind Charlies	apartments	110.0	660	2.20	\$1,870	\$262,315	\$196,736	\$131,157	\$65,579	\$17,040	\$13,250	\$9,450	\$5,660
9320-62	72 Westchester Ave	PR Dry Cleaners	retail	0.1	238	0.79	\$673	\$94,394	\$70,795	\$47,197	\$23,598	\$6,130	\$4,770	\$3,400	\$2,040
9320-62	72 Westchester Ave	Plum Plum's	Food Prep	0.1	119	0.40	\$336	\$47,197	\$35,398	\$23,598	\$11,799	\$3,070	\$2,380	\$1,700	\$1,020
9320-62	72 Westchester Ave	Plum Plum's	Employees	15.0	60	0.20	\$170	\$23,847	\$17,885	\$11,923	\$5,962	\$1,550	\$1,200	\$860	\$510
9320-62	72 Westchester Ave	Nephawa	retail	0.1	119	0.40	\$336	\$47,197	\$35,398	\$23,598	\$11,799	\$3,070	\$2,380	\$1,700	\$1,020
9320-62	72 A & B Westchester Ave	above PR Dry Cleaners	apartment	110.0	220	0.73	\$623	\$87,438	\$65,579	\$43,719	\$21,860	\$5,680	\$4,420	\$3,150	\$1,890

Table 10-1, Continued

Parcel #	Property Address	Tenant	Use	Usage Rate (gpd/unit)	WW Design Flow	# of EDU's	Flow Based Annual O&M Cost	Total Capital Cost				Flow-Based Annual User Charge			
								No Grant	25% Grant	50% Grant	75% Grant	No Grants	25% Grant	50% Grant	75% Grant
9320-63	70 Westchester Ave	above retail	apartments	110.0	220	0.73	\$623	\$87,438	\$65,579	\$43,719	\$21,860	\$5,680	\$4,420	\$3,150	\$1,890
9320-63	70 Westchester Ave	Barber	Barber	250.0	250	0.83	\$708	\$99,362	\$74,521	\$49,681	\$24,840	\$6,450	\$5,020	\$3,580	\$2,140
9320-63	70 Westchester Ave	P. Queens, Avalon Ins, Hedg., PR Home	retail / Office	0.1	103	0.34	\$292	\$40,921	\$30,691	\$20,461	\$10,230	\$2,660	\$2,070	\$1,470	\$880
9320-64	68 Westchester Ave	Chubby's	retail	0.1	346	1.15	\$981	\$137,576	\$103,182	\$68,788	\$34,394	\$8,940	\$6,950	\$4,960	\$2,970
9320-64	68 A,B,C,&D Westchester Ave	above Chubby's	apartments	110.0	660	2.20	\$1,870	\$262,315	\$196,736	\$131,157	\$65,579	\$17,040	\$13,250	\$9,450	\$5,660
9320-65	66 Westchester Ave	gas station	auto repair	400.0	800	2.67	\$2,267	\$317,958	\$238,468	\$158,979	\$79,489	\$20,650	\$16,060	\$11,460	\$6,860
9455-18.9	26 Lower Trinity Pass	Joiquim Felice	Home	110.0	440	1.47	\$1,247	\$174,877	\$131,157	\$87,438	\$43,719	\$11,360	\$8,830	\$6,300	\$3,770
9455-20	32 Westchester Ave	Wine Connection	retail	0.1	444	1.48	\$1,258	\$176,506	\$132,380	\$88,253	\$44,127	\$11,470	\$8,910	\$6,360	\$3,810
9455-20	32 Westchester Ave	Above Wine Connection	apartments	110.0	110	0.37	\$312	\$43,719	\$32,789	\$21,860	\$10,930	\$2,840	\$2,210	\$1,580	\$940
9455-21	34 Westchester Ave	above Antique	apartments	110.0	110	0.37	\$312	\$43,719	\$32,789	\$21,860	\$10,930	\$2,840	\$2,210	\$1,580	\$940
9455-21	34 Westchester Ave	Antique	retail	0.1	196	0.65	\$557	\$78,078	\$58,559	\$39,039	\$19,520	\$5,070	\$3,940	\$2,810	\$1,690
9455-27	38 Westchester Ave	Future Value Assoc	office	0.1	176	0.59	\$499	\$69,951	\$52,463	\$34,975	\$17,488	\$4,540	\$3,530	\$2,520	\$1,510
9455-28	40, 40A Westchester Ave	Wittus	retail	0.1	270	0.90	\$765	\$107,311	\$80,483	\$53,655	\$26,828	\$6,970	\$5,420	\$3,870	\$2,320
9455-28	40, 40A Westchester Ave	Helen Famulare Spa	Spa	20.0	400	1.33	\$1,133	\$158,979	\$119,234	\$79,489	\$39,745	\$10,330	\$8,030	\$5,730	\$3,430
9455-28	40, 40A Westchester Ave	Private	apartment	110.0	440	1.47	\$1,247	\$174,877	\$131,157	\$87,438	\$43,719	\$11,360	\$8,830	\$6,300	\$3,770
9455-26	46 Westchester Ave	Roeco	office	0.1	184	0.61	\$520	\$73,010	\$54,757	\$36,505	\$18,252	\$4,740	\$3,690	\$2,630	\$1,580
9455-25	54 Westchester Ave	Asia Hamachi	restaurant	35.0	875	2.92	\$2,479	\$347,766	\$260,825	\$173,883	\$86,942	\$22,590	\$17,560	\$12,530	\$7,510
9455-25	54 Westchester Ave	Dragon Martial Arts	Health Club	20.0	300	1.00	\$850	\$119,234	\$89,426	\$59,617	\$29,809	\$7,750	\$6,020	\$4,300	\$2,570
9455-25	54 Westchester Ave	Curry & Hovis	retail	0.1	120	0.40	\$340	\$47,694	\$35,770	\$23,847	\$11,923	\$3,100	\$2,410	\$1,720	\$1,030
9455-25	54 Westchester Ave	above Curry & Hovis	apartments	110.0	110	0.37	\$312	\$43,719	\$32,789	\$21,860	\$10,930	\$2,840	\$2,210	\$1,580	\$940
9455-24	56, 60 Westchester Ave	above retail	apartments	110.0	770	2.57	\$2,182	\$306,034	\$229,526	\$153,017	\$76,509	\$19,880	\$15,460	\$11,030	\$6,610
9455-24	56, 60 Westchester Ave	Key Bank, Toy Store	retail / Office	0.1	779	2.60	\$2,207	\$309,651	\$232,238	\$154,825	\$77,413	\$20,110	\$15,640	\$11,160	\$6,680
9456-4	39 Westchester Ave	private	residential	110.0	660	2.20	\$1,870	\$262,315	\$196,736	\$131,157	\$65,579	\$17,040	\$13,250	\$9,450	\$5,660
9456-1.9	55, 57 Westchester Ave	Market, post office, 5 Retail Stores, Office	retail / office	0.1	5,414	18.0	\$15,339	\$2,151,738	\$1,613,803	\$1,075,869	\$537,934	\$139,770	\$108,670	\$77,560	\$46,450
9455-10	22, 24 Westchester Ave	PR Organics	Retail	0.1	478	1.59	\$1,355	\$190,019	\$142,515	\$95,010	\$47,505	\$12,340	\$9,600	\$6,850	\$4,100
9455-13	26 Westchester Ave	Above Educators Alley	apartments	110.0	110	0.37	\$312	\$43,719	\$32,789	\$21,860	\$10,930	\$2,840	\$2,210	\$1,580	\$940
9455-13	26 Westchester Ave	Qualities	retail	0.1	55	0.18	\$156	\$21,830	\$16,372	\$10,915	\$5,457	\$1,420	\$1,100	\$790	\$470
9455-13	26 Westchester Ave	Educators Alley	office	0.1	110	0.37	\$311	\$43,660	\$32,745	\$21,830	\$10,915	\$2,840	\$2,200	\$1,570	\$940
9455-14	30 Westchester Ave	private	residential	110.0	110	0.37	\$312	\$43,719	\$32,789	\$21,860	\$10,930	\$2,840	\$2,210	\$1,580	\$940
9456-8	21 Westchester Ave	private	residential	110.0	440	1.47	\$1,247	\$174,877	\$131,157	\$87,438	\$43,719	\$11,360	\$8,830	\$6,300	\$3,770
9456-7	23,23A,B Westchester Ave	Kende & London Joiner	retail	0.1	306	1.02	\$868	\$121,698	\$91,274	\$60,849	\$30,425	\$7,910	\$6,150	\$4,390	\$2,630
9456-6	27 Westchester Ave	above Lion Heart	apartments	110.0	110	0.37	\$312	\$43,719	\$32,789	\$21,860	\$10,930	\$2,840	\$2,210	\$1,580	\$940
9456-6	27 Westchester Ave	Di Biase Filkoff Architects	Office	0.1	152	0.51	\$430	\$60,332	\$45,249	\$30,166	\$15,083	\$3,920	\$3,050	\$2,170	\$1,300
9456-5	29 Westchester Ave	A Home	residential	110.0	1,760	5.87	\$4,987	\$699,507	\$524,630	\$349,753	\$174,877	\$45,440	\$35,330	\$25,210	\$15,100
9456-55	35 Westchester Ave	PR Vet Center	retail	0.1	214	0.71	\$608	\$85,243	\$63,933	\$42,622	\$21,311	\$5,540	\$4,300	\$3,070	\$1,840
	IN-FILL			1.1	6,365	21.22	\$18,035	\$2,529,910	\$1,897,432	\$1,264,955	\$632,477	\$164,340	\$127,760	\$91,190	\$54,610
	PM&G		CURRY & HOVIS	2.1	20,000	66.67	\$56,667	\$7,948,938	\$5,961,703	\$3,974,469	\$1,987,234	\$516,350	\$401,430	\$286,510	\$171,590
	SCOTT'S CORNER MARKET		Market & Post Office	3.1	20,000	66.67	\$56,667	\$7,948,938	\$5,961,703	\$3,974,469	\$1,987,234	\$516,350	\$401,430	\$286,510	\$171,590
				3,914	80,000	267	\$226,667	\$31,795,750	\$23,846,813	\$15,897,875	\$7,948,938	\$2,065,410	\$1,605,740	\$1,146,010	\$686,290

Table 10-2 Wastewater System Estimated User Charges by Use

Scott's Corner Wastewater System - Preliminary Cost Estimates & User Charge						No Grants	
267	Total	Per EDU 1 EDU = 300 gpd	Restaurant / seat	Store Floor Area		Per Apart. / condo 601 - 1,200 sf	
# of EDU in SubArea				Wet Goods / 100 ft ²	Dry Goods / 100 ft ³		
Capital Costs	\$ 31,795,750	\$ 119,234	\$ 11,923	\$ 5,962	\$ 1,192	\$ 89,649	
Annual O&M Costs	\$ 226,668	\$ 850	\$ 85	\$ 43	\$ 9	\$ 639	
Combined Amortized Capital Costs (@30 yrs. & 4%) & Annual O&M	30 years	\$ 7,745	\$ 775	\$ 387	\$ 77	\$ 5,824	

Scott's Corner Wastewater System - Preliminary Cost Estimates & User Charge						25% Grants	
267	Total	Per EDU 1 EDU = 300 gpd	Restaurant / seat	Store Floor Area		Per Apart. / condo 601 - 1,200 sf	
# of EDU in SubArea				Wet Goods / 100 ft ²	Dry Goods / 100 ft ³		
Capital Costs	\$ 23,846,813	\$ 89,425	\$ 8,943	\$ 4,471	\$ 894	\$ 67,237	
Annual O&M Costs	\$ 226,668	\$ 850	\$ 85	\$ 43	\$ 9	\$ 639	
Combined Amortized Capital Costs (@30 yrs. & 4%) & Annual O&M	30 years	\$ 6,021	\$ 775	\$ 387	\$ 77	\$ 5,824	

Scott's Corner Wastewater System - Preliminary Cost Estimates & User Charge						50% Grants	
267	Total	Per EDU 1 EDU = 300 gpd	Restaurant / seat	Store Floor Area		Per Apart. / condo 601 - 1,200 sf	
# of EDU in SubArea				Wet Goods / 100 ft ²	Dry Goods / 100 ft ³		
Capital Costs	\$ 15,897,875	\$ 59,617	\$ 5,962	\$ 2,981	\$ 596	\$ 44,825	
Annual O&M Costs	\$ 226,668	\$ 850	\$ 85	\$ 43	\$ 9	\$ 639	
Combined Amortized Capital Costs (@30 yrs. & 4%) & Annual O&M	30 years	\$ 4,298	\$ 430	\$ 215	\$ 43	\$ 3,231	

Scott's Corner Wastewater System - Preliminary Cost Estimates & User Charge						75% Grants	
267	Total	Per EDU 1 EDU = 300 gpd	Restaurant / seat	Store Floor Area		Per Apart. / condo 601 - 1,200 sf	
# of EDU in SubArea				Wet Goods / 100 ft ²	Dry Goods / 100 ft ³		
Capital Costs	\$ 7,948,938	\$ 29,808	\$ 2,981	\$ 1,490	\$ 298	\$ 22,412	
Annual O&M Costs	\$ 226,668	\$ 850	\$ 85	\$ 43	\$ 9	\$ 639	
Combined Amortized Capital Costs (@30 yrs. & 4%) & Annual O&M	30 years	\$ 2,574	\$ 257	\$ 129	\$ 26	\$ 1,935	

Table 10-3 Property Water System Capital Costs and User Charges – By Address

Parcel #	Property Address	Tenant	Use	Final Water Design Flow (gpd)	# of EDU's	Flow Based Annual O&M Cost	Total Capital Cost				Flow-Based Annual User Charge			
							No Grant	25% Grant	50% Grant	75% Grant	No Grants	25% Grant	50% Grant	75% Grant
9454-36	89 Westchester Ave	PR Ambulance Corps	community facility	65	0.43	\$367	\$14,987	\$11,240	\$7,493	\$3,747	\$1,230	\$1,020	\$800	\$580
9454-5	87 Westchester Ave	Avant Garden	retail	72	0.48	\$409	\$16,698	\$12,524	\$8,349	\$4,175	\$1,370	\$1,130	\$890	\$650
9454-6	85 Westchester Ave	North Star	restaurant	875	5.83	\$4,958	\$202,366	\$151,774	\$101,183	\$50,591	\$16,660	\$13,740	\$10,810	\$7,880
9454-6	85 Westchester Ave	North Star	office	68	0.45	\$385	\$15,730	\$11,797	\$7,865	\$3,932	\$1,300	\$1,070	\$840	\$610
9454-7	83 Westchester Ave	Albano Appliance	retail	307	2.05	\$1,739	\$70,977	\$53,233	\$35,488	\$17,744	\$5,840	\$4,820	\$3,790	\$2,770
9454-7	83A,&B Westchester Ave	Above Albano	apartments	220	1.47	\$1,247	\$50,881	\$38,160	\$25,440	\$12,720	\$4,190	\$3,450	\$2,720	\$1,980
9454-7	83C&D Westchester Ave	Albano Appliance	office	115	0.76	\$649	\$26,484	\$19,863	\$13,242	\$6,621	\$2,180	\$1,800	\$1,410	\$1,030
9454-8	79 Westchester Ave	Dynax	office	94	0.62	\$530	\$21,647	\$16,236	\$10,824	\$5,412	\$1,780	\$1,470	\$1,160	\$840
9454-9	77 Westchester Ave	Vacant	Vacant	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-9	77A Westchester Ave	Vacant	Vacant	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-35	NA	Parking	Parking	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-10	73 Westchester Ave	Healthy Home Foods	Retail / Food Prep	210	1.40	\$1,190	\$48,568	\$36,426	\$24,284	\$12,142	\$4,000	\$3,300	\$2,590	\$1,890
9454-10	73 Westchester Ave	Pound Ridge Dentistry	Medical Office	125	0.83	\$708	\$28,909	\$21,682	\$14,455	\$7,227	\$2,380	\$1,960	\$1,540	\$1,130
9454-11	71 Westchester Ave	Kitchen Table	restaurant	438	2.92	\$2,479	\$101,183	\$75,887	\$50,591	\$25,296	\$8,330	\$6,870	\$5,400	\$3,940
9454-11	71 Westchester Ave	Wine Store	retail	97	0.65	\$549	\$22,422	\$16,817	\$11,211	\$5,606	\$1,850	\$1,520	\$1,200	\$870
9454-11	69 Westchester Ave	La Familia	restaurant	700	4.67	\$3,967	\$161,893	\$121,419	\$80,946	\$40,473	\$13,330	\$10,990	\$8,650	\$6,310
9454-11	69 Westchester Ave	Martin House	Office	154	1.02	\$870	\$35,515	\$26,636	\$17,758	\$8,879	\$2,920	\$2,410	\$1,900	\$1,380
9454-12	69 Westchester Ave	Summit Company	Office	154	1.02	\$870	\$35,515	\$26,636	\$17,758	\$8,879	\$2,920	\$2,410	\$1,900	\$1,380
9454-13	67 Westchester Ave	Above Retail	apartments	110	0.73	\$623	\$25,440	\$19,080	\$12,720	\$6,360	\$2,090	\$1,730	\$1,360	\$990
9454-13	67 Westchester Ave	The Cottage / Booksy	retail	141	0.94	\$798	\$32,564	\$24,423	\$16,282	\$8,141	\$2,680	\$2,210	\$1,740	\$1,270
9454-14	4 Trinity Pass Rd.	Vacant	Vacant	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-15	65A,B Westchester Ave	Kahlo	retail	59	0.39	\$332	\$13,570	\$10,178	\$6,785	\$3,393	\$1,120	\$920	\$720	\$530
9454-15	65A,B Westchester Ave	Above Kahlo	apartments	220	1.47	\$1,247	\$50,881	\$38,160	\$25,440	\$12,720	\$4,190	\$3,450	\$2,720	\$1,980
9320-56	Westchester Ave	Parking	parking w/2 shed	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9320-58	80 Westchester Ave	Fire Department	community facility	354	2.36	\$2,005	\$81,825	\$61,369	\$40,913	\$20,456	\$6,740	\$5,550	\$4,370	\$3,190
9320-59	78 Westchester Ave	123 Dough	Food Prep	112	0.74	\$633	\$25,836	\$19,377	\$12,918	\$6,459	\$2,130	\$1,750	\$1,380	\$1,010
9320-59	78 Westchester Ave	123 Dough	Employees	30	0.20	\$170	\$6,938	\$5,204	\$3,469	\$1,735	\$570	\$470	\$370	\$270
9320-59	78 Westchester Ave	Miller's Landscape	office	37	0.25	\$211	\$8,612	\$6,459	\$4,306	\$2,153	\$710	\$580	\$460	\$340
9320-60	76 Westchester Ave	Dinardos	restaurant	1,050	7.00	\$5,950	\$242,839	\$182,129	\$121,419	\$60,710	\$19,990	\$16,480	\$12,970	\$9,460
9320-60	76 Westchester Ave	Vacant	Vacant	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9320-60	76 Westchester Ave	above Dinardos	apartments	220	1.47	\$1,247	\$50,881	\$38,160	\$25,440	\$12,720	\$4,190	\$3,450	\$2,720	\$1,980
9320-61	74 Westchester Ave	Blind Charlies	restaurant	875	5.83	\$4,958	\$202,366	\$151,774	\$101,183	\$50,591	\$16,660	\$13,740	\$10,810	\$7,880
9320-61	74 Westchester Ave	Jacob Allen	Spa	100	0.67	\$567	\$23,128	\$17,346	\$11,564	\$5,782	\$1,900	\$1,570	\$1,240	\$900
9320-61	74 Westchester Ave	O'Donnell	Retail	100	0.66	\$565	\$23,041	\$17,281	\$11,520	\$5,760	\$1,900	\$1,560	\$1,230	\$900
9320-61	74 A,B,C,&D Westchester Ave	above Blind Charlies	apartments	330	2.20	\$1,870	\$76,321	\$57,241	\$38,160	\$19,080	\$6,280	\$5,180	\$4,080	\$2,970
9320-62	72 Westchester Ave	PR Dry Cleaners	retail	119	0.79	\$673	\$27,464	\$20,598	\$13,732	\$6,866	\$2,260	\$1,860	\$1,470	\$1,070
9320-62	72 Westchester Ave	Plum Plum's	Food Prep	59	0.40	\$336	\$13,732	\$10,299	\$6,866	\$3,433	\$1,130	\$930	\$730	\$530
9320-62	72 Westchester Ave	Plum Plum's	Employees	30	0.20	\$170	\$6,938	\$5,204	\$3,469	\$1,735	\$570	\$470	\$370	\$270
9320-62	72 Westchester Ave	Nephawa	retail	59	0.40	\$336	\$13,732	\$10,299	\$6,866	\$3,433	\$1,130	\$930	\$730	\$530
9320-62	72 A & B Westchester Ave	above PR Dry Cleaners	apartment	110	0.73	\$623	\$25,440	\$19,080	\$12,720	\$6,360	\$2,090	\$1,730	\$1,360	\$990

Table 10-4, Continued

Parcel #	Property Address	Tenant	Use	Final Water Design Flow (gpd)	# of EDU's	Flow Based Annual O&M Cost	Total Capital Cost				Flow-Based Annual User Charge			
							No Grant	25% Grant	50% Grant	75% Grant	No Grants	25% Grant	50% Grant	75% Grant
9320-63	70 Westchester Ave	above retail	apartments	110	0.73	\$623	\$25,440	\$19,080	\$12,720	\$6,360	\$2,090	\$1,730	\$1,360	\$990
9320-63	70 Westchester Ave	Barber	Barber	125	0.83	\$708	\$28,909	\$21,682	\$14,455	\$7,227	\$2,380	\$1,960	\$1,540	\$1,130
9320-63	70 Westchester Ave	P. Queens, Avalon Ins, Hedg., PR Home	retail / Office	51	0.34	\$292	\$11,906	\$8,930	\$5,953	\$2,977	\$980	\$810	\$640	\$460
9320-64	68 Westchester Ave	Chubby's	retail	173	1.15	\$981	\$40,028	\$30,021	\$20,014	\$10,007	\$3,300	\$2,720	\$2,140	\$1,560
9320-64	68 A,B,C,&D Westchester Ave	above Chubby's	apartments	330	2.20	\$1,870	\$76,321	\$57,241	\$38,160	\$19,080	\$6,280	\$5,180	\$4,080	\$2,970
9320-65	66 Westchester Ave	gas station	auto repair	400	2.67	\$2,267	\$92,510	\$69,383	\$46,255	\$23,128	\$7,620	\$6,280	\$4,940	\$3,600
9455-18.9	26 Lower Trinity Pass	Joiquim Felice	Home	220	1.47	\$1,247	\$50,881	\$38,160	\$25,440	\$12,720	\$4,190	\$3,450	\$2,720	\$1,980
9455-20	32 Westchester Ave	Wine Connection	retail	222	1.48	\$1,258	\$51,355	\$38,516	\$25,677	\$12,839	\$4,230	\$3,490	\$2,740	\$2,000
9455-20	32 Westchester Ave	Above Wine	apartments	55	0.37	\$312	\$12,720	\$9,540	\$6,360	\$3,180	\$1,050	\$860	\$680	\$500
9455-21	34 Westchester Ave	above Antique	apartments	55	0.37	\$312	\$12,720	\$9,540	\$6,360	\$3,180	\$1,050	\$860	\$680	\$500
9455-21	34 Westchester Ave	Antique	retail	98	0.65	\$557	\$22,717	\$17,038	\$11,358	\$5,679	\$1,870	\$1,540	\$1,210	\$890
9455-27	38 Westchester Ave	Future Value Assoc	office	88	0.59	\$499	\$20,352	\$15,264	\$10,176	\$5,088	\$1,680	\$1,380	\$1,090	\$790
9455-28	40, 40A Westchester Ave	Wittus	retail	135	0.90	\$765	\$31,222	\$23,417	\$15,611	\$7,806	\$2,570	\$2,120	\$1,670	\$1,220
9455-28	40, 40A Westchester Ave	Helen Famulare Spa	Spa	200	1.33	\$1,133	\$46,255	\$34,691	\$23,128	\$11,564	\$3,810	\$3,140	\$2,470	\$1,800
9455-28	40, 40A Westchester Ave	Private	apartment	220	1.47	\$1,247	\$50,881	\$38,160	\$25,440	\$12,720	\$4,190	\$3,450	\$2,720	\$1,980
9455-26	46 Westchester Ave	Roeco	office	92	0.61	\$520	\$21,242	\$15,932	\$10,621	\$5,311	\$1,750	\$1,440	\$1,130	\$830
9455-25	54 Westchester Ave	Asia Hamachi	restaurant	438	2.92	\$2,479	\$101,183	\$75,887	\$50,591	\$25,296	\$8,330	\$6,870	\$5,400	\$3,940
9455-25	54 Westchester Ave	Dragon Martial Arts	Health Club	150	1.00	\$850	\$34,691	\$26,018	\$17,346	\$8,673	\$2,860	\$2,350	\$1,850	\$1,350
9455-25	54 Westchester Ave	Curry & Hovis	retail	60	0.40	\$340	\$13,877	\$10,407	\$6,938	\$3,469	\$1,140	\$940	\$740	\$540
9455-25	54 Westchester Ave	above Curry & Hovis	apartments	55	0.37	\$312	\$12,720	\$9,540	\$6,360	\$3,180	\$1,050	\$860	\$680	\$500
9455-24	56, 60 Westchester Ave	above retail	apartments	385	2.57	\$2,182	\$89,041	\$66,781	\$44,520	\$22,260	\$7,330	\$6,040	\$4,760	\$3,470
9455-24	56, 60 Westchester Ave	Key Bank, Toy Store	retail / Office	390	2.60	\$2,207	\$90,093	\$67,570	\$45,047	\$22,523	\$7,420	\$6,120	\$4,810	\$3,510
9456-4	39 Westchester Ave	private	residential	330	2.20	\$1,870	\$76,321	\$57,241	\$38,160	\$19,080	\$6,280	\$5,180	\$4,080	\$2,970
9456-1.9	55, 57 Westchester Ave	Market, post office, 5 Retail Stores, Office	retail / office	2,707	18.0	\$15,339	\$626,050	\$469,537	\$313,025	\$156,512	\$51,540	\$42,490	\$33,440	\$24,390
9455-10	22, 24 Westchester Ave	PR Organics	Retail	239	1.59	\$1,355	\$55,286	\$41,465	\$27,643	\$13,822	\$4,550	\$3,750	\$2,950	\$2,150
9455-13	26 Westchester Ave	Above Educators Alley	apartments	55	0.37	\$312	\$12,720	\$9,540	\$6,360	\$3,180	\$1,050	\$860	\$680	\$500
9455-13	26 Westchester Ave	Qualities	retail	27	0.18	\$156	\$6,351	\$4,764	\$3,176	\$1,588	\$520	\$430	\$340	\$250
9455-13	26 Westchester Ave	Educators Alley	office	55	0.37	\$311	\$12,703	\$9,527	\$6,351	\$3,176	\$1,050	\$860	\$680	\$490
9455-14	30 Westchester Ave	private	residential	55	0.37	\$312	\$12,720	\$9,540	\$6,360	\$3,180	\$1,050	\$860	\$680	\$500
9456-8	21 Westchester Ave	private	residential	220	1.47	\$1,247	\$50,881	\$38,160	\$25,440	\$12,720	\$4,190	\$3,450	\$2,720	\$1,980
9456-7	23,23A,B Westchester Ave	Kende & London Joiner	retail	153	1.02	\$868	\$35,408	\$26,556	\$17,704	\$8,852	\$2,920	\$2,400	\$1,890	\$1,380
9456-6	27 Westchester Ave	above Lion Heart	apartments	55	0.37	\$312	\$12,720	\$9,540	\$6,360	\$3,180	\$1,050	\$860	\$680	\$500
9456-6	27 Westchester Ave	Di Biase Filkoff Architects	Office	76	0.51	\$430	\$17,554	\$13,165	\$8,777	\$4,388	\$1,450	\$1,190	\$940	\$680
9456-5	29 Westchester Ave	A Home	residential	880	5.87	\$4,987	\$203,522	\$152,642	\$101,761	\$50,881	\$16,760	\$13,810	\$10,870	\$7,930
9456-55	35 Westchester Ave	PR Vet Center	retail	107	0.71	\$608	\$24,802	\$18,601	\$12,401	\$6,200	\$2,040	\$1,680	\$1,320	\$970
		IN-FILL		3,183	21.22	\$18,035	\$736,079	\$552,059	\$368,040	\$184,020	\$60,600	\$49,960	\$39,320	\$28,680
		PM&G	CURRY & HOVIS	10,000	66.67	\$56,667	\$2,312,750	\$1,734,563	\$1,156,375	\$578,188	\$190,410	\$156,980	\$123,540	\$90,100
		SCOTT'S CORNER MARKET	Market & Post Office	10,000	66.67	\$56,667	\$2,312,750	\$1,734,563	\$1,156,375	\$578,188	\$190,410	\$156,980	\$123,540	\$90,100
				40,000	267	\$226,667	\$9,251,000	\$6,938,250	\$4,625,500	\$2,312,750	\$761,650	\$627,850	\$494,150	\$360,380

Table 10-4 Wastewater & Water Supply Systems User Charge Estimates

Parcel #	Property Address	Tenant	Use	Final WW Design Flow (gpd)	Final Water Design Flow (gpd)	# of EDU's	Flow Based Annual O&M Cost	Total Capital Cost				Flow-Based Annual User Charge			
								No Grant	25% Grant	50% Grant	75% Grant	No Grants	25% Grant	50% Grant	75% Grant
9454-36	89 Westchester Ave	PR Ambulance Corps	community facility	130	65	0.43	\$734	\$66,496	\$49,872	\$33,248	\$16,624	\$4,580	\$3,620	\$2,660	\$1,690
9454-5	87 Westchester Ave	Avant Garden	retail	144	72	0.48	\$818	\$74,089	\$55,567	\$37,045	\$18,522	\$5,100	\$4,030	\$2,960	\$1,890
9454-6	85 Westchester Ave	North Star	restaurant	1750	875	5.83	\$9,917	\$897,898	\$673,423	\$448,949	\$224,474	\$61,840	\$48,870	\$35,880	\$22,890
9454-6	85 Westchester Ave	North Star	office	136	68	0.45	\$771	\$69,793	\$52,345	\$34,896	\$17,448	\$4,810	\$3,800	\$2,790	\$1,780
9454-7	83 Westchester Ave	Albano Appliance	retail	614	307	2.05	\$3,478	\$314,925	\$236,193	\$157,462	\$78,731	\$21,690	\$17,140	\$12,580	\$8,040
9454-7	83A,&B Westchester Ave	Above Albano Appliance	apartments	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9454-7	83C&D Westchester Ave	Albano Appliance	office	229	115	0.76	\$1,298	\$117,509	\$88,132	\$58,755	\$29,377	\$8,090	\$6,400	\$4,690	\$2,990
9454-8	79 Westchester Ave	Dynax	office	187	94	0.62	\$1,061	\$96,049	\$72,037	\$48,025	\$24,012	\$6,610	\$5,230	\$3,840	\$2,450
9454-9	77 Westchester Ave	Vacant	Vacant	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-9	77A Westchester Ave	Vacant	Vacant	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-35	NA	Parking	Parking	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-10	73 Westchester Ave	Healthy Home Foods	Retail / Food Prep	420	210	1.40	\$2,380	\$215,495	\$161,622	\$107,748	\$53,874	\$14,840	\$11,730	\$8,610	\$5,490
9454-10	73 Westchester Ave	Pound Ridge Dentistry	Medical Office	250	125	0.83	\$1,417	\$128,271	\$96,203	\$64,136	\$32,068	\$8,830	\$6,980	\$5,120	\$3,270
9454-11	71 Westchester Ave	Kitchen Table	restaurant	875	438	2.92	\$4,958	\$448,949	\$336,712	\$224,474	\$112,237	\$30,920	\$24,430	\$17,930	\$11,450
9454-11	71 Westchester Ave	Wine Store	retail	194	97	0.65	\$1,099	\$99,487	\$74,615	\$49,744	\$24,872	\$6,860	\$5,410	\$3,980	\$2,530
9454-11	69 Westchester Ave	La Familia	restaurant	1400	700	4.67	\$7,933	\$718,318	\$538,739	\$359,159	\$179,580	\$49,470	\$39,090	\$28,710	\$18,320
9454-11	69 Westchester Ave	Martin House	Office	307	154	1.02	\$1,740	\$157,581	\$118,186	\$78,791	\$39,395	\$10,850	\$8,570	\$6,300	\$4,010
9454-12	69 Westchester Ave	Summit Company	Office	307	154	1.02	\$1,740	\$157,581	\$118,186	\$78,791	\$39,395	\$10,850	\$8,570	\$6,300	\$4,010
9454-13	67 Westchester Ave	Above Retail	apartments	220	110	0.73	\$1,247	\$112,879	\$84,659	\$56,439	\$28,220	\$7,770	\$6,150	\$4,510	\$2,880
9454-13	67 Westchester Ave	The Cottage / Booksy	retail	282	141	0.94	\$1,596	\$144,485	\$108,363	\$72,242	\$36,121	\$9,950	\$7,860	\$5,770	\$3,690
9454-14	4 Trinity Pass Rd.	Vacant	Vacant	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9454-15	65A,B Westchester Ave	Kahlo	retail	117	59	0.39	\$665	\$60,210	\$45,158	\$30,105	\$15,053	\$4,150	\$3,280	\$2,400	\$1,540
9454-15	65A,B Westchester Ave	Above Kahlo	apartments	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9320-56	Westchester Ave	Parking	parking w/2 shed	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9320-58	80 Westchester Ave	Fire Department	community facility	708	354	2.36	\$4,010	\$363,059	\$272,294	\$181,529	\$90,765	\$25,010	\$19,750	\$14,510	\$9,260
9320-59	78 Westchester Ave	123 Dough	Food Prep	223	112	0.74	\$1,266	\$114,636	\$85,977	\$57,318	\$28,659	\$7,900	\$6,230	\$4,580	\$2,930
9320-59	78 Westchester Ave	123 Dough	Employees	60	30	0.20	\$340	\$30,785	\$23,089	\$15,393	\$7,696	\$2,120	\$1,670	\$1,230	\$780
9320-59	78 Westchester Ave	Miller's Landscape	office	74	37	0.25	\$422	\$38,212	\$28,659	\$19,106	\$9,553	\$2,630	\$2,070	\$1,530	\$980
9320-60	76 Westchester Ave	Dinardos	restaurant	2100	1,050	7.00	\$11,900	\$1,077,477	\$808,108	\$538,739	\$269,369	\$74,210	\$58,630	\$43,050	\$27,480
9320-60	76 Westchester Ave	Vacant	Vacant	0	0	0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9320-60	76 Westchester Ave	above Dinardos	apartments	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9320-61	74 Westchester Ave	Blind Charlies	restaurant	1750	875	5.83	\$9,917	\$897,898	\$673,423	\$448,949	\$224,474	\$61,840	\$48,870	\$35,880	\$22,890
9320-61	74 Westchester Ave	Jacob Allen	Spa	200	100	0.67	\$1,133	\$102,617	\$76,963	\$51,308	\$25,654	\$7,060	\$5,580	\$4,110	\$2,620
9320-61	74 Westchester Ave	O'Donnell	Retail	199	100	0.66	\$1,129	\$102,232	\$76,674	\$51,116	\$25,558	\$7,040	\$5,560	\$4,080	\$2,610
9320-61	74 A,B,C,&D Westchester Ave	above Blind Charlies	apartments	660	330	2.20	\$3,740	\$338,636	\$253,977	\$169,318	\$84,659	\$23,320	\$18,430	\$13,530	\$8,630
9320-62	72 Westchester Ave	PR Dry Cleaners	retail	238	119	0.79	\$1,346	\$121,858	\$91,393	\$60,929	\$30,464	\$8,390	\$6,630	\$4,870	\$3,110
9320-62	72 Westchester Ave	Plum Plum's	Food Prep	119	59	0.40	\$673	\$60,929	\$45,697	\$30,464	\$15,232	\$4,200	\$3,310	\$2,430	\$1,550
9320-62	72 Westchester Ave	Plum Plum's	Employees	60	30	0.20	\$340	\$30,785	\$23,089	\$15,393	\$7,696	\$2,120	\$1,670	\$1,230	\$780
9320-62	72 Westchester Ave	Nephawa	retail	119	59	0.40	\$673	\$60,929	\$45,697	\$30,464	\$15,232	\$4,200	\$3,310	\$2,430	\$1,550
9320-62	72 A & B Westchester Ave	above PR Dry Cleaners	apartment	220	110	0.73	\$1,247	\$112,879	\$84,659	\$56,439	\$28,220	\$7,770	\$6,150	\$4,510	\$2,880
9320-63	70 Westchester Ave	above retail	apartments	220	110	0.73	\$1,247	\$112,879	\$84,659	\$56,439	\$28,220	\$7,770	\$6,150	\$4,510	\$2,880
9320-63	70 Westchester Ave	Barber	Barber	250	125	0.83	\$1,417	\$128,271	\$96,203	\$64,136	\$32,068	\$8,830	\$6,980	\$5,120	\$3,270
9320-63	70 Westchester Ave	P. Queens, Avalon Ins, Hedg., PR Home	retail / Office	103	51	0.34	\$583	\$52,827	\$39,620	\$26,414	\$13,207	\$3,640	\$2,880	\$2,110	\$1,340

Table 10-4, Continued

Parcel #	Property Address	Tenant	Use	Final WW Design Flow (gpd)	Final Water Design Flow (gpd)	# of EDU's	Flow Based Annual O&M Cost	Total Capital Cost				Flow-Based Annual User Charge			
								No Grant	25% Grant	50% Grant	75% Grant	No Grants	25% Grant	50% Grant	75% Grant
9320-64	68 Westchester Ave	Chubby's	retail	346	173	1.15	\$1,962	\$177,604	\$133,203	\$88,802	\$44,401	\$12,240	\$9,670	\$7,100	\$4,530
9320-64	68 A,B,C,&D Westchester Ave	above Chubby's	apartments	660	330	2.20	\$3,740	\$338,636	\$253,977	\$169,318	\$84,659	\$23,320	\$18,430	\$13,530	\$8,630
9320-65	66 Westchester Ave	gas station	auto repair	800	400	2.67	\$4,533	\$410,468	\$307,851	\$205,234	\$102,617	\$28,270	\$22,340	\$16,400	\$10,460
9455-18.9	26 Lower Trinity Pass	Joiquim Felice	Home	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9455-20	32 Westchester Ave	Wine Connection	retail	444	222	1.48	\$2,517	\$227,861	\$170,896	\$113,930	\$56,965	\$15,700	\$12,400	\$9,100	\$5,810
9455-20	32 Westchester Ave	Above Wine Connection	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9455-21	34 Westchester Ave	above Antique	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9455-21	34 Westchester Ave	Antique	retail	196	98	0.65	\$1,113	\$100,795	\$75,597	\$50,398	\$25,199	\$6,940	\$5,480	\$4,020	\$2,580
9455-27	38 Westchester Ave	Future Value Assoc	office	176	88	0.59	\$997	\$90,303	\$67,727	\$45,151	\$22,576	\$6,220	\$4,910	\$3,610	\$2,300
9455-28	40, 40A Westchester Ave	Wittus	retail	270	135	0.90	\$1,530	\$138,533	\$103,900	\$69,266	\$34,633	\$9,540	\$7,540	\$5,540	\$3,540
9455-28	40, 40A Westchester Ave	Helen Famulare Spa	Spa	400	200	1.33	\$2,267	\$205,234	\$153,925	\$102,617	\$51,308	\$14,140	\$11,170	\$8,200	\$5,230
9455-28	40, 40A Westchester Ave	Private	apartment	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9455-26	46 Westchester Ave	Roeco	office	184	92	0.61	\$1,041	\$94,252	\$70,689	\$47,126	\$23,563	\$6,490	\$5,130	\$3,760	\$2,410
9455-25	54 Westchester Ave	Asia Hamachi	restaurant	875	438	2.92	\$4,958	\$448,949	\$336,712	\$224,474	\$112,237	\$30,920	\$24,430	\$17,930	\$11,450
9455-25	54 Westchester Ave	Dragon Martial Arts	Health Club	300	150	1.00	\$1,700	\$153,925	\$115,444	\$76,963	\$38,481	\$10,610	\$8,370	\$6,150	\$3,920
9455-25	54 Westchester Ave	Curry & Hovis	retail	120	60	0.40	\$680	\$61,570	\$46,178	\$30,785	\$15,393	\$4,240	\$3,350	\$2,460	\$1,570
9455-25	54 Westchester Ave	above Curry & Hovis	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9455-24	56, 60 Westchester Ave	above retail	apartments	770	385	2.57	\$4,363	\$395,075	\$296,306	\$197,537	\$98,769	\$27,210	\$21,500	\$15,790	\$10,080
9455-24	56, 60 Westchester Ave	Key Bank, Toy Store	retail / Office	779	390	2.60	\$4,415	\$399,744	\$299,808	\$199,872	\$99,936	\$27,530	\$21,760	\$15,970	\$10,190
9456-4	39 Westchester Ave	private	residential	660	330	2.20	\$3,740	\$338,636	\$253,977	\$169,318	\$84,659	\$23,320	\$18,430	\$13,530	\$8,630
9456-1.9	55, 57 Westchester Ave	Market, post office, 5 Retail Stores, Office	retail / office	5414	2,707	18.05	\$30,679	\$2,777,787	\$2,083,341	\$1,388,894	\$694,447	\$191,310	\$151,160	\$111,000	\$70,840
9455-10	22, 24 Westchester Ave	PR Organics	Retail	478	239	1.59	\$2,709	\$245,306	\$183,979	\$122,653	\$61,326	\$16,890	\$13,350	\$9,800	\$6,250
9455-13	26 Westchester Ave	Above Educators Alley	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9455-13	26 Westchester Ave	Qualities	retail	55	27	0.18	\$311	\$28,181	\$21,136	\$14,091	\$7,045	\$1,940	\$1,530	\$1,130	\$720
9455-13	26 Westchester Ave	Educators Alley	office	110	55	0.37	\$622	\$56,362	\$42,272	\$28,181	\$14,091	\$3,890	\$3,060	\$2,250	\$1,430
9455-14	30 Westchester Ave	private	residential	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9456-8	21 Westchester Ave	private	residential	440	220	1.47	\$2,493	\$225,757	\$169,318	\$112,879	\$56,439	\$15,550	\$12,280	\$9,020	\$5,750
9456-7	23,23A,B Westchester Ave	Kende & London Joiner	retail	306	153	1.02	\$1,735	\$157,106	\$117,830	\$78,553	\$39,277	\$10,830	\$8,550	\$6,280	\$4,010
9456-6	27 Westchester Ave	above Lion Heart	apartments	110	55	0.37	\$623	\$56,439	\$42,329	\$28,220	\$14,110	\$3,890	\$3,070	\$2,260	\$1,440
9456-6	27 Westchester Ave	Di Biase Filkoff Architects	Office	152	76	0.51	\$860	\$77,886	\$58,415	\$38,943	\$19,472	\$5,370	\$4,240	\$3,110	\$1,980
9456-5	29 Westchester Ave	A Home	residential	1760	880	5.87	\$9,973	\$903,029	\$677,271	\$451,514	\$225,757	\$62,200	\$49,140	\$36,080	\$23,030
9456-55	35 Westchester Ave	PR Vet Center	retail	214	107	0.71	\$1,215	\$110,045	\$82,534	\$55,023	\$27,511	\$7,580	\$5,980	\$4,390	\$2,810
	IN-FILL			6365	3,183	21.22	\$36,071	\$3,265,989	\$2,449,492	\$1,632,994	\$816,497	\$224,940	\$177,720	\$130,510	\$83,290
	PM&G		CURRY & HOVIS	20000	10,000	66.67	\$113,333	\$10,261,688	\$7,696,266	\$5,130,844	\$2,565,422	\$706,760	\$558,410	\$410,050	\$261,690
	SCOTT'S CORNER MARKET		Market & Post Office	20000	10,000	66.67	\$113,333	\$10,261,688	\$7,696,266	\$5,130,844	\$2,565,422	\$706,760	\$558,410	\$410,050	\$261,690
				80,000	40,000	267	\$453,333	\$41,046,750	\$30,785,063	\$20,523,375	\$10,261,688	\$2,827,060	\$2,233,590	\$1,640,160	\$1,046,670

Table 10-5 Draft - Implementation Schedule

Tentative Schedule for Scott's Corner Near Term System Activities										DRAFT AS OF May 16, 2019										
Activity		Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19												
1	Site Testing/Modeling	█	█	█	█	█	█	█	█											
2	Aquarion Agreement				█	█	█	█	█											
3	Site Selection				█	█	█	█	█											
4	District Formation			█	█	█	█	█	█	█	█	█	█	█	█					

Tentative Schedule for Scott's Corner Long Term System Activities										DRAFT AS OF May 16, 2019																
Activity		2020					2021					2022					2023					2024				
5	Design & Permitting	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█						
6	Bid Period																									
7	Construction																									
8	Start-Up																									

A Public Meeting on the draft Report was presented at the Town Board meeting of April 11, 2019.

REFERENCES

1. Pound Ridge Water/Waste Water Task Force, 2017. Existing Conditions Report, Baseline Conditions Workgroup, December.
2. Frederick P. Clark Associates, 1990. Scotts Corners Planning Study, October.
3. National Decentralized Water Resources Capacity Development Project (NDWRCDP) Research Project, Guidance for Evaluation of Potential Groundwater Mounding Associated with Cluster and High-Density Wastewater Soil Absorption System, 2005
4. Bradley, J. G. et al, Groundwater Mounding Analysis for Onsite Wastewater Discharge: From Simple to Innovative, presented at the 2019 NE Short Course, Groton, CT April 6, 2019

GLOSSARY

BOD – Biochemical Oxygen Demand. A laboratory measurement of wastewater that is one of the main indicators of the quantity of pollutants present; a parameter used to measure the amount of oxygen that will be consumed by microorganisms during the biological reaction of oxygen with organic material.

Drip Irrigation – A slow rate, shallow dispersal system where treated wastewater is dispersed through emitters into the root zone near the ground surface.

Effluent Tee Filter – Filtration device that installs directly into the outlet tee on the effluent end of the septic tank.

Fixed Film Treatment Systems – Secondary treatment achieved through percolating wastewater through media, typically sand, rock or a synthetic material.

gpd – gallons per day

gpm – gallons per minute

GIS – Geographic Information Systems

Grinder Pump System – A type of collection system that takes raw wastewater (no septic tank) and uses a small basin containing a grinder pump (the grinder pump station) to convey raw wastewater to the desired location.

I/I – Inflow/infiltration

MBR – Membrane Bio-Reactor. A type of suspended growth system that uses membrane filtration instead of final settling

MLSS – Mixed Liquor Suspended Solids

MPN – Most Probable Number

NWI – National Wetlands Inventory

NYSDEC – New York State Department of environmental Conservation

Primary Treatment – the first stage of wastewater treatment that removes settleable or floating solids only; generally removes 40% of the suspended solids and 30-40% of the BOD in the wastewater.

RMF – Recirculating Media Filter. A type of secondary, fixed-film process that recirculates wastewater over media and blends recirculated water with raw wastewater prior to discharging to the next treatment process.

RSF – Recirculating Sand Filter. The simplest type of RMF, where sand is used as the media.

SBR – Sequencing Batch Reactor

Secondary Treatment – a type of wastewater treatment used to remove dissolved and suspended pollutants through biological treatment processes. The basic categories of secondary treatment are suspended growth, fixed film and integrated fixed film – activated sludge. Effluent quality is BOD/TSS < 30 mg/L. Advanced secondary treatment achieves effluent quality of BOD/TSS < 30 mg/L and Ammonia < 3 mg/L.

STEP System – Septic Tank Effluent by Pump. A type of collection system that takes effluent from septic tanks and pumps the wastewater to the desired location.

STEG System – Septic Tank Effluent by Gravity. A type of collection system that takes effluent from septic tanks and drains by gravity to the desired location.

Suspended Growth Treatment Systems – Secondary treatment achieved through maintaining particles in suspension in an aerobic environment.

Tertiary Treatment with Disinfection – wastewater treatment system that achieves the following effluent quality.

pH	6.5 – 8.5
BOD/TSS	< 10 mg/L
Oil & Grease	< 15 mg/L
Total Nitrogen (TN)	< 10 mg/L
Fecal Coliform	Average < 24 & Maximum < 200 MPN / 100 ml
Enterococcus	Average < 24 & Maximum < 104 MPN / 100 ml

TSS – Total Suspended Solids. A measure of the amount of solid material in suspension within a waste stream.

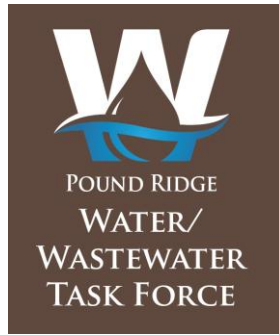
USDA – U.S. Department of Agriculture

UV Disinfection – The use of ultraviolet radiation to inactivate pathogens in a treated waste stream.

WCDoH – Westchester County Department of Health

WWTF – Wastewater Treatment Facility

**APPENDIX A POUND RIDGE WATER/WASTE WATER TASK FORCE, 2017, EXISTING
CONDITIONS REPORT**



Pound Ridge Water/Waste Water Task Force

Existing Conditions Report

Baseline Conditions Workgroup
December 2017

CONTENTS

POUND RIDGE WATER/WASTEWATER TASK FORCE	1
Baseline Conditions Workgroup Report.....	3
1.0 Charge.....	3
1.1 Problem	3
1.2 Baseline Conditions Workgroup Scope and Methodology	3
1.2.1 Area of Responsibility	3
1.3 Methodology.....	4
2.0 Current Conditions	4
3.0 Summary of Previous Reports	6
3.1 Wastewater	6
3.2 Potable Water	8
4.0 Environmental Conditions	9
4.1 Geology	9
4.2 Hydrogeology.....	10
4.3 Topography.....	10
5.0 Applicable Regulations.....	11
5.1 NEW YORK STATE DEPARTMENT HEALTH.....	11
5.2 WESTCHESTER COUNTY DEPARTMENT OF HEALTH	12
5.3 POLICIES AND STANDARDS	12
6.0 WASTEWATER FLOW.....	13
6.1 Wastewater Flow Estimates	13
6.2 CURRENT FLOWS.....	13
6.3 FULL OCCUPANCY FLOWS	13
6.4 COMPARISON OF CURRENT AND HISTORICAL FLOW ESTIMATES.....	14
6.5 Community Waste Water Treatment Plants in Westchester	14
6.6 CURRENT WATER SUPPLY CONDITIONS	15
6.7 FUTURE DEVELOPMENTAL CONDITIONS	15
7.0 Underground Storage Tanks	15
7.1 Location of usts	15
7.2 Potential Sources.....	16
8.0 Summary of Findings.....	16

9.0 Next Steps.....	17
Tables.....	2
Figures.....	2
Appendices (on CD)	2

TABLES

Table 1: Summary of [wastewater system](#) data by block and lot

Table 2: Wastewater issues identified by historical review

Table 3: Wastewater generation rates

Table 4: Current flow estimates

Table 5: Full occupancy flow

Table 6: Flow comparison

Table 7: Known sites

FIGURES

Figure 1: Location of the Scotts Corners Business District

Figure 2: Historical Septic System Data

Figure 3: Wetlands Zoning Topography

Figure 4: Wells and setbacks

Figure 5: Flow estimates

APPENDICES (ON CD)

Appendix A: Historical Wastewater Studies

Appendix B: Historical Potable Water Studies

Appendix C: WDOH Records

Appendix D: Flow Estimate Details

Appendix E: Photos Documentation

POUND RIDGE WATER/WASTEWATER TASK FORCE BASELINE CONDITIONS WORKGROUP REPORT

1.0 CHARGE

As given by the Town Board: “The mission of the Pound Ridge Water/Wastewater Task Force is to assist the Town of Pound Ridge in developing potential long-term wastewater treatment and disposal solutions for the Scotts Corners Business Districts” (**Figure 1**).

1.1 PROBLEM

Scotts Corners is the main commercial and retail area of Pound Ridge and has three planned business zones, PB-A, PB-B, and PB-C (**Figure 2**). Many of the lots have antiquated wastewater treatment systems that are still in use and have experienced health code violations. The present situation is not sustainable, limits any future growth in the Scotts Corner area and, if left unaddressed will lead to future waste water treatment systems failures.

The Pound Ridge Wastewater Task Force Baseline Conditions Work Group is tasked to assess the present situation and make recommendations to remedy the current situation.

1.2 BASELINE CONDITIONS WORKGROUP SCOPE AND METHODOLOGY

1.2.1 AREA OF RESPONSIBILITY

1. The Baseline Conditions Workgroup is tasked with surveying existing conditions, and compiling a baseline report.
2. The baseline report contains data on the location, and type of waste water systems in the PB-A, PB-B and PB-C zoning areas of Scotts Corners. An estimate of the flows generated is included.
3. A synopsis of the geological and groundwater constraints of the Scotts Corners area is presented as these factors impact any future solutions.
4. The regulatory constraints that impact the present and future waste water treatment options are presented. The location of Scotts Corners in the watershed of the Stamford water supply also impacts any future solutions to the current problems.

5. The Scotts Corners area is serviced by a series of privately owned wells that provide potable water to the residences and businesses. These wells are inventoried and locations presented. Any discussion of future waste water solutions to the current problems must include an analysis of the sustainability of the potable water supply.
6. A synopsis of the past studies is presented summarizing salient facts that are relevant to the understanding of current conditions and the development of future solutions. The historical waste water reports are included as Appendix A. The historical potable water studies are included as Appendix B.
7. A number of steps necessary to develop recommendations will be presented.
8. Tables and figures have been prepared to assist the reader in his or her review of the data.

1.3 METHODOLOGY

The following steps were taken to gather the data for this report.

- File review at the Pound Ridge Townhouse to identify available files.
- Submittal of Open Records Request to the Westchester County Department of Health See Appendix C, WCHD Property Information
- Preliminary review of records from the Town Building Department, County Health Department, and NYSDEC to identify existing records for well locations, septic systems, and underground storage tanks to the extent possible.
- Preliminary review of geographical information available through existing reports, PR GIS, Westchester County GIS, NYS State records, and USGS.
- Walking survey of Scotts Corners to visually identify commercial, retail, and residential use areas.
- Current and projected future water use was calculated based on data collected as part of the walking survey.

2.0 CURRENT CONDITIONS

The Scotts Corners business district encompasses approximately 40 acres and 40 properties across blocks 9454, 9455, 9456, 9320, 9820, and 9816. All properties are served by well water and depend on septic systems for wastewater disposals. The Baseline Task Force submitted a request for information to the Westchester County Department of Health in September 2016. The information included in this report is based on a review of records received as part of the information request, review of Town files, and conversations with town officials and property owners. A summary of the data is presented in **Table 1**. Information has not yet been located for 19 properties.

Based on a review of the data, 2012 was the most recent date for a septic system permit reviewed. The oldest permit reviewed was issued in 1942. Some existing systems were installed prior to 1942 but a permit was not available for review at this time. Many of the septic systems appear to have been installed in the 1940s and 1950s before any current regulations as to design, were in place.

Waste water disposal in Scotts Corners is constrained by several factors:

- Scotts Corners is situated near Class AA streams that feed reservoirs used for potable water supplies in Connecticut. Class AA streams are subject to New York State Protection of Waters Regulations.
- The areas available for traditional subsurface wastewater disposal systems are limited due to the following:
 - Topographical restrictions (**Figure 3**)
 - High groundwater tables
 - Presence of bedrock
 - Proximity to wetlands (**Figure 3**)
 - Regulatory constraints related to the treatment technologies that can be approved.
- The age of the existing subsurface disposal systems
- Potable water wells dot the area. Public health regulations require a separation of 50 to 150 feet between wells and various elements of septic systems.
- Public health laws and regulations have become more detailed and protective over time and many of the well and septic system installations do not comply with current

regulations. **Figure 4** provides an overview of the proximity of wells and the septic systems in the area.

- The land area required for the traditional subsurface disposal of the volume of wastewater estimated at 54,000 gallons per day (GPD) is not available in Scott's Corner.

The historical reports as they relate to **wastewater** disposal are summarized in **Section 3**. A summary of the problems and constraints identified and the proposed solutions have been included as **Table 2**.

3.0 SUMMARY OF PREVIOUS REPORTS

A review of town files produced a series of reports addressing water and wastewater conditions in Scotts Corners dating back to the early 1990s. A copy of the historical reports reviewed have been included in Appendix A for waste water and Appendix B for potable water.

A summary of historical reports follows:

3.1 WASTEWATER

1990 Clark Report

The study includes existing use and development levels and projections of future development potentials. Concern about future development exceeding capacity of existing parking. Includes: land and building use, parking and traffic, future development and trends from 1974-1990. In 1974 after a study the Zoning regulations were changed to provide the Floor Area Ratio (FAR) restrictions reducing the theoretical zoning potential by approx. one-half. A common sewage disposal system or expansion to the west would provide more parking in the northern lot. Alternatives for Development potential identified.

1992 Folchetti Report

This report studied a wastewater treatment plant for pre-treating waste water for a subsurface disposal system. Two areas for subsurface disposal near the point of generation in the Scotts Corners Business area were studied and neither were determined to be suitable. Pumping the effluent to the Town Park, a distance of 6,300 or 9,000 feet depending on the route, was proposed as a potential solution. This study was fairly comprehensive and included estimates of square footage of residential and commercial space and resulting waste water flows. Projections were made to 2012. The projected wastewater treatment plant was estimated to cost \$1.5 million and have annual operating costs of \$38,000 per year.

1998 Malcom Pirnie

The report evaluated pumping treated wastewater effluent into the bedrock. This was not considered a viable option.

1999 Malcolm Pirnie

The report established that certain wastewater systems were experiencing failures. The study reviewed three solutions. A wastewater treatment plant was deemed too expensive. On site wastewater disposal was not feasible as there is not enough space and DOH waivers would be required. Upgrading existing systems was discussed. The Town Park disposal solution would seem viable but faces some hurdles.

2000 June and July, Malcolm Pirnie

Test pits were dug and percolation tests performed behind lots 60, 61, 62 (see figure -). A solution was proposed but it did not address the needed flows and would require regulatory waivers.

2000 September, Malcom Pirnie

The study proposal discussed regulatory issues with potable water wells and the possibility of combining them into a Community Water Supply, but wanted to start over with a wastewater study.

2002 April, Folchetti

The study picks up from previous studies and addresses the lack of space in Town for wastewater disposal. The Town Park site is addressed and some challenges for the use of that site for wastewater disposal is addressed. This report also discusses potable water solutions, water from Stamford, drilling wells and getting water from the golf course.

2015 Ridge 29 Proposal

The OnSite Wastewater treatment system proposed for the Ridge 29 development was designed by Onsite Engineering PLLC and included Septic Tank Effluent Gravity System (STEG) for the forty-three proposed units and a constructed wetland treatment system.¹

Opposition to the development was based in part on the site topography where approximately 80% of the 29 acre property consisted of slopes of more than 25% , the density of the proposed development, and the selection of an unconventional, technologically complex, on-site community sewage treatment and disposal system on a steep and environmentally sensitive site. The technology had previously been used to remediate failing septic systems but not as the primary septic treatment technology and it was the opinion of Aquarion, the Connecticut water utility who owns the watershed land in Pound Ridge, that the technology should not be applied to develop a marginal piece of property in a major watershed².

3.2 POTABLE WATER

Potable water is also an issue in Scott's Corners. New potable wells in Scott's Corners have been required to have extensive filtration systems and participate in regular monitoring. There are legacy MTBE issues in the ground water. Any replacement of the existing septic systems or addition of new wells run into regulatory issues as the present configuration of septic systems and wells do not meet regulatory separation requirements. These studies recognize the need to address present and future potable water supply challenges. See Appendix B Historical Potable Water Reports

¹ <http://www.townofpoundridge.com/boardsandcommissions/ridge-29-llc>

² May 11, 2015 letter from Aquarion to the Chairman of the Pound Ridge Planning Board.

The conclusions of the reports on the ability to provide **potable water** to Scott's Corners are summarized below.

A 1973 contract between the Stamford Water Company and Pound Ridge for the construction of the Siscowit or other Reservoir to provide water to Stamford also includes a provision for Pound Ridge to access this water supply.

In 1997 and 1998 plans were made to provide Scott's Corners with potable water either from three deep wells on property owned by the Bridgeport Hydraulic Company (BHC)³ on Westchester Avenue, or from an interconnect in Connecticut. It would appear that the driving force was the MTBE contamination. An interconnect seems to have been stopped late in the process by New Canaan who would not issue street opening permits for the interconnection and the project was cancelled.

4.0 ENVIRONMENTAL CONDITIONS

4.1 GEOLOGY

Northern Westchester, including Pound Ridge, was included in a 1995 USGS report⁴ as part of a water resources investigation. The report provides an overview of the geological and hydrogeological setting of northern Westchester. The major findings are summarized below.

BEDROCK

Pound Ridge "is underlain by a complex sequence of bedrock that varies greatly in age and composition... The rocks are extensively folded and faulted... The bedrock is mostly metamorphic with some igneous rock and ranges in age Precambrian to Upper Devonian.... Rock of Precambrian age are by far the most extensive in the study area and consist of three major groups-Fordham Gneiss, Pound Ridge Gneiss, and the Hudson Highlands

³ Aquarion Water Company is the current owner of the Bridgewater Hydraulic properties.

⁴ S. Wolcott and R. Snow. Computation of Bedrock-Aquifer Recharge in northern Westchester County, New York, and Chemical Quality of Water from Selected Bedrock Wells. Water Resources Investigation Report 92-4157, USGS 1995

complex...Cambro-Ordovician.-Bedford Gneiss, Hartland Formation, and the Inwood Marble are formations of an uncertain age. ”

SOILS

“Much of the bedrock is overlain by unconsolidated Pleistocene or Recent deposits, some of which are extensive. The Pleistocene deposits typically include a thin mantle of till on hilltops and valley sides and stratified sand, gravel, silt, and clay in the valley bottoms. Recent deposits consist of alluvium in stream valleys and organic rich sediments in swampy areas.” “Much of the Pleistocene material is till, which consists of unsorted materials ranging in size from clay to large boulders. Thicknesses range from less than 1 ft. to more than 100 ft. Stratified drift, unlike till, forms sorted deposits of either clay, silt, sand or gravel that can be interbedded amongst themselves or between till deposits. The extent and thickness of stratified drift...range from zero in areas of no stratified drift to more than 250 ft. Recent deposits are typically alluvium and fine-grained organic rich sediments in and near swamps and streams and are generally less than 10 ft. thick.

4.2 HYDROGEOLOGY

Scotts Corners is located in an area characterized by hydric soils, state regulated wetlands, class AA streams, and within certain FEMA flood zones. Groundwater is generally encountered within the first 4 feet in areas of the business district that are not characterized as steep slopes.

4.3 TOPOGRAPHY

STEEP SLOPES

The Town of Pound Ridge protection of steep slopes ordinance can be found in the Code Book Chapter 89. The ordinance was promulgated in 2007. Disturbance of steep slopes above 35% is prohibited. Disturbance of slopes of more than 15% requires a permit. Given the local topography where more than 2,000 acres⁵ have slopes of more than 15%, steep slopes will have to be considered in any future proposed water and wastewater solution for Scotts Corners.

⁵ Town of Pound Ridge Comprehensive Plan, 2010.

WETLANDS

The Pound Ridge Wetlands Ordinance (Chapter 63) was adopted in 1986. According to the Comprehensive Plan, the Town encompasses 8,300 acres of wetland, including wetlands regulated by federal, state and local laws and ordinances representing approximately 40% of the Town.

The Business District is located on or near wetlands that drain into the Laurel Reservoir. The Scott's Corner's shopping center located in PB-B was constructed on filled in wetlands

5.0 APPLICABLE REGULATIONS

A network of regulations and agencies address septic tanks, wastewater treatment and discharges, surface water criteria, drinking water wells, distance requirements, steep slopes, and so forth. All of which will have to be considered as part of evaluation of Scotts Corners. A summary is presented below. A comprehensive discussion of the applicable regulations will be included in the Phase 2 technical report.

5.1 NEW YORK STATE DEPARTMENT HEALTH

The New York State Department of Health (NYSDOH) Bureau of Water Supply Protection issued the current *Onsite Residential Wastewater Treatment System Design Handbook* in 2012. The Design Handbook provides the current requirements and guidelines for the construction and operation of residential septic systems. The design standards were established in 10NYCRR Appendix 75A and 10NYCRR Part 75 and apply to residential septic systems with flows of 1000 gallons per day (gpd) or less. The standards for intermediate systems with a flow above 1000 gpd are regulated by the NY State Department of Environmental Conservation (NYSDEC) in 6NYCRR part 750.

The New York State Public Health Law has given counties, municipalities, and other agencies the authority to enact ordinances to protect public health. If more stringent regulations exist locally they will have to be met as well when new systems are designed.

5.2 WESTCHESTER COUNTY DEPARTMENT OF HEALTH

Article VIII of the Westchester County Sanitary Code regulates the construction and operation and maintenance of onsite wastewater treatment systems. This report will use the common term “septic system” instead of “onsite wastewater treatment systems”. Article VII has been amended several times, most recently in 2008.

Construction of a new septic system or expansion of an existing system requires the approval of the Westchester County Department of Health.

The Town of Pound Ridge implemented Chapter 86 in 2011. The intent of the septic tank regulations according to §86.1 “The Town of Pound Ridge hereby finds that it is necessary to the health, safety, and welfare of the residents of the Town of Pound Ridge that separate sewage disposal systems operate and be maintained in a manner that will prevent, to the extent possible, hazards to the public health and to protect the drinking water supply of the Town of Pound Ridge and drinking water supplies which pass through the Town of Pound Ridge.” Chapter 86 sets forth the inspection schedule for septic systems within the Town required to maintain compliance with the Westchester County Sanitary Code sect VIII.

5.3 POLICIES AND STANDARDS

The Public Health Law of New York Part 5 subpart 5-1 Appendix 5B sets the minimum standards for water wells used for drinking and food processing but not for public water supply. The minimum separation distance between a water well and a contamination source are outlined in a table format. Generally, a well should be located 150 ft upgradient of an underground storage tank (single wall), 50 ft upgradient of a septic tank with a water tight effluent line and 150 ft upgradient of a seepage pit. The distance requirement can increase 50% based on site specific soil and depth to groundwater conditions. The distance requirement for cesspools which have no septic tank pretreatment is 200 ft. **Figure 4** provides an overview of the distance requirements.

6.0 WASTEWATER FLOW

6.1 WASTEWATER FLOW ESTIMATES

The estimates of wastewater flows from the three business districts (PB-A, PB-B, and PB-C) were generated using wastewater generation rates developed by New York City Department of Environmental Protection (NYC DEP) and various architectural handbooks used for sizing water and wastewater systems in homes, offices, and other commercial uses. The rates are shown in **Table 3**. These are general rates and are not applicable in every individual situation. However, they have been developed over a number of decades of practice and do reflect conservative and generally accurate aggregate estimates.

6.2 CURRENT FLOWS

Using information from the Pound Ridge Assessors Office and supplemented with field land use surveys, the current wastewater flows from the PB-A, -B, and -C zoning districts were estimated and are summarized in **Table 4**. Based on United States Census Bureau data, the residential usage was based on 3 persons per apartment. The estimates are based on the observed occupancy of buildings at the end of May 2016.

6.3 FULL OCCUPANCY FLOWS

The full occupancy of all existing space in the three Planned Business Districts is based on “highest and best use” of the existing buildings. No new buildings or structures are assumed in this estimate. “Best and highest use” would be retail or restaurant on the street level first floor and residential or office on the second floor. The differentiation between office or residential on the second floor is based current usage of the second floor. The “highest and best use” is considered to the reasonable worst case without new building. The estimated are shown on **Table 5**. Detailed, use, by use wastewater flow estimates are contained in **Appendix D**.

6.4 COMPARISON OF CURRENT AND HISTORICAL FLOW ESTIMATES

Previous estimates of wastewater flows in Scotts Corner ranged from approximately 25,000 to 28,000 gallons per day, depending on the date of the study. Although the wastewater generation rates in the two estimates are similar, several assumptions contribute to the difference between the earlier historical estimates and the current estimates of 40,000 to 55,000 gallons per day developed for this report. The differences in assumptions between the historical data in the Folchetti Report (1992) and the current estimate are summarized in Table 6 and outlined below:

- The historical estimate included only 25 buildings, compared to the 41 buildings in the current wastewater flow estimates. The main reason for the difference in the number of buildings is the decision to include all three PB zoning districts in the present analysis. Folchetti only included PB-A.
- Folchetti estimated 20,400 gallons per day (gpd) from commercial use. The current estimate is about double that flow at approximately 40,300 gallons per day.
- The Folchetti Report does not present the number of residential units included in the estimate nor the generation rate use.
- Folchetti Report did not include A Home in its estimate. This report estimates daily flow generated by A-Home at approximately 3,600 gpd.

The current estimate for residential units in Scotts Corner is 45 units with a population of 135 people (3 persons per unit based on U.S. Census Bureau data) and a total wastewater flow of approximately 13,500 gpd. The Folchetti Report estimated 4,250 gpd for the residential population. These two factors increased the wastewater flow estimates by about 29,000 gpd. **Table 6** provides a summary of the flow estimate assumptions.

6.5 COMMUNITY WASTE WATER TREATMENT PLANTS IN WESTCHESTER

In Westchester County, 12 wastewater treatment plants are authorized to discharge treated wastewater under the State Pollution Discharge Elimination System (SPDES). Of these, 7 are owned and operated by Westchester County Department of Environmental Facilities, and are rated to treat volumes of wastewater in excess of millions of gallons per day, far more than wastewater generated in Scotts Corner. The largest plant is the Yonkers Joint Treatment Plant

and is rated for 145,000,000 million gallons per day. The Bedford Hills/Taconic Correctional Facility, which is close by, is rated to treat 500,000 GPD and normally treats 300,000 to 400,000 GPD.

Two wastewater treatment plants in Westchester County that treat a comparable volume to Scotts Corner are: (1) Wild Oaks Condominium Sewer District, Goldens Bridge rated to treat 60,000 GPD; and (2) Oakridge Condominium Treatment Plant, Vista, rated to treat 80,000 GPD. These plants are small with 1 or 2 employees. The plants are not staffed 24 hours per day.

6.6 CURRENT WATER SUPPLY CONDITIONS

Potable water is supplied by individual wells serving the properties in Scotts Corners. It is the Work Group's understanding that the wells serving restaurants and food preparation operations in the business districts participate in water quality monitoring programs overseen by the NYSDOH. The task force did not review any of the individual water treatment systems or the monitoring data. It may be required at a later date to include a review of the potable water data.

6.7 FUTURE DEVELOPMENTAL CONDITIONS

TEP AND EXPECTED CHANGES IN REGULATIONS AND USES

Several infrastructure related projects that could influence the business district wide wastewater treatment options are currently underway or planned. This includes the TEP project, the redevelopment of the Pound Ridge Square Shopping Center, future use decisions at 77 Westchester Avenue, and other development decisions, including a renewed application at 29 Acres.

7.0 UNDERGROUND STORAGE TANKS

7.1 LOCATION OF USTS

Heating oil underground storage tanks (USTs) were marked on many of the site plans reviewed as part of the septic system analysis. It is anticipated that every property in the three business district has at least one UST or above ground storage tank (AST) for heating oil storage.

7.2 POTENTIAL SOURCES

A review of the NYSDEC Environmental Site Remediation Database and NYSDEC Spills Database⁶, was conducted in 2016 by Toxics Targeting Report (2016) prepared as part of the NRI project. Additional data was made available as a result of the recently completed site assessment at 77 Westchester Avenue the following spills and recognized environmental conditions have been identified in Scotts Corners.

Table 7 presents the site ID, address, site name, issue, and status of sites identified in the business district. A total of eighteen incidents in the business district have been identified in the NYS DEC spills database. The incidents were associated with tank test failures, tank overflow or equipment failures. Only three incidents have been classified as unknown or other. Work is currently continuing at 77 Westchester Avenue under a federal brownfields grant.

8.0 SUMMARY OF FINDINGS

The Scotts Corner's business district provides a challenging environment for wastewater treatment systems and potable water supply.

- There has never been an overall plan for wastewater treatment in the business district. Each property is served by an individual septic tank or cesspool.
- Some of the septic tanks or cesspools are old and do not meet current standards for septic system design or minimum separation distance requirements for water wells.
- Some systems are likely to fail and will not meet present standards for renovated or new systems.
- Based on estimates of current and projected flow and the use of currently accepted treatment technologies a minimum of 7 acres is required for a leachfield.
- Site conditions are not amendable to new septic systems.
 - Groundwater encountered at 4-5 feet bgs
 - Bedrock or boulders too large to move within 5 feet of surface on test plots

⁶ The NYSDEC databases were last accessed June 17, 2017.

- Close proximity to wetlands and Class AA streams severely limits the amount of land that is available for septic systems and drainage field in compliance with current requirements.
- Steep slopes
- Because of the proximity to Class AA streams and the Laurel Reservoir which is part of the water supply system for Stamford, CT, all wastewater discharges have to be below ground which may limit the use of constructed wetlands.
- The properties in the business district are served by private wells. Continued additional filtration systems will be required in the future.
- Minimum separation distance requirements are not always met. Some properties are likely to fail if current standards are applied.
- Area required for seepage fields based on estimated future flow of 54,000 gpd and current technologies is not available in Scotts Corners.

9.0 NEXT STEPS

The Technical Committee will evaluate technical options and present its findings and recommendations to the public in a technical report as well as presentations at public meetings.

Funding opportunities will be evaluated concurrently.

Table 1



Property Data

Block	Lot	Zone	Property Address	Tenant	Use	Acreage	Year Built	Location of Well	Location of Septic	Property Owner	Owner Info	Original Owner
PB-A												
9454	36	R-2A	89 Westchester Ave	PR Ambulance Corps	community facility	0.530	1981	X		Pound Ridge Lions Ambulance Corps	914-764-8510 PO Box 237 Pound Ridge NY 10576	
9454	5	PB-A	87 Westchester Ave	Avant Garden	retail	1.131	1950	X	X	Rex Realty of CT Inc.	1111 Summer St. Suite 603, Stamford CT 06905	Rex Oil Co.
9454	6	PB-A	85 Westchester Ave	Part of North Star	restaurant w/ office	0.415	1930	X	X	Westchester Ave LLP	100 S. Bedford Rd, Suite 340 Mt. Kisco NY 10549	Geraldine Ash
9454	7	PB-A	83 and 83A Westchester Ave	North Star, Albano Appliance & vacant	retail/office w/ apts	0.473	1950	X	X	Albano Realty Assoc. LLC	Kathy Albano 2 Orchard Dr, South Salem NY 10590	Alfred Albano
9454	8	PB-A	79 Westchester Ave	Dynax	office	0.345	1957	X	X	Edward K. Kleiner Family Truест	PO Box 285 Pound Ridge, NY 10576	Baring - Gould
9454	9	PB-A	77 and 77A Westchester Ave	Vacant auto repair	retail w/ apts.	0.342	1945			John and Gildo DiFulvio	77 Westchester Ave, Pound Ridge NY 10576	Anthony Pirone-Amerigo Pro시오
9454	35	PB-A	NA	Parking & vacant	Vacant	0.356						
9454	10	PB-A	73 Westchester Ave	HHF - Dentist	office	0.670	1959	X	X	Atem Enterprises Inc.	297 Hayward St., Yonkers NY 10704	New Canaan Devel. Co.
9454	11	PB-A	71 Westchester Ave	Kitchen Table & wine store	resaurant/retail/office	0.631	1948	X	X	Gateway Management		Scotts Corners Market Inc.
9454	12	PB-A	69 Westchester Ave	Pizza, PR Dance, Nail/Spin	resaurant/retail/office	0.493	1950	X	X	Nicholas S. Vazzana	PO Box 390 Pound Ridge NY 10575	Norkin Bros.
9454	13	PB-A	67 Westchester Ave	Gen Store, Booksy, Antique	retail w/apts	0.147	1950	X	X	Jerome and Elinor Deutsch Trustee	PO Box 127 Pound Ridge NY 10576	Theodore & David Allen
9454	14	PB-A	4 Trinity Pass Rd.	Manville Trust	office	0.181	1940	X		Yudith Ita Schwartz	112 Round Hill Rd, Armonk NY 10504	Trinity Corners Corp.
9454	15	PB-A	65, 65A, B Westchester Ave	Antique Store	retail w/2 apts	0.185	1934			Yudith Ita Schwartz	112 Round Hill Rd, Armonk NY 10504. 237-3550	Trinity Corners Corp.
9320	56	PB-A	Westchester Ave	parking	parking w/2 shed	5.084				Pound Ridge Fire District	PO Box 129 Pound Ridge, NY 10576	Quade
9320	58	PB-A	80 Westchester Ave	Fire Department	community facility	0.449		X	X	Pound Ridge Fire District	PO Box 129 Pound Ridge, NY 10576	Quade
9320	59	PB-A	78 Westchester Ave	Vacant, World Ins	food prep/office w/apts	0.207	1952	X		Dail Metzger	Dail Metzger 320 Strawberry Hill Ave, Stamford CT 06902	John Ditore
9320	60	PB-A	76 Westchester Ave	Dinardos/American T	restaurant/retail w/apts	0.207	1955	X	X	76 Westchester Ave Realty Co. Ltd.	PO Box 36, Pound Ridge NY 10576	Quade & Roth
9320	61	PB-A	74 Westchester Ave	Blind Charlies/O'Donell	restaurant/retail w/apts	0.207	1968	X	X	Scott's Corner Market, Inc.	PO Box 180 Pound Ridge NY 10576	Quade & Clemons
9320	62	PB-A	72 Westchester Ave	PR Dry Cleaners, Plum Plums, Foxy	retail w/apts	0.207				Stephanie Degraff	4606 13th Place, Vero Beach, FL 32960	
9320	63	PB-A	70 Westchester Ave	Promo Queens, Avalon Ins, Barber, Hedgerow, PR Home	retail/office w/apts	0.207	1945		X	Trinity Lane Ltd.	Attn: Sally Siano 52 Babbitt Rd, Bedford Hills, NY 10507	Frank & Esther Beccaria
9320	64	PB-A	68 Westchester Ave	Chubby's	retail w/apts	0.418	1942	X		Joseph and Carmella DiPietro	129 Redmond Rd, Stamford CT 06903	Gustav & Lena Shutte
9320	65	PB-A	66 Westchester Ave	Gas Station	retail	0.642		X		Shaeffer Realty Ltd.	PO Box 380 Pound Ridge NY 10576	
					Subtotal	13.527						
PB-B												
9455	18.9	PB-B, R-1A	26 Lower Trinity Pass	no building	vacant	0.615	1940			Felice Joaquim		Bathrick
9455	20	PB-B	32 Westchester Ave	Wine Connection	retail	0.656	1910	X	X	Peter Desimini		Barker
9455	21	PB-B	34 Westchester Ave	Antique	retail	0.652	1965	X	X	Linda DiMattia		Frank Columbo & Girolamo Mastromauro
9455	26	RA-1	46 Westchester Ave	Offices	Office	4.589		X				
9455	27	PB-B, R-1A	38 Westchester Ave	Future Value Assoc	office	0.717	1932	X	X	TS Affiliates LLC	Ferrara/Becker	Evelyn Yalien
9455	28	PB-B	40, 40A Westchester Ave	Wittus, Greenfull	retail	0.495				Mastromoro Fam LP		
9455	25	PB-B	54 Westchester Ave	Hamachi, Curry & Hovis, Pound Ridge Painting	restaurant/retail w/ apt	1.632	1869	X	X	PMNG Management Inc.	PMNG Management LLC, 82 Grandview Blvd, Yonkers NY 10710	Pluto Properties, Inc.
9455	24	PB-B	56, 60 Westchester Ave	Toys & Sports, Salon, Key Bank, Eye Care	retail w/apts	1.698	1860			David Berman H.	PMNG Management LLC, 82 Grandview Blvd, Yonkers NY 10710	Seymour - Berman - Renovated 1970
9456	4	PB-B	39 Westchester Ave	Private	residential	2.196						
9456	1.9	PB-B	55, 57 Westchester Ave	Market, Post Office & vacant	retail	7.707	1976		X	Roe Scotts Corner LLC	Scott Solomon 46 Westchester Avenue, Pound Ridge, New York 10576	
					Subtotal	20.957						Evelyn & Benjamin Butterworth
PB-C												
9455	10	PB-C	22, 24 Westchester Ave	vacant PR Painting	office	2.005	1810	X	X	Stuart Simons		Kaufman
9455	13	PB-C	26 Westchester Ave	Educators Alley	office	0.781	1930			Pedani Realty Services	26 Westchester Ave 28, Pound Ridge, NY 10576	Scofield
9455	14	PB-C	30 Westchester Ave	private	residential	1.002	1934	X	X	Paterson		Scofield
9456	8	PB-C	21 Westchester Ave	private	residential	0.656	1930			James & Elaine Suda		Emily Suda
9456	7	PB-C	23, 23 A, B Westchester Ave	Kendal Studio & London Joiner	retail w/apt	1.537	1940	X	X	M. Byrne		McNally
9456	6	PB-C	27 Westchester Ave	Lionheart Gallery	retail w/apt	0.693	1949		X	Coleridge Spyder, LLC		Jackson
9456	5	PB-C	29 Westchester Ave	A Home	residential	3.195	2008	X	X	Scotts Ridge Housing Dev. Fund Corp.		Thomas Sefcik
9456	5.5	PB-C	35 Westchester Ave	PR Vet Center	retail w/apt	0.764	1974	X	X	35 Westchester Ave., Inc.		Dolensek
					Subtotal	10.633						
TOTAL						Total	45.117					

Waterwater Generation Rates from City Environmental Review Technical Manual
 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
 Resident 100 gallons per day per person

Acreage for lots 9455-18.9 and 9455-27 are for PB-B section only and approximate

Table 2



Wastewater Issues and Solutions identified in historical reports

Potential Problem		Reference
Parking Lots 56, 58-64 Block 9320 Construction subsurface disposal system@50,000 gpd not feasible	Max. capacity 24,000 gpd	Folchetti, 2002
	Variance for required separation distance between well and disposal system of less than 200 ft.	
	Groundwater within 4 ft. of surface	
	Proximity to wetlands and rocks too large to remove	
Lot 8, 86, 152 Block 9820 (Town Park)	Additional testing required to confirm early findings	
	No bedrock and no groundwater during original test	
	Meets wetland setback dependent on final design	
Treatment through golf course irrigation	slopes may interfere with design choice and require larger area	
	Potential legal issues regarding permitting CT DEP prohibits surface water discharge within water supply basin	

Table 3



Wastewater Generation Rates

Use	Generation Rates
Residential	100 gallons per day per resident
Community Facilities	0.10 gallons per day per building square foot
Office	0.10 gallons per day per building square foot
Retail	0.24 gallons per day per building square foot
Restaurant	35 gallons per day per seat
Food Preparation	0.50 gallons per day per building square foot

Sources:

New York City Office of Sustainability CEQR

NYC DEP Bureau of Environmental Planning and Assessment

Metcalf and Eddy (1991) Wastewater Engineering. Treatment Disposal Reuse

Table 4**Wastewater Generation Estimate for Current Occupancy in Scotts Corner**

Use	Number/Unit	Wastewater Generation Gallons per Day
Residential/Community Facility	39 Apartments/8,372 Square Feet	11,700/837
Office	15,108 square feet	1,511
Retail	92,588 square feet	15,021
Restaurant/Food Preparation	250 seats/5,041 square feet	8,750/2,521
Total	NA	40,340

Table 5



Wastewater Generation Estimate for Full Occupancy in Scotts Corner

Use	Number/Unit	Wastewater Generation Gallons per Day
Residential/Community Facility	45 apartments/8,372 square feet	13,500/837
Office	26,728 square feet	2,673
Retail	120,045 square feet	28,837
Restaurant/Food Preparation	250 seats/0 square feet	8,750
Total		54,597

Table 6



Flow Estimate Comparison

	Historic Wastewater Flow Estimates	Current Wastewater Flow Estimates
Buildings included in estimate	25	41
Estimated Commercial flow	20,400 gpd	40,300 gpd
Residential Units in estimate	unclear	45
A-Home	0	3,600 gpd
Estimated Residential Flow	4,250 gpd	13,400 gpd

Table 7**Known Spill Sites**

Facility Name	Address	City	Site ID	Description	Spill Date	Close Date
Abandon Site	55 Westchester Avenue	Pound Ridge	325964	Other	11/21/2000	12/28/2000
Value Clean Cleaners	55 Westchester Avenue	Pound Ridge	325965	Unknown	1/24/2002	3/29/2002
Trinity Corner Shopping Center	55 Westchester Avenue	Pound Ridge	399707	Equipment Failure	2/13/2002	3/5/2002
60-80 Westchester Avenue	60-80 Westchester Avenue	Pound Ridge	102411	Unknown	3/18/2002	4/5/2002
Spill Number 0111906	65 Westchester Avenue	Pound Ridge	173308	Tank Test Failure	8/9/2002	11/12/2002
New Media School House	69 Westchester Avenue	Pound Ridge	59404	Tank Test Failure	6/26/2006	2/24/2012
New Media School House	69 Westchester Avenue	Pound Ridge	305220	Tank Overfill	6/13/2008	6/16/2008
Sally & Joseph Siano Assoc.	70 Westchester Avenue	Pound Ridge	68318	Equipment Failure	3/22/2011	6/1/2011
Spill Number 0009626	74 Westchester Avenue	Pound Ridge	195220	Tank Test Failure	4/14/2011	6/2/2011
Spill Number 0110835	76 Westchester Avenue	Pound Ridge	209563	Tank Overfill	4/5/2016	
Town & Country Auto Inc.	77 Westchester Avenue	Pound Ridge	313756	Tank Failure	3/27/1991	3/10/1992
Texaco	77 Westchester Avenue	Pound Ridge	138800	Unknown	8/26/1994	9/14/1994
Pound Ridge Fire Department	80 Westchester Avenue	Pound Ridge	320739	Tank Failure	12/16/1994	2/18/2005
Albano Appliance	83 Westchester Avenue	Pound Ridge	446942	Equipment Failure	7/1/1993	
Pound Ridge Ambulance	89 Westchester Avenue	Pound Ridge	447921	Equipment Failure	8/8/1995	3/27/2013
Pound Ridge Post Office	57 Westchester Avenue	Pound Ridge	87798	Tank Failure	4/1/1998	4/17/1998
Pound Ridge Veterinary Clinic	35 Westchester Avenue	Pound Ridge	124053	Unknown	12/21/1999	6/1/2000
On Side of Road	Westchester / Salem	Pound Ridge	366006	Other	9/9/1999	2/26/2005

POUND RIDGE WASTEWATER TASK FORCE

Figure 1 - Scotts Corners Business District

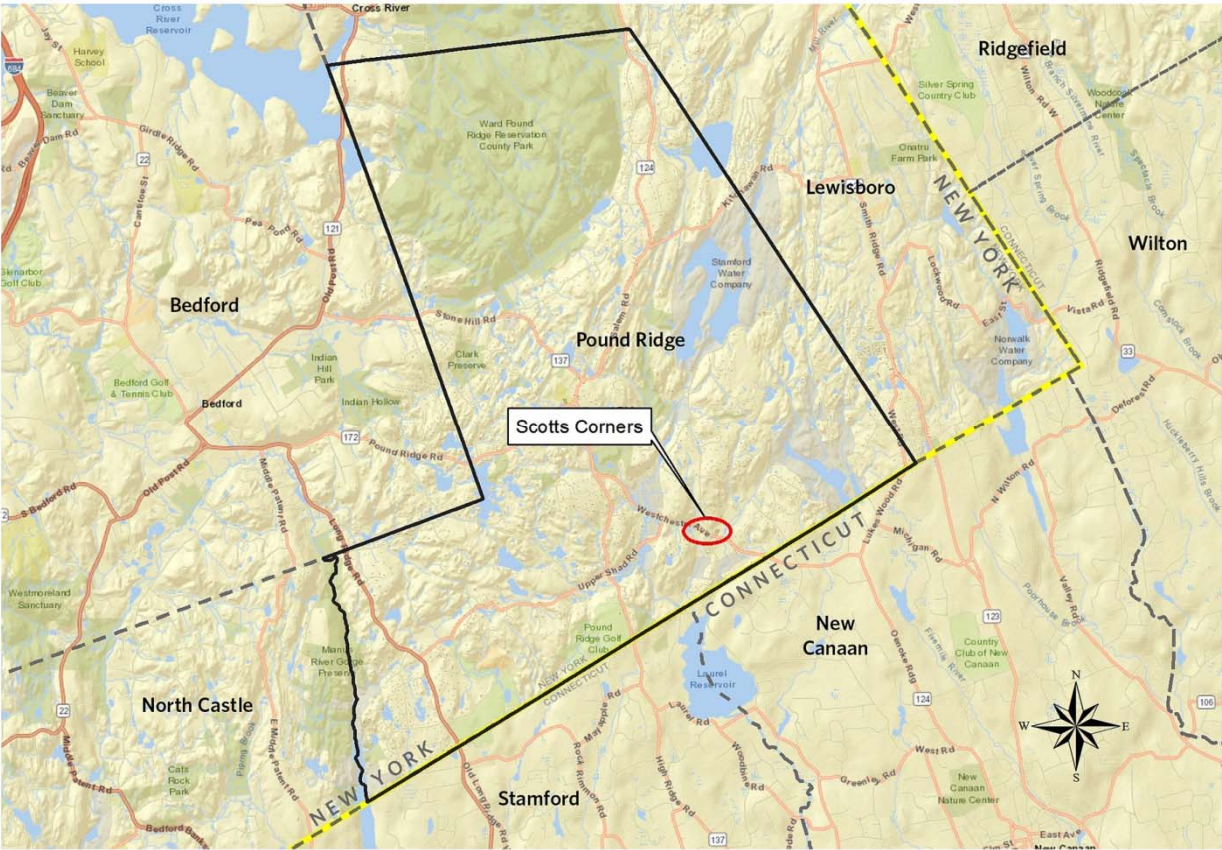


Figure 2a - Historical Septic System Data Zone PB-A

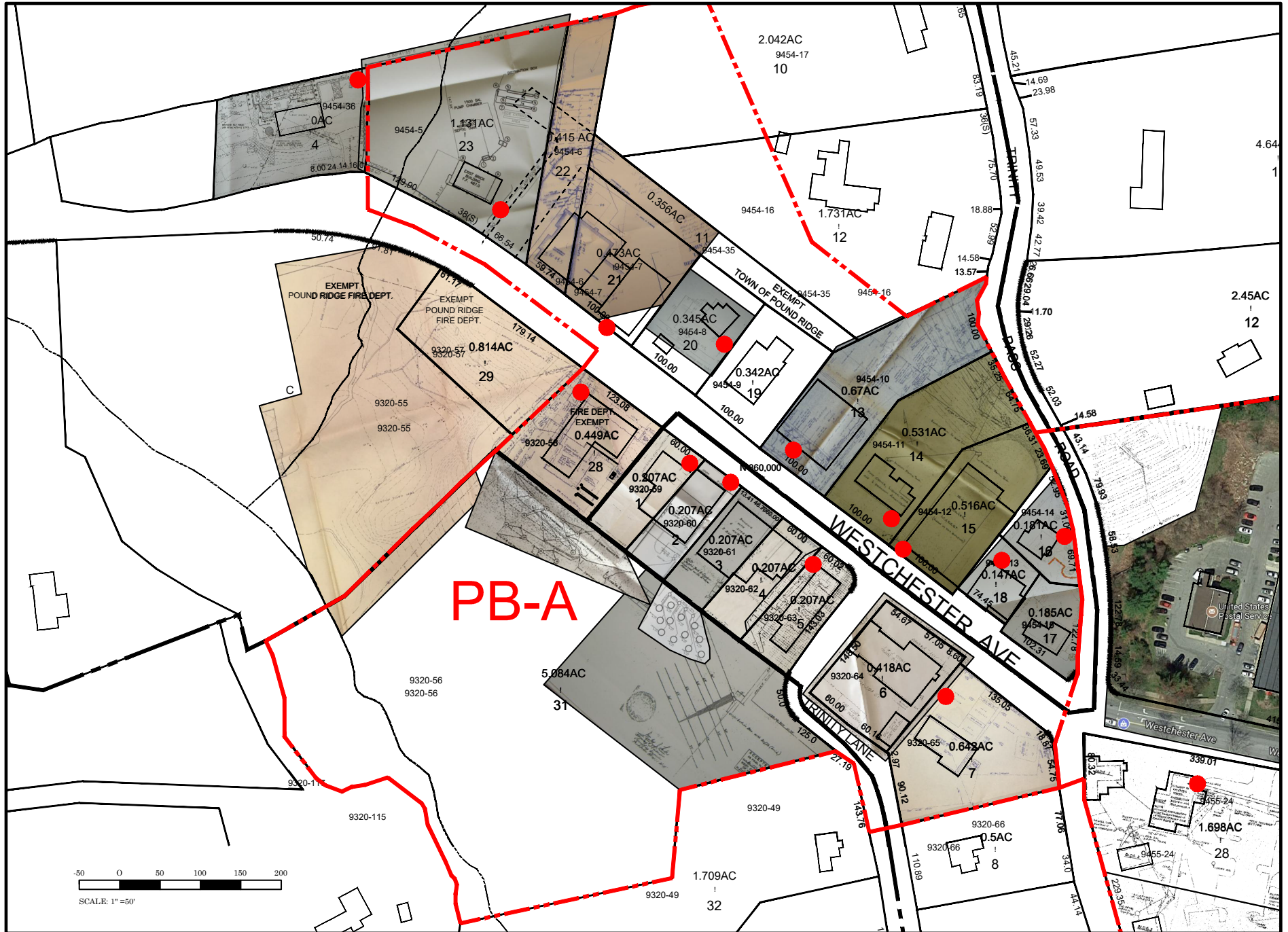


Figure 2b - Historical Septic System Data Zone PB-B

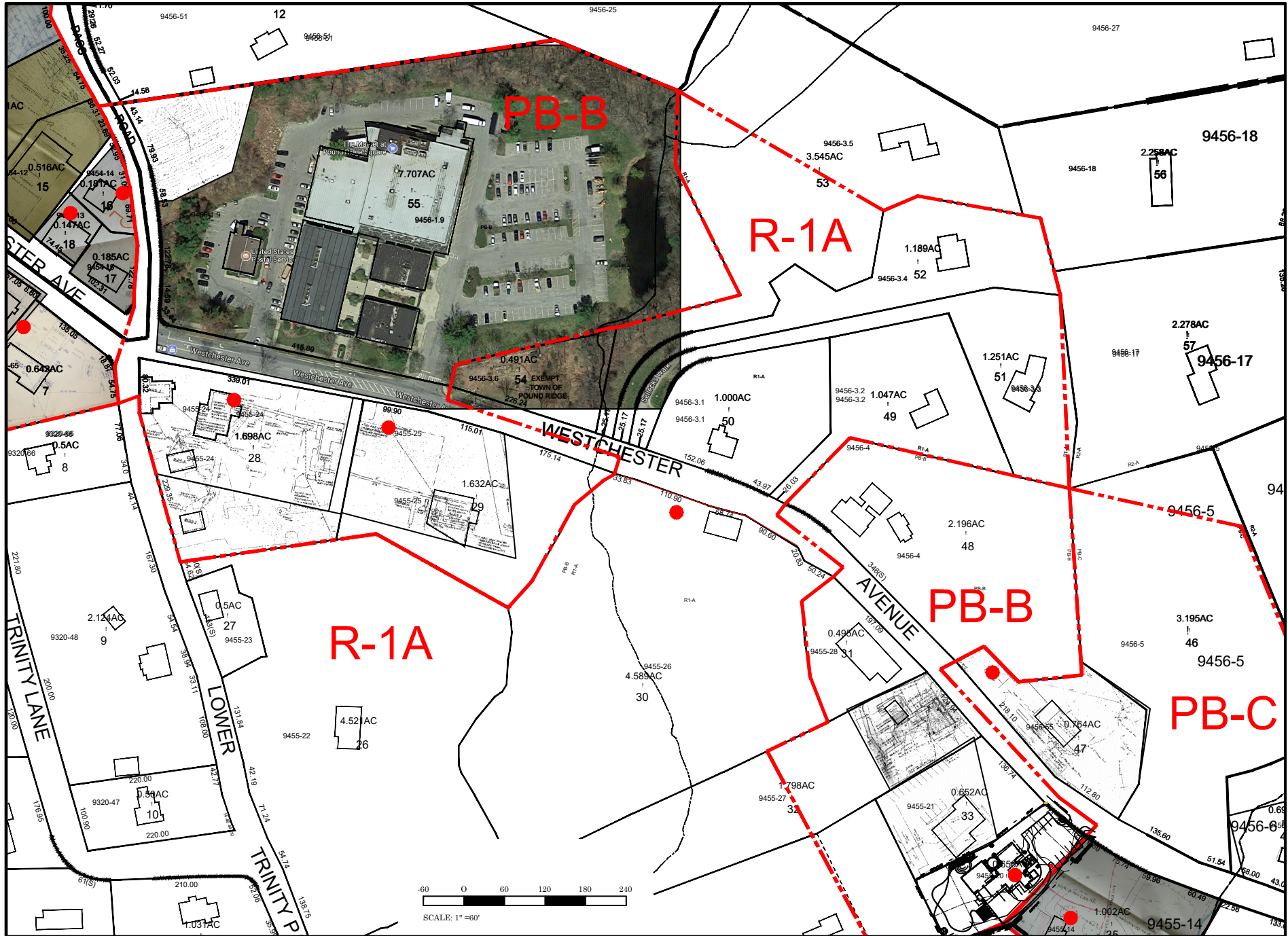
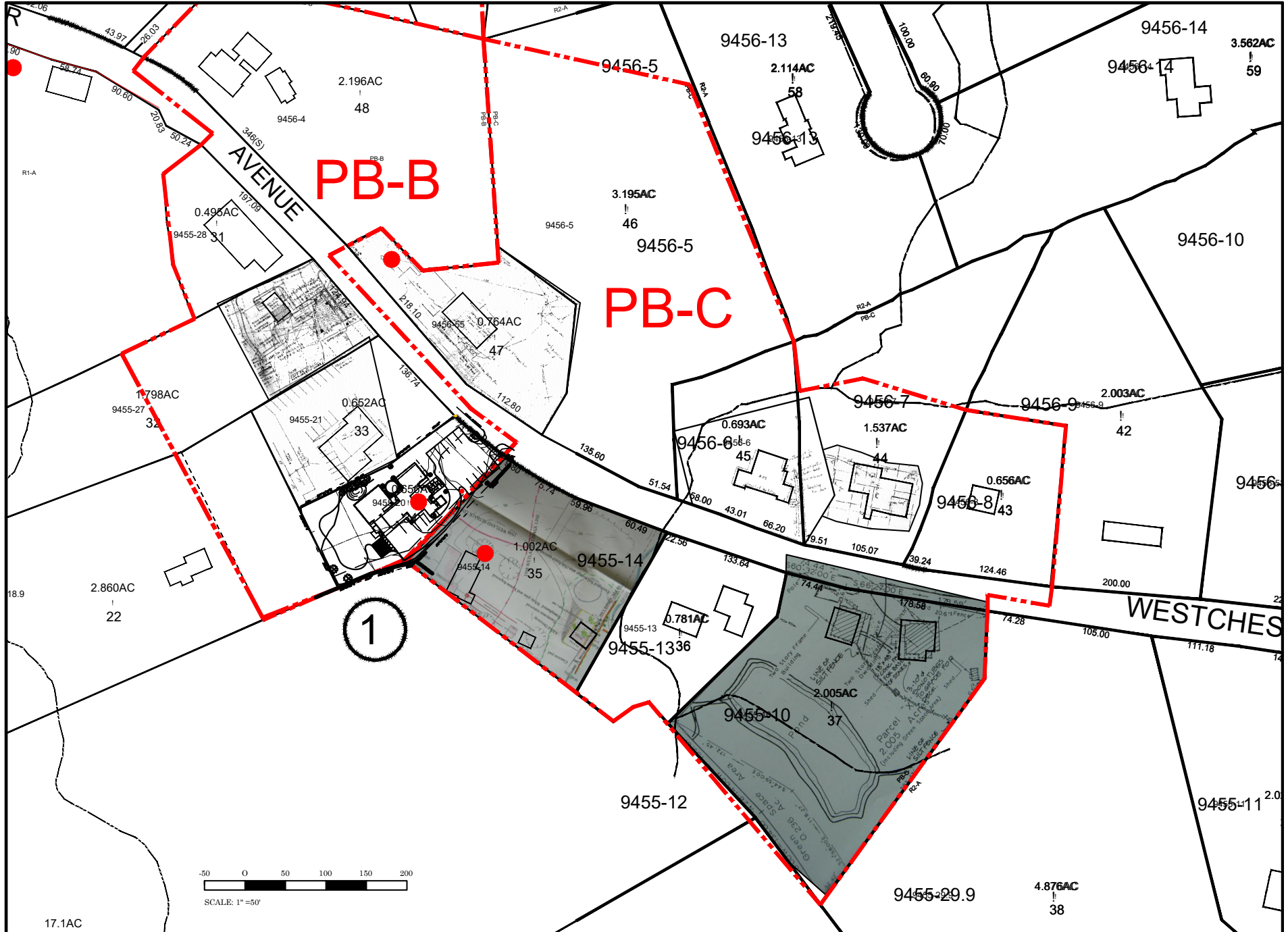
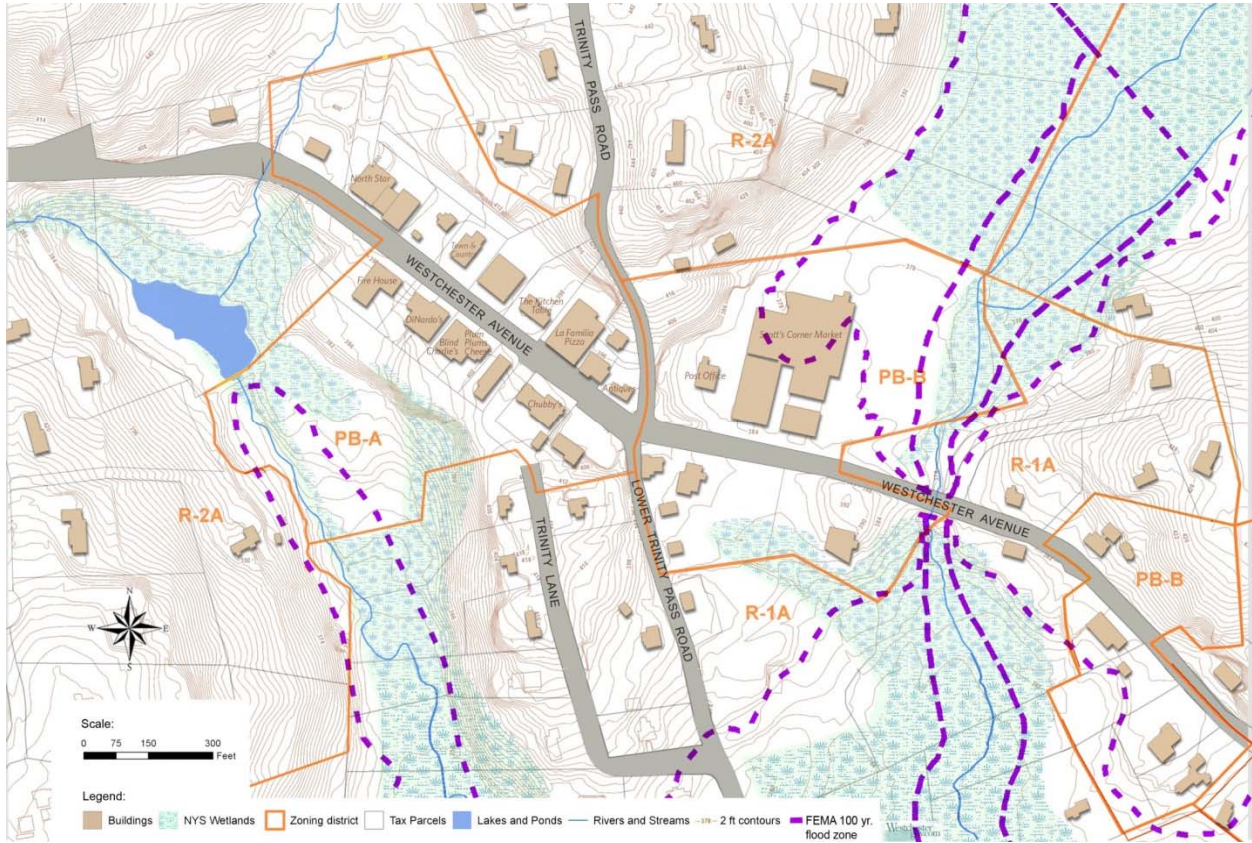


Figure 2c - Historical Septic System Data Zone PB-C



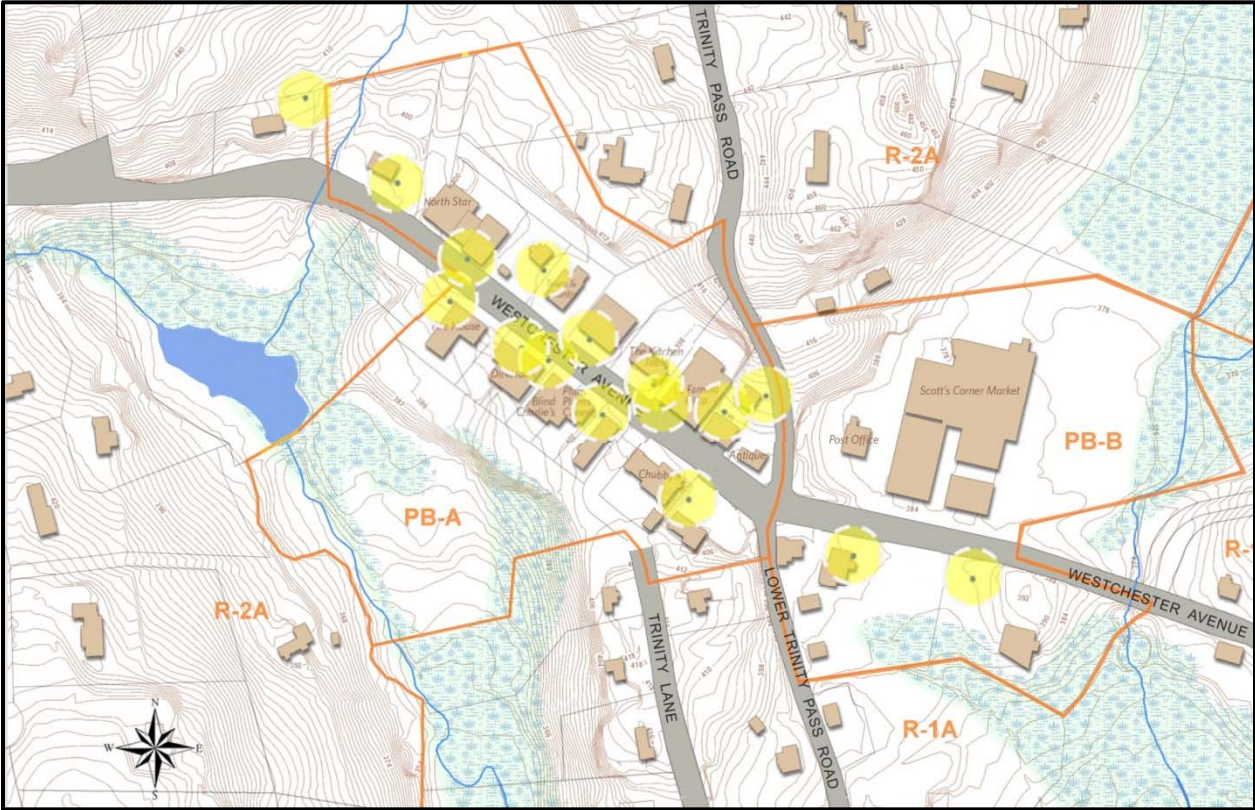
POUND RIDGE WASTEWATER TASK FORCE

Figure 3 Wetlands, zoning, and topography



POUND RIDGE WASTEWATER TASK FORCE

Figure 4 Wells and 100 foot setbacks



Wastewater Generation (Estimates)

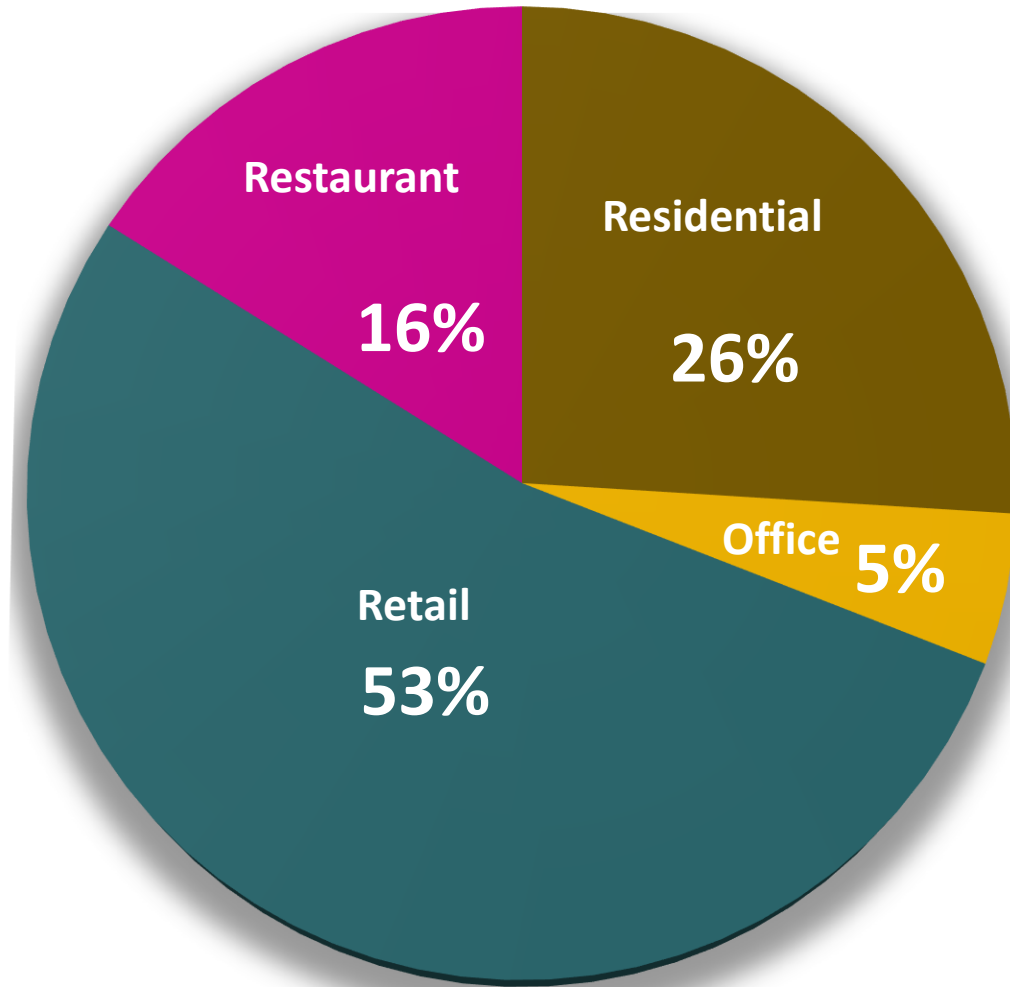
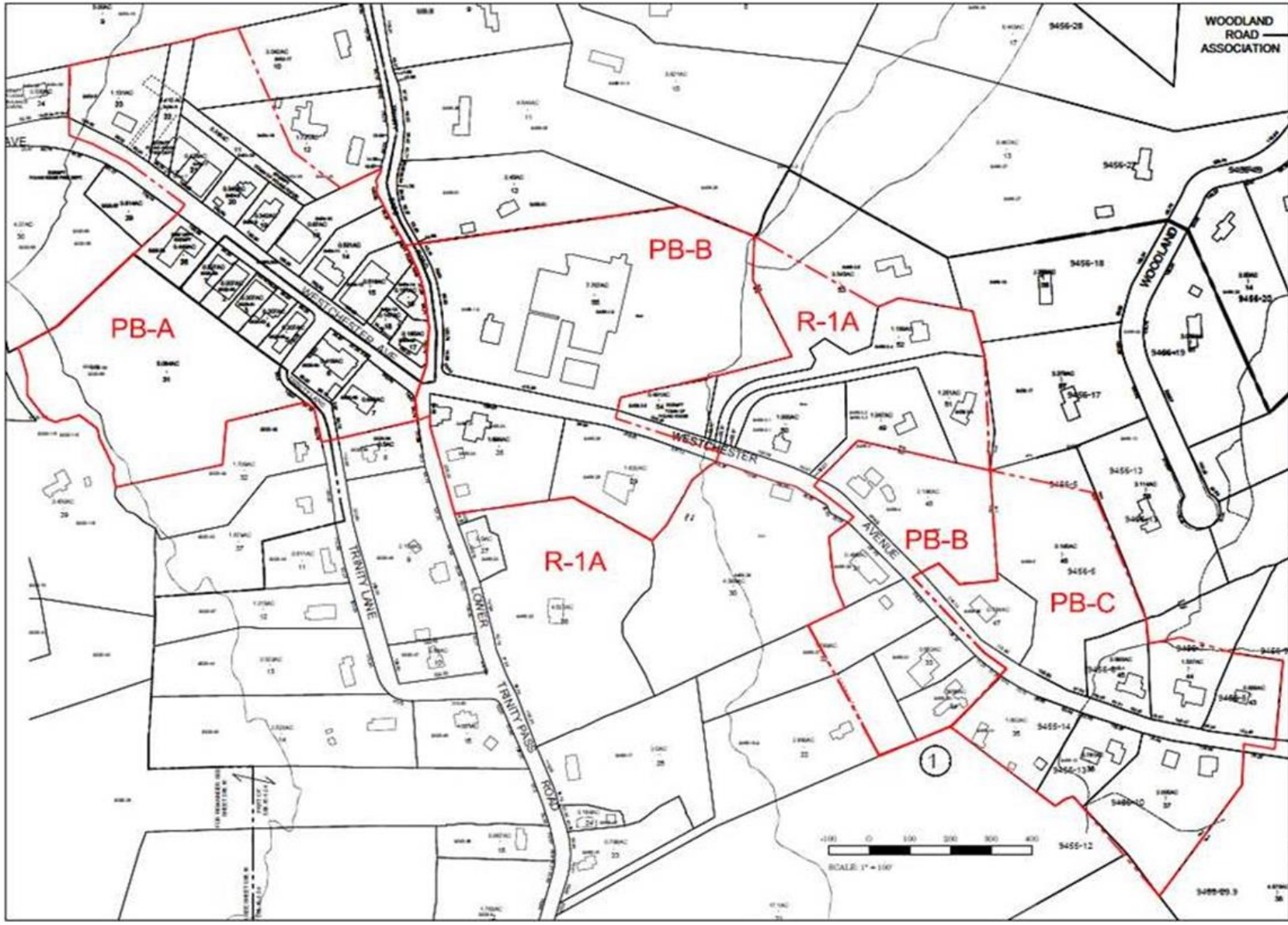


Figure 5: Flow Estimates

Appendix A

Business District Maps



WOODLAND ROAD ASSOCIATION

JAMES T. HEST ARCHITECT & ASSOCIATES
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TOWN OF POUND RIDGE
 WATER-WASTEWATER
 TOWN OF POUND RIDGE
 POUND RIDGE, NY 10576

SCALE: 1" = 100'

POUND RIDGE BUSINESS DISTRICT

SP-1



Scale:
0 75 150 300
Feet

Westchester.gov.com

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, apt 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

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

Table of Contents

	<u>Page</u>	
1.0	Summary of Findings, Conclusions and Recommendations	1
1.1	Findings	1
1.2	Conclusions	2
1.3	Recommendations	3
2.0	Introduction	3
3.0	Existing Conditions and Projections	5
3.1	Land Use	5
3.1.1	Existing Use	6
3.1.2	Future Use	7
3.1.3	Demographic Data	8
3.2	Flows	11
3.2.1	Estimate of Existing Flows	11
3.2.2	Projection of Future Flows	12
4.0	Treatment	14
4.1	Design Flows	14
4.2	Design Loads	14
4.3	Treatment Required	15
4.4	Collection System	17
4.5	Treatment Alternatives	18
5.0	Site Alternatives	19
5.1	Berman Parcel	20
5.2	Quade Parcel	21
5.3	Town Parcel	21
5.4	Treatment Plant Location	23
6.0	Estimated Project Cost	24
6.1	Estimated Capital Costs	24
6.2	Estimated Annualized Capital Costs	25
6.3	Estimated Annual Operation and Maintenance Costs	26
6.4	Estimated Total Annual Costs	26
6.5	Cost Allocation Alternatives	27
6.6	Alternative Financing Sources	28
6.7	New York State Revolving Fund Low Interest Loan Milestones	29
7.0	Implementation Task Schedule	30
8.0	Audit and Control Requirements	30

TABLES

Table 3-1	Existing Land Use in Scotts Corners
Table 3-2	Remaining Developable Square Footage in Scotts Corners
Table 3-3	Change in Square Footage in Scotts Corners 1974-1990
Table 3-4	Percent Change 1990 to Saturation
Table 3-5	Projected 2012 Square Footage Increase at 0.75%/Year Growth
Table 3-6	Estimated Existing Flows in Scotts Corners
Table 3-7	Estimated Flow at Saturation
Table 3-8	Estimated 2012 Flow
Table 4-1	Design Loads
Table 5-1	Percolation Rates on Town Parcel
Table 5-2	Comparison of Pumping Raw Waste vs. Treated Effluent
Table 6-1	Estimated 1992 Construction Cost
Table 6-2	Estimated Annualized Capital Cost & Parameters
Table 6-3	Estimated Annual O&M Costs
Table 6-4	Estimated Total Annual Costs Under NYSDEC Loan Program

FIGURES

Figure 3-1	Proposed Scotts Corners Wastewater District
Figure 3-2	Scotts Corners Wastewater District Commission Questionnaire Responses
Figure 4-1	Conceptual Collection System Sketch
Figure 4-2	Process Flow Diagram
Figure 5-1	Deep Hole Test Locations Berman & Quade Parcels
Figure 5-2	Town Parcel Soil Test Location Sketch
Figure 5-3	Sketch of Approximate Force Main Routing From STP
Figure 7-1	Implementation Task Schedule

APPENDICES

Appendix A	Trinity Corners Shopping Center SSDS Failure History Since 1980
Appendix B	Deep Hole Test Data
Appendix C	Extract From NYS Audit and Control Board Requirements
Appendix D	Extract From NYS Revolving Fund Intended Use Plan (Draft) 1992
Appendix E	Siano Violations
Appendix F	Westchester County Health Department Comments on Chromaglass System
Appendix G	State Revolving Fund Direct Loan Application Form
Appendix H	Farmers Home Administration Loan Application Form
Appendix I	Housing and Urban Development Loan Application Form

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.

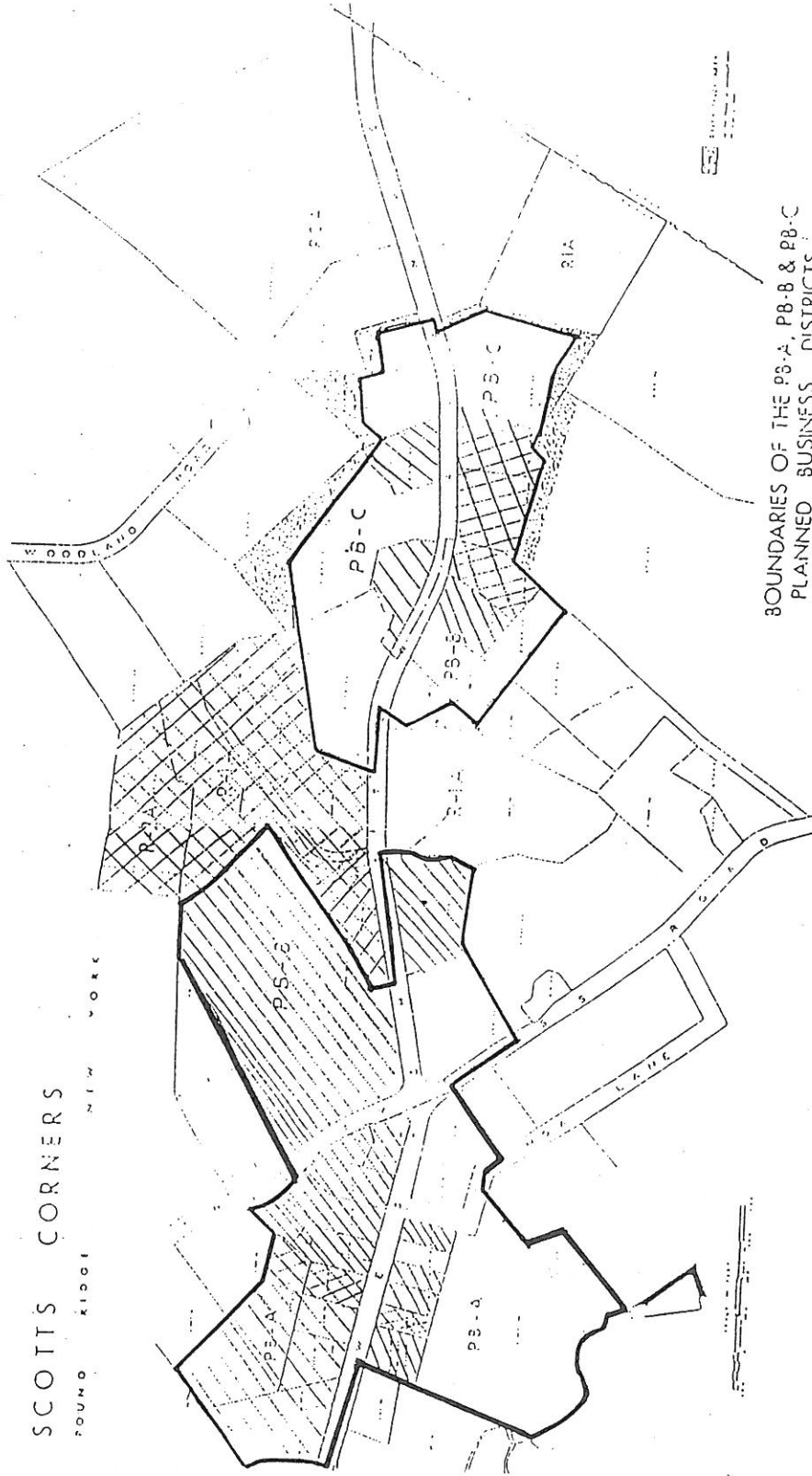
The Scotts Corners Commercial District area encompasses approximately 41.1 acres. This is divided into primary and secondary zones (see Figure 3.1). The primary zone encompasses 24.43 acres and the secondary zone encompasses 16.68 acres.

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 COMMONS AT ITS REGULAR MEETING, APRIL 14, 1983

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

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

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

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

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

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

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

Table 3-8

<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>
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.

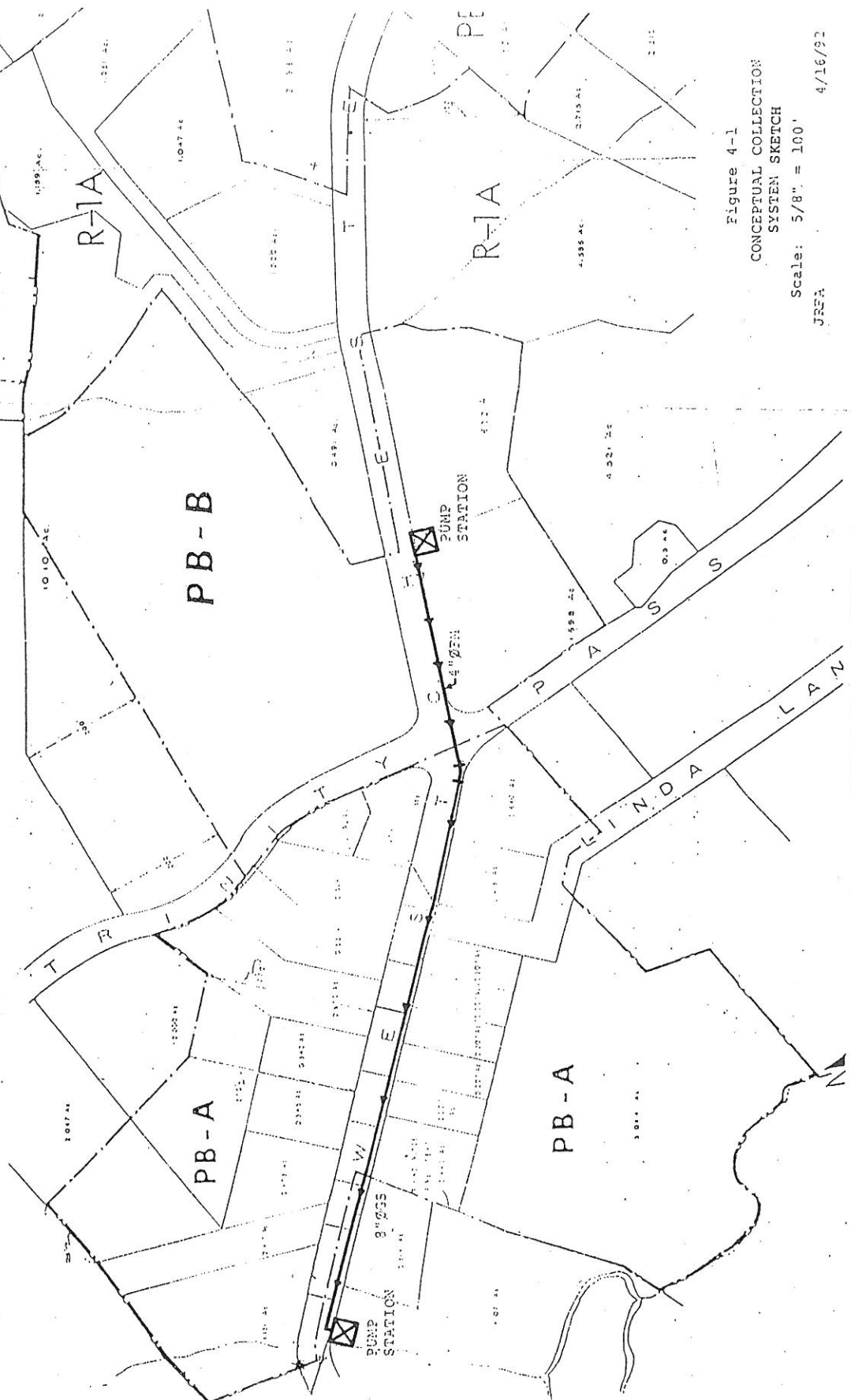
4. Failure of a 30,000 gpd SSDS without pretreatment would present problems several orders of magnitude greater than those historically associated with the Trinity Corners Shopping Center.
5. Given the regulatory situation and geologic and hydrologic conditions in the Scotts Corners area, pretreated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

Handwritten note: -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.

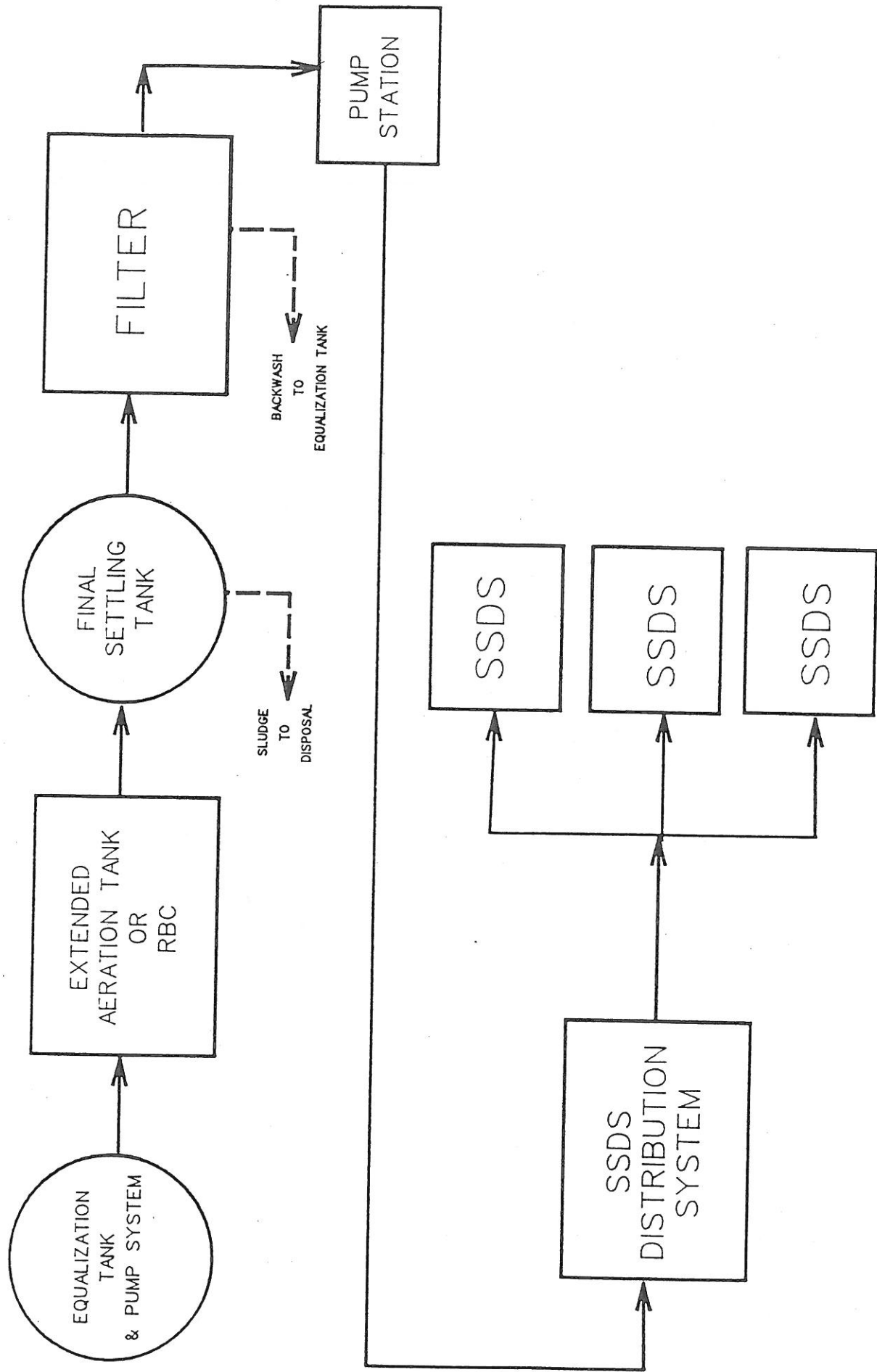


FIGURE 4-2
PROCESS FLOW DIAGRAM

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

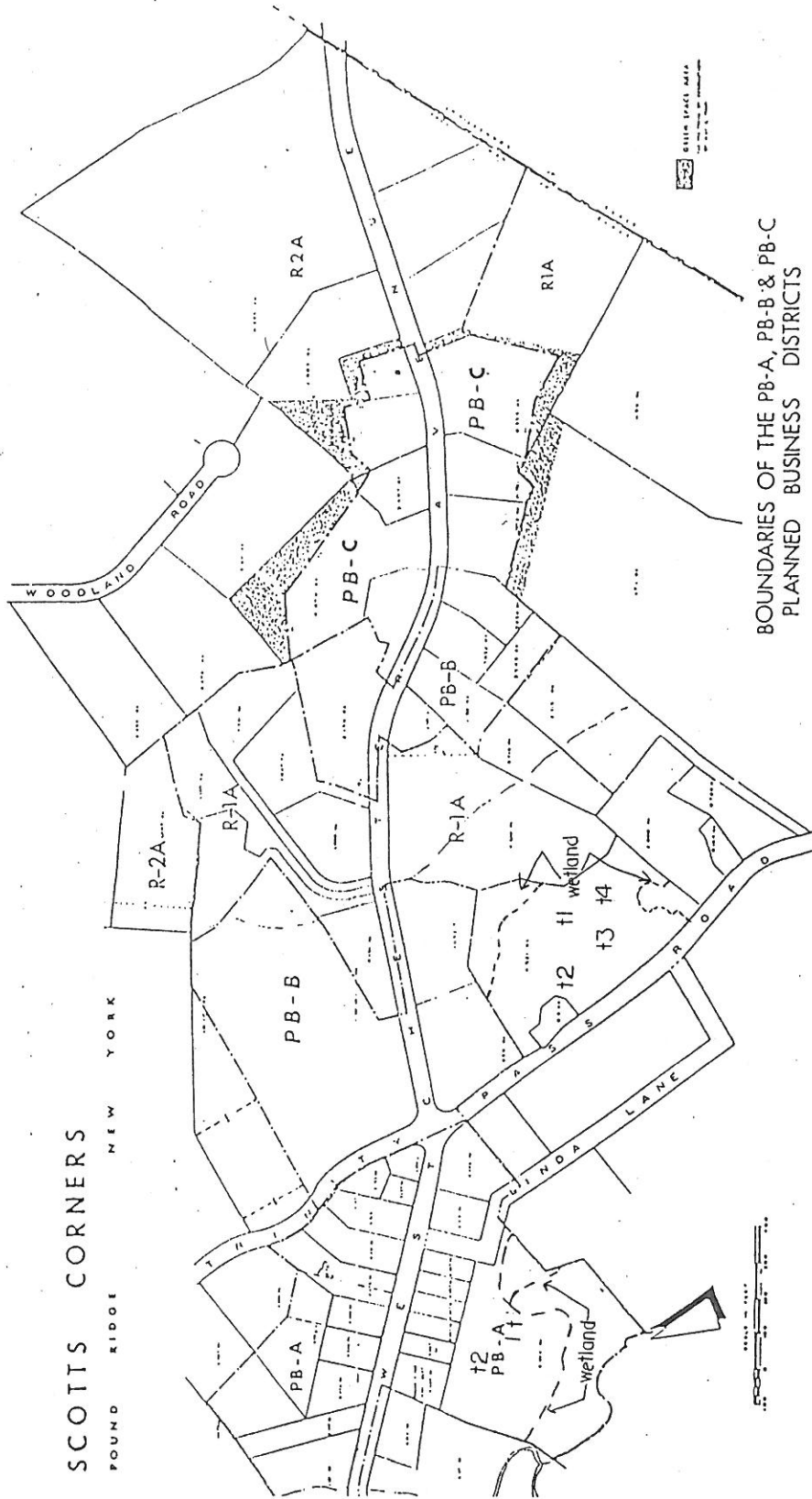
required minimum SSDS area of approximately 2 acres. Additional area would be required for buffers and pumping/distribution structures and expansion.

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

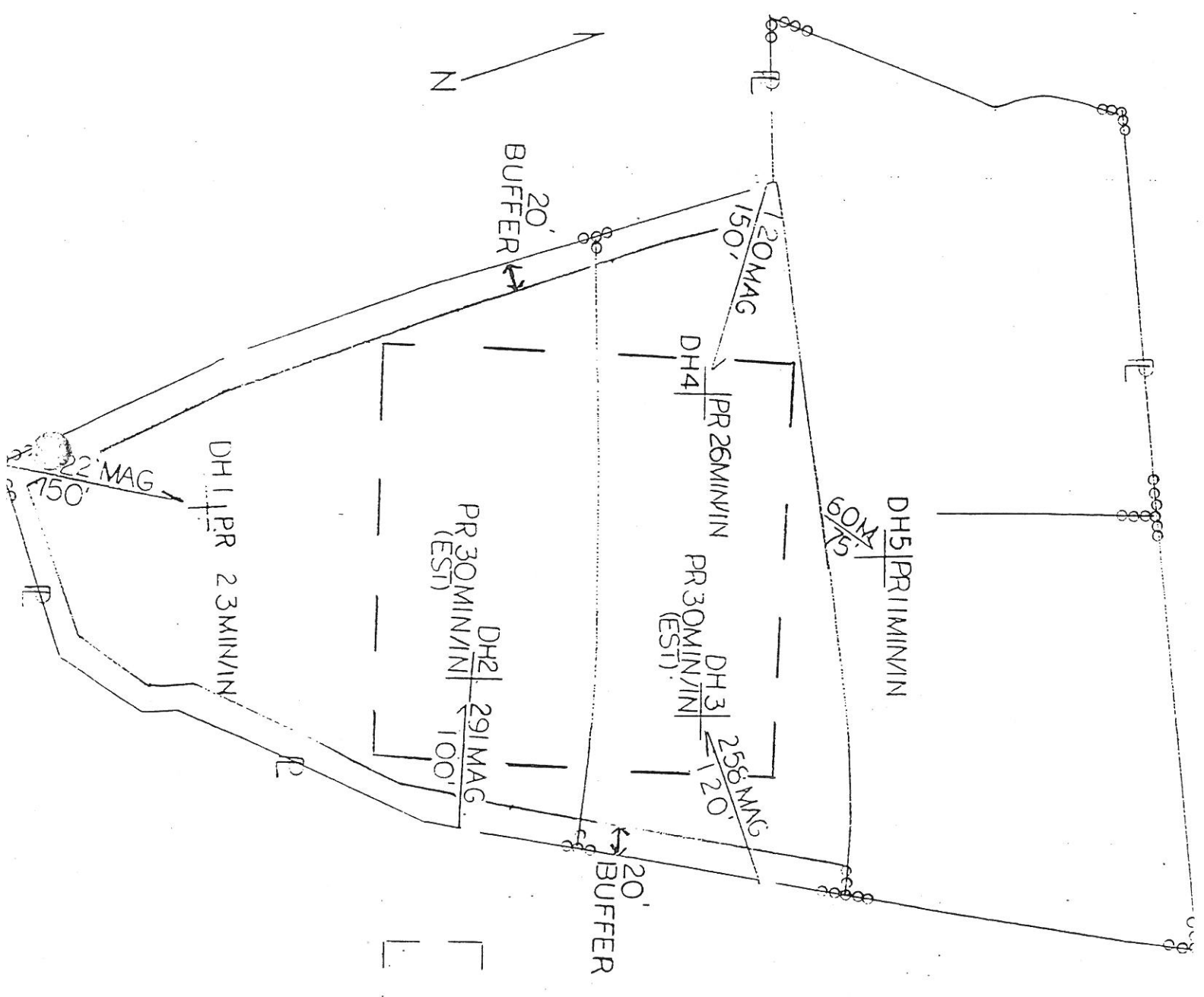
+ - D.H. Location

Figure 5-1

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

JRFA

4/92



TOWN PARCEL SOIL TEST
LOCATION SKETCH

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

GROSS AREA
 SSDS AREA
 REOD

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

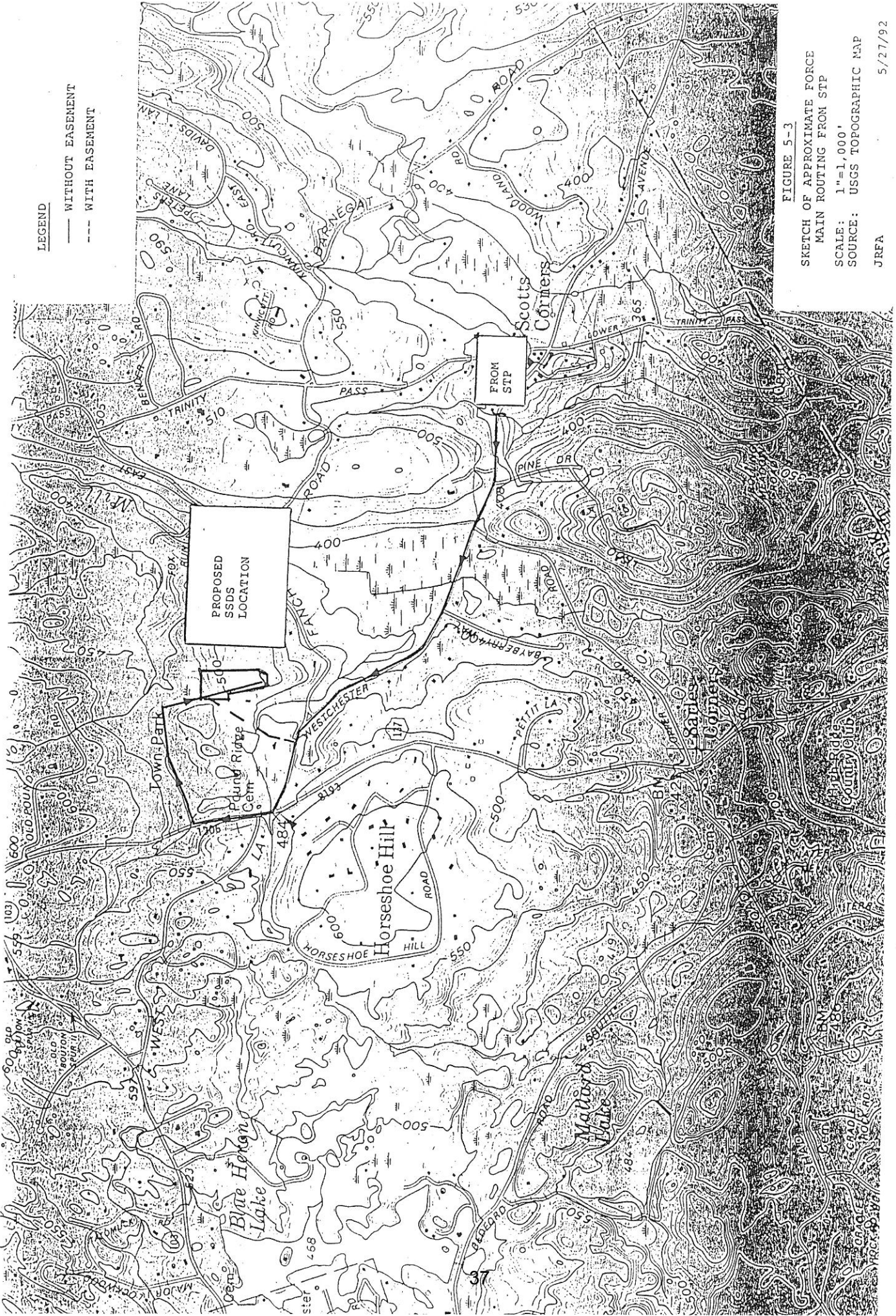
Based on the preliminary soil data, the Town parcel appears to be suitable for a SSDS location. It should be noted that this is data typically collected during SSDS

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



LEGEND

- WITHOUT EASEMENT
- - - WITH EASEMENT

FIGURE 5-3

SKETCH OF APPROXIMATE FORCE
 MAIN ROUTING FROM STP
 SCALE: 1"=1,000'
 SOURCE: USGS TOPOGRAPHIC MAP
 JRFA 5/27/92

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

Table 5-2

Comparison of Pumping Raw Waste vs. Highly Treated Effluent

<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.

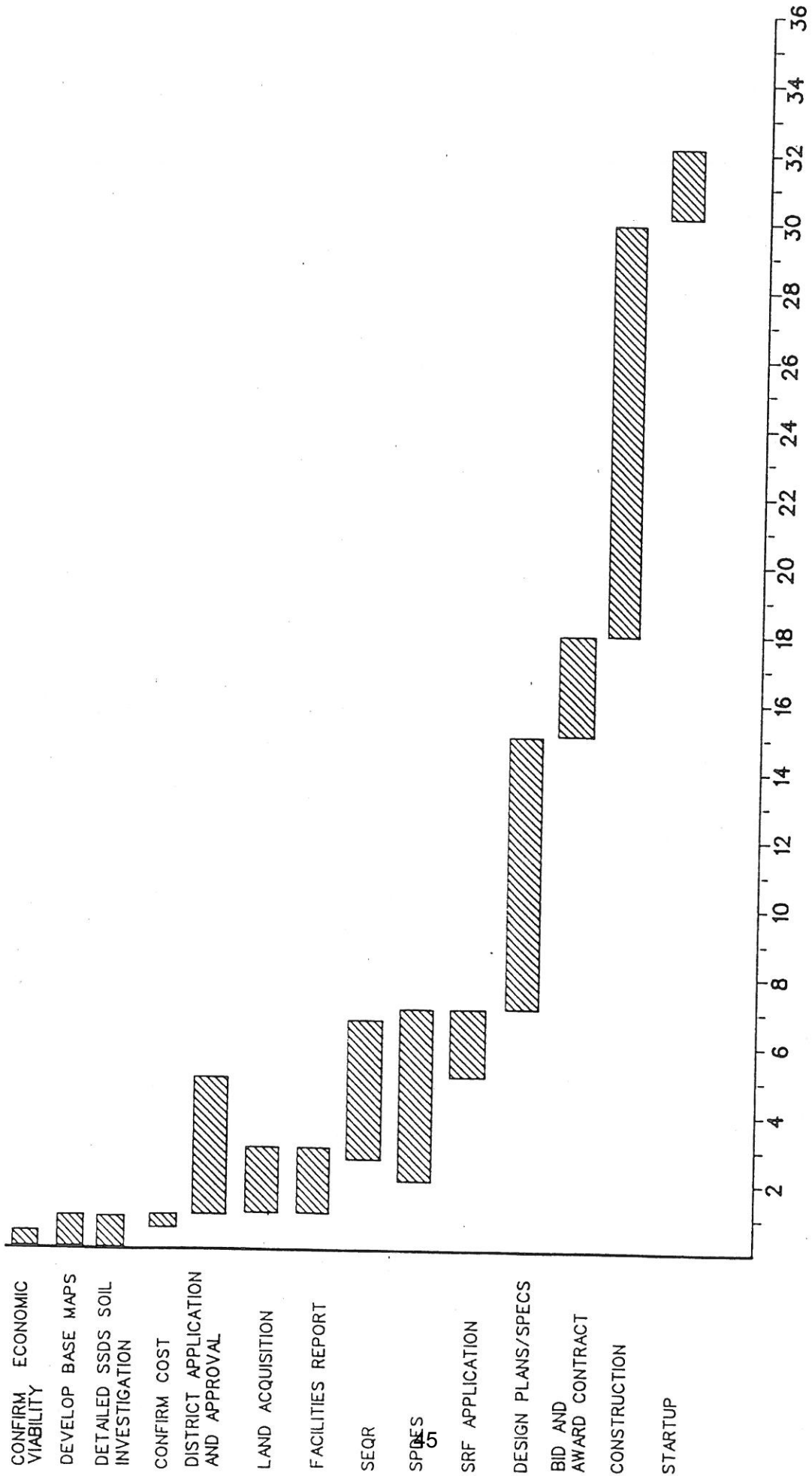
- 6.7.1 Establish Municipal Wastewater Treatment District.
- 6.7.2 Collect Water Quality data from Stamford Water Company.
- 6.7.3 Complete Facility/Engineering Report.
- 6.7.4 Meet with DEC for scoring of application.
- 6.7.5 See Appendix D for SRF Requirements.

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

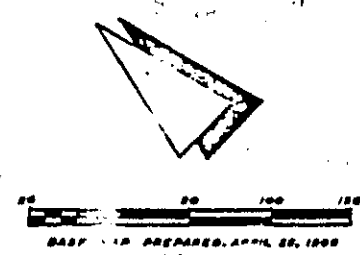
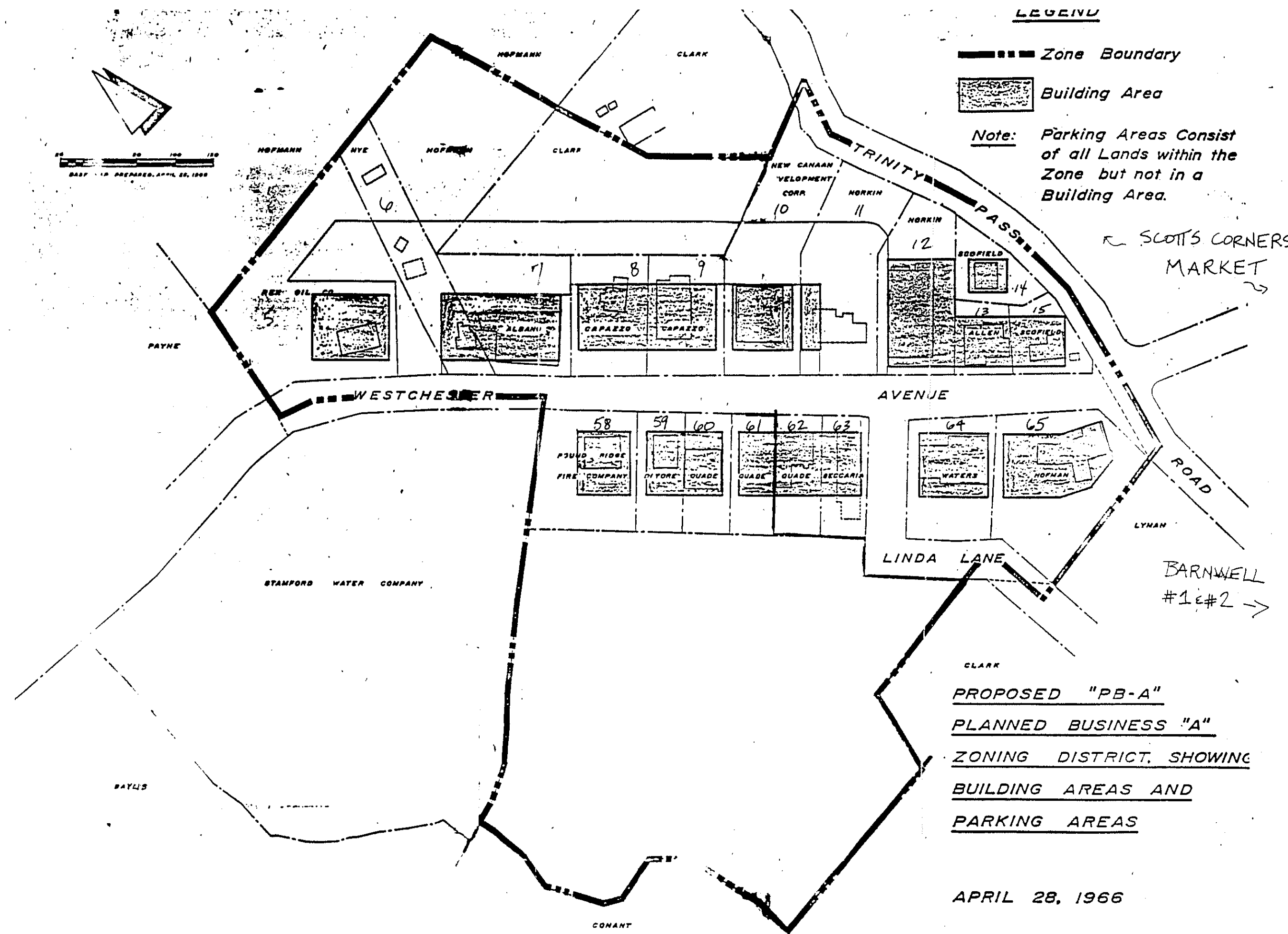
**TOWN OF POUND RIDGE
SCOTTS CORNERS WASTEWATER TREATMENT STUDY
EXISTING CONDITIONS ASSESSMENT**

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 **Date:** June 29, 2000
M. Morgante, WHI

Copy: Project Files, 3541003

From: John Ifkovits, NNJ

Re: Scotts Corner Test Pits and Percolation Tests

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

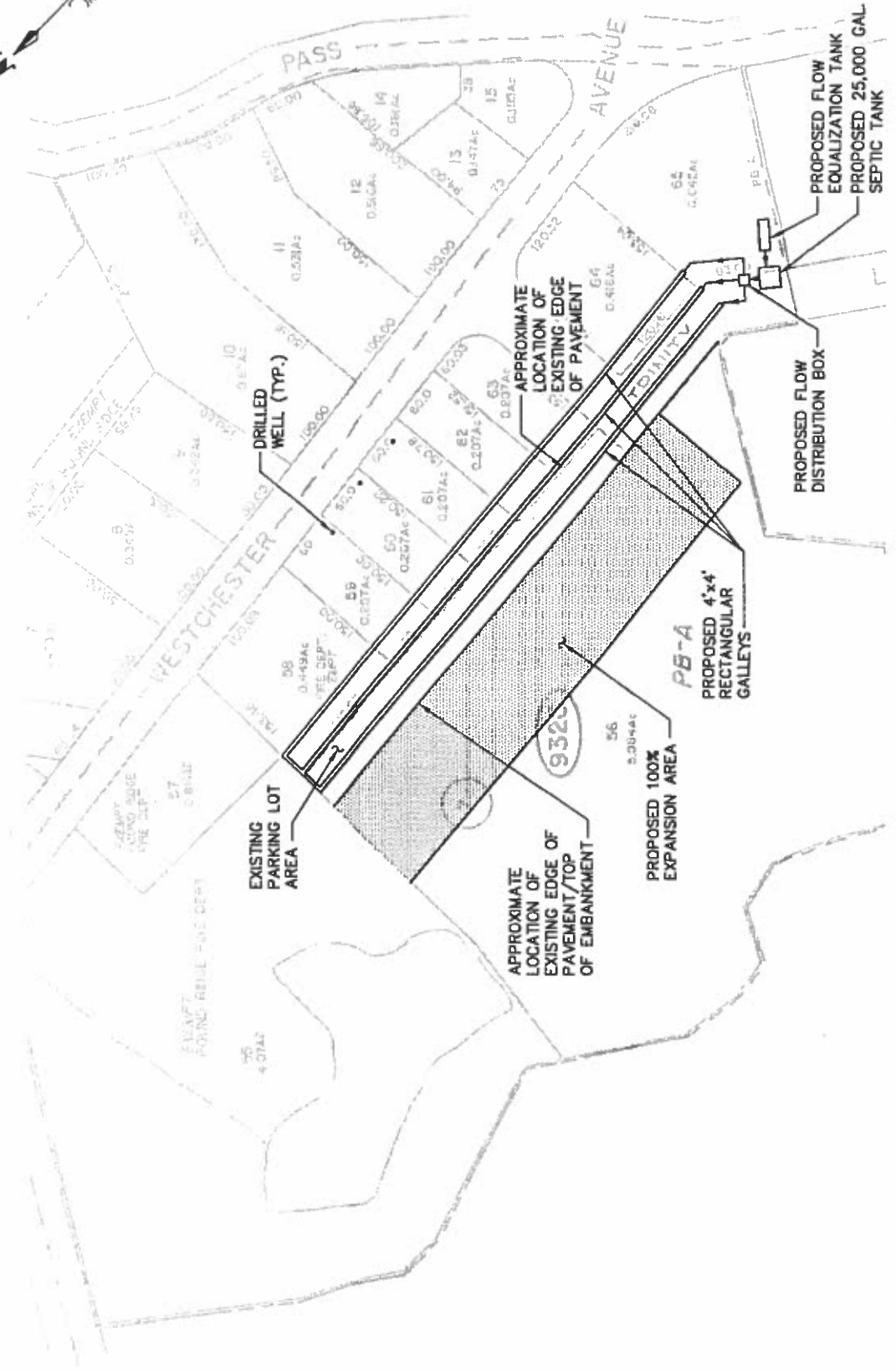
Mike departed the site during the excavation of the second test pit. Ed was content with three test pits. Additional test pits were planned for the area of the parking lot near the firehouse however Ed said they would not be necessary because the WCDOH has extensive records of the soils in this location.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

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

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

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

jji
Attachments
3541003





**MALCOLM
PIRNIE**

**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.

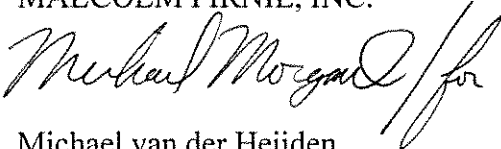
Upon the review and acceptance of the preliminary design by the regulatory agencies, the next phase of the project would require the following:

- 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) Westchester Ave 	
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 Delaney (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		[Symbol]		
				1	4"-10' sand, silt, cobbles, boulders with organics tan brown to dark brown, dry, compact (Miscellaneous Fill)		[Symbol]		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.

Mr. Clay Fowler
Town of Pound Ridge Planning Board

September 26, 2000
Page 2

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

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40 RAILROAD AVENUE
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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
April 11, 2002
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
Page 4

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

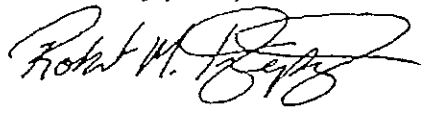
BHC has indicated that the storage tank being contemplated for the Golf Course will be owned and operated by BHC for its Connecticut customers. Peter Galant, BHC, believed that the proposed tank size is adequate to serve the Scott's Corners Area originally contemplated for service, but could not recall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

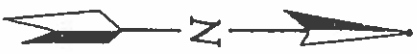
BY Fred D. Jewick, Supervisor

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 (BWC) PROPERTY
 - ▩ PROPERTIES WHERE MTRB WAS DETECTED

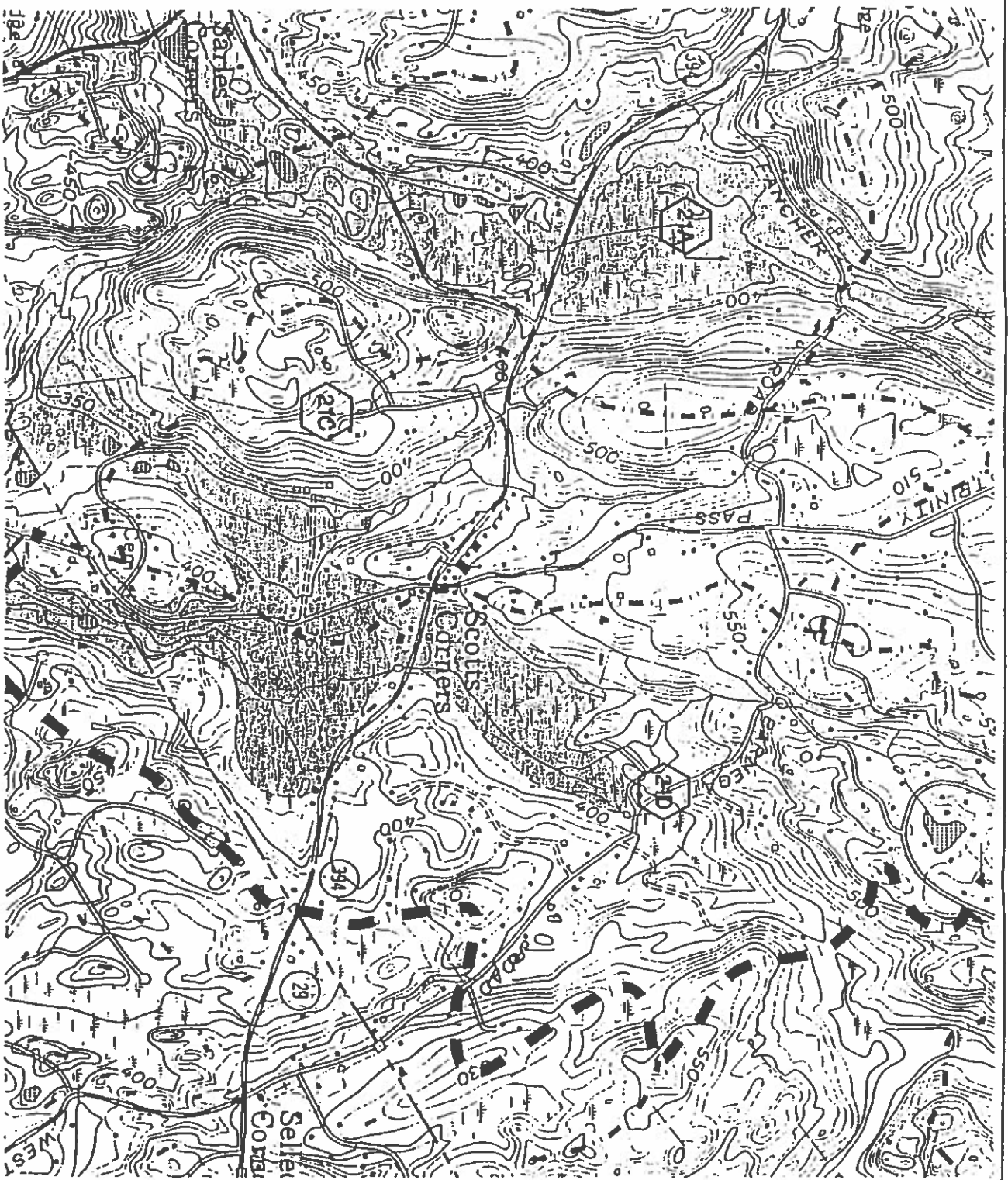


**BRIDGEPORT HYDRAULIC COMPANY
 HYDROGEOLOGIC ASSESSMENT
 POUND RIDGE, NEW YORK**

STUDY AREA AND PROPERTY MAP

DATE	REVISED	DRAWN	CHECKED	DATE	FIGURE

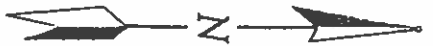
PREPARED BY:
LBOCETTE BRASHBARS & GRAHAM, INC.
 Professional Ground-Water and Environmental Engineering Services
 126 Moore's Turnpike
 Trumbull CT 06611
 (203) 432-3100



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
 - 21C 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.



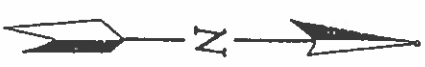
**BRIDGEPORT HYDRAULIC COMPANY
HYDROGEOLOGIC ASSESSMENT
POND RIDGE, NEW YORK**

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, Torrington
		Torrington, CT 06811
		(203) 433-1100
DRAWN BY:	CHECKED BY:	DATE:
WV	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
- ▨ STAFFORD WATER COMPANY (BMC) PROPERTY

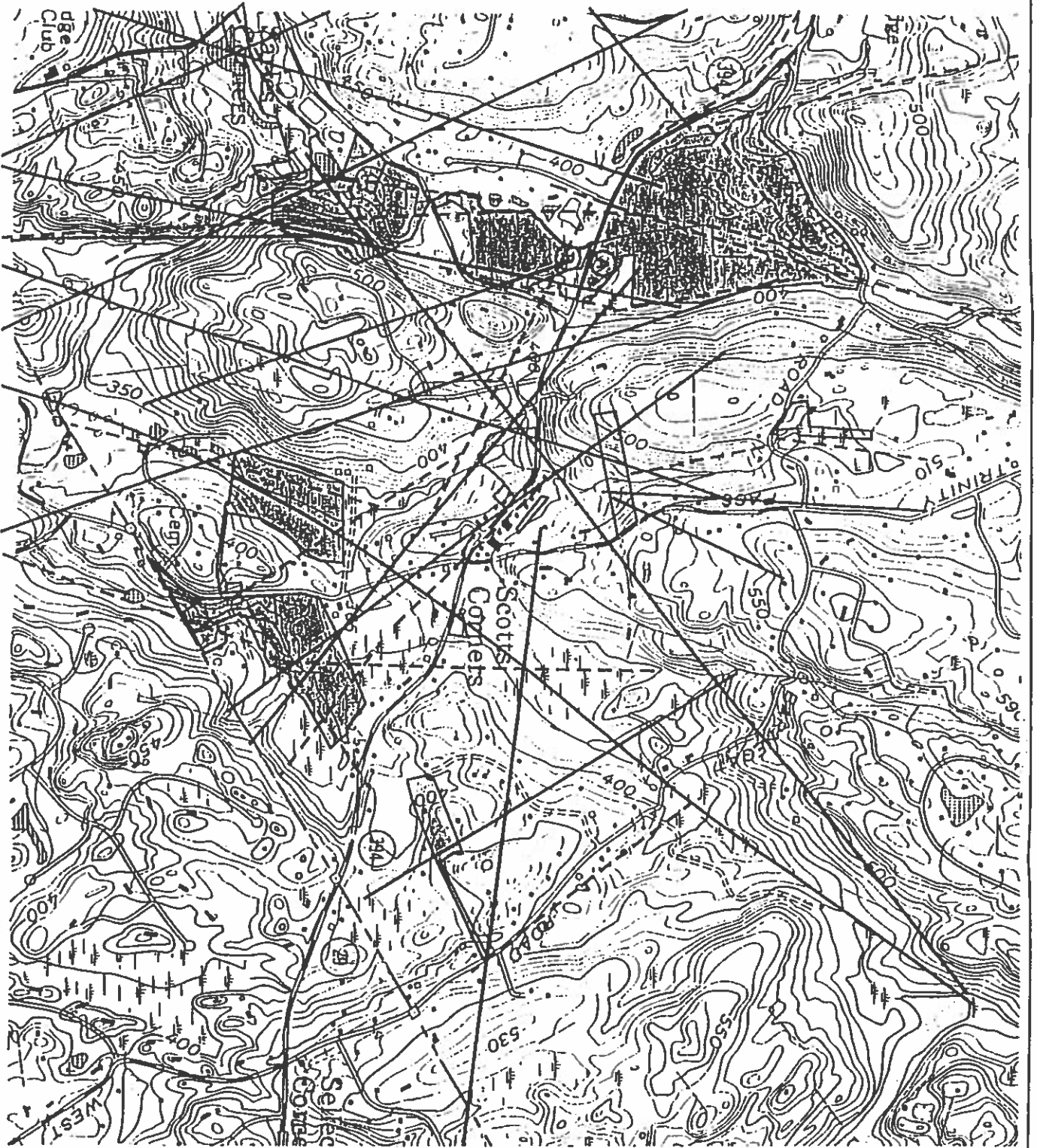
↙ SEE TABLE I FOR WELL INFORMATION



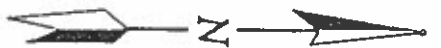
**BRIDGEPORT HYDRAULIC COMPANY
 HYDROGEOLOGIC ASSESSMENT
 POUND RIDGE, NEW YORK**

BEDROCK WELL LOCATIONS

DATE	REVISION	PREPARED BY
		LEOGERTE, BRASHBARS & GRAHAM, INC.
		Professional Geologic, Hydr. and Environmental Engineering Services
		126 Main Street, Torrington, CT 06801
		(203) 452-3100
DATE	CHECKED BY	DATE
1/21/97	JAB	1/21/97
DATE	APPROVED BY	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:

LEBOEUF BLAISHEARS & 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

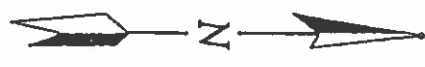
DATE: 4/28/97

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, BRASHEARS & 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 I 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>PG</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

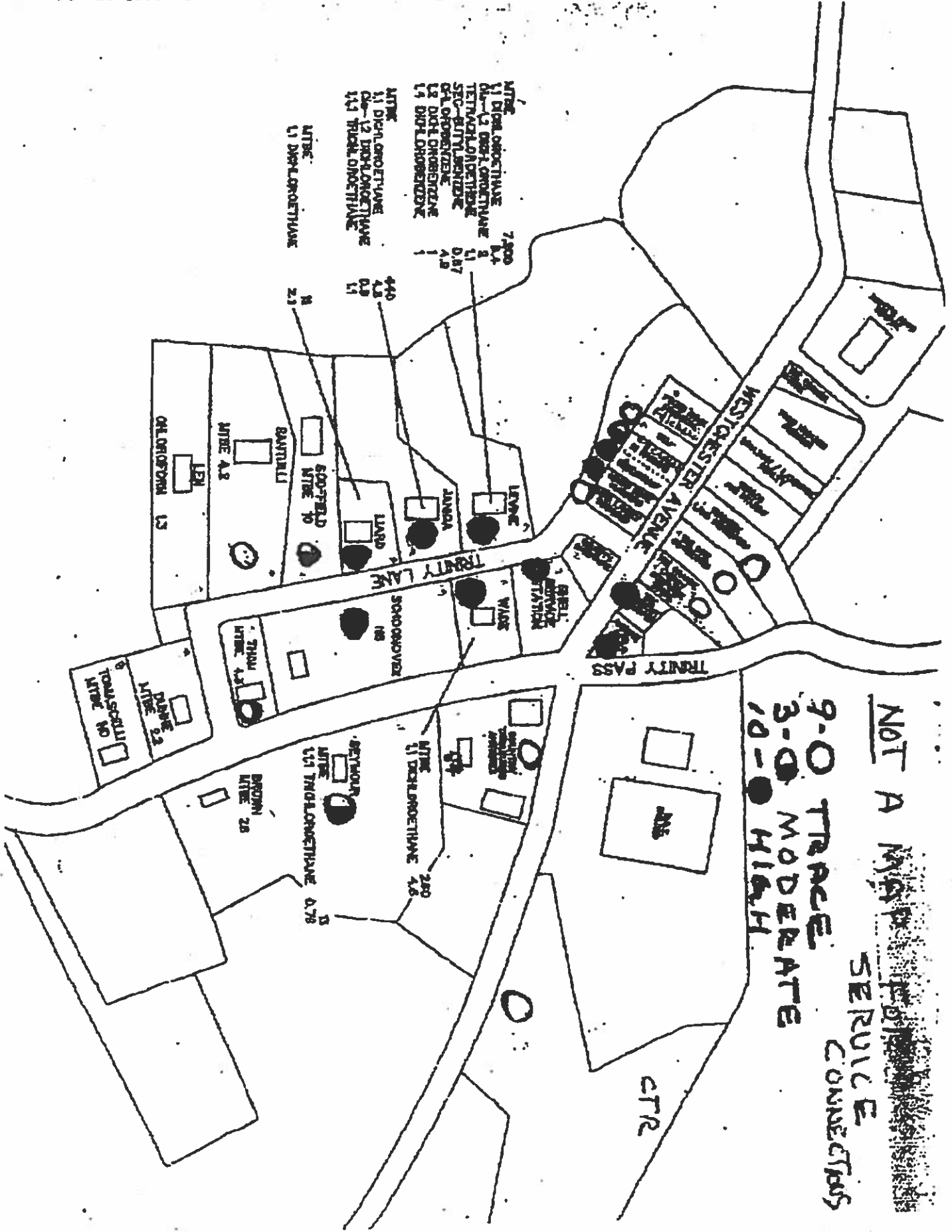
See cost notes from 5/12/97 letter to Shell Oil

NOU-26-1996 14:55 FROM STAMFORD WATER CO.

TO

912833375839

P.02



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

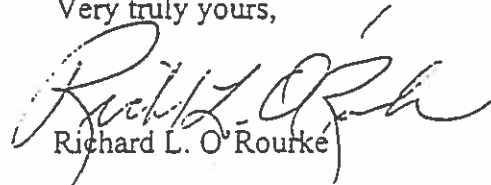
Re: BHC Company, Town of Pound Ridge Water Supply

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.

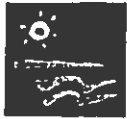
Town Attorney

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.

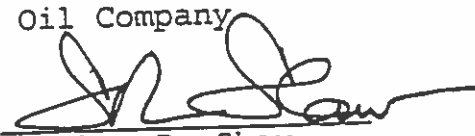
7. BHC shall complete the work required by this Agreement (including providing a cost estimate) within 120 days of the execution of this Agreement by Shell which 120 days shall not include the period of review and comment set forth in

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. Fieric
Title: Senior Vice President & COO

Shell Oil Company

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

**POUND RIDGE SITES UNDER
CONSIDERATION FOR CONNECTION
TO PUBLIC WATER**

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

1999 Nov. 23: Letter indicating the New Canaan would oppose any street openings that are required for the BHC Pound Ridge Water Supply Project.

June 22 1999: Letter from BHC to Keane and Beane regarding an estimate for the work for a pipeline at the cost of \$2.1 million and a ground water source for Pound Ridge from wells at \$500,000. The proposed well location is in a wetland. Permissions and permitting not addressed.

June 14, 1999 Letter from New Canaan selectman to Joy Simpkins, vague denial (of project?).

May 4, 1999 Meeting Notes from New Canaan and Pound Ridge representatives resulting in denial of project based upon New Canaan not issuing permits. A water line might cause cause "downzoning" of that area of New Canaan. This superseded discussions about repaving costs which were also discussed.

Sept. 8, 1999 Letter from BHC to Joy Simpkins regarding rights of BHC to put pipelines in New Canaan roads and a comment on water rates.

BHC Company
600 Lindley Street
Bridgeport, CT 06606-5044

Telephone
203.367 8821



BHC
An Aquarion Company

RECEIVED

NOV 30 1999

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

November 23, 1999

Re: BHC Company - Pound Ridge Water Supply

Dear Rick:

This letter is written in response to Shell Oil's request to proceed with bidding the proposed pipeline project in order to select a contractor and apply for the street opening permit required from the Town of New Canaan. The Town of New Canaan has made clear not only its opposition to the proposed pipeline in 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", with 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 # _____

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

MESSAGE: Pipe Line Project involves:

7,095 ft. in New York State

8,279 ft. in Connecticut

New York is:	Lower Trinity Pass	-	3,260 ft. ✓
	Trinity Pass		1,415 ft. ✓
	Trinity Lane		945 ft. ✓
	Westchester Avenue		1,480 ft. ✓

He will fax us this information on Monday.

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

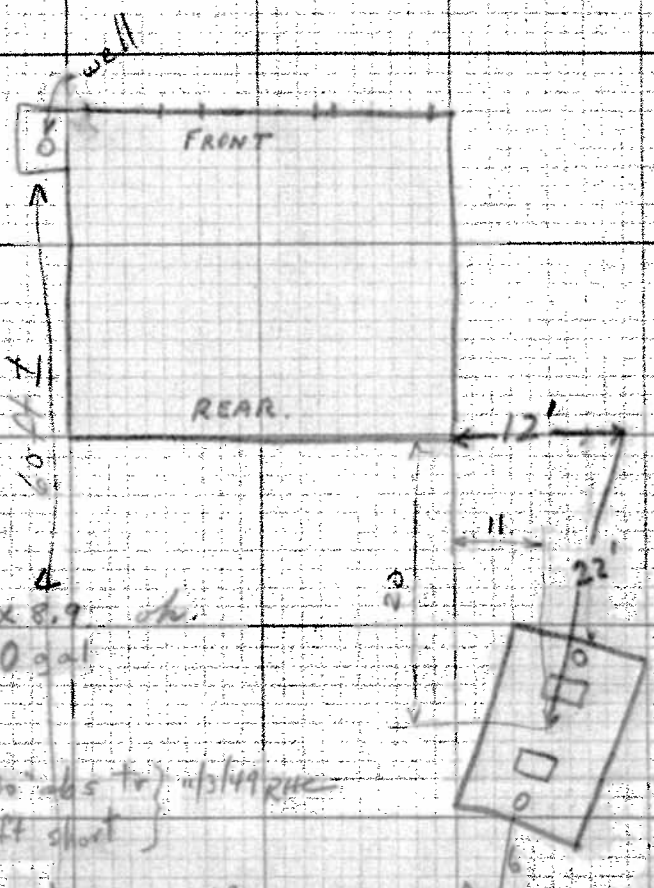
Town of Poundridge

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 D. Sullivan

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

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

Date 2/14/95 Mark S. Raboport, 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.

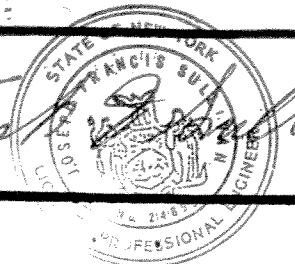
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLE

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

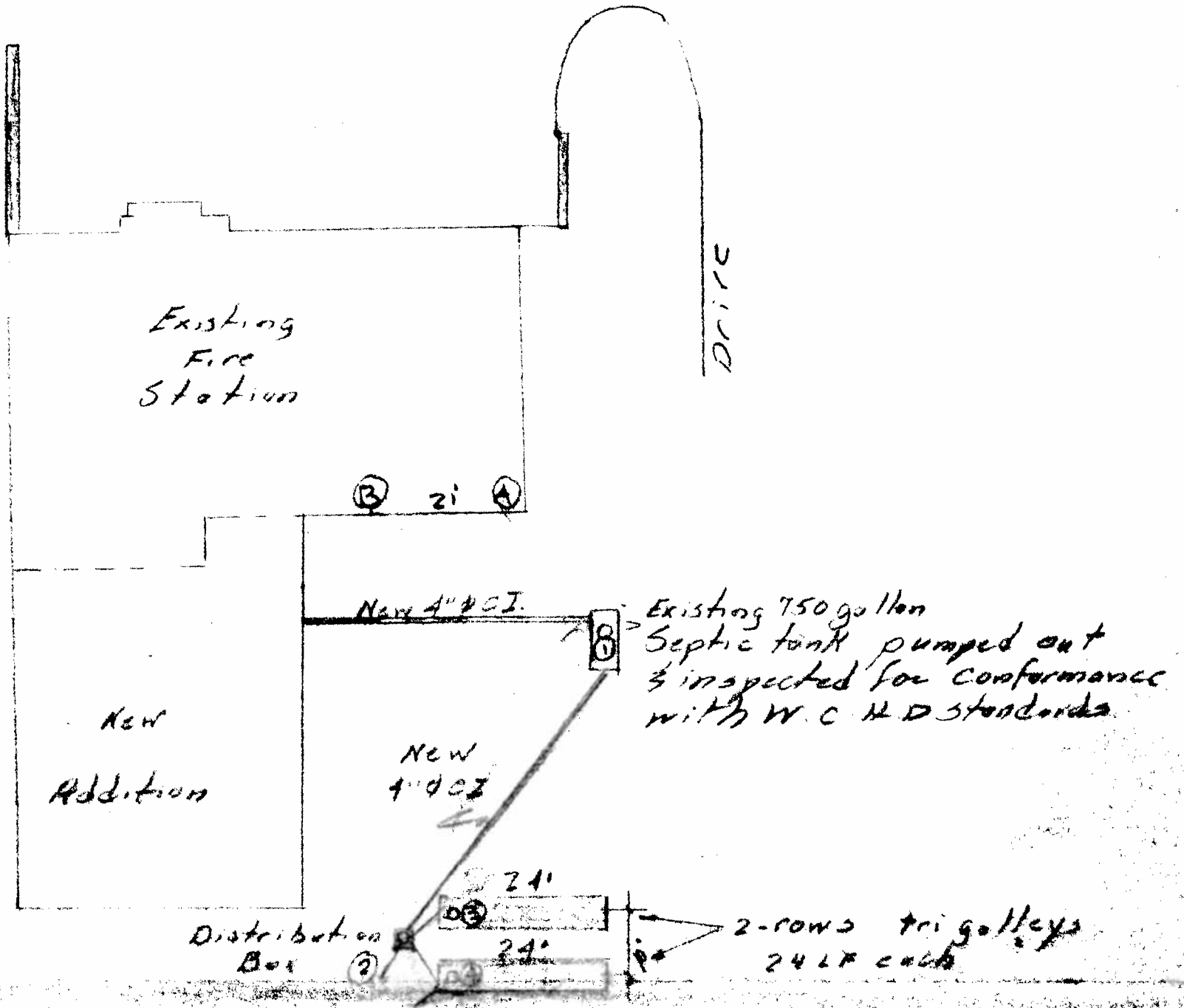
DESIGN
 Soil Rate Used 0-5 ML/1" Drop: S.B. Usable Area Provided -
450 gallons/day.
 No. of Bedrooms 4 Septic Tank Capacity 750 Gals. Masonry Metal
 Absorption Area Provided by 48 J.P.S. 24" 36" width trench. Other tri-galleys

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



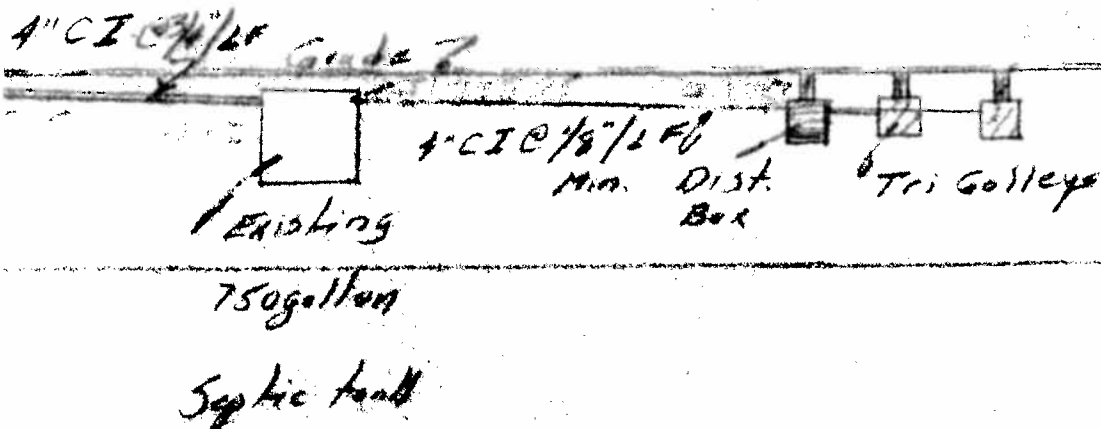
Norchester County Health Department
 Soil Rate Approved 0-5 ML/1" Drop. Checked by [Signature]
 Date [Signature]
 S.D. 87.6 (Rev. 5/78)

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

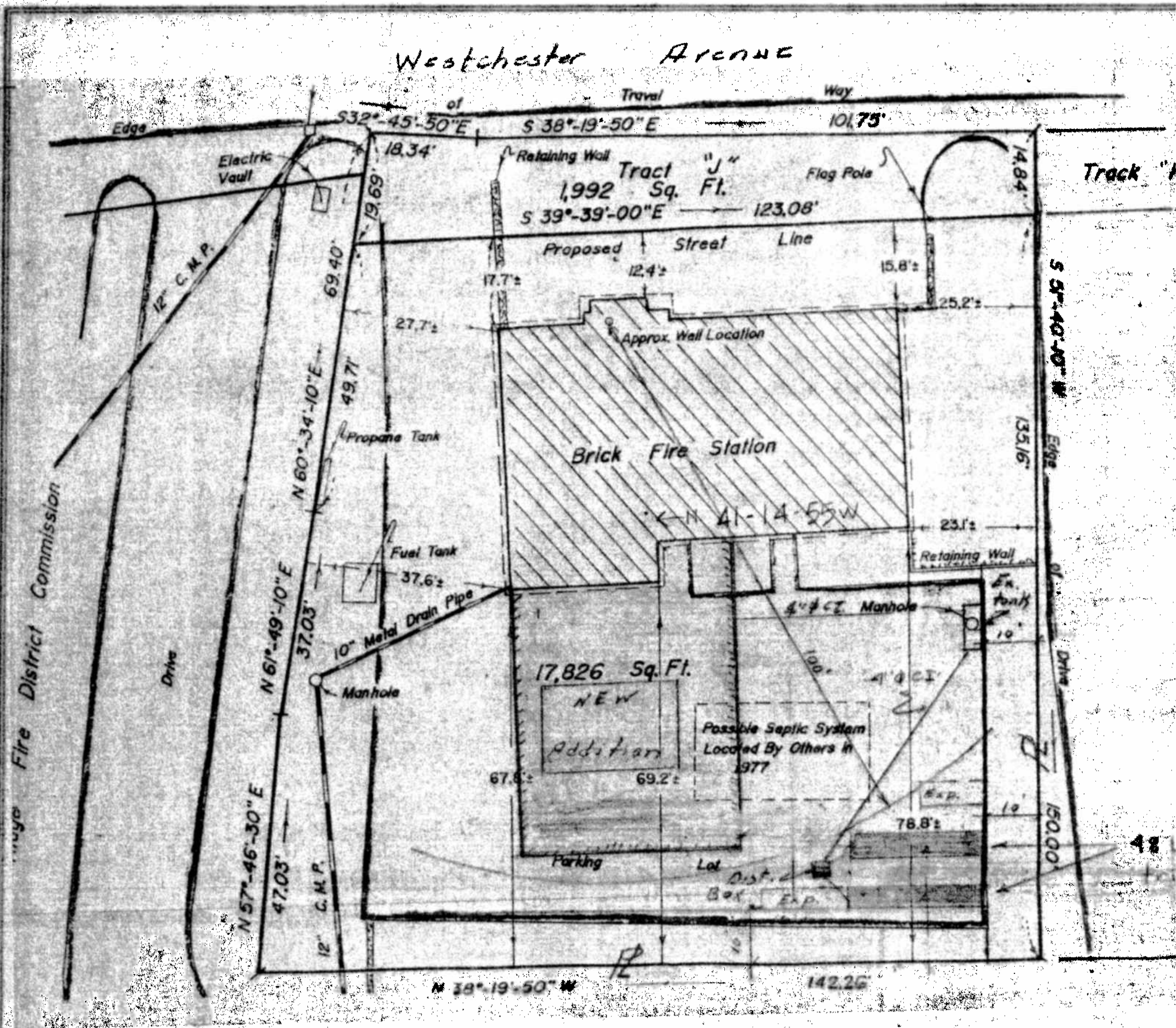
AS-BUILT SEWAGE DISPOSAL SYSTEM

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. ...*



PLAN

Scale 1" = 20'-0"

9320-59 78 WESTCHESTER AVE

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

ION OF SANITATION

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

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

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

To the Commissioner of Health: *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 refing*
Extra lavatories.....Special Fixtures.....Maximum Future Occupancy.....*for child*

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.....sq. ft.

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.

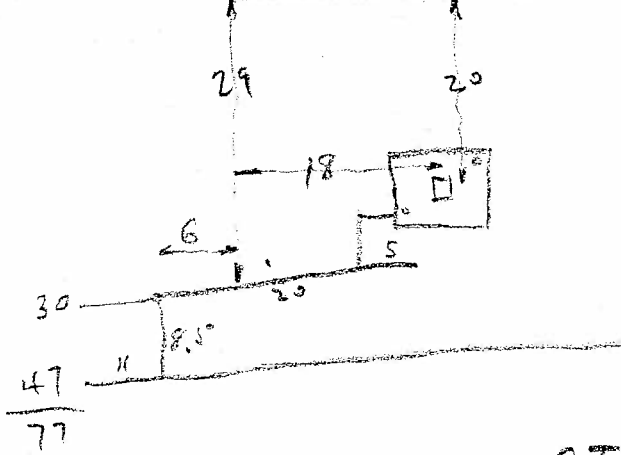
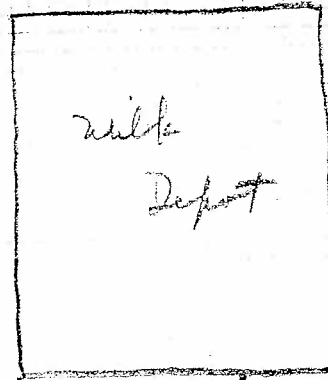
Town of Pound Ridge
John & Frank Di Tore, Westchester Avenue
4/19/51 - 500 gal. 75' x 24"

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 4/19/51¹⁵⁰

Approval 5/29/51

Location: Westchester Avenue

Section _____ Block: _____ Lot: _____

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

Builder: John Di Tore, (same)

House: 1 building for dairy & garage.

Soil test made: 4 min. per inch Rate:

Tank capacity: 660 gal. Material: Masonry

Absorption: 77 linear feet of 24 inches wide absorption

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

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

Issued April 19, 1951

*Sewer
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

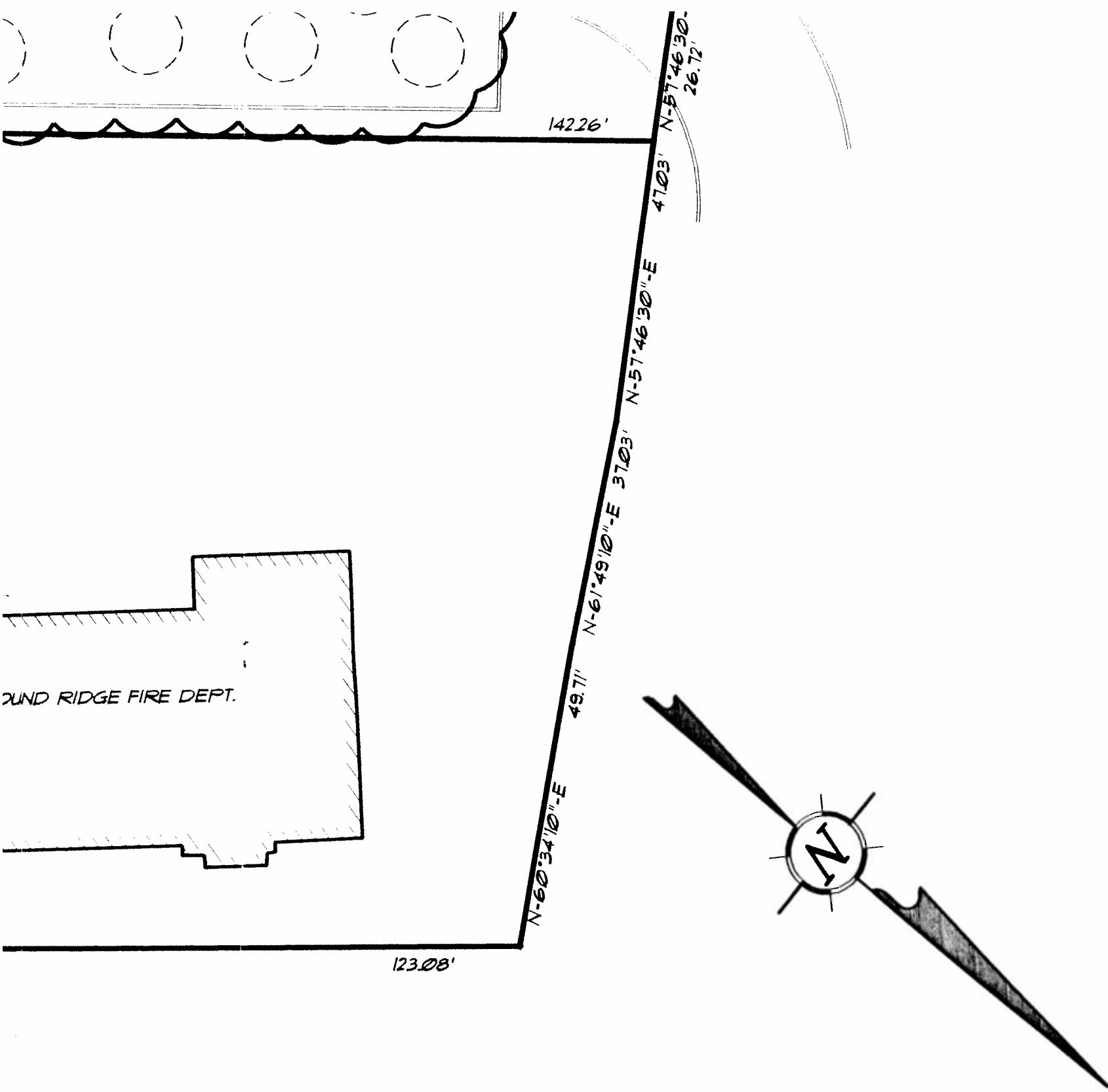
- I. *No portion of the system shall be backfilled or covered until inspected.*
Inspections are made during regular working hours only. Twenty-four hours' notice is required.
- II. The system shall not be used until it has been constructed in an approved manner, inspected and back-filled, and the written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

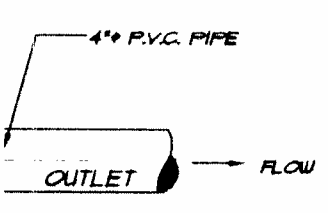
Commissioner of Health

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

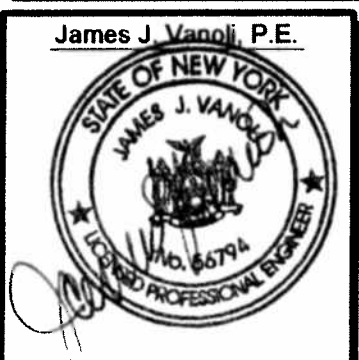
PROJECT LOCATION :
**SCOTTS CORNERS
POUND RIDGE
WESTCHESTER COUNTY, NEW YORK**

JJV, PE

*Consulting Engineering
Site Development*

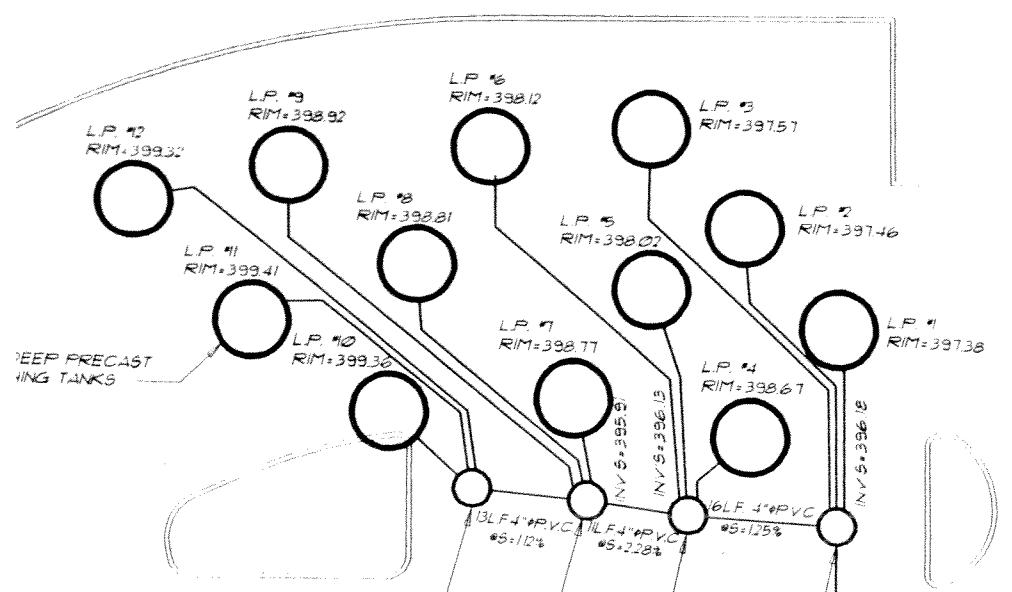
James J. Vanoli, P.E.
752 Old Kensico Road
Thornwood, New York 10594
Telephone 914.769.0902 Fax 914.747.3402

FAIL
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

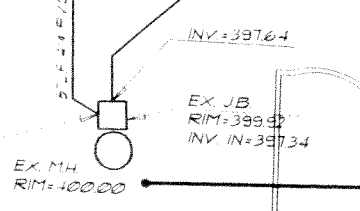
N-38°19'50\"/>

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

S-51°40'10\"/>

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

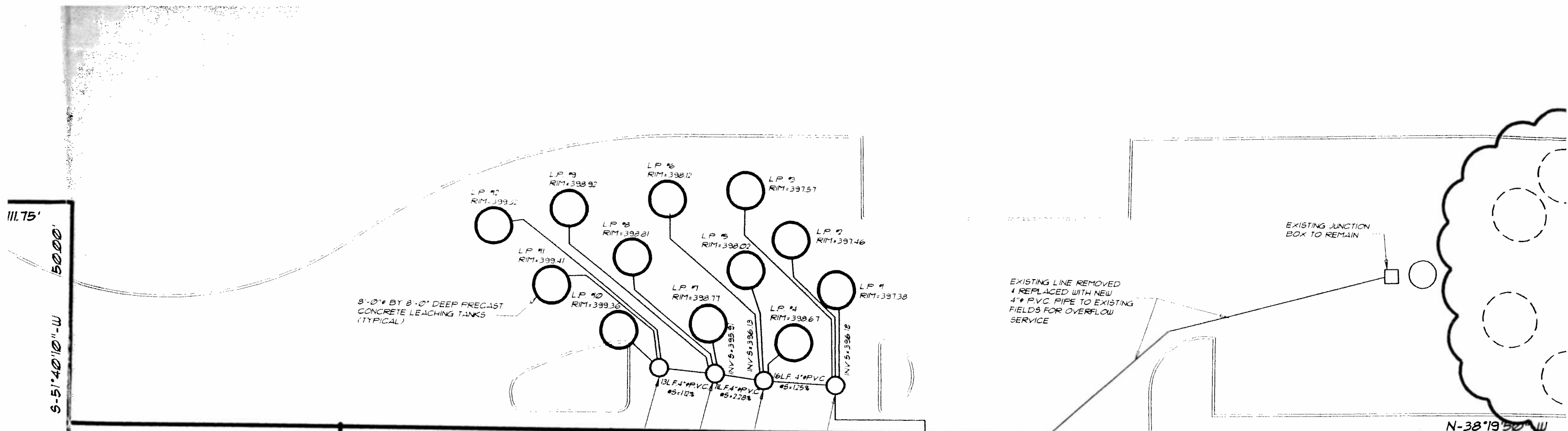
S-51°40'10\"/>

N/F JOHN A.
 DITORE

S-51°40'10\"/>

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: 399.79 INV: 396.06 INV. OUT: 395.84
 DE #1 RIM: 399.25 INV: 396.27 INV. OUT: 396.05
 DE #5 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'

5'-51"40"10"-W

5'-51"40"10"-W

5'-51"40"10"-W

5'-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'

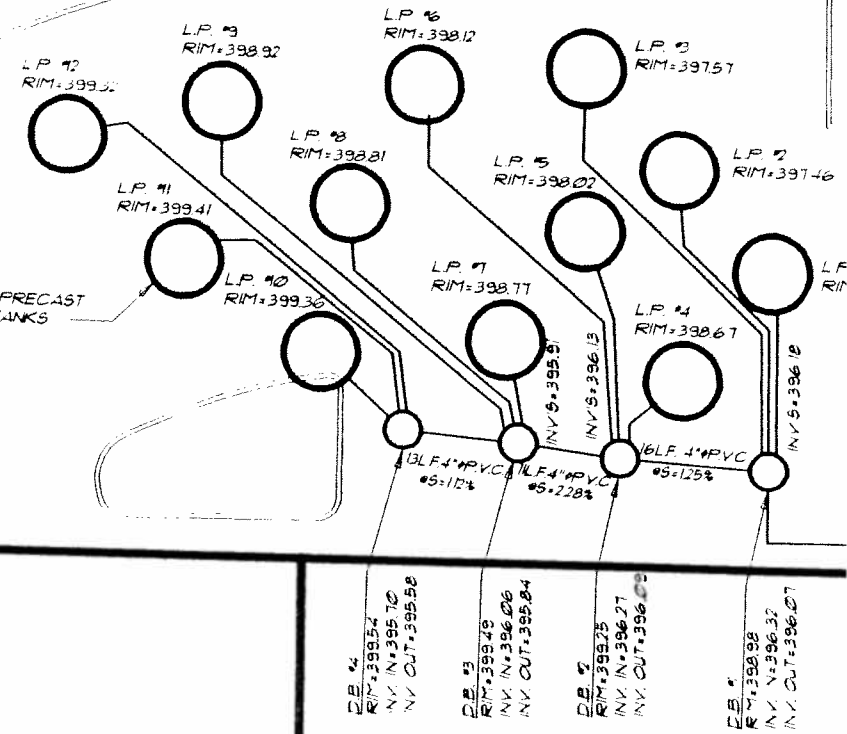
S-51°40'10"-W

143.03'

LINDA LANE

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'

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



NF ESTHER
PECCARIE

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

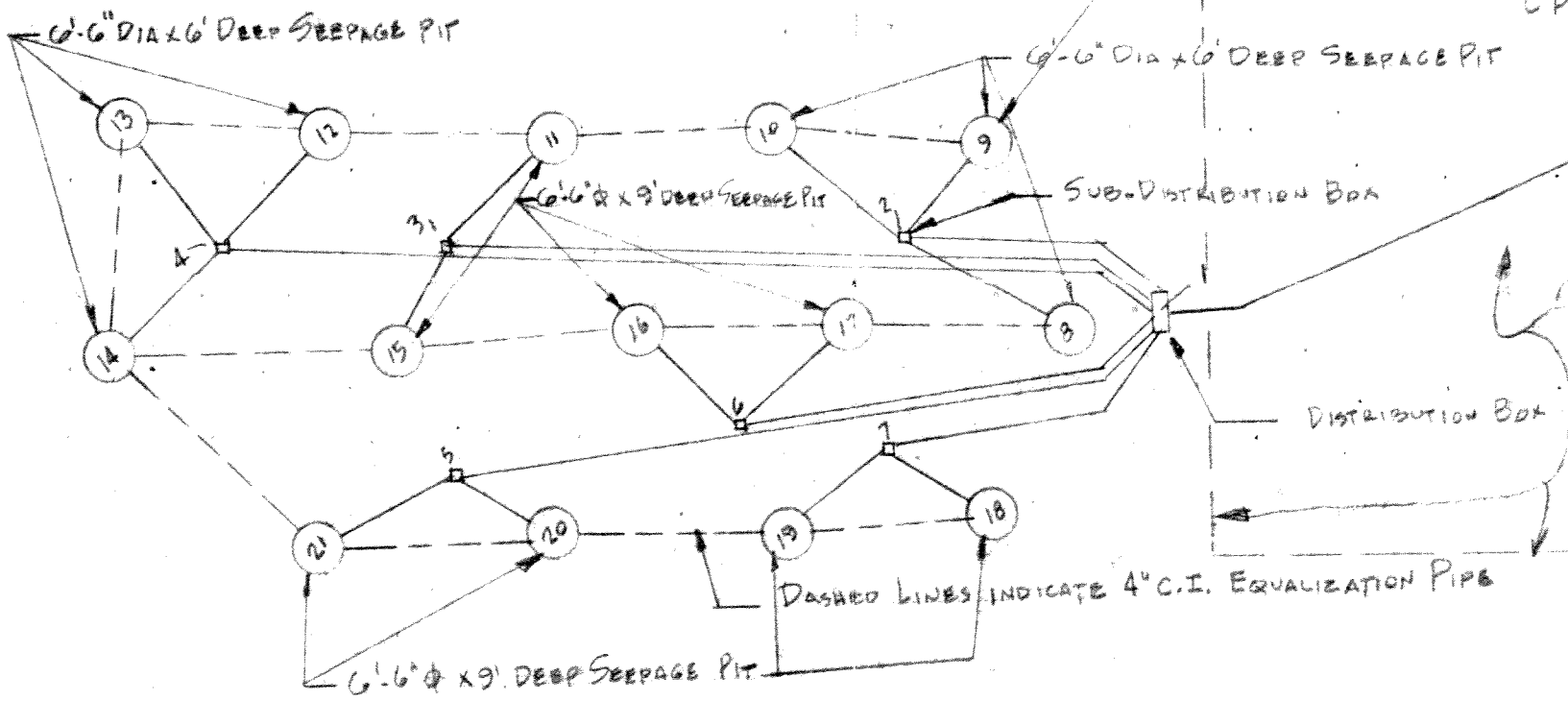
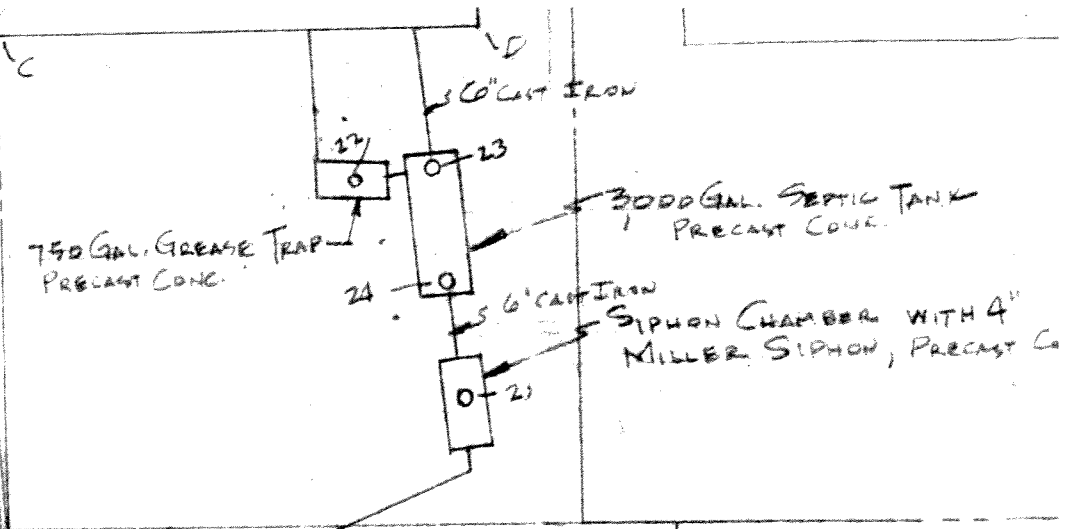
NF CARL J. QUADE
KATHERINE L. QUADE
BYRON S. CLEMONS
ADELINE Q. CLEMONS

INV. 397.11

S-51°40'10"-W

SEPTIC SYSTEM

SEPTIC SYSTEM



100% EXPANSION AREA

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

PROPERTY LINE

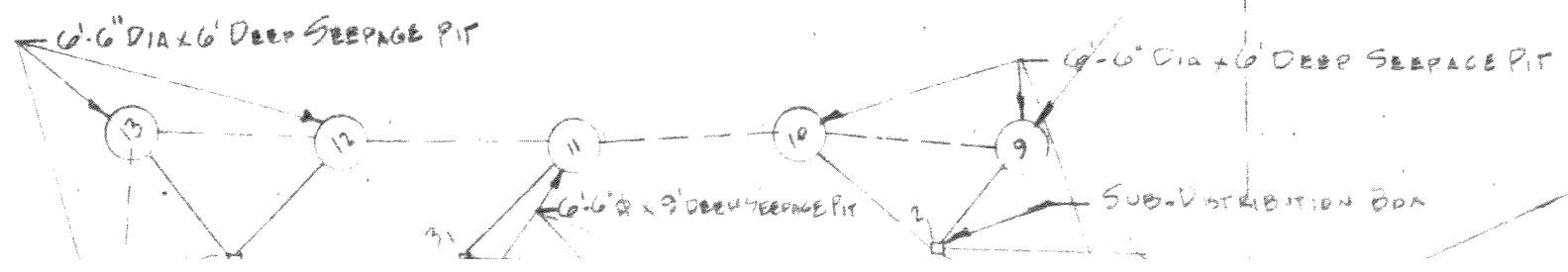
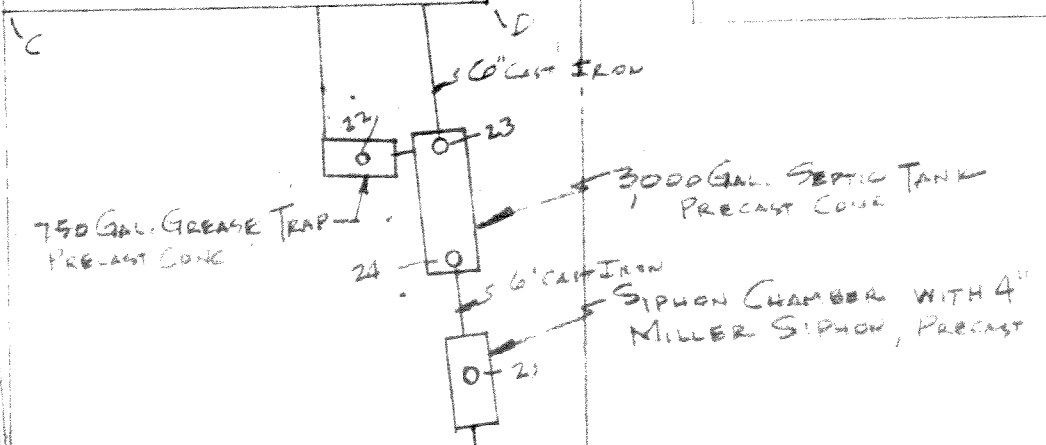
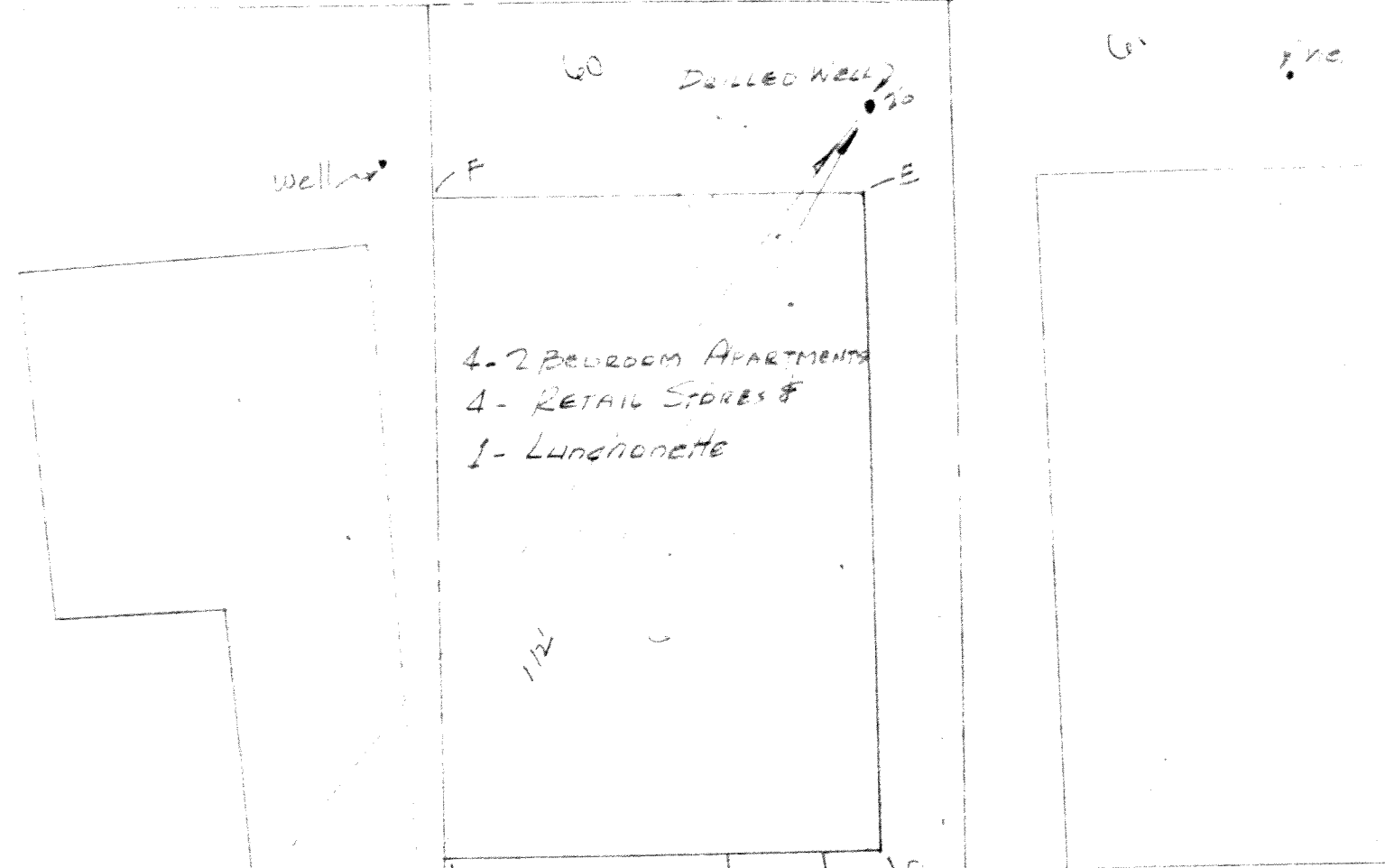
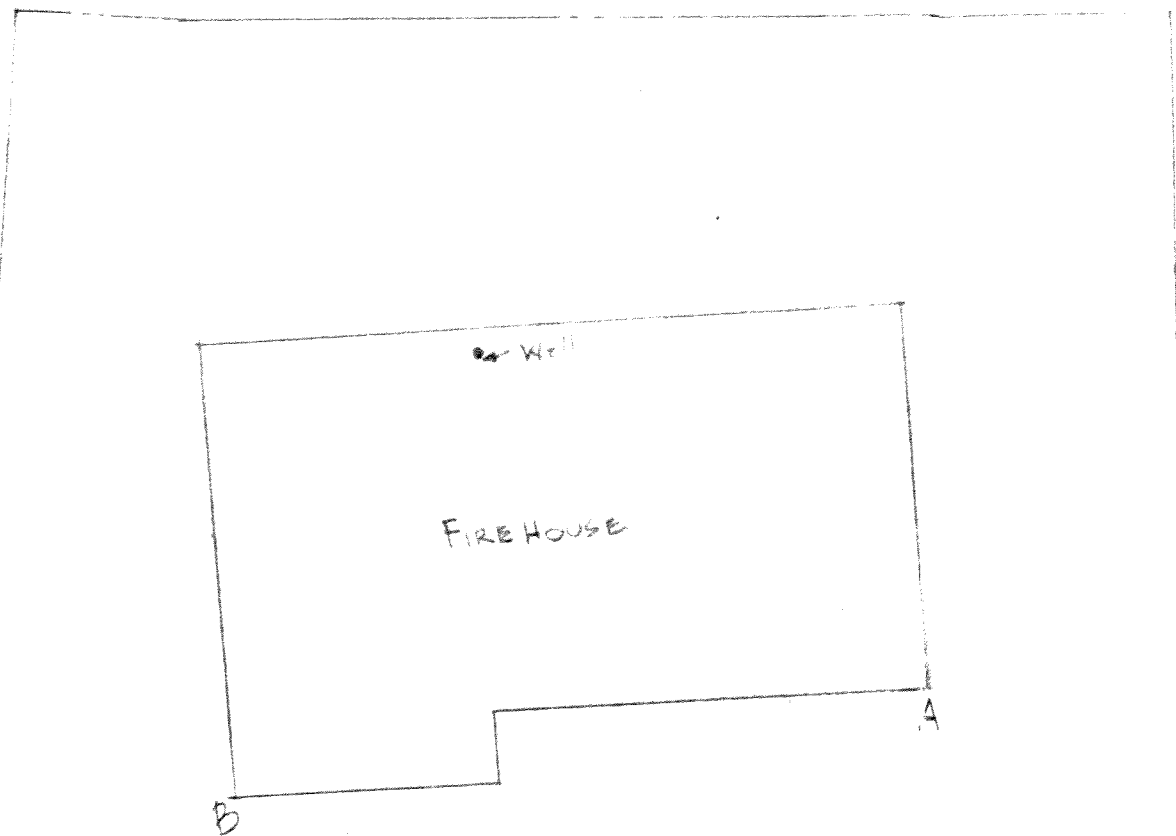
50 FEET TO
 GROUND

AP. 20' LOCATION TOP OF BANK

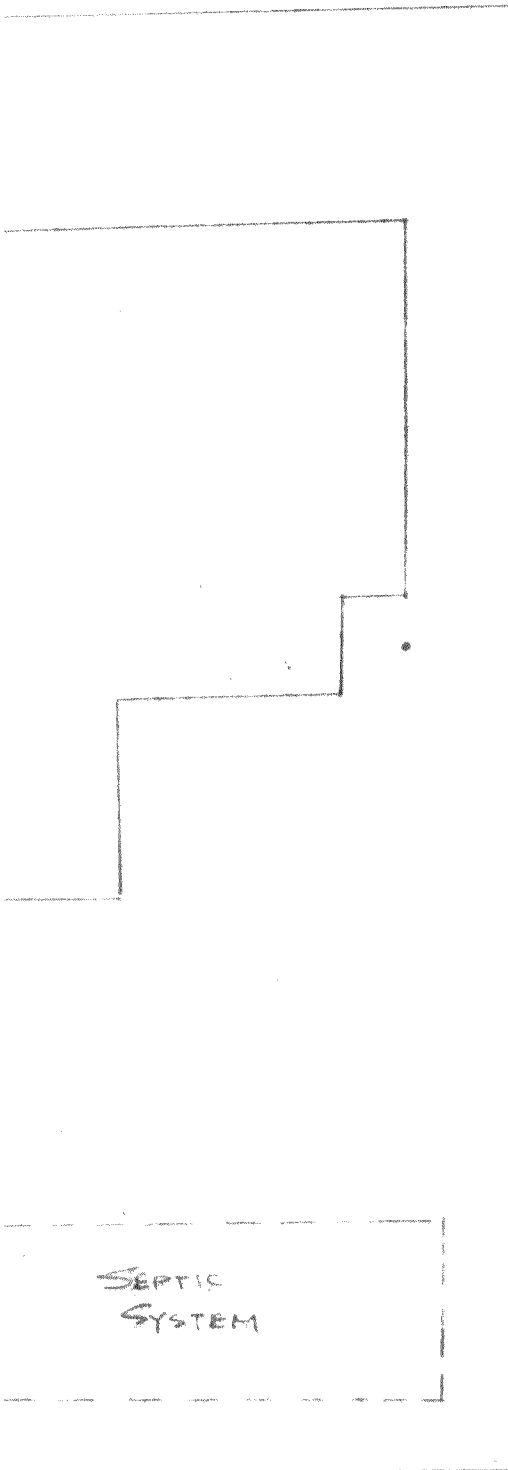
NOTES:

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.

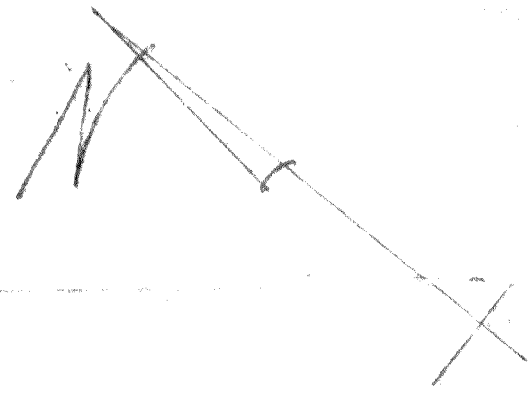


PROPERTY LINE



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'

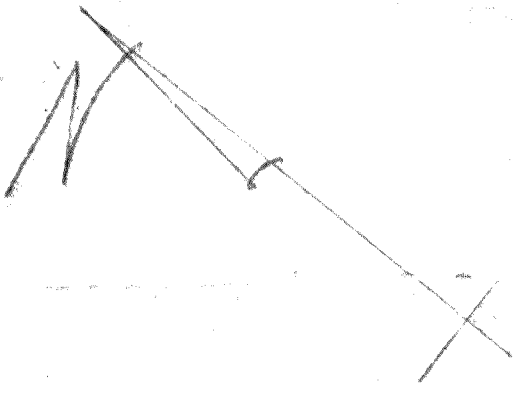
SEPTIC SYSTEM



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

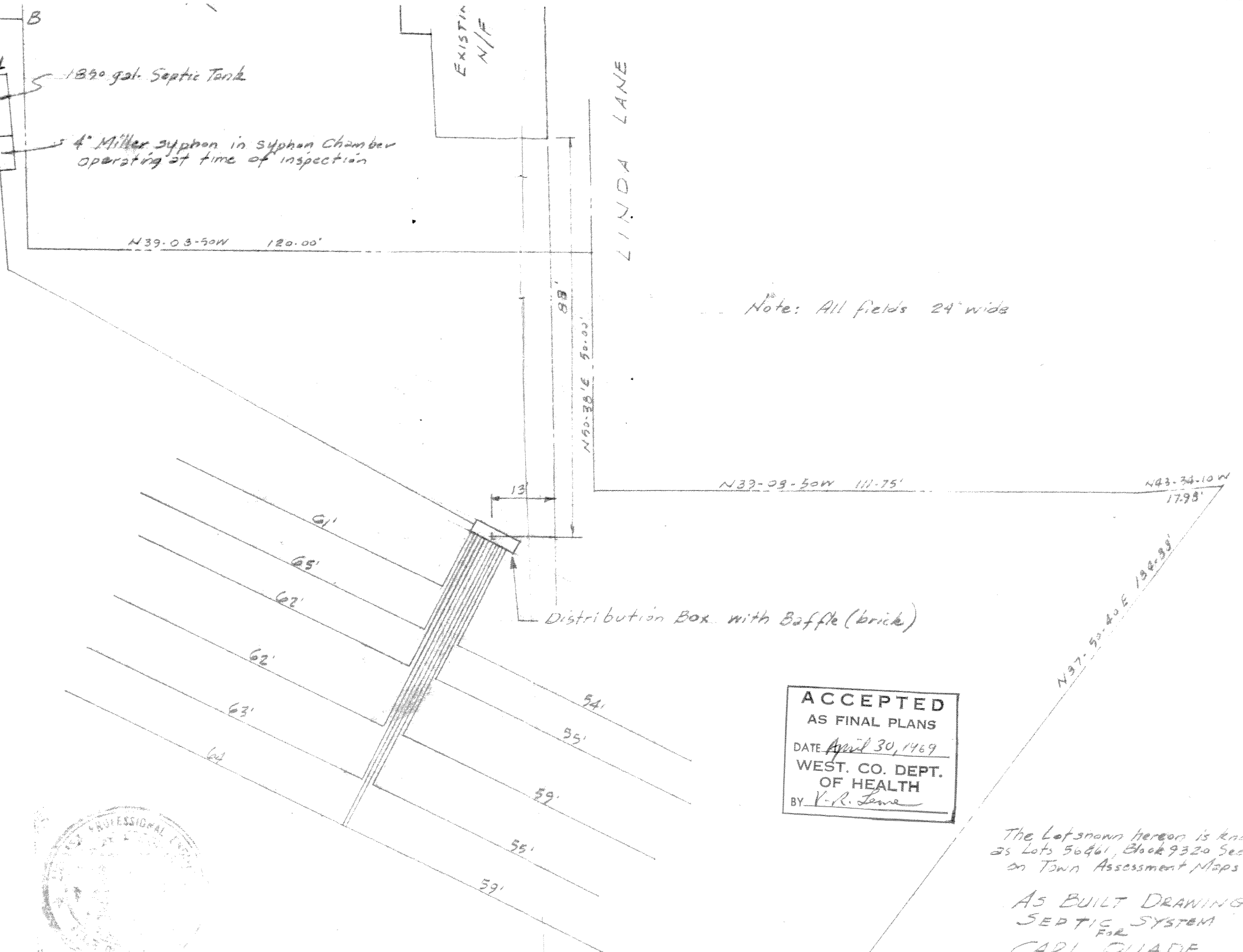
1890 gal. Septic Tank
4" Miller syphon in syphon chamber
operating at time of inspection

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'



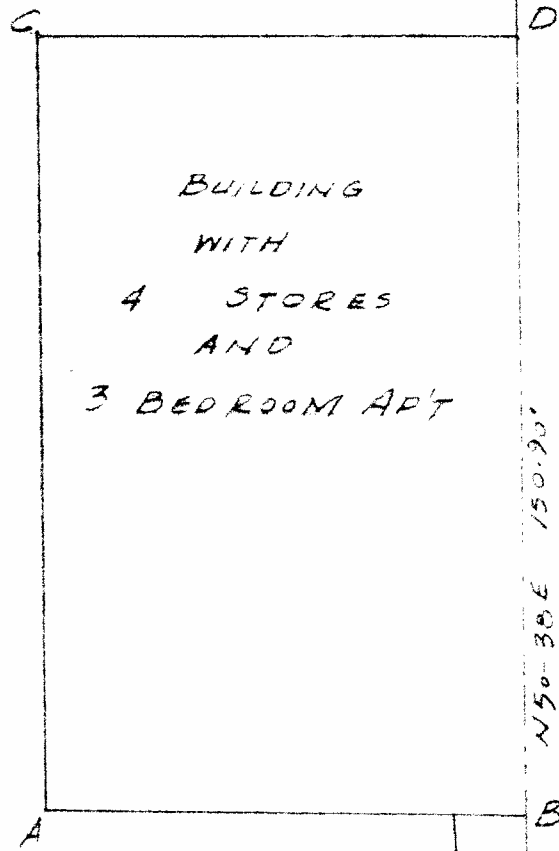
ACCEPTED
AS FINAL PLANS
DATE April 30, 1969
WEST. CO. DEPT.
OF HEALTH
BY V-R. Lane



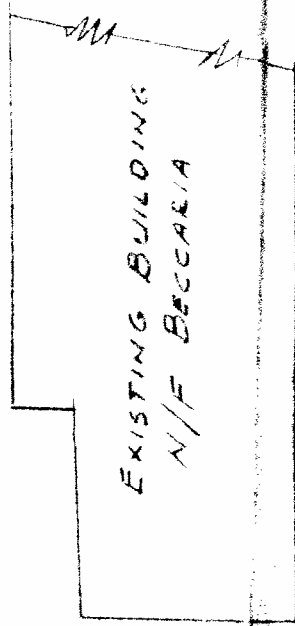
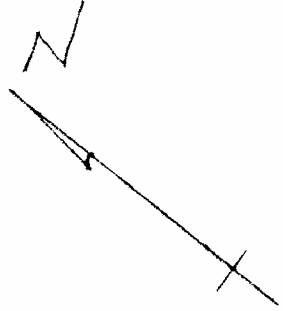
Stanley J. Lane
Stanley J. Lane, P.E.

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

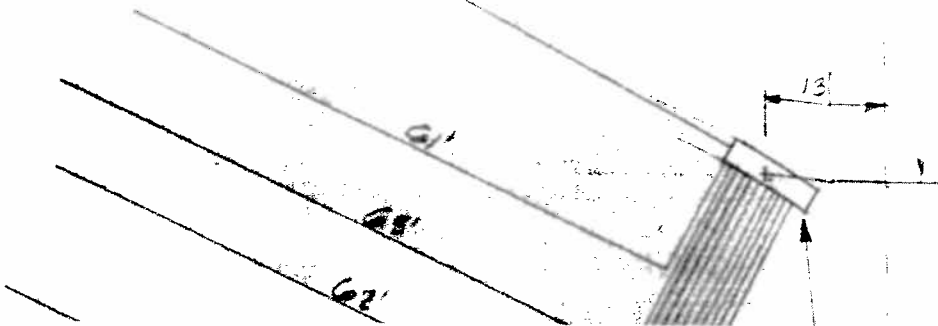
Note:
Septic Tank & Syphon
Covered with 6" Conc.
Planks

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 120.75'

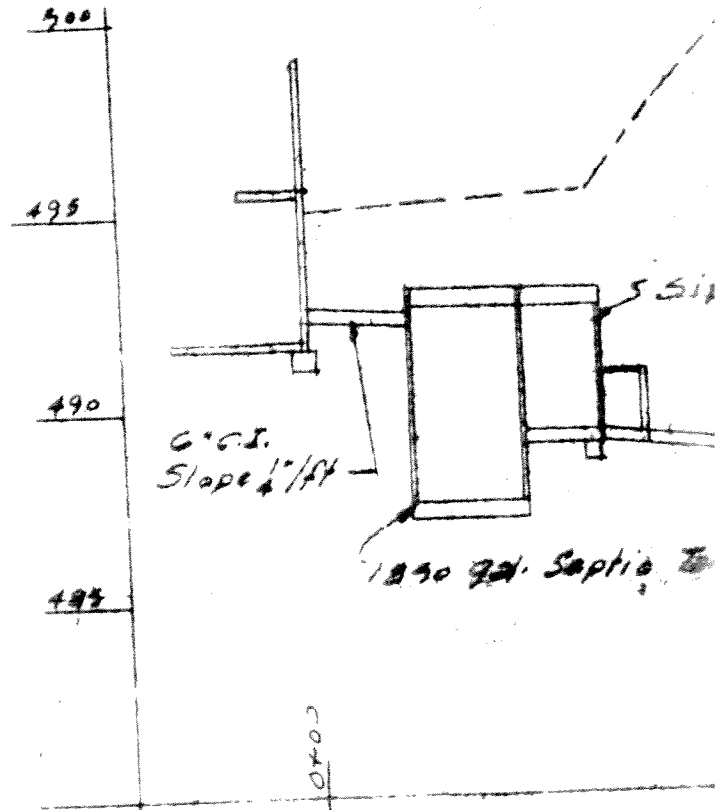
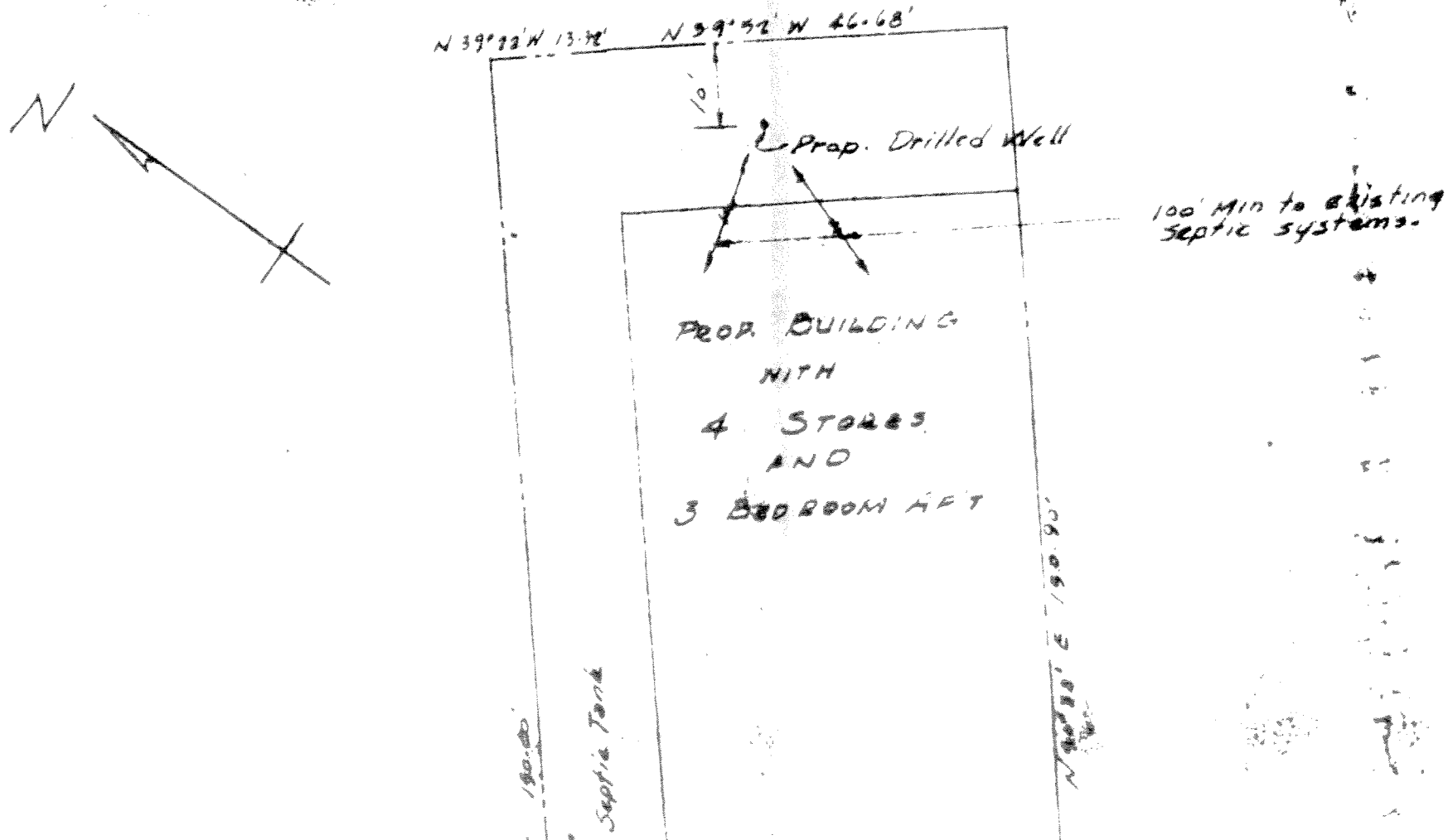
N 43-24-10 W 17.95'

E 192.95'

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 Chambers 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

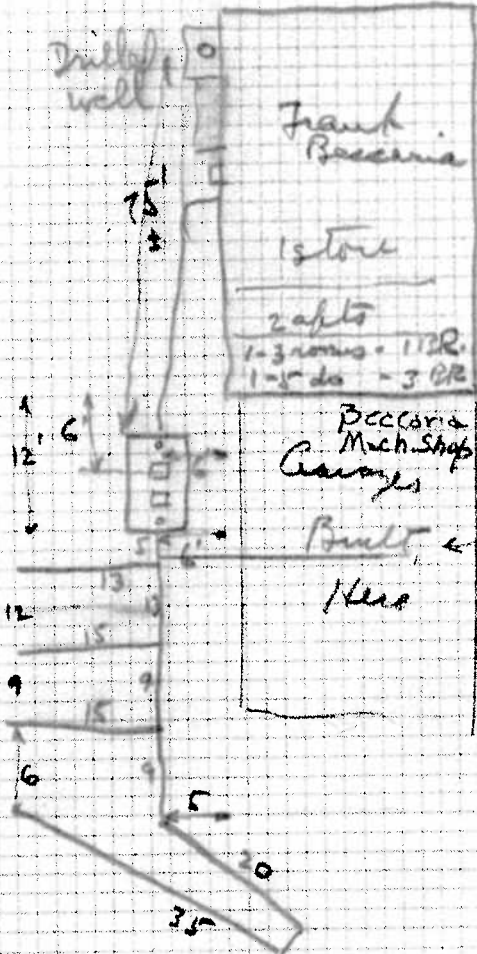
Frank Beccaria, Westchester Ave.

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' x 12'
 20'
 36'
 91'
 13'
 14'
 15'
 134'
 30'
 164'

*Sewers
Poundridge*

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

William A. Holla, M. D., Commissioner

White Plains, N. Y.

PERMIT TO PROVIDE A SEWAGE DISPOSAL SYSTEM

Application having been duly made to the County Commissioner of Health as required by Article II of the Sanitary Code of the Westchester County Health District, permission is hereby given to Frank Beccaria, R.F.D. 5, Ridgefield,

Connecticut, for the construction or provision of a sewage disposal system consisting of a 1000 gallon masonry septic tank and 130 linear feet of 30 inches wide absorption trench,

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

subject to the following conditions:

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

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

III. That such sewage disposal system shall be constructed in complete conformity with the application data and plans 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:

- Owner Frank Beccaria..... Mail Address R. 5 Ridgefield Town
Note: Owner must receive permit and approval. Check here for extra copy....
 - Property location Westchester ave...... Place Pound Ridge
(Street) (Village, Town, City)
 - Tax Map Location: Section..... Block 7326 Lot..... Subdivision.....
 - Construction: New, Replacement, Proposed Future Building New.....
 - Lot area 60 X 150. No. of rooms 8. Bedrooms 4. Bathrooms 2.....
Extra Lavatories 1. Special Fixtures..... Maximum Future Occupancy 7.....
 - 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
 - Daily Sewage Flow: No. of persons 7 x 75 gals. = 525..... gals. per day
 - 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.
 - 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.
 - Absorption area: 32.5 sq. ft...... -:- sq. ft.
gals. waste (No. 7) Absorption rate from table bottom area.
 - 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

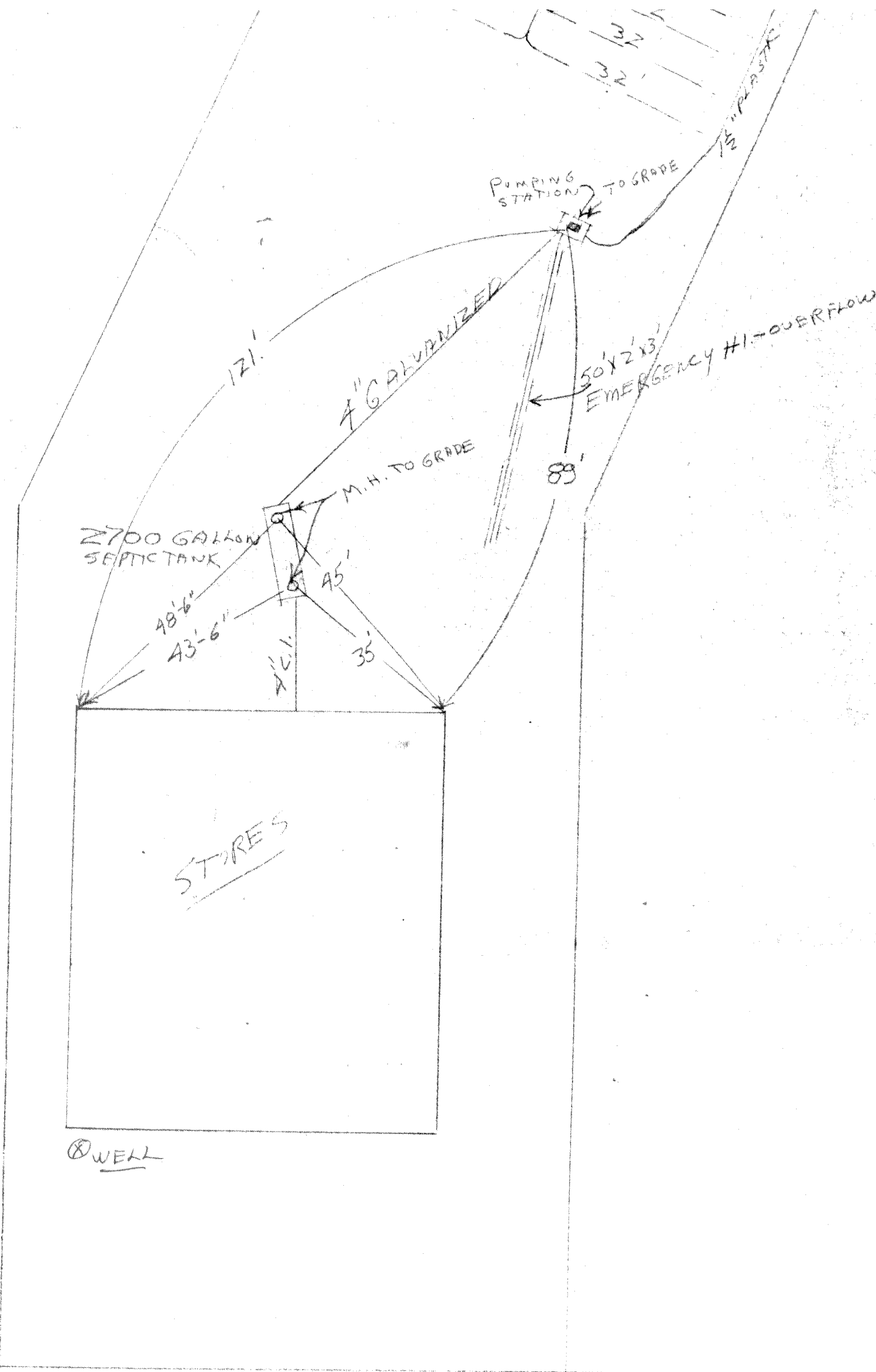
TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO. <u>1</u>	HOLE NO. _____	HOLE NO. _____	HOLE NO. _____
G.L.	TOP SOIL	_____	TOP SOIL	_____
6"	TOP SOIL	_____	TOP SOIL	_____
12"	SANDY LOAM	_____	SANDY LOAM	_____
18"	SANDY LOAM	_____	SANDY LOAM	_____
24"	SAND LOAM GRAVEL	_____	SANDY LOAM GRAVEL	_____
30"	SAND LOAM GRAVEL	_____	SAND & GRAVEL	_____
36"	_____	_____	_____	_____
42"	_____	_____	_____	_____
48"	_____	_____	_____	_____
54"	_____	_____	_____	_____
60"	_____	_____	_____	_____
66"	_____	_____	_____	_____
72"	_____	_____	_____	_____
78"	_____	_____	_____	_____
84"	_____	_____	_____	_____

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

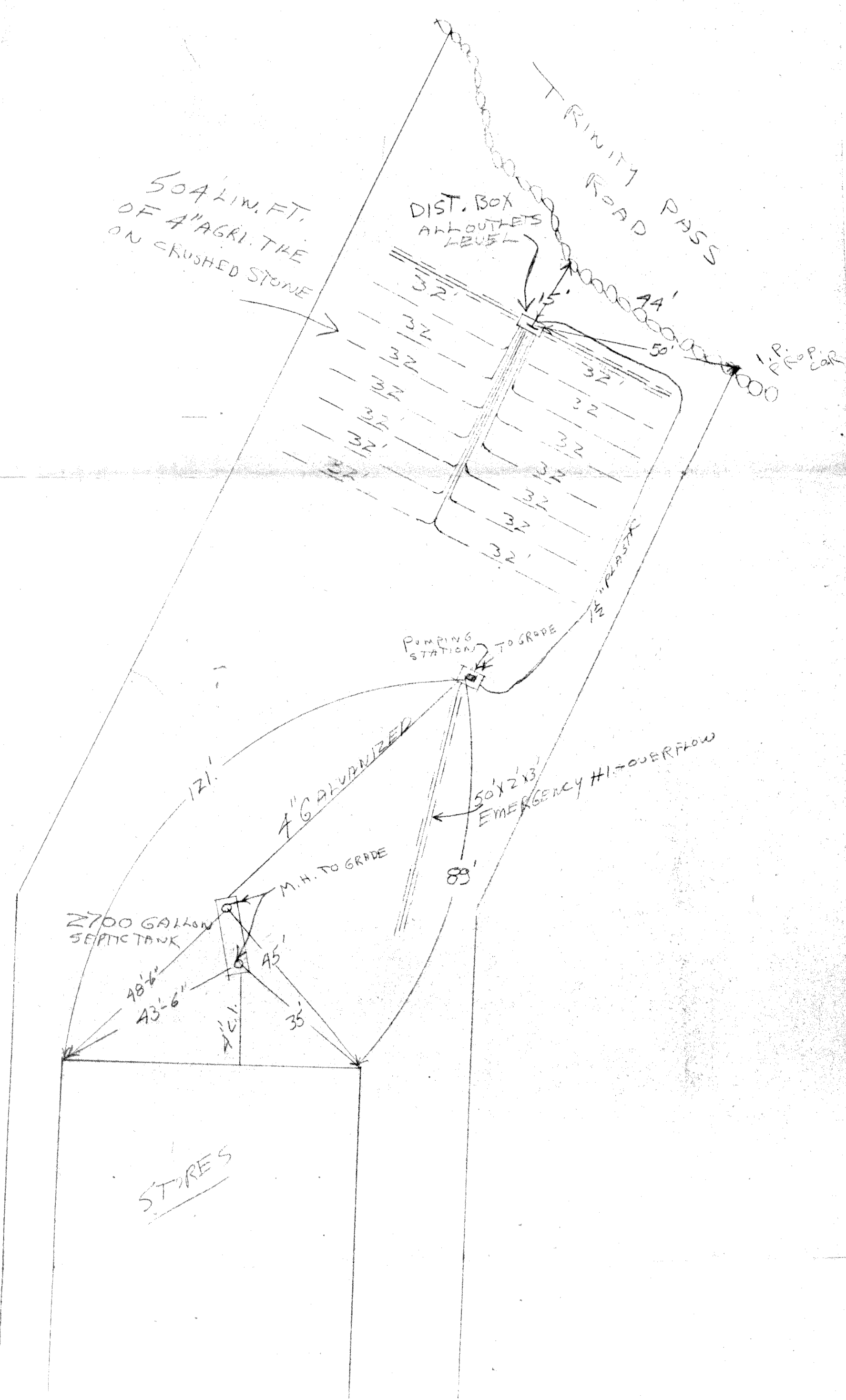
Tests made by J.H.E. P.E.A.S.E. CO. Date DEC. 30, 1958 . . .



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

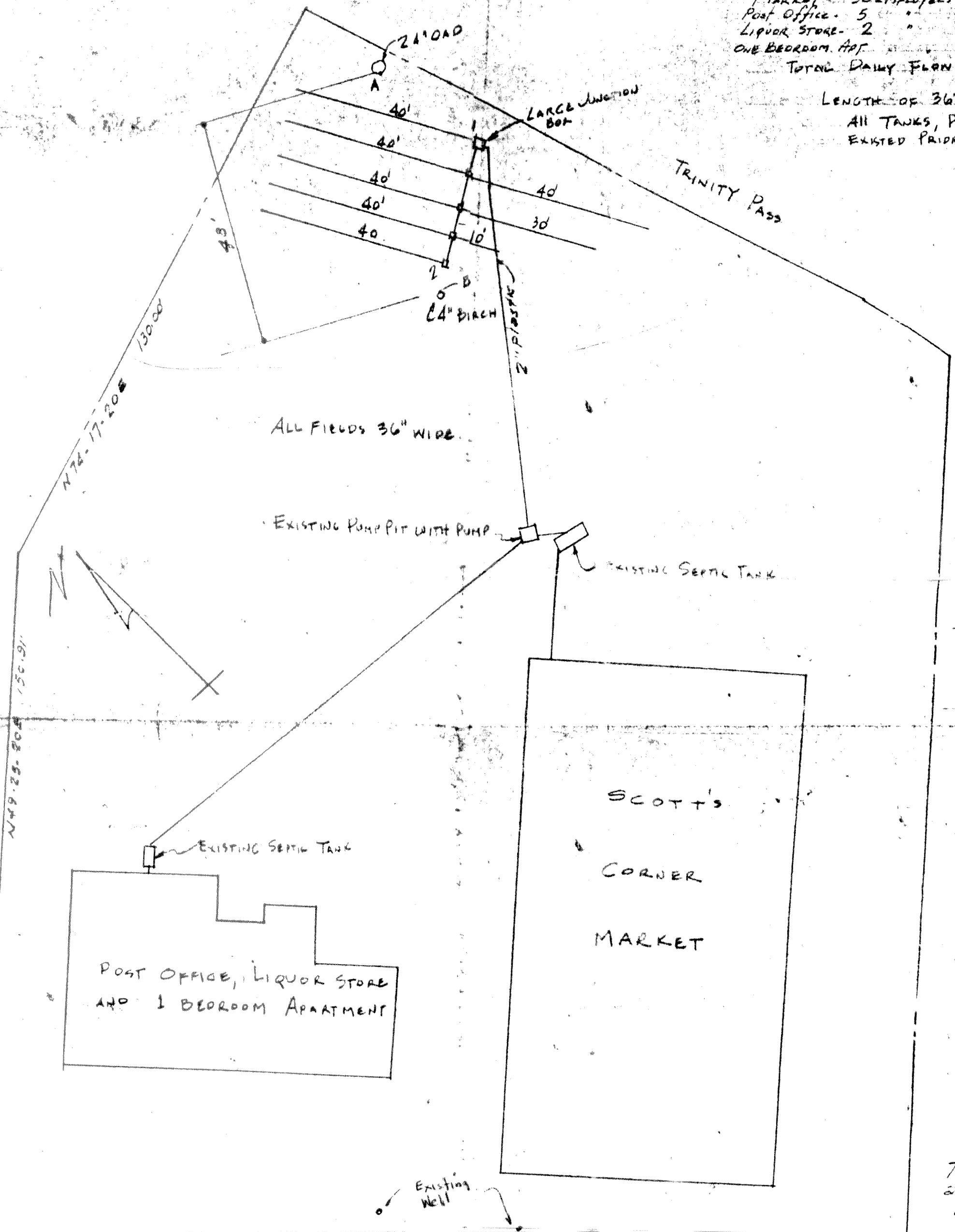


9454-12 and 9454-11 69-71
WESTCHESTER AVE

DESIGN

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

LENGTH OF 36" T
ALL TANKS, PUM
EXISTED PRIOR

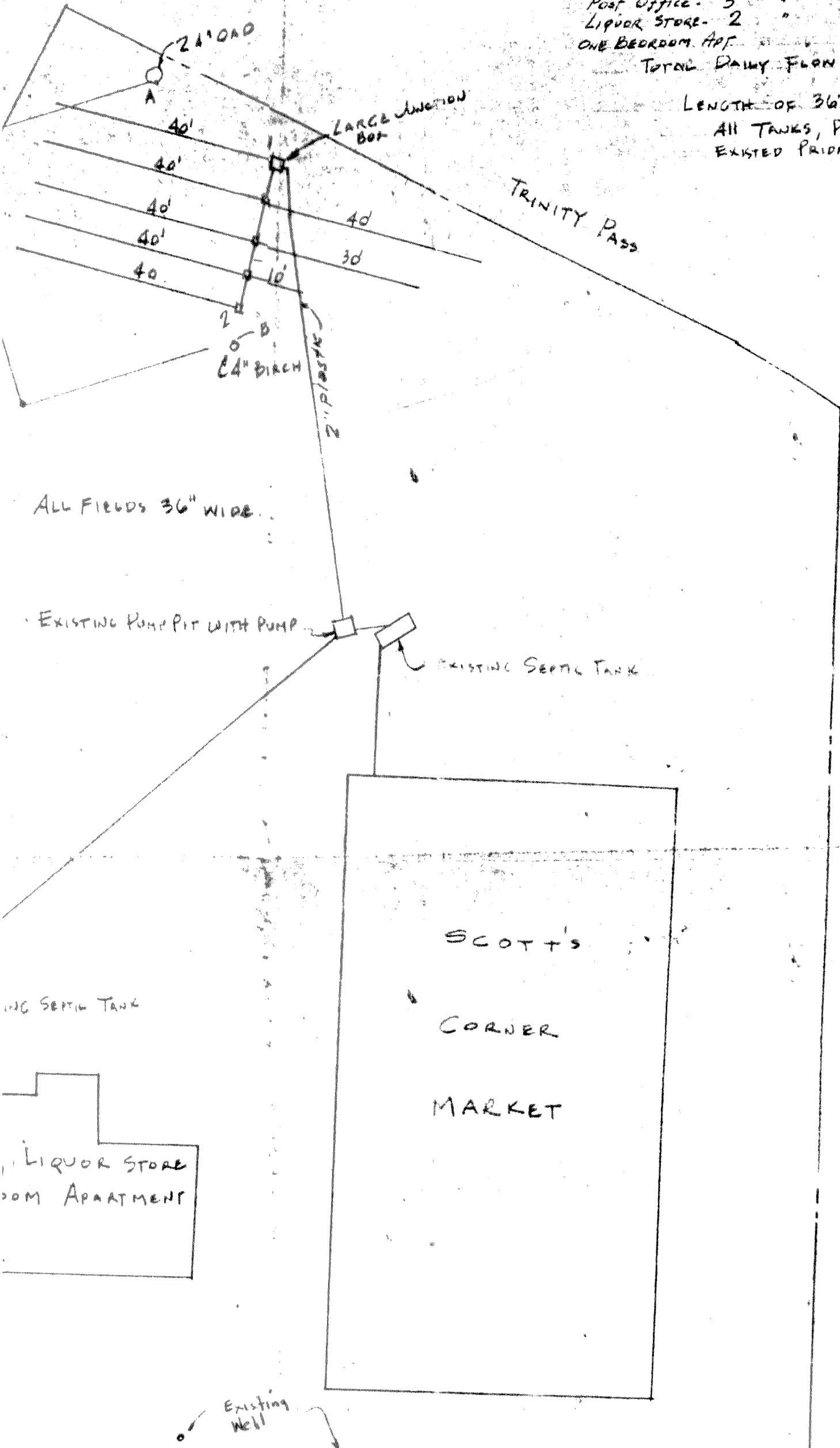


T1
25
0

DESIGN FLOW

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

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



POINT	DISTANCE FROM	
	A	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

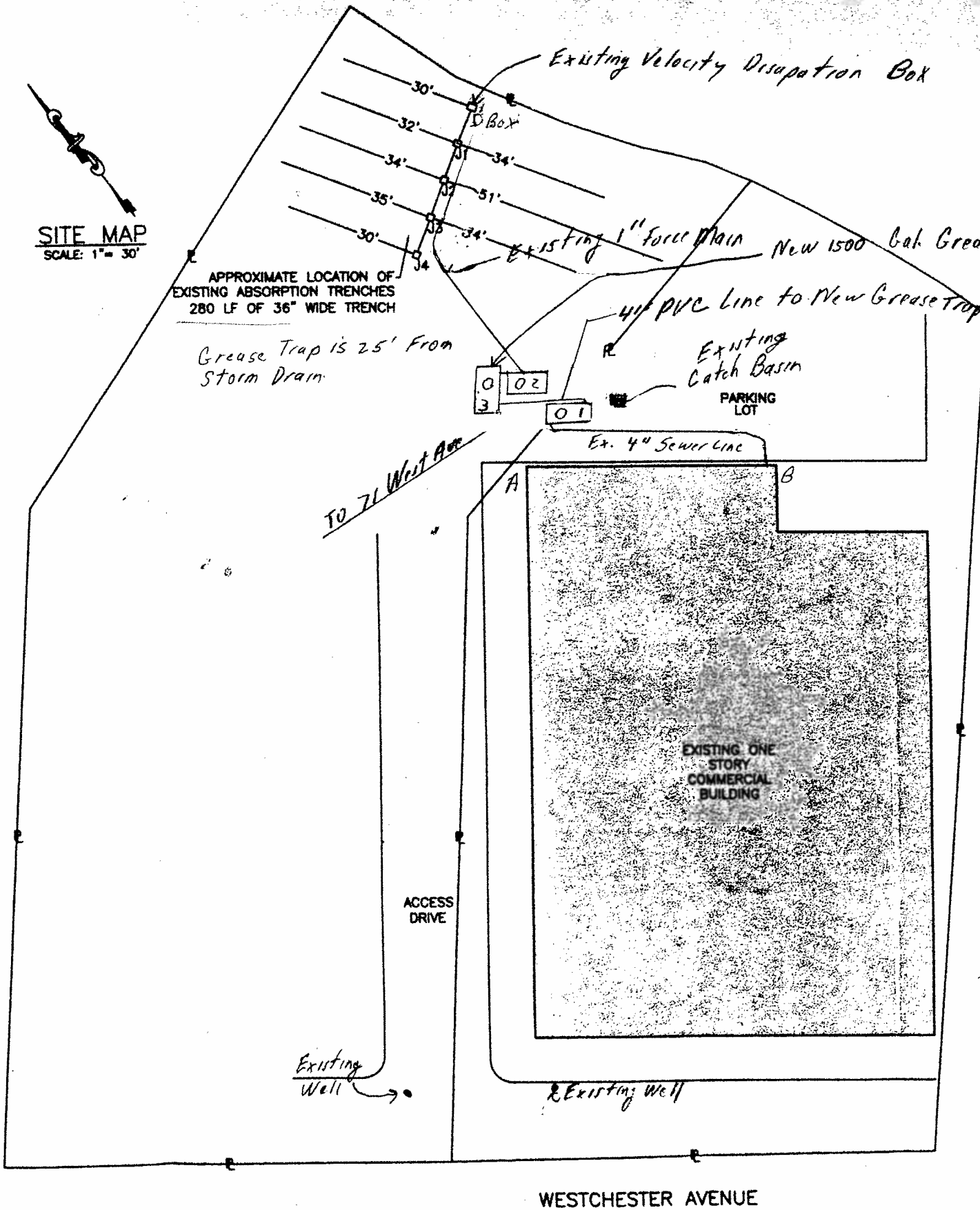
I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), in accordance with the standards, rules and regulations of the State of New York and the approval issued by the Westchester County Department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



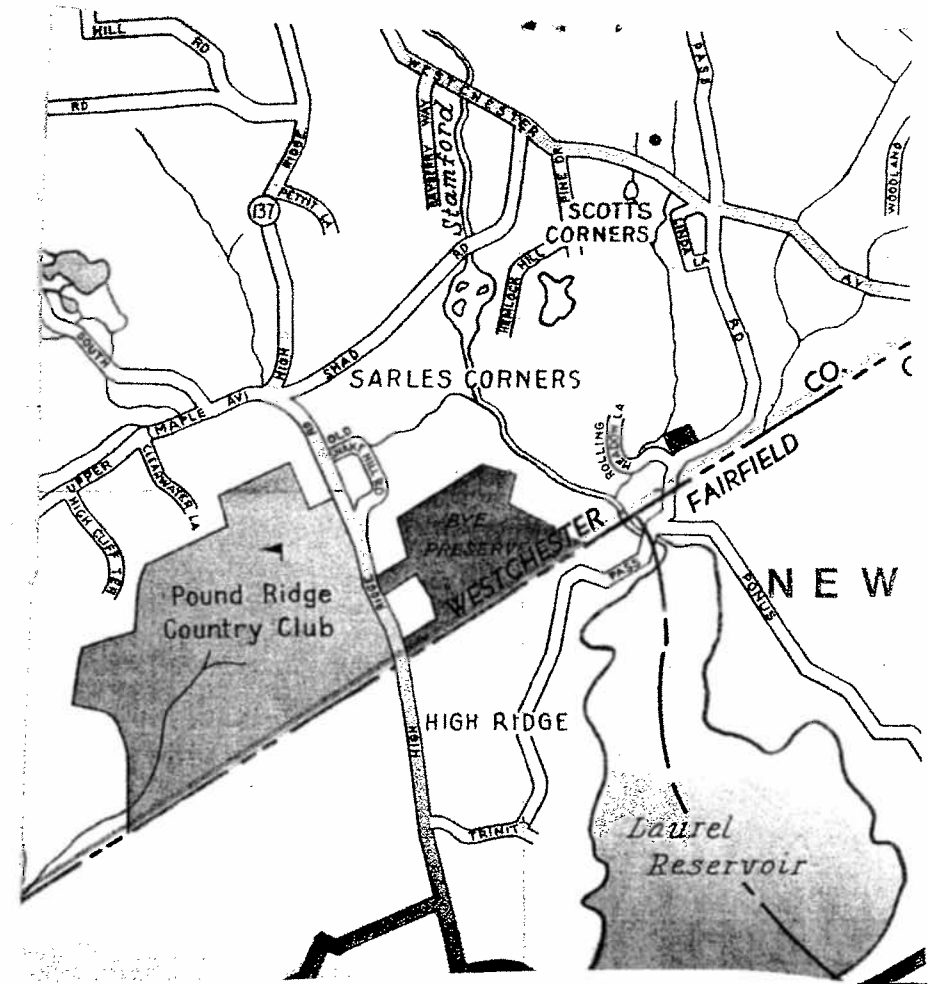
John P. Annicelli, P.E.
Troy La. Bedford, N. Y. 10506
914-273-3682.

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

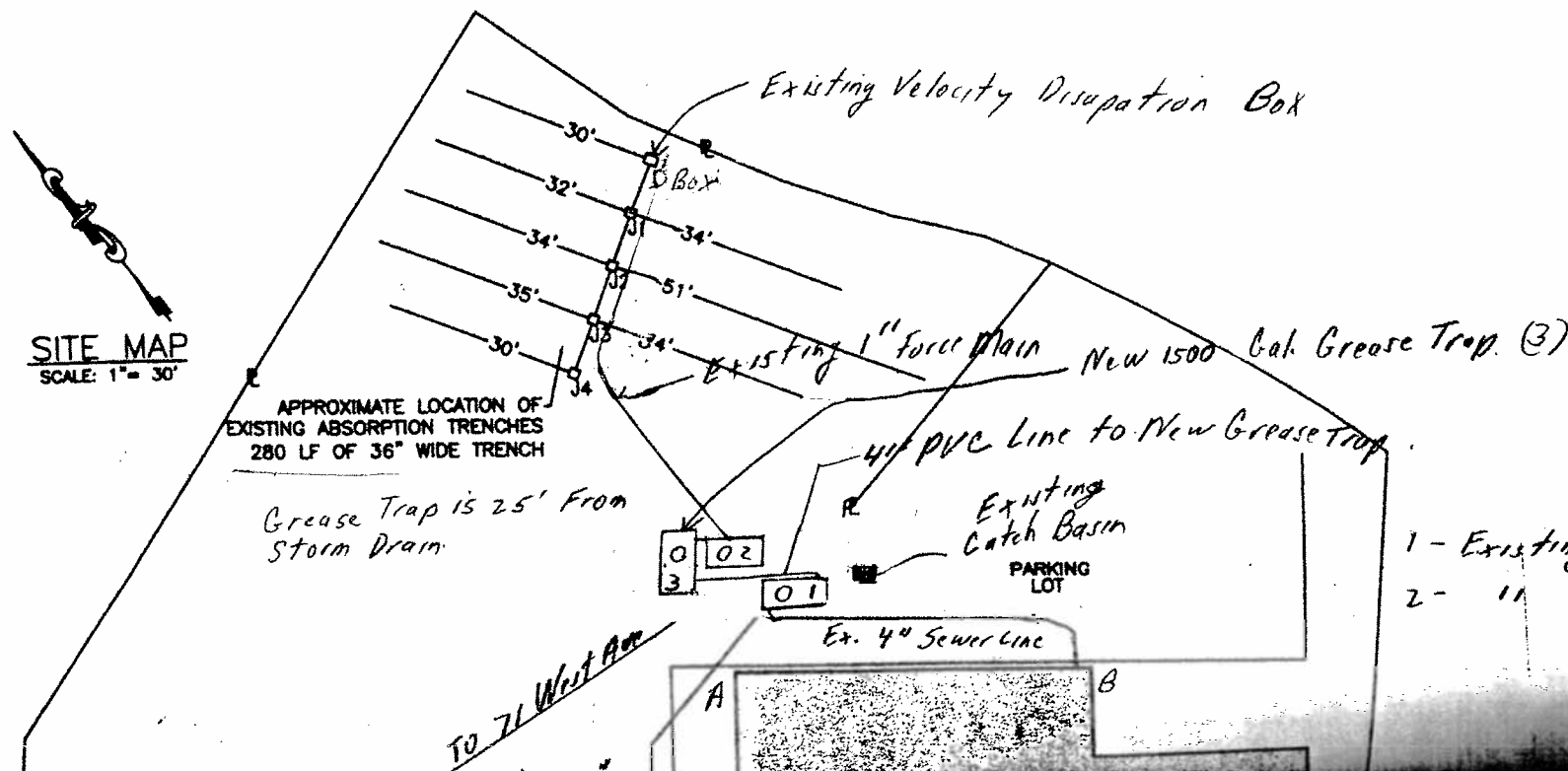
NOTE

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

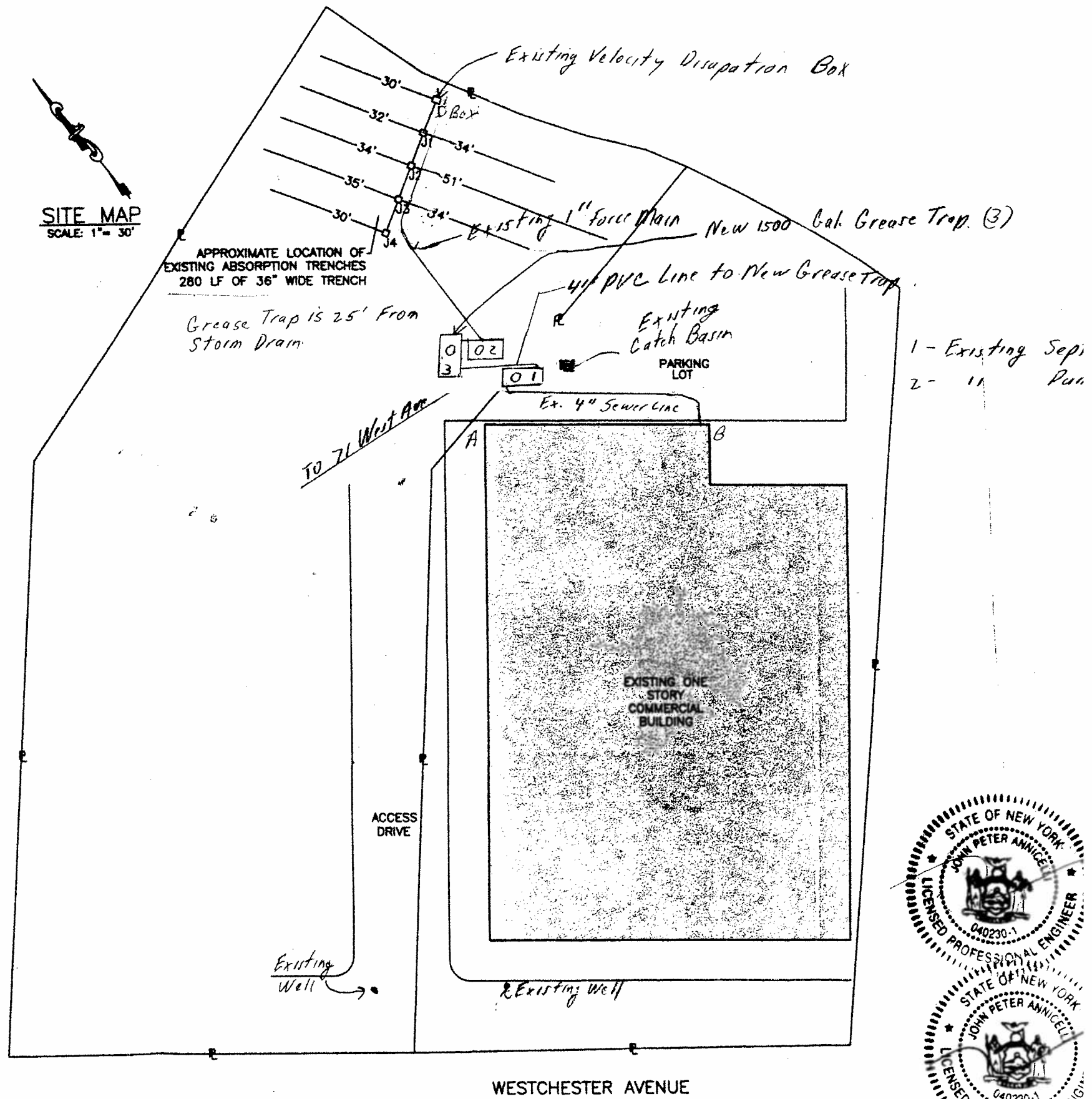
ACCEPTED
AS FINAL PLANS

DEC 03 2012

WEST. CO. DEPT. OF HEALTH

BY *[Signature]*

* GREASE TRAP ONLY *



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	_____ Ft. Width
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:	_____	_____		

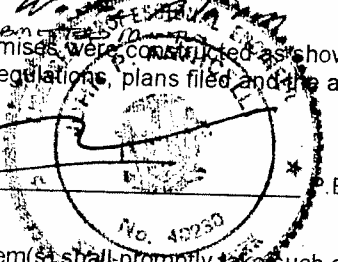
Erosion Control (EC) Completed _____

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

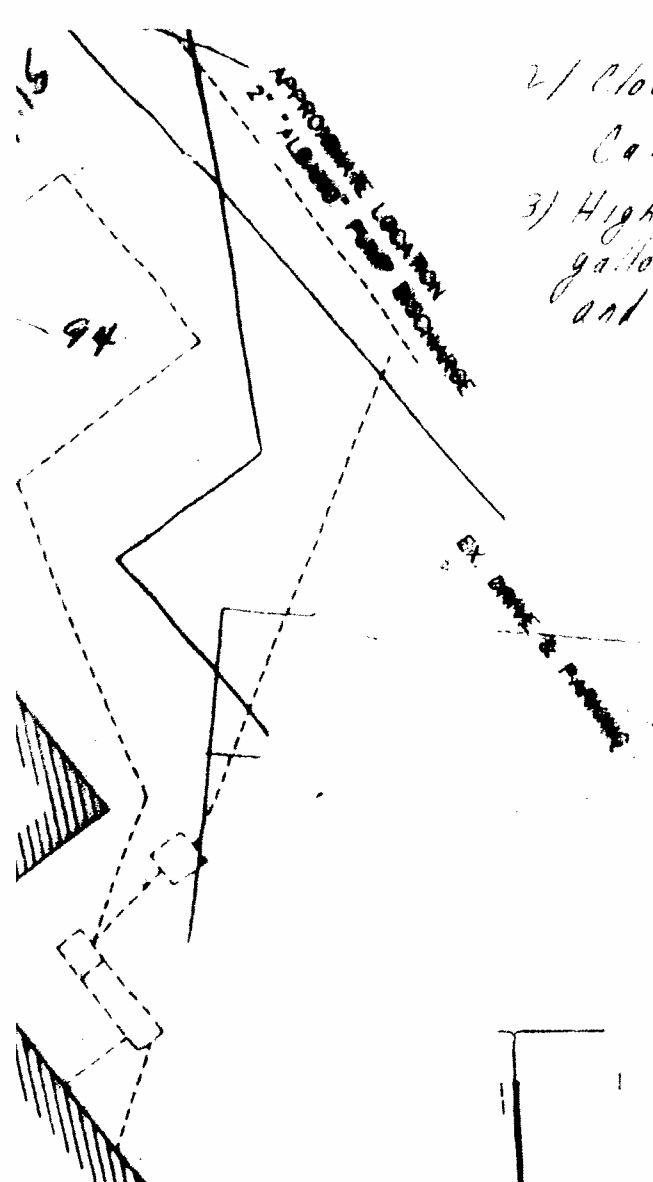
* Daily WATER + SEWAGE FLOW READINGS must be submitted to the Department of Health. I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), in accordance with the rules and regulations, plans filed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

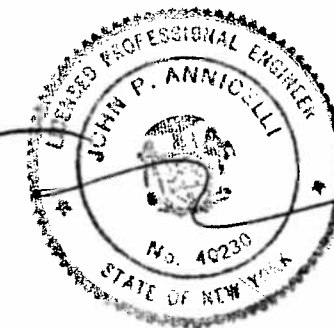


- 2) Clock timer to pump installed in No Star Electric Room.
Calibrated 4 Pumps each 12 hours 310 gal / pumping Centipex Pump Control Panel with Time Clock.
- 3) High Water Alarm in overflow Tank set to 600 gallons. Alarm light & audible in North Star Restaurant and Overflow Tank to be pumped when Alarm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

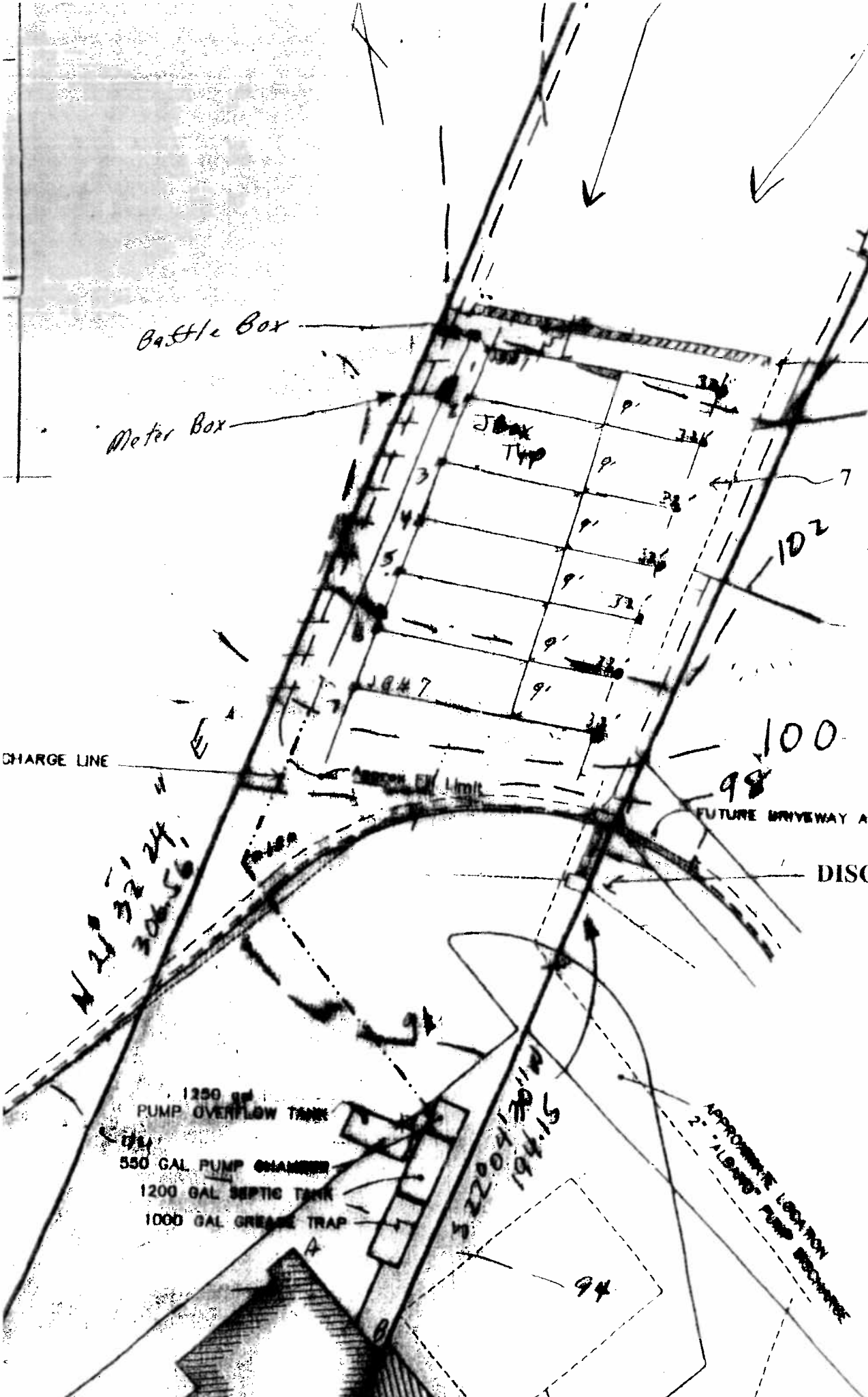


W2004 E110# PR207-04B
ACCEPTED
 AS FINAL PLANS
 DEC 17 2009
 WEST. CO. DEPT. OF HEALTH
 BY *[Signature]*
 MAX DAILEY FLOW 695 gpd

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



- 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

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

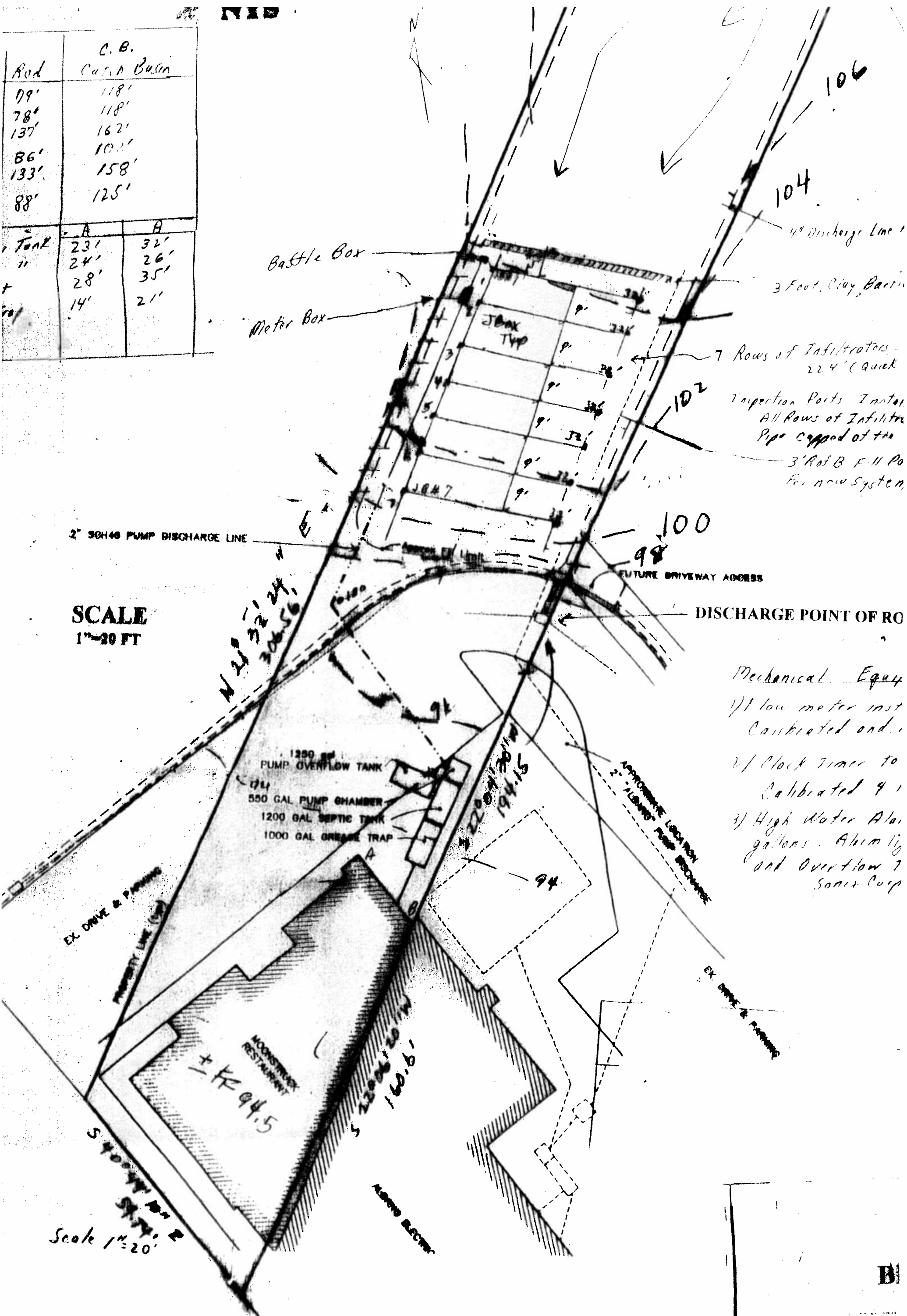
3' Rot B F.H Package for new system

DISCHARGE POINT OF ROOF LEADERS

- Mechanical Equipment
- 1) Flow meter installed Mc Crometer Ultra May 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

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'

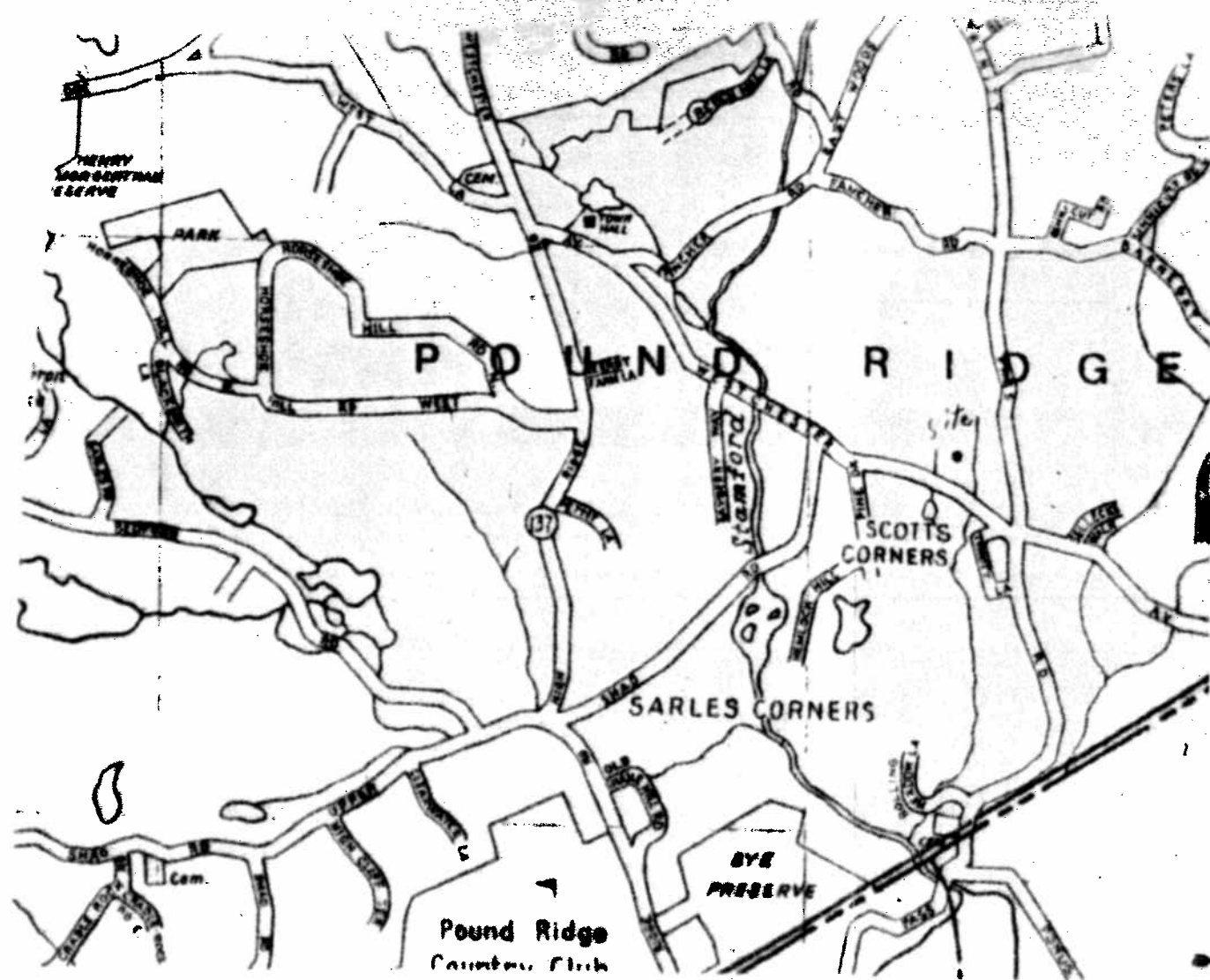


SCALE
1"=20 FT

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

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

NORTH
85 WBS



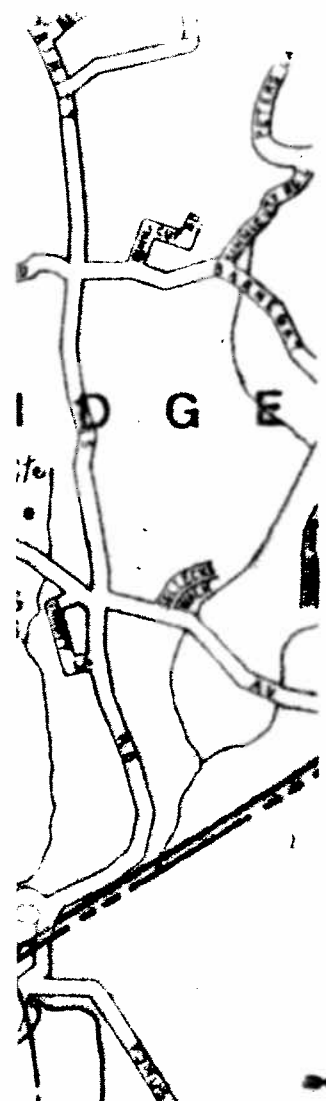
**LOCATION MAP
NTS**

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'
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

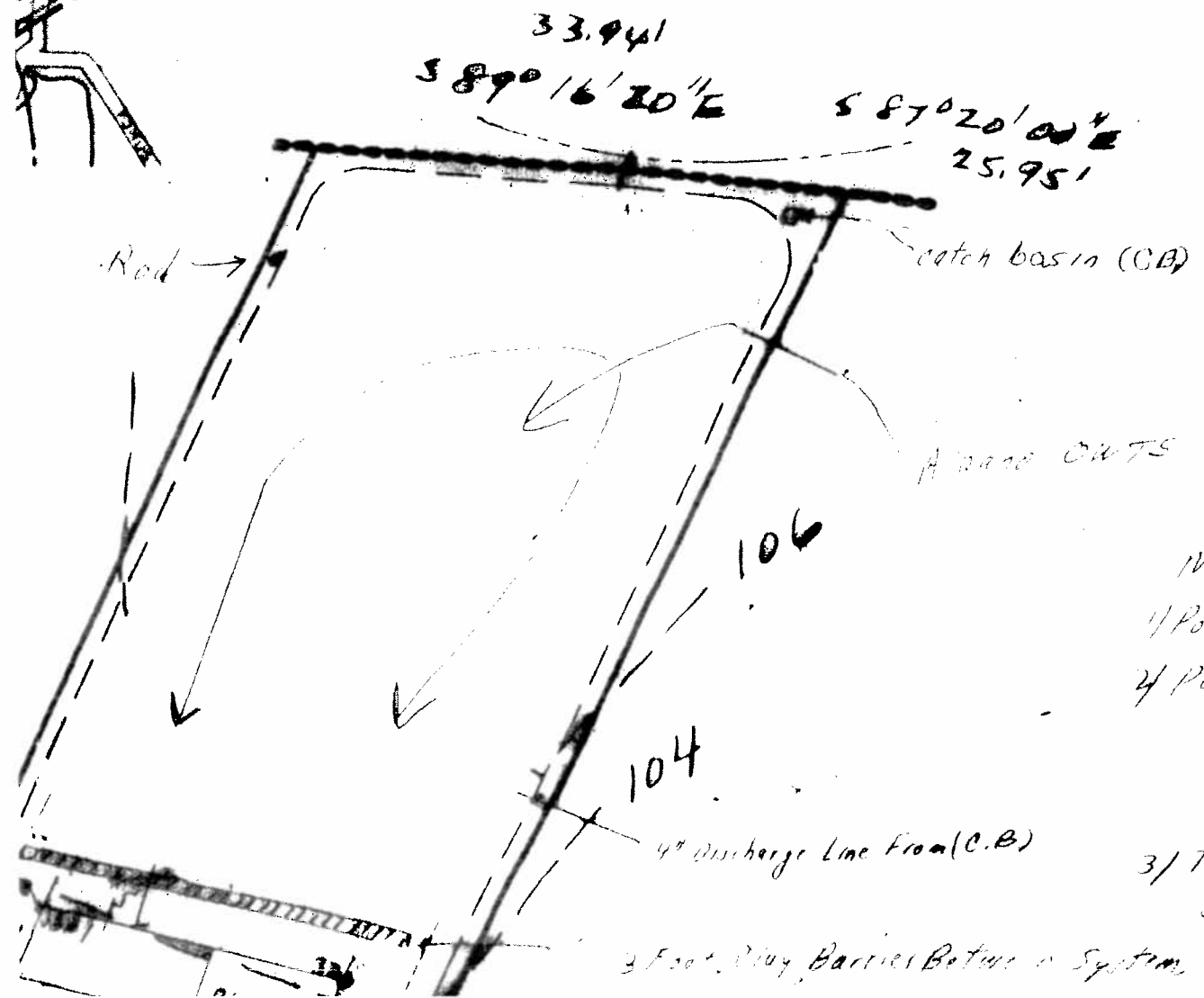
Design Data

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

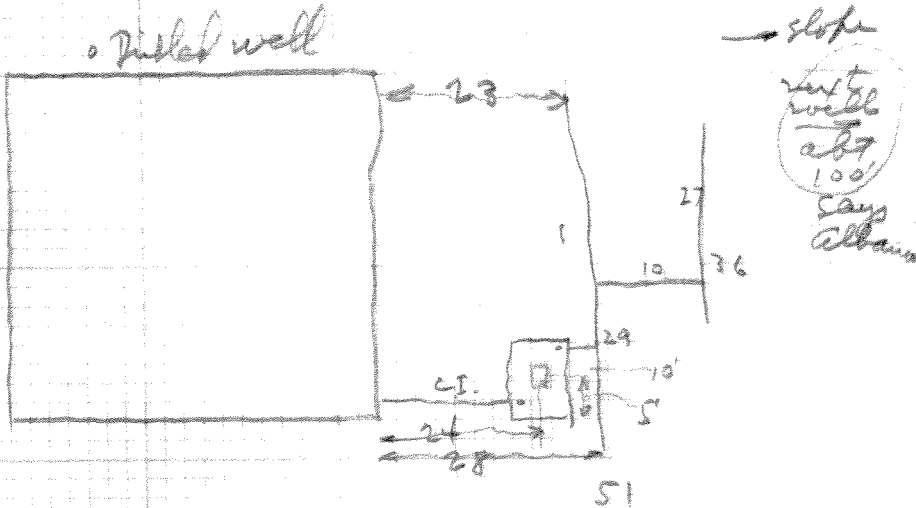
Alfred Albano, Westchester Avenue

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

Westchester Ave

6.8 x 40 x 40 = 810 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 Coutermarsh, 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.

WAC:tf

.....
W.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... 4'-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

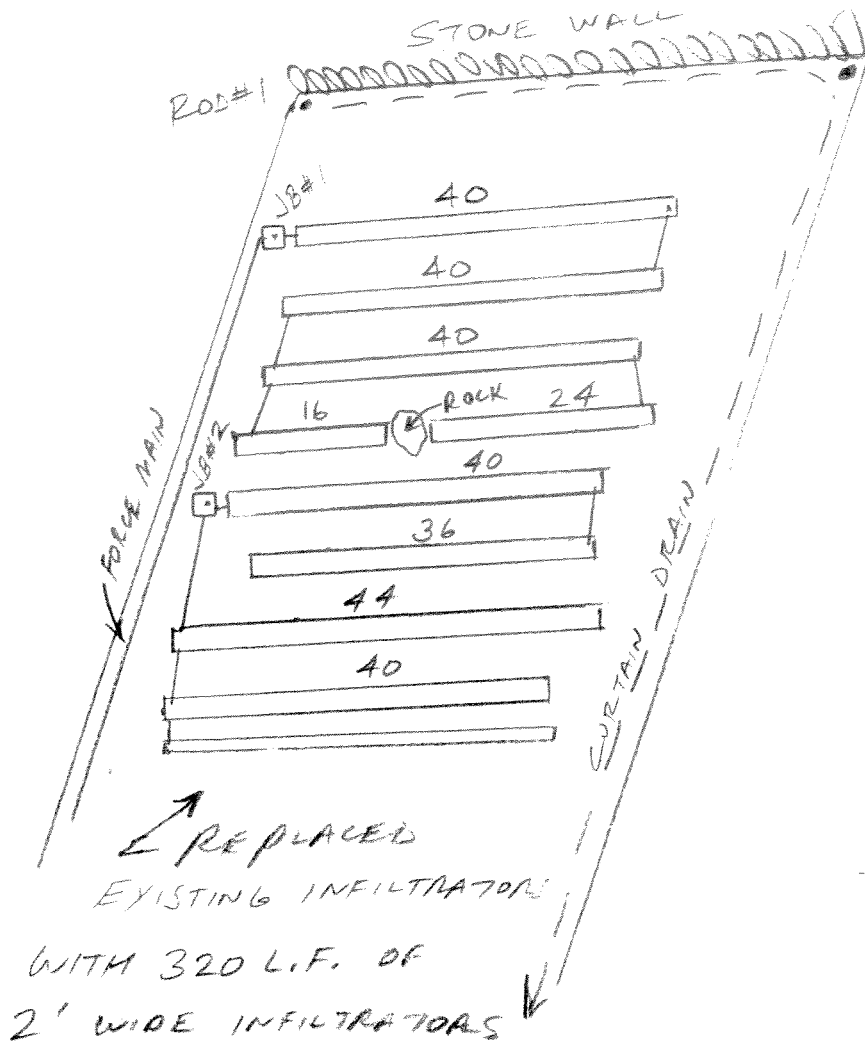
Contractor's Name (print): UNITED SEPTIC & EXCAVATION Date Repair/Remediation Completed: 6-18-14

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

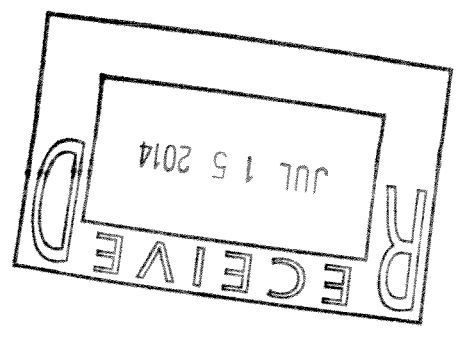
Upon completion please remit to:

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)



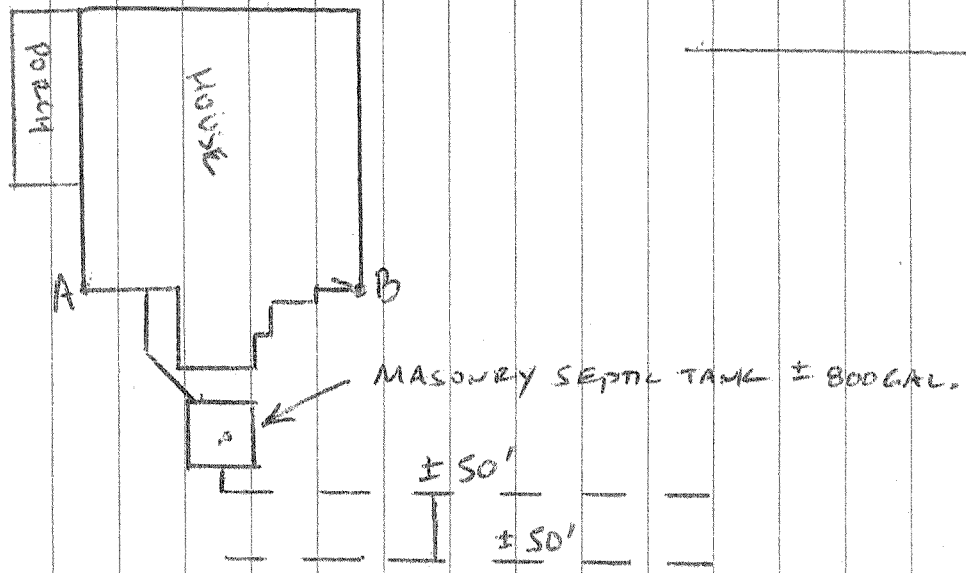
	ROD #1	ROD #2
J-BOX #1	13 1/2	63 1/2
END #1	39 1/2	23
BEGIN #4	35	76
END #4	49	42
J-BOX #2	42 1/2	81 1/2
END #5	48 1/2	49
BEGIN #8	65	99
END #8	64	71



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. Hauld
D 47.60 Westchester County Department of Health

FILE COPY

Stamped

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

CONSTRUCTION PERMIT 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 _____

Other Requirements _____

I represent that I am wholly and completely responsible for the design and location of the proposed system(s); 1) that the separate sewage disposal system above described will be constructed as shown on the approved plan or approved amendment thereto and in accordance with the standards, rules and regulations of the Westchester County Department of Health, and that on completion thereof a "Certificate of Construction Compliance" satisfactory to the Commissioner of Health will be submitted to the Department, and a written guarantee will be furnished the owner, his successors, heirs or assigns by the builder, that said builder will place in good operating condition any part of said sewage disposal system during the period of two (2) years immediately following the date of the issuance of the approval of the Certificate of Construction Compliance of the original system or any repairs thereto; 2) that the drilled well described above will be located as shown on the approved plan and that said well will be installed in accordance with the standards, rules and regulations of the Westchester County Department of Health.

Date 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. Hauld
SD 46.64 Westchester County Department of Health

FILE COPY

Stamped

DR 65-5
APPROVED

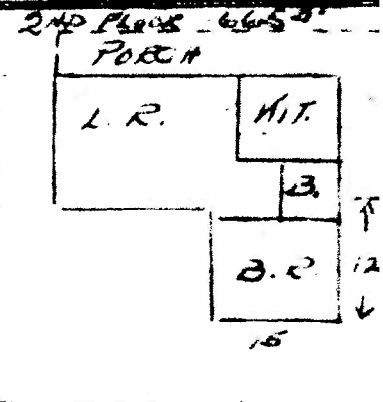
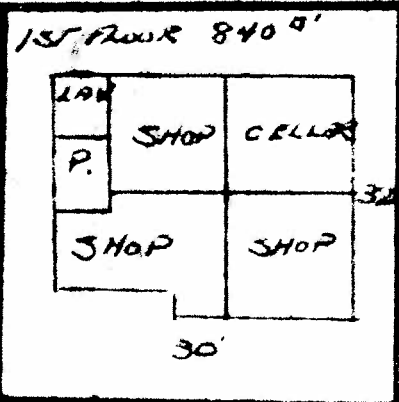
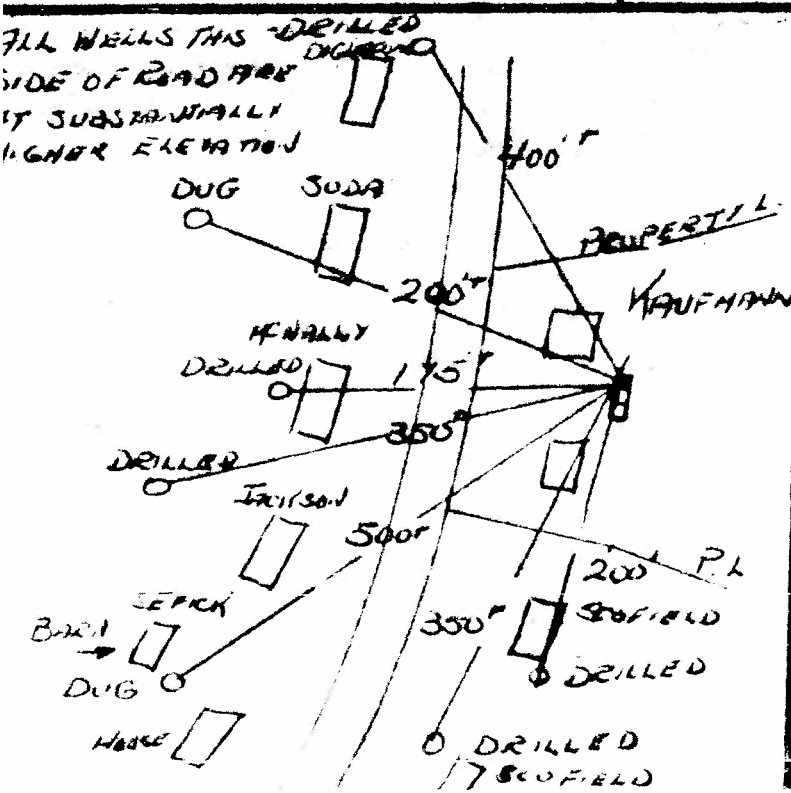
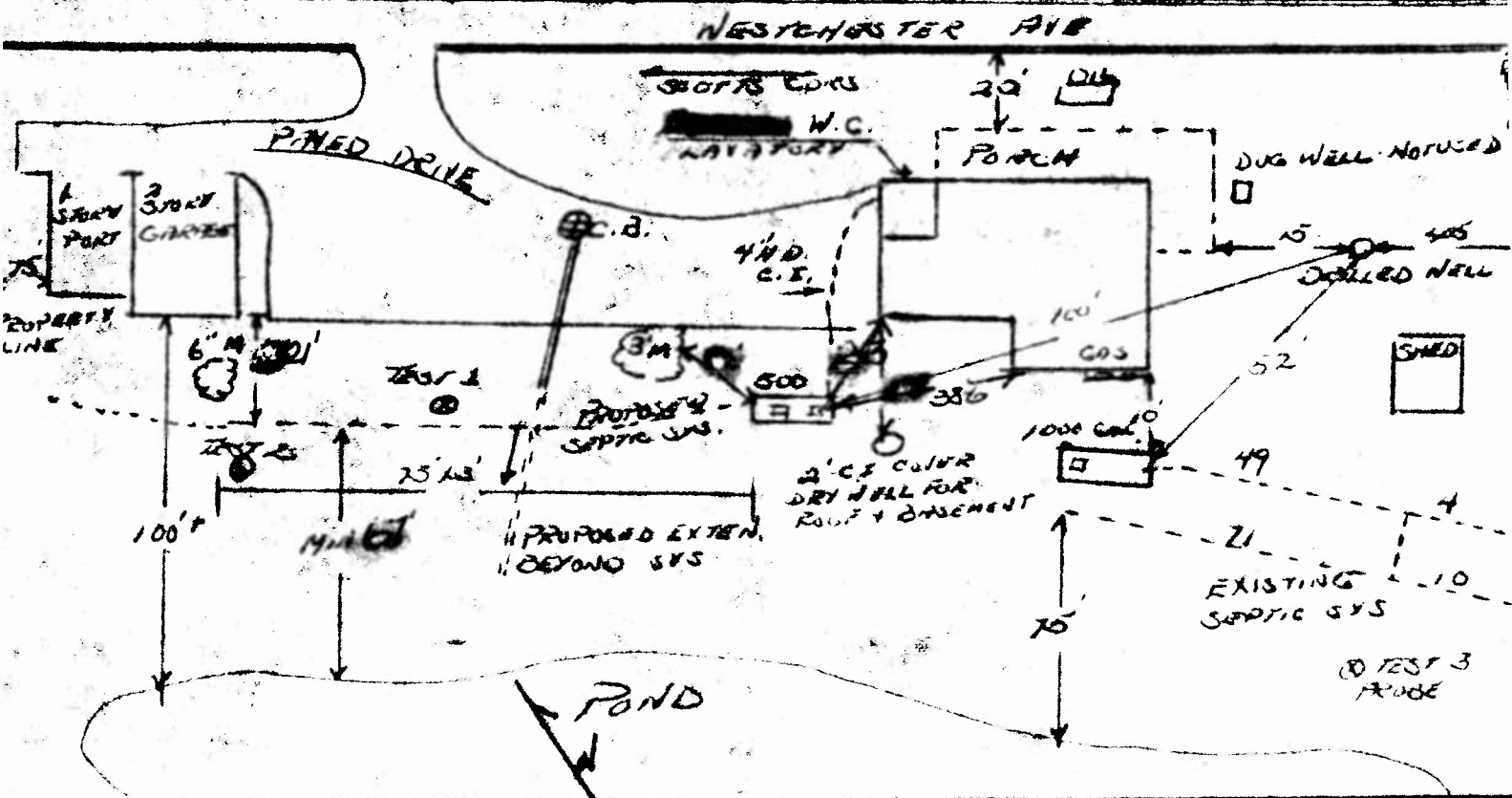
Designs
Maintenance
Installation
Cleaning
Septic Tanks

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

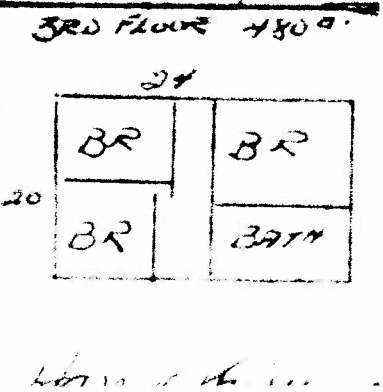
JUL 13 65
West. Co. Dept.
of Health

By *J. G. Hand* 10/10/65

KAUFMANN MILDRED D. WESTCHESTER AVE POUND RIDGE / SEG 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 DRAINWELLS
GAS & SURFACE TANKS
WELL WATER ELE. SHOWN
NO CURTAIN DRAINS
NO CURTAIN DRAINAGE
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 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 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 type="checkbox"/> Adj. ponds, etc. <input checked="" type="checkbox"/> 9. Well Water Elevation <input checked="" type="checkbox"/> 10. Curtain Drain Discharge Elevation |
|--|--|

DATA SUBMITTED BY (Sign) Henry Kaiser, Inc. Henry Kaiser, Jr. Pres

OWNER KAUFMANN, MILDRED B. BUILDER Henry Kaiser, Inc. 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 Artesian - 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

CERTIFICATE OF CONSTRUCTION COMPLIANCE

Located at Walden Ave Section 9A Block 941

Owner Columbo & Mastromarino Lot 21 Job

Separate Sewerage System built by Jung Address 111 Walden Ave

Consisting of 50 Gal. Masonry, Metal Septic Tank 74 lineal feet X 2 width trench

Other requirements

Water Supply: Public Supply From

Private Supply Drilled By Jung Address 111 Walden Ave

Building Type 1 1/2 story Number of Bedrooms 1 Date Permit Issued APR 1973

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 4/1/73 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.

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, Sr. 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 21 Lot 21 Job

Owner Columbo & Mastromarino Address Post Office Round Ridge NY Lot Area

Building Type Addition to Commercial Bldg No. of Bedrooms 0 Total Habitable Space 0 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 [Signature]

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, Sr. 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. Matromaru 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

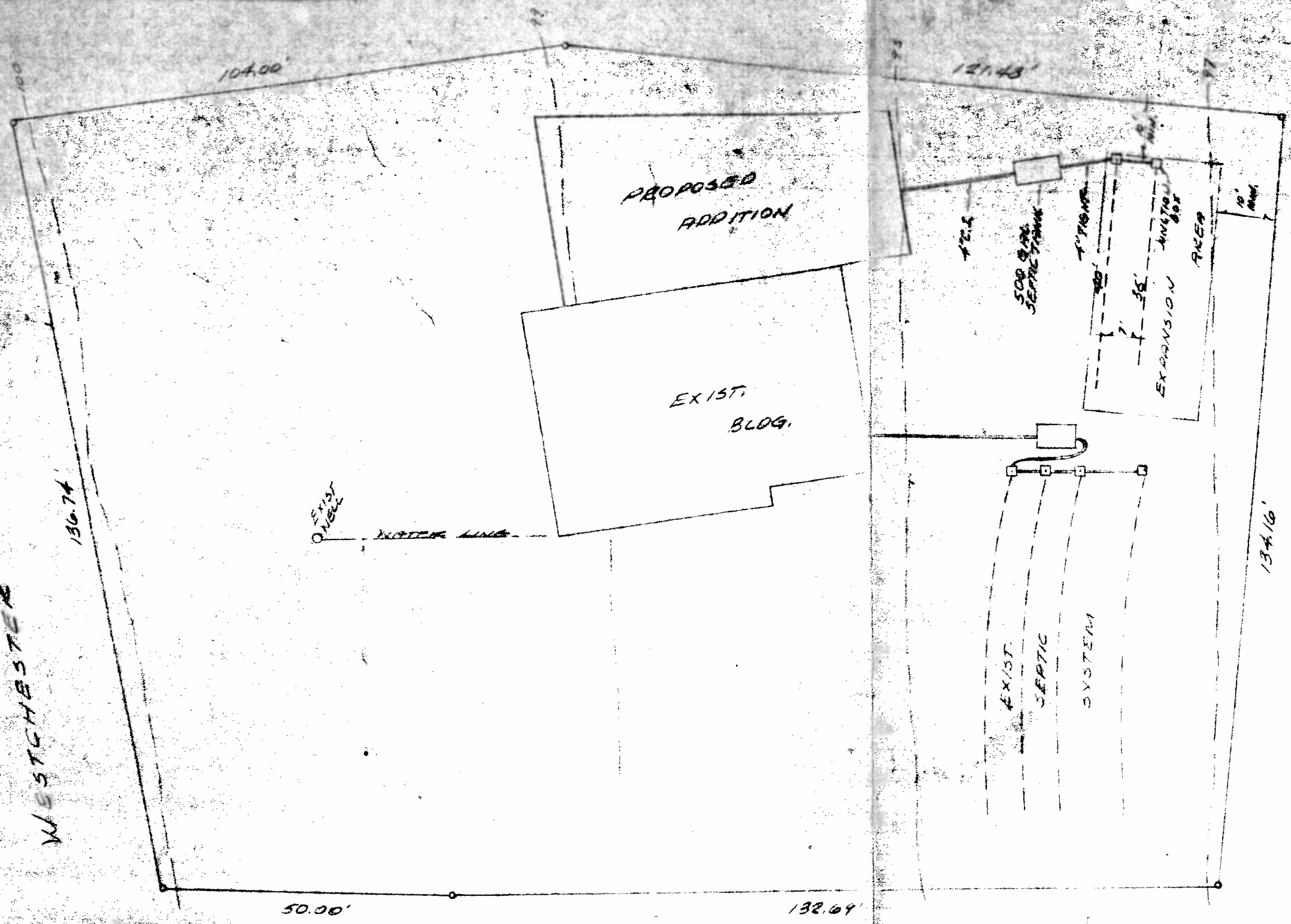
DESIGN
 Soil Rate Used 4 Min/1" Drop: S.D. Usable Area Provided Double the System
 Maximum 8 persons/day @ 15 gpd/person/day = 120 gallons/day
 No. of Bedrooms _____ Septic Tank Capacity 500 Gals. Masonry Metal
 Absorption Area Provided By 75 L.F. x 24" 36" width trench. Other _____

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

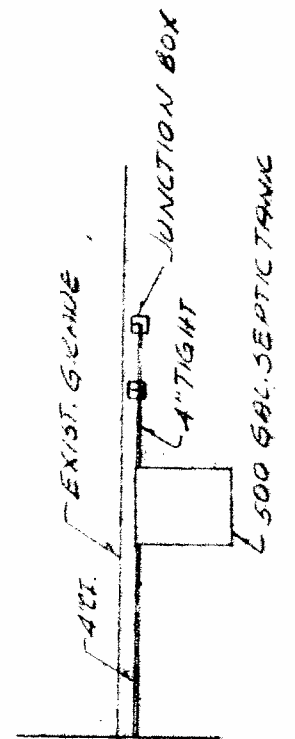
WESTCHESTER AVE.



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

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

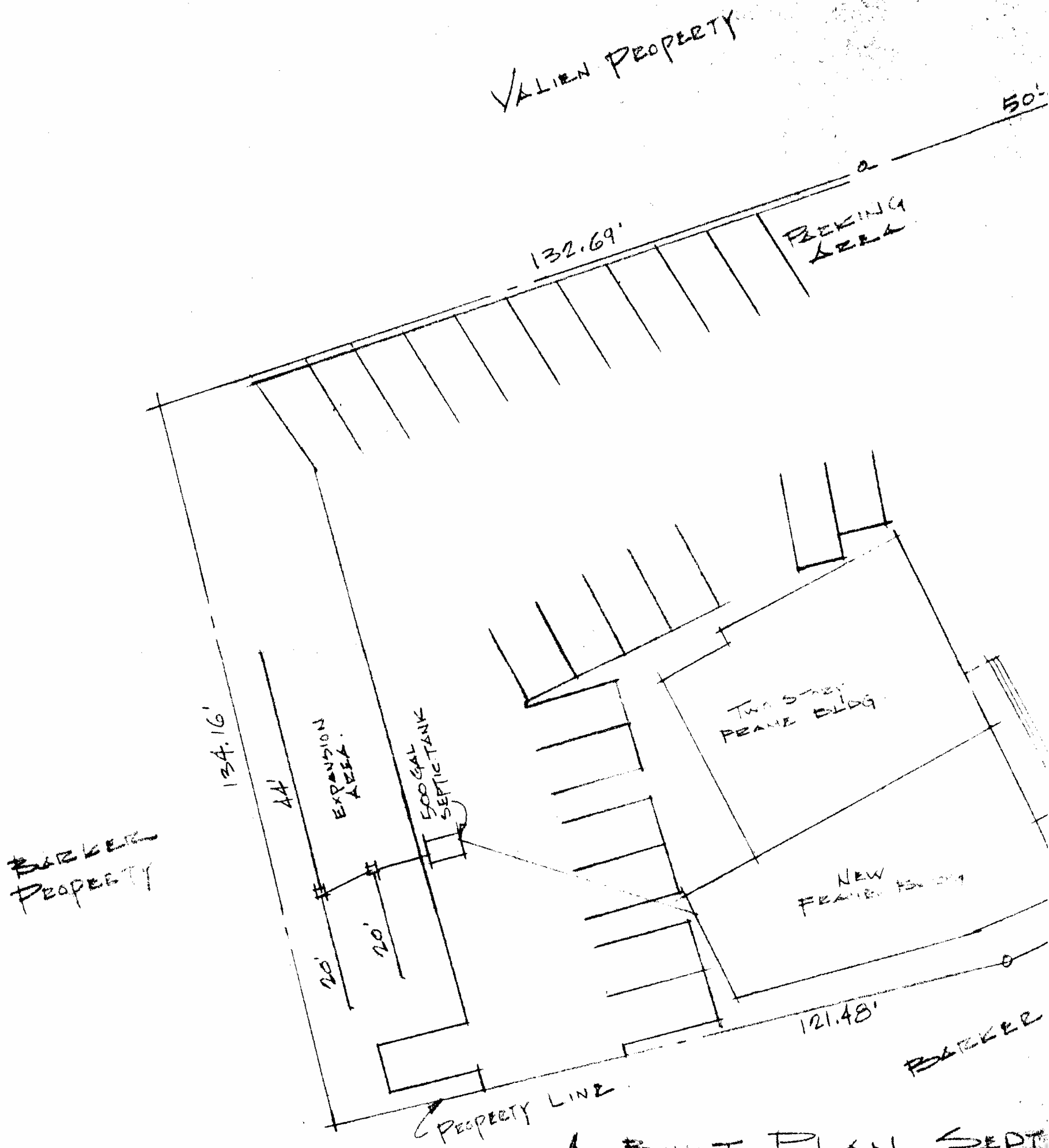
JOHN P. ANNICELLI P.E. NYS. LIC. NO.



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

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

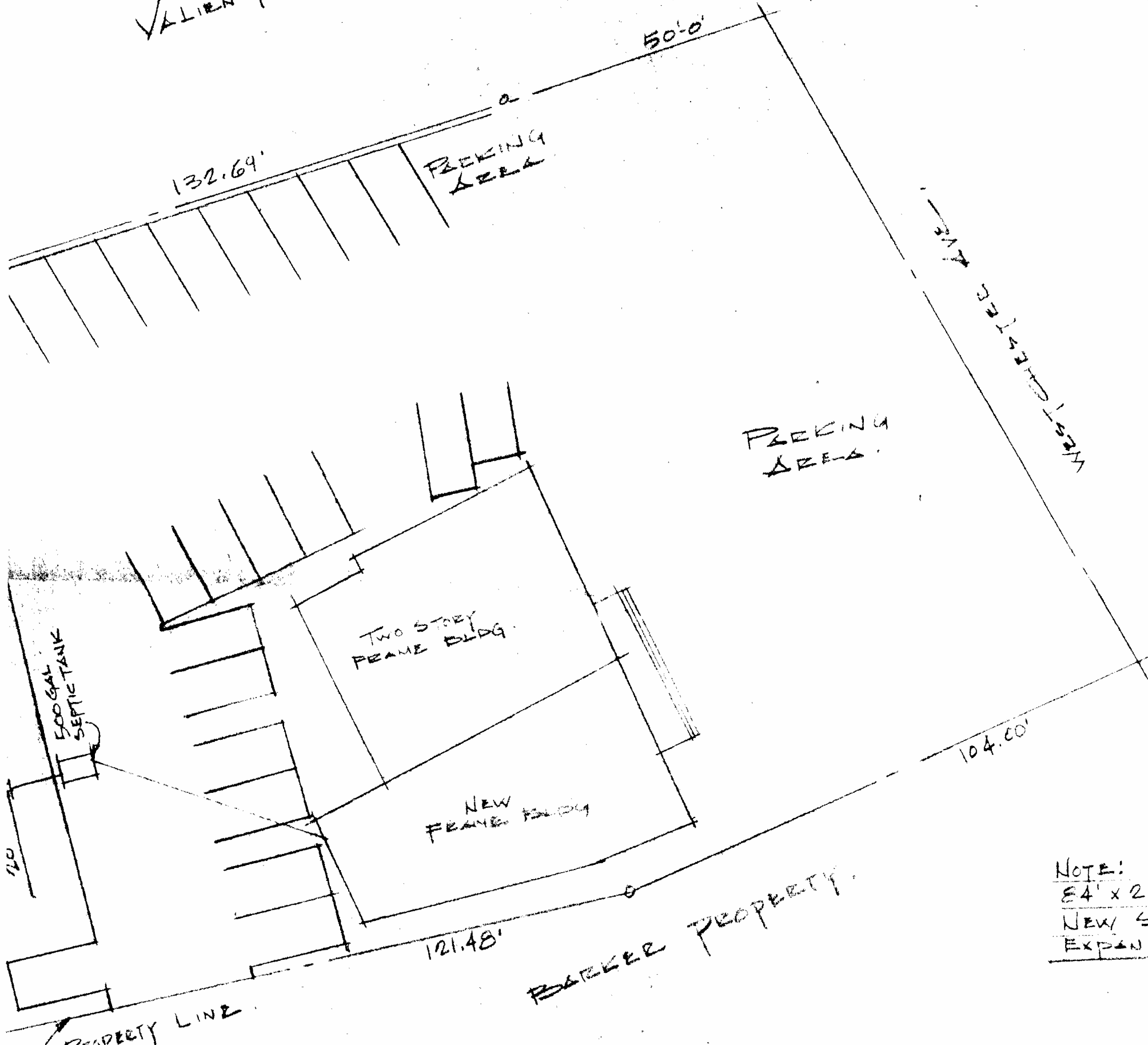
SEPARATE SEWAGE SYSTEM
F. COLOMBO & J. MASTROMAURO
WESTCHESTER AVE.
TOWN OF POUND RIDGE
WESTCHESTER CO., N.Y.
SCALE AS SHOWN APRIL 10, 1973
JOHN P. ANNICELLI P.E.
TEDDY LANE BEDFORD N.Y.



AS BUILT PLAN SEPT
SCALE 1"=2'

NO TRUCKS MACHINERY BUILDING MATERIALS NOR EXCAVATED EARTH ALLOWED IN SEWAGE DISPOSAL AREA. CONSTRUCTION OF THE SYSTEM IS TO BE IN ACCORDANCE WITH THESE PLANS AND ANY REVISIONS THERE TO AND THE RULES AND REGULATIONS OF THE PERMIT ISSUING GOVERNMENTAL AGENCY.

VALIEN PROPERTY



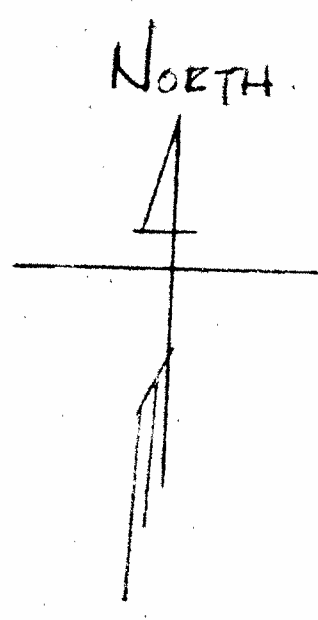
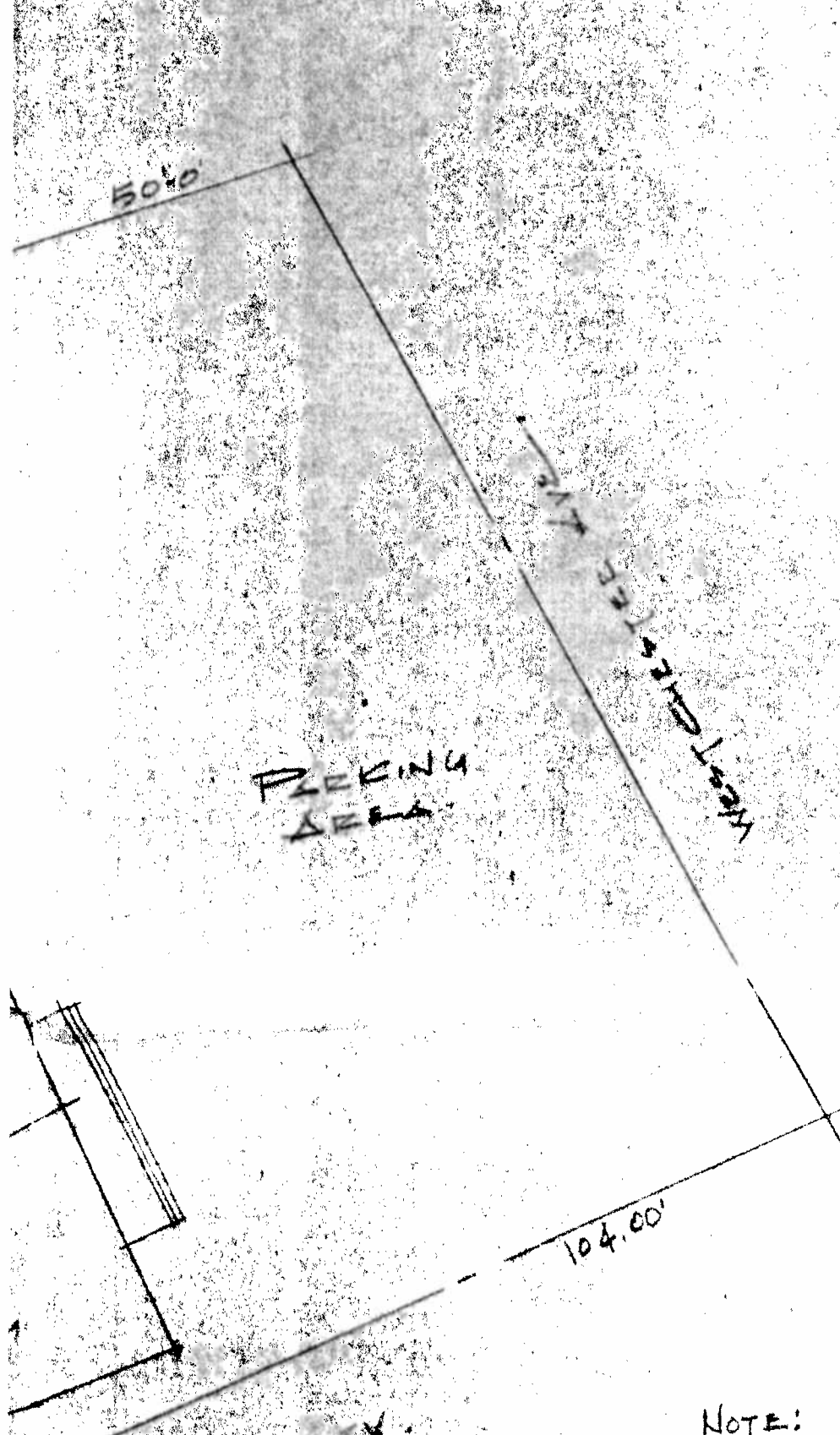
NOTE:
 8'4" x 2' T
 NEW SYS
 EXPANSION

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**
WCDH File No. **PR 75-257**

CERTIFICATE OF CONSTRUCTION COMPLIANCE

H1-604
94-35-10
7

Located at _____ Section _____ Block **9400**

Owner **Paradise Assoc** Lot **21** Job _____

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

Consisting of **1000** Gal. Masonry, Metal Septic Tank **187** 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>		

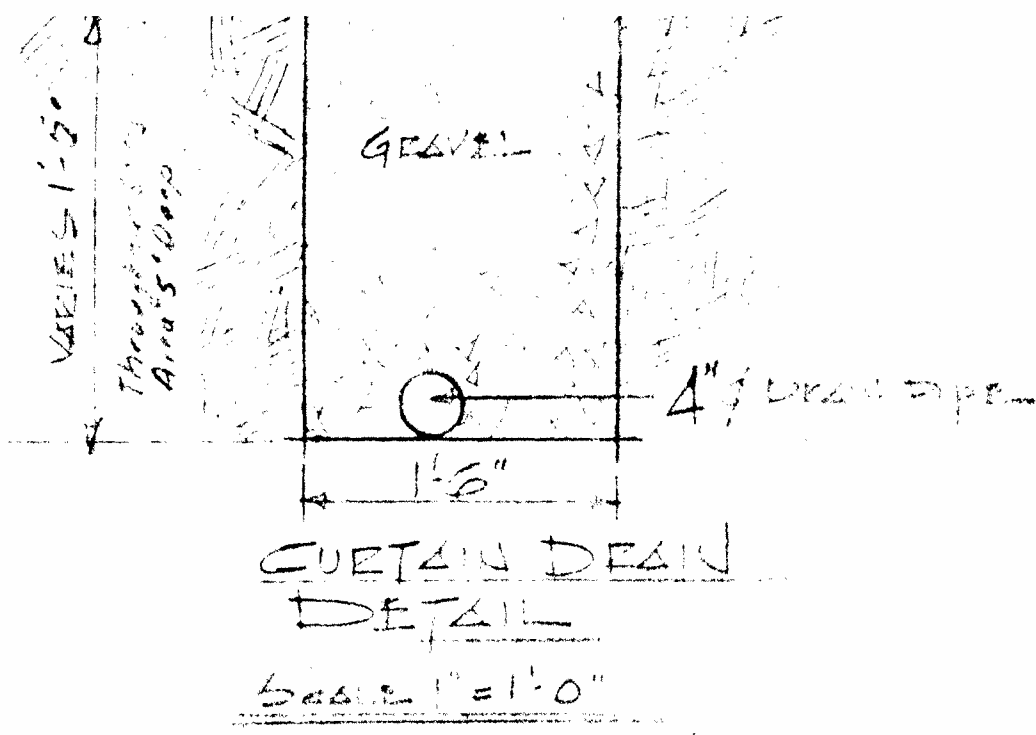
INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED 9'
 INDICATE LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED 3'
 TESTS MADE BY John P. Annice DATE 9/1/75

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

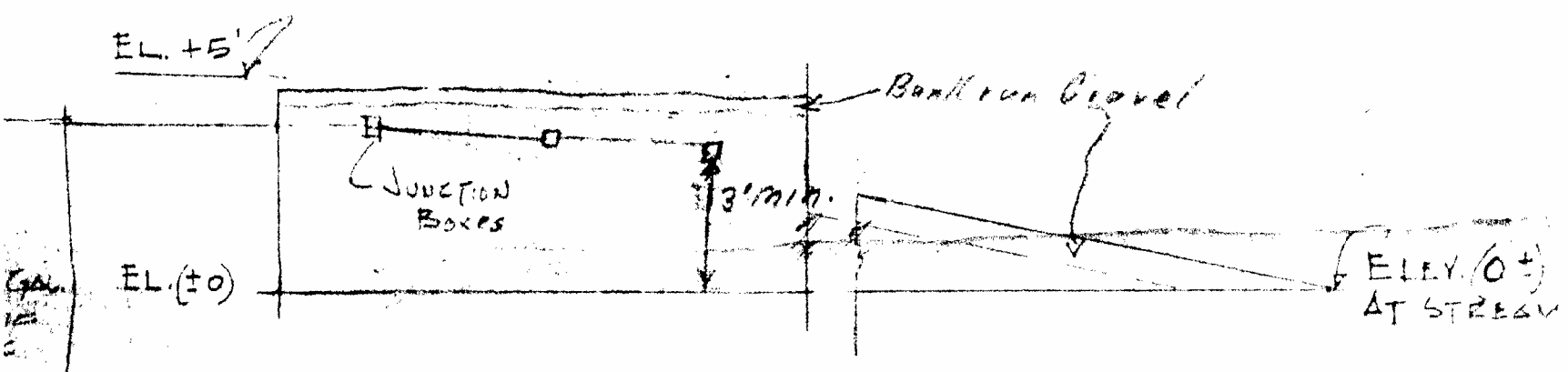
Name _____
 Address John P. Annice 18506
Troy La. Bedford, N.

Signature _____
 SEAL

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"

ELEV. (to)

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"

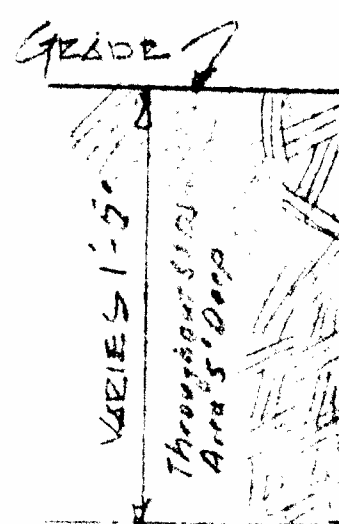
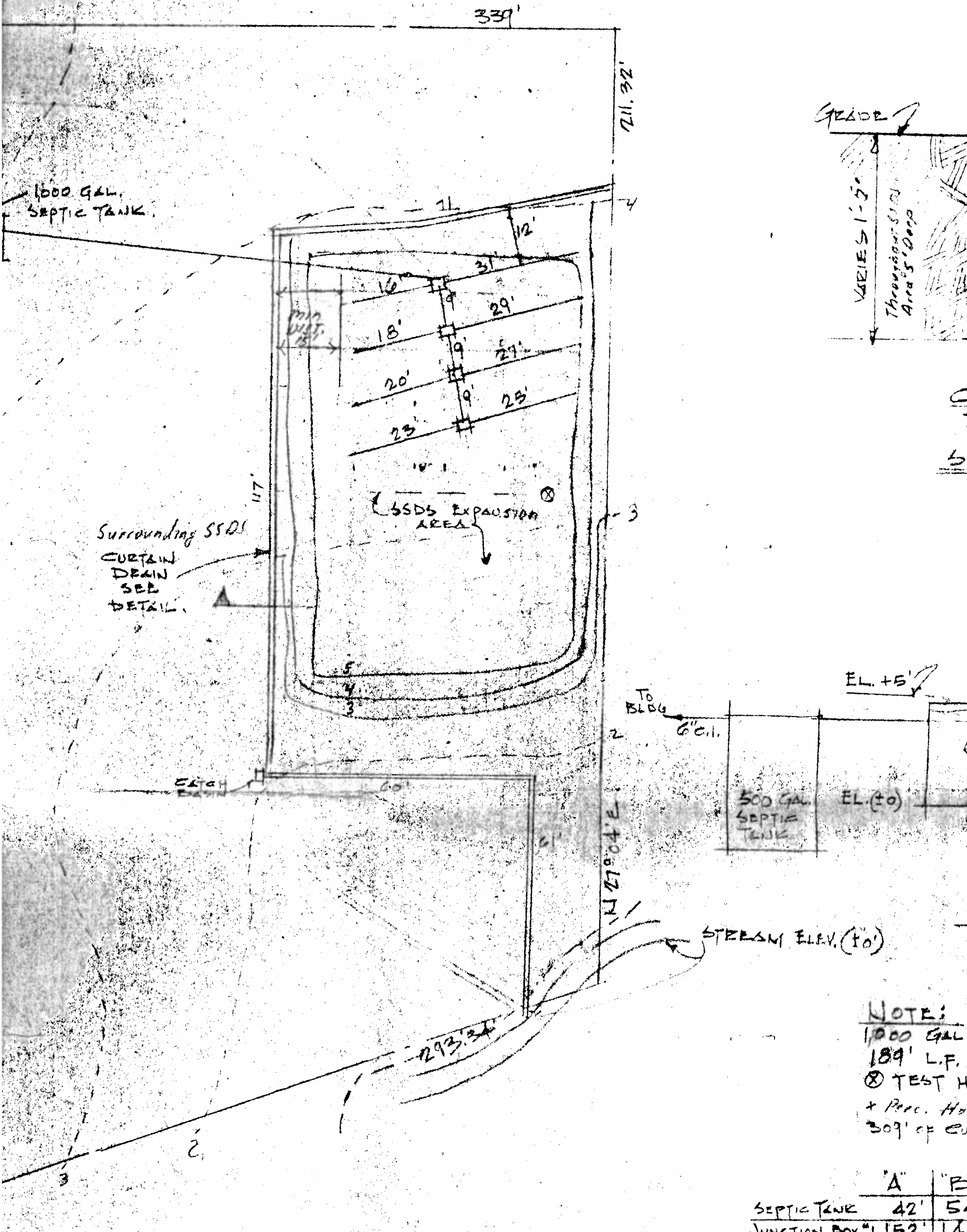
ACCEPTED
AS FINAL PLANS
DATE July 26, 1976
WEST. CO. DEPT.
OF HEALTH
BY V.R. Lave

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. 10506



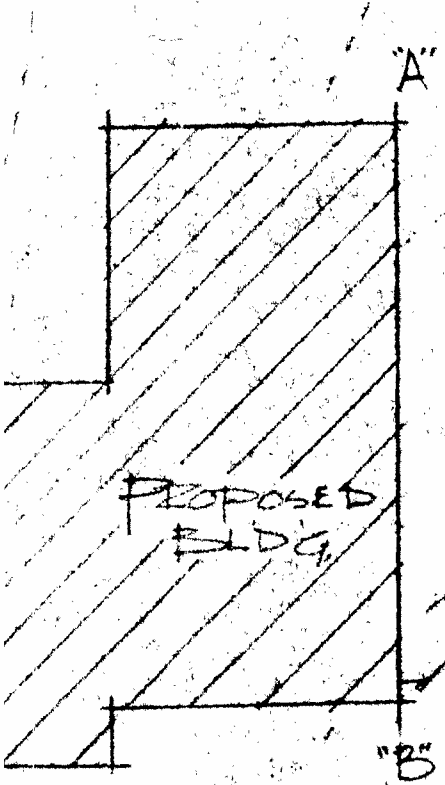
NOTE:
 1000 GAL.
 189' L.F.
 ⊗ TEST H
 + Perc. H
 309' of CU

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

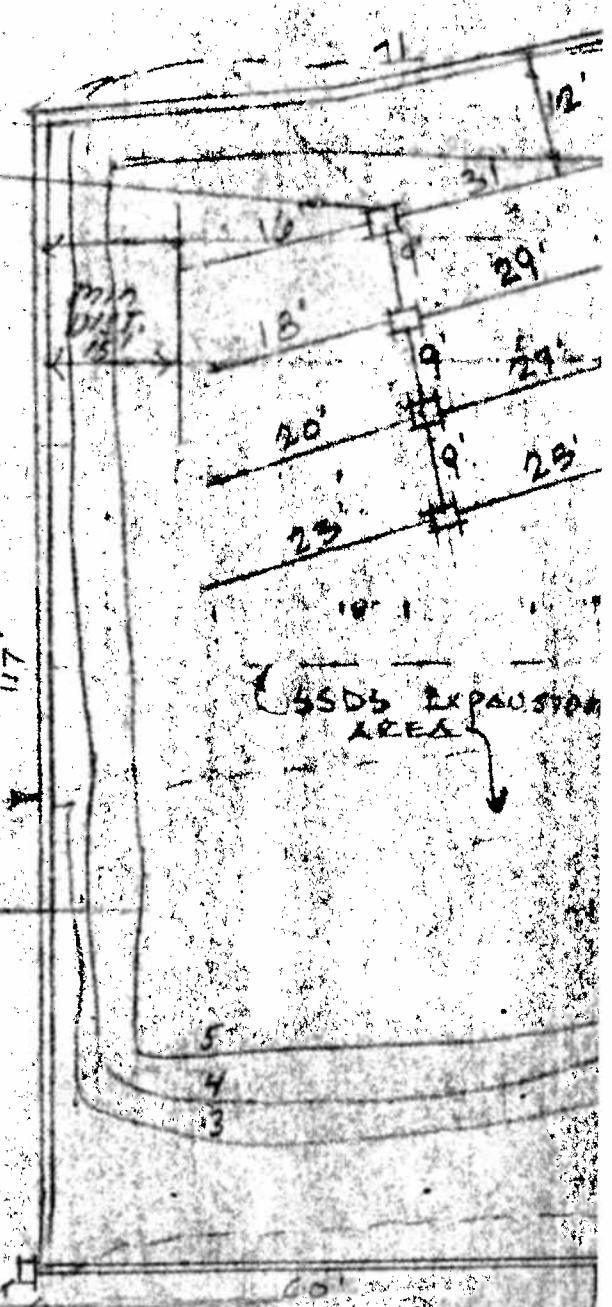
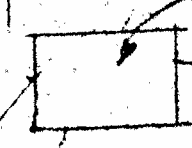
SITE PLAN
 SCALE 1" = 20'-0"

--- Existing Contours
 ——— New Contours

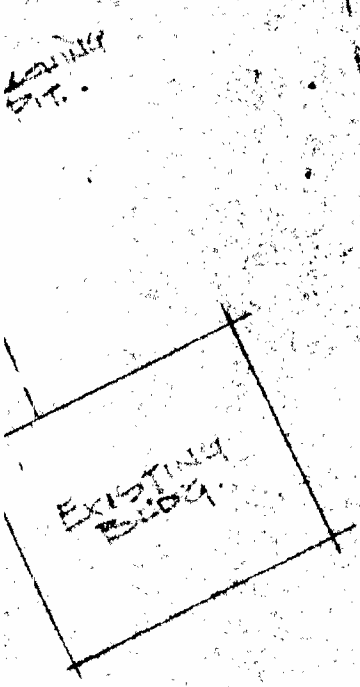
100' MIN.



1000 GAL. SEPTIC TANK



Surrounding SSDS CURTAIN DRAIN SEE DETAIL



N82°12'20" E

SITE PLAN SCALE 1" = 20'-0"

Existing Contour New Contour

WESTCHESTER AVE

S 63° 40' E

100' MIN.

80.00'
N 11° 59' E
120.00'

EXISTING BLDG.

LEACHING PIT.

Well

PROPOSED BLDG.

A"

B"

EXISTING BLDG.

SEPTIC TANK

LEACHING FIELD

LEACHING PIT.

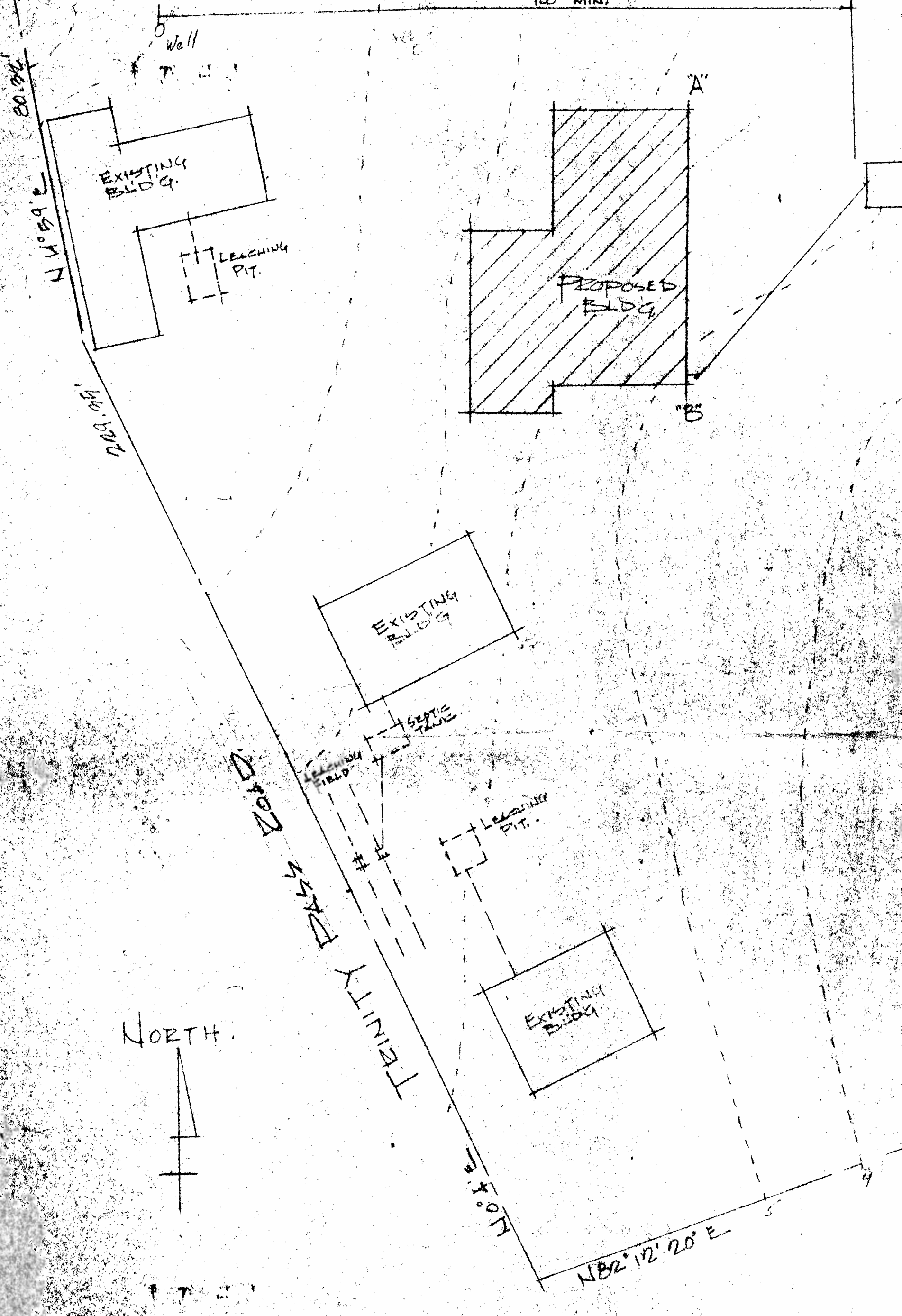
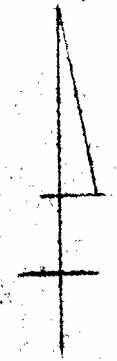
EXISTING BLDG.

TRINITY PARK ROAD

NORTH

120.00'

N 82° 12' 20" E



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.

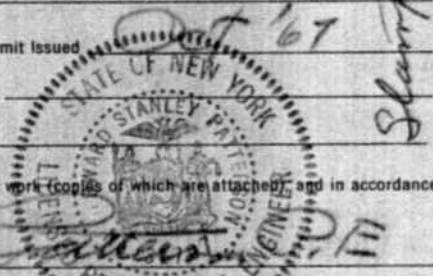
Consisting of 2000 Gal. Masonry, Metal Septic Tank Leaching Gallery 40x5x5 lineal feet X _____ width trench
Other requirements None

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 Stanley C. [Name]

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. [Name]
Westchester County Department of Health

See back to page 2 FILE COPY on West office

Douglas Mackey
PRESIDENT



KAISER - BATTISTONE, INC.

Sewage Systems Specialists

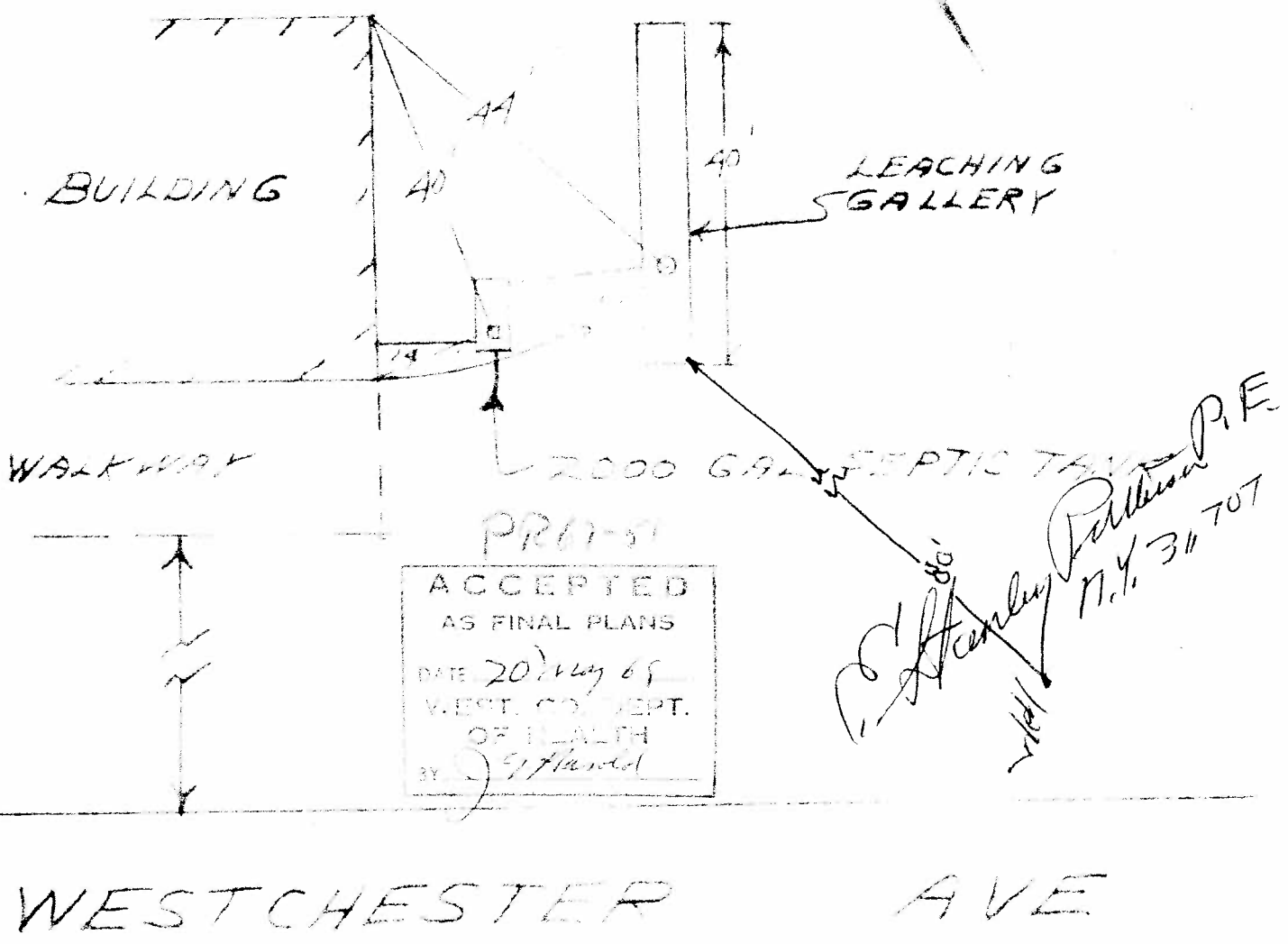
- CLEANING
- REPAIRS
- INSTALLATIONS
- ELECTRIC POWER
- DRAIN CLEANING
- SEWAGE TREATMENT PLANTS
- CHLORINATION EQUIPMENT

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



ACCEPTED
 AS FINAL PLANS
 DATE 20 May 68
 WEST. CO. DEPT.
 OF HEALTH
 BY J. J. Haddad

Handwritten signature: J. J. Haddad
Handwritten text: N.Y. 31707
Handwritten initials: Haddad

WESTCHESTER AVE

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 _____

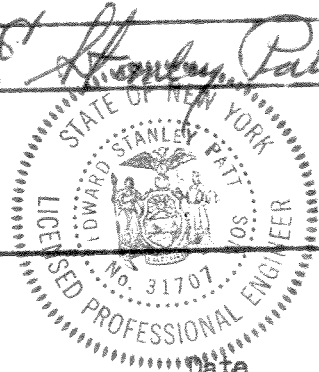
Absorption Area Provided By L.F.x24" 36" width trench. Other _____

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 dental
 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.

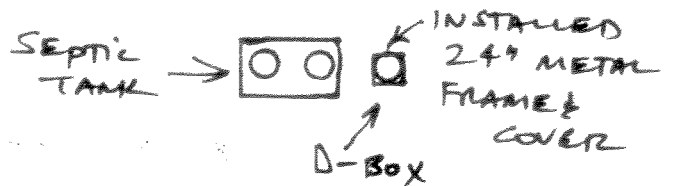
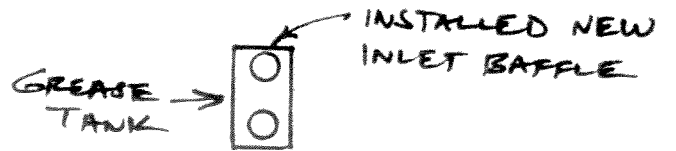
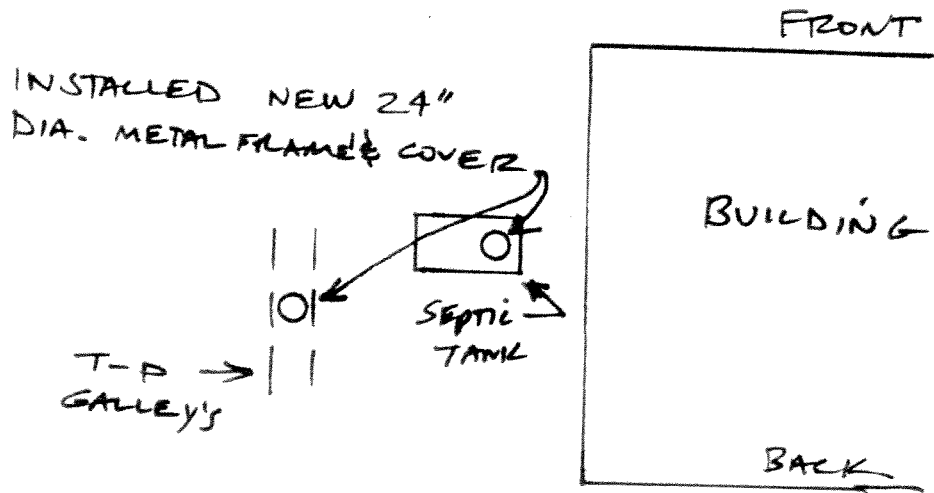
- | Repaired | Replaced | | |
|--------------------------|-------------------------------------|---|---|
| <input type="checkbox"/> | <input type="checkbox"/> | House Sewer or other Solid Pipe(s) | DRAW BUILDING AND LOCATION
OF WORK PERFORMED ON BACK
OF THIS FORM |
| <input type="checkbox"/> | <input 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 type="checkbox"/> | <input checked="" type="checkbox"/> | Other System Component(s) - Describe: <u>Covers of septic tank/grease trap/Obox</u> | |
| <input type="checkbox"/> | <input type="checkbox"/> | Entire System Replaced | <u>with seal tight lids</u> |
| | | | <u>installed new baffle at inlet of</u> |
| | | | <u>grease trap</u> |

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. :

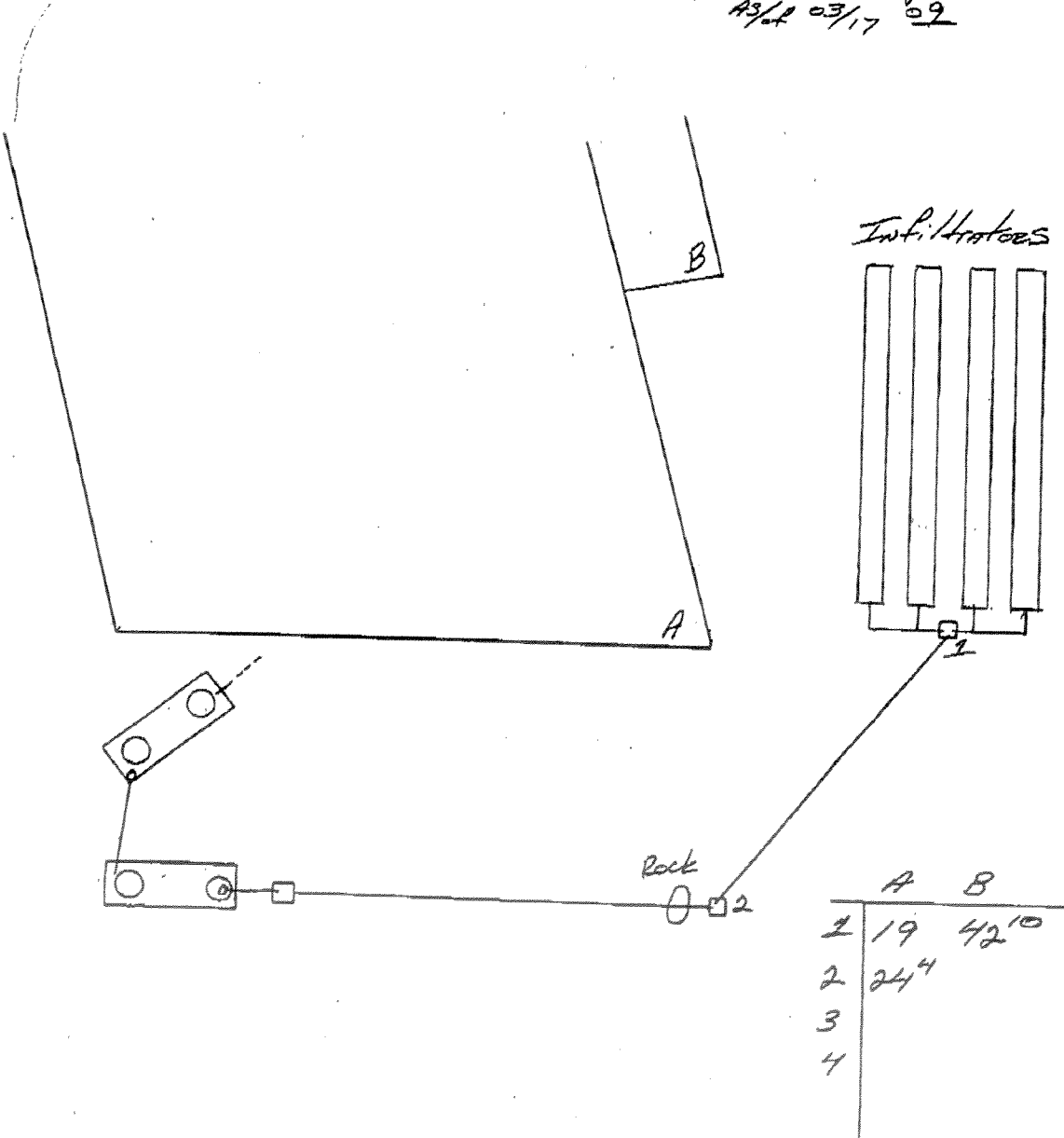
Jan. 25 2007 03:24AM P1



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 Lot: 27 R.S. Lot:
Becker Sarah

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:

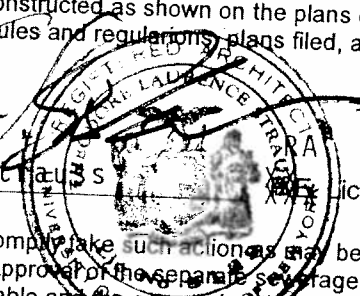
Public Water Supply Public Water Source:

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 of ___, 20__.

Well Driller Signature: *[Signature]*

Notary Public, Westchester County.

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
 Bureau of Environmental Quality
 118 North Bedford Road
 Mount Kisco, NY 10549

DESIGN DATA SHEET - SEPARATE SEWAGE SYSTEM FILE NO. _____

Owner Thomas Ferrara/Sarah Becker Address 38 Westchester Avenue, Scotts Corners

Located at (Street) _____ Sec. 8 Block 9455 Lot 27

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	Depth to Water From Ground Surface 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

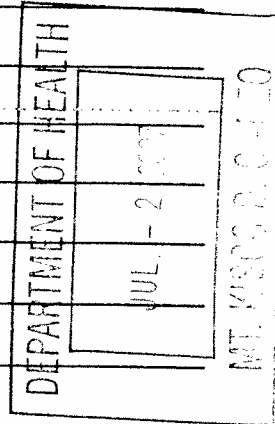
Notes:

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

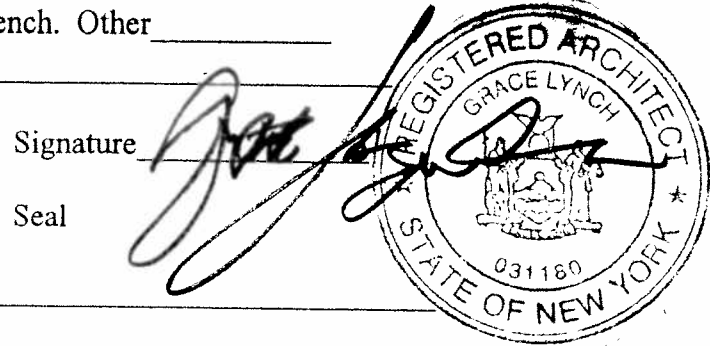
DEPTH G.L.	HOLE NO. <u>1</u>	HOLE NO. <u>2</u>	HOLE NO. <u>3</u>	HOLE NO. _____
	Topsoil	Topsoil	Topsoil	
6"	Topsoil	Topsoil	Topsoil	
12"				
18"	Sandy Loam	Sandy Loam	Sandy Loam	
24"	"	"	"	
30"				
36"	Fine graded sand with small to medium stones			
42"	"	"	"	
48"	"	"	"	
54"	"	"	"	
60"	"	"	"	
66"	"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

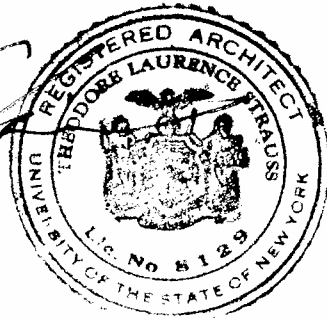
RE: Permit No. PR 2007-18 - 38 Westchester Avenue, Poundridge, NY.

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)

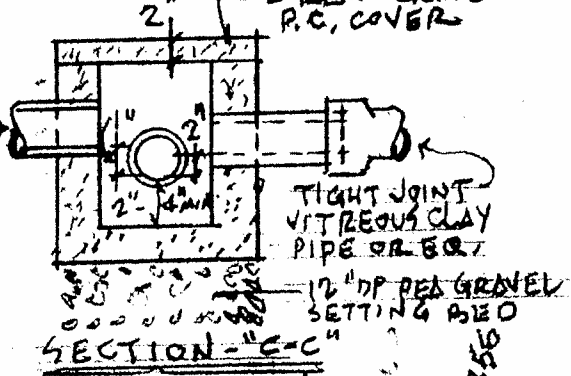
Are hereby accepted as conforming to the provisions of Chapter
873, Article VIII, Section 873.708.1 of the Westchester County Sanitary Code, subject to the provisions
of the Certificate of Construction Compliance issued this date.

Reviewed by: _____ Date _____

Recommended by: _____ Date _____

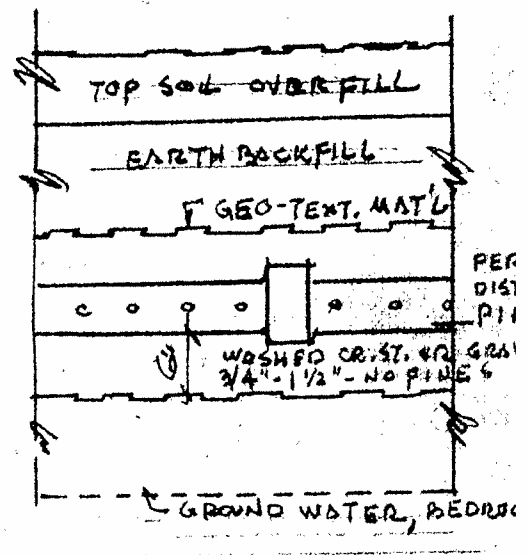
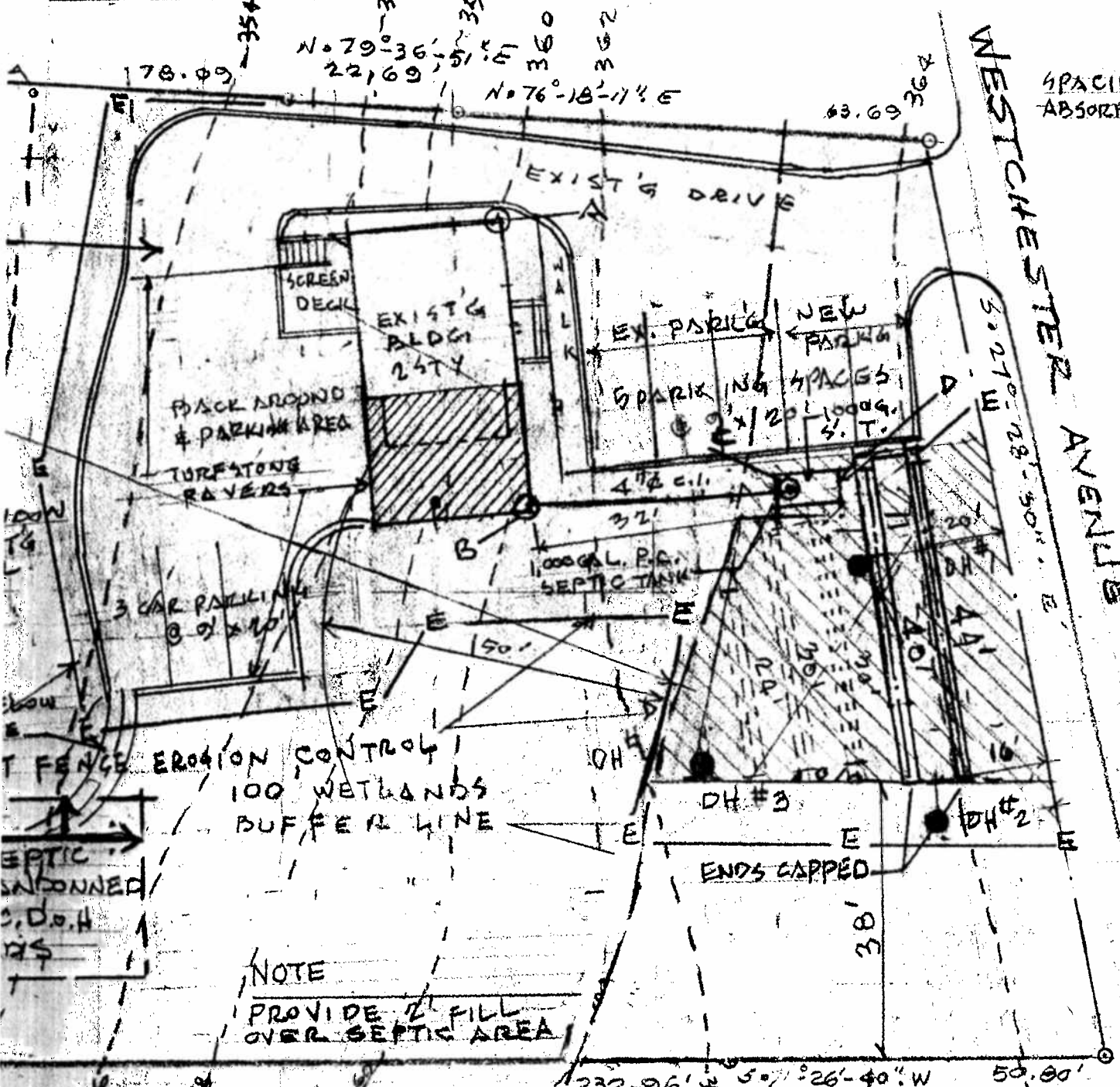
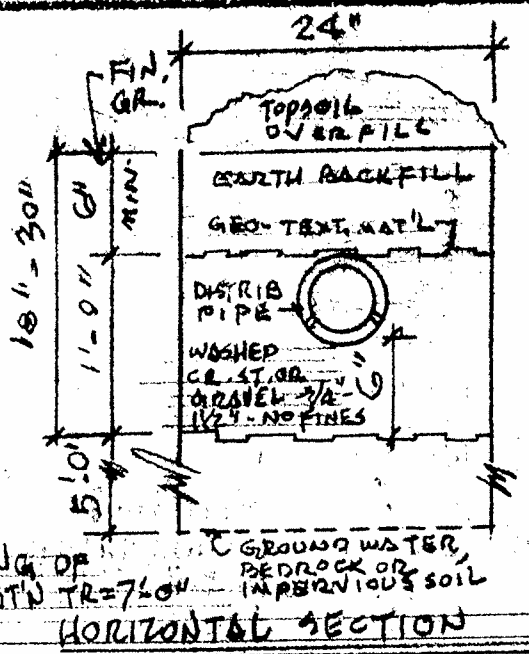
Accepted by: Fuelberg 5/23/08
Dist. _____

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" WASHED GRAVEL FREE OF FINES OR SILL.
5. TRENCH COURSE TO BE COVER WITH GEO-TEXTILE MATERIAL OR APPROVED EQUAL.

SEPTIC SYSTEM ANALYSIS & NOTES

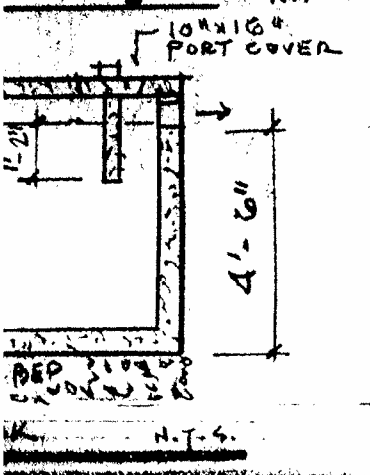
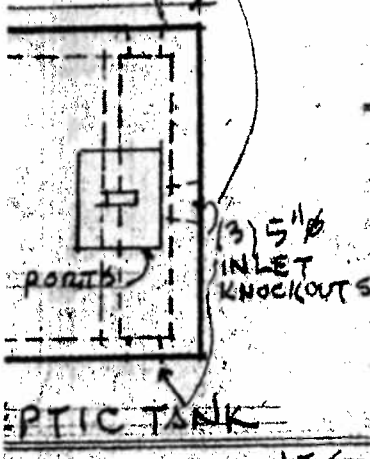
1. NO KNOWN WELLS WITHIN 100' OF PROPOSED S.S.R.A. OR WITHIN 200' IN LINE WITH DRAINAGE TO PROPOSED
2. 100 YEAR FLOOD PLAIN 100' FROM S.S.T.A.
3. NO WATER COURSES, WETLANDS OR STREAMS WITHIN 100' OF S.S.D.A.
4. ALTERED EXISTING RESIDENCE INTO OFFICE BUILDING FOR 5 OFFICES + RECEPTION + CONF 5 PERSONS (1/OFF.) + 1 RECEPTION + 2 IN CONF. RM = 8 PERSONS @ 15 G.P.D. = 120 G.P.D.
5. SEPTIC TANK REQUIRED = 1,000 GAL. PRECAST CONC.
6. LEACHING FIELDS = 8-10 SOIL RATE - APP. RATE = 0.9 G/SF - (120 GPD x 0.9 G/SF) / 2 SF/FT = 67 L.F.
7. 100% EXPANSION AREA PROVIDED (150 GPD / 0.9 G/SF) / 2 = 83.3 L.F.

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

date: 6/24/07
revision: 8/16, 9/19, 10/10, 10/17, 5/09, 8/11

drawn by: T.L.S.
checked by: G.L.

drawing title: AS-BUILT
• PLOT & SEPTIC PLAN

scale: AS SHOWN

job no.: 2500

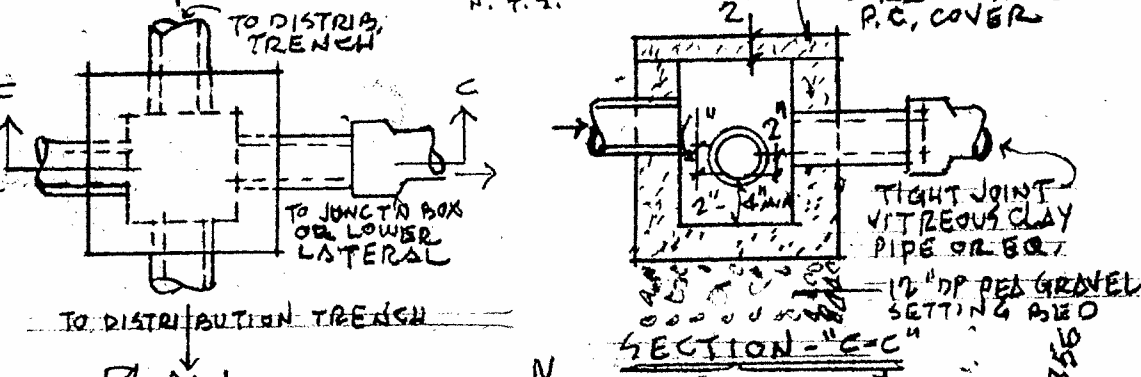
drawing no.: 3

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

NOTES FOR JUNCT'N BOX

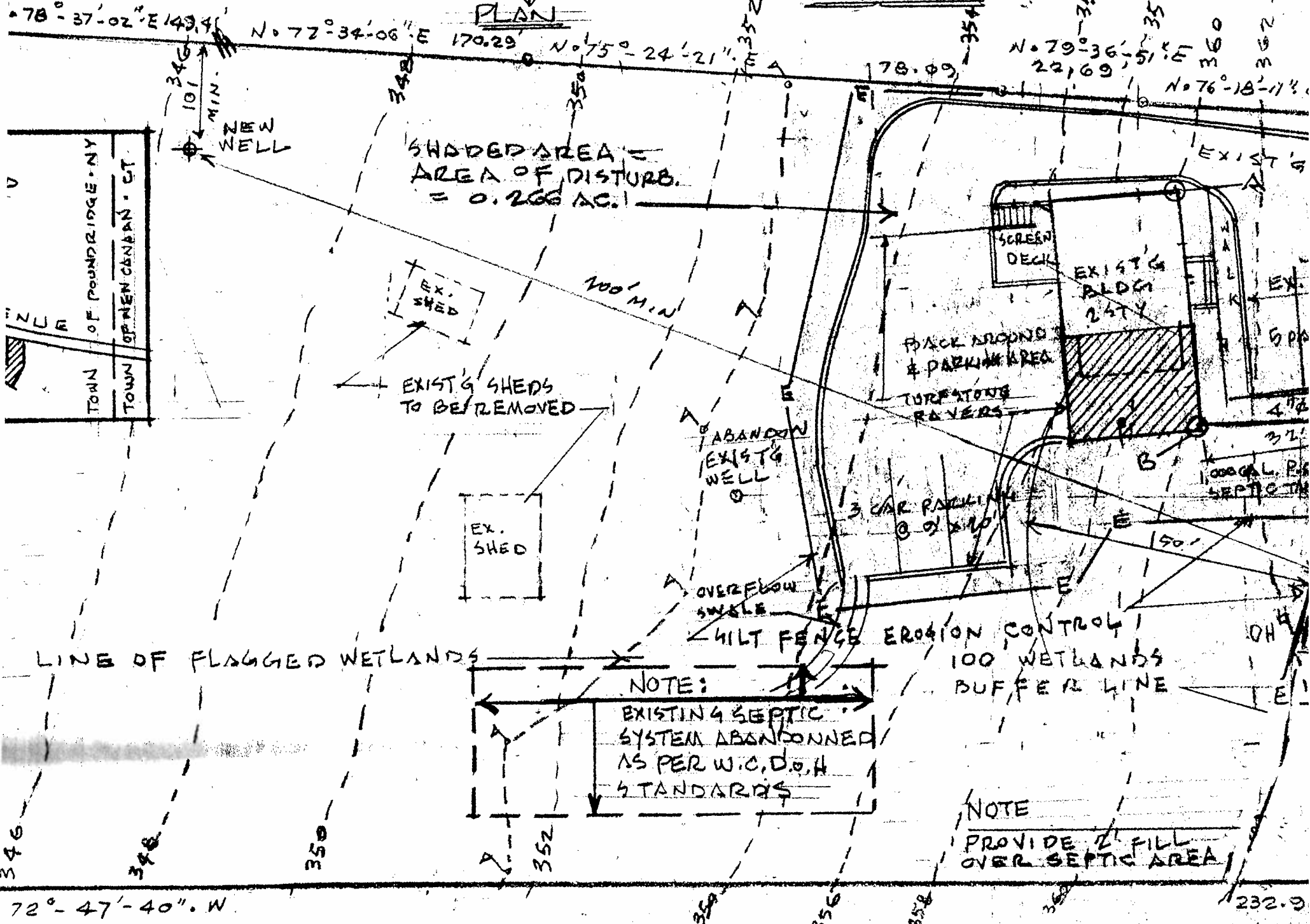
- JUNCTION BOX TO BE MIN. 12'x12'
- MIN. 12" SOLID PIPE FROM JUNCT'N BOX TO LEACH'G FIELD
- MAX. 12" COVER FROM FIN. GRADE TO TOP OF JUNCTION BOX

JUNCTION BOX DETAILS



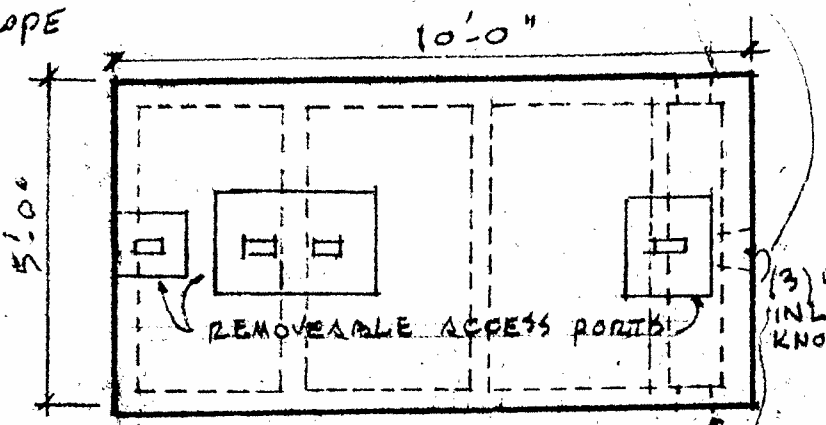
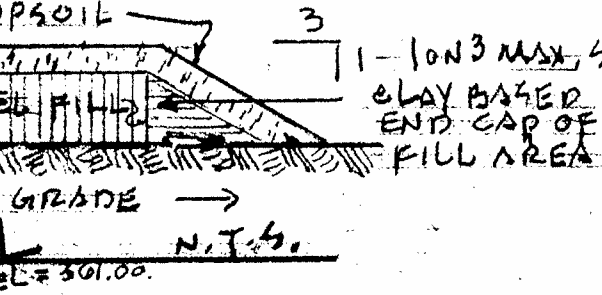
JUNCTIC

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



SEPTIC PLAN

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

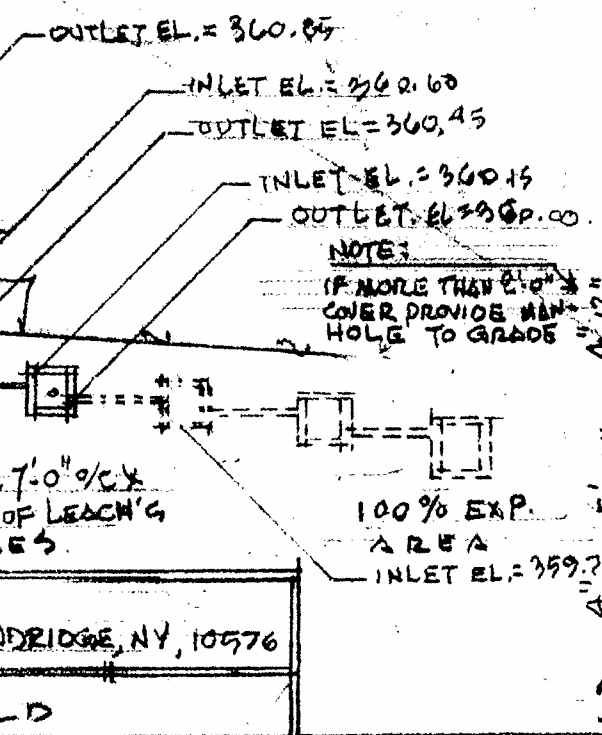


SEPTIC SYSTEM ANALYSIS

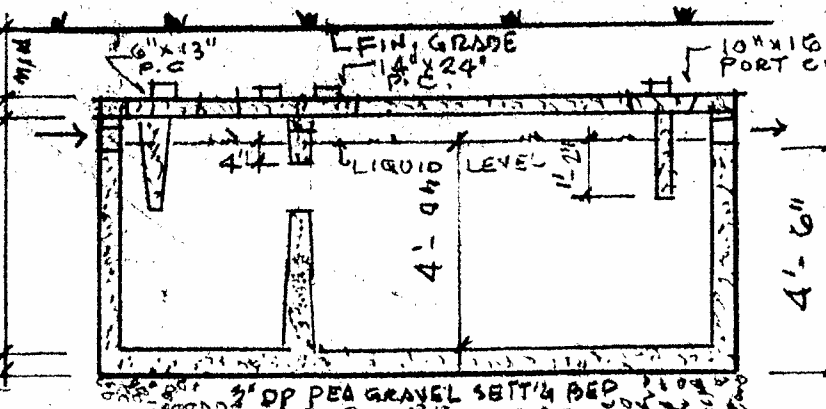
1. NO KNOWN WELLS WITHIN 100'
2. 100 YEAR FLOOD PLAIN I
3. NO WATERCOURSES, WETLAND
4. ALTERED EXISTING RE
5. SEPTIC TANK REQUIR
6. LEACHING FIELDS
7. 100% EXPANSION ARE

CLIMATIC & GE

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



PLAN OF 1000 GAL. PC SEPTIC TANK



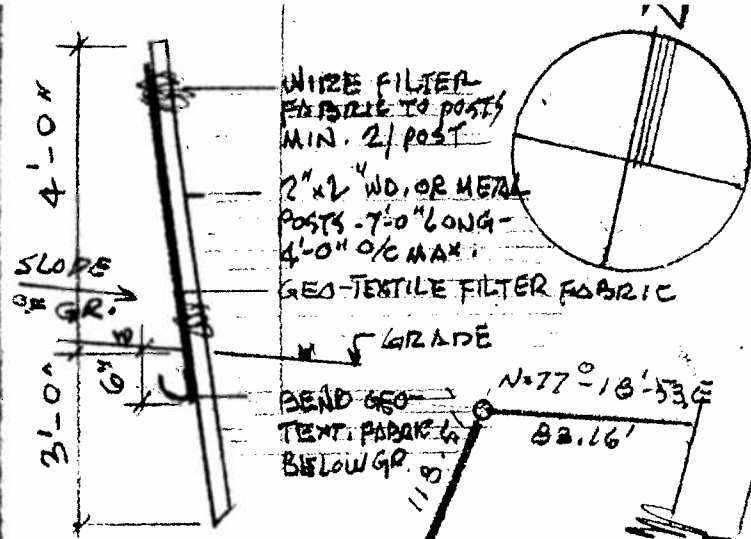
SECTION THRU SEPTIC TANK

WATER SHED: UPPER LONG

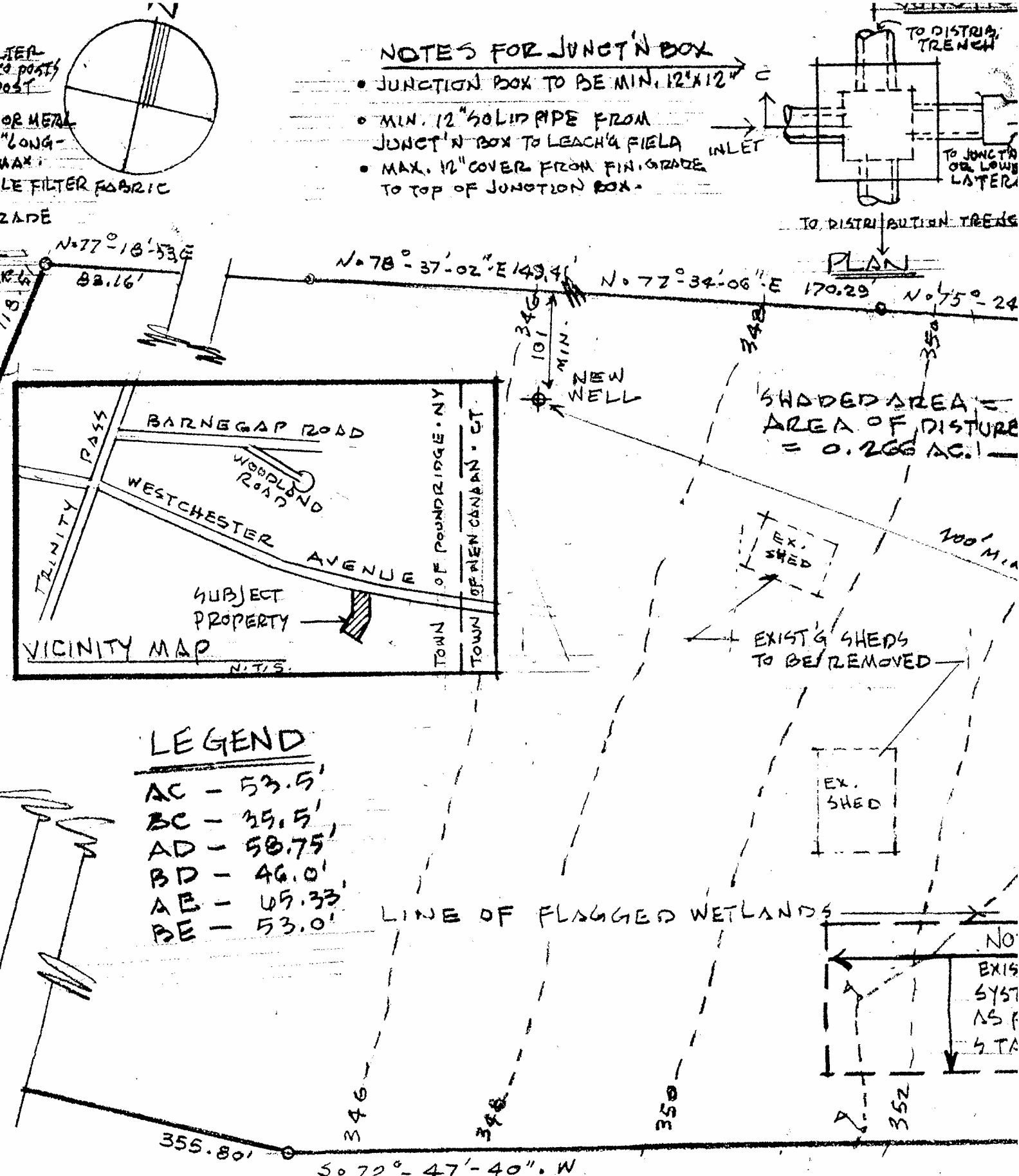
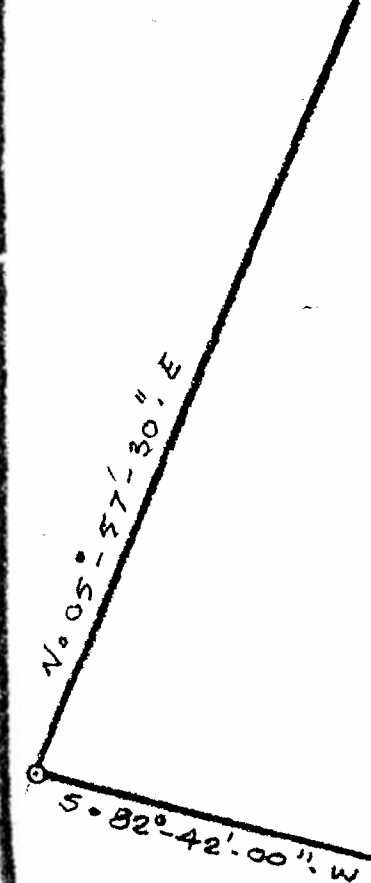


ESTIMATED COMPLETION DATE: 12/30/07

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



WIRE FILTER DETAIL

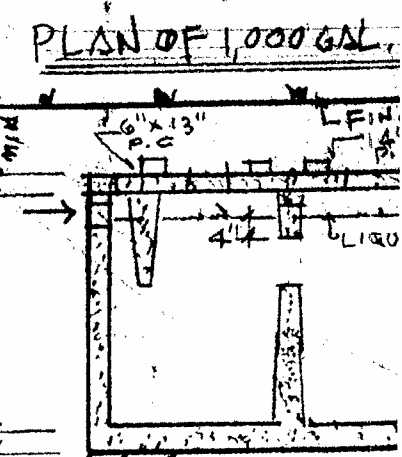
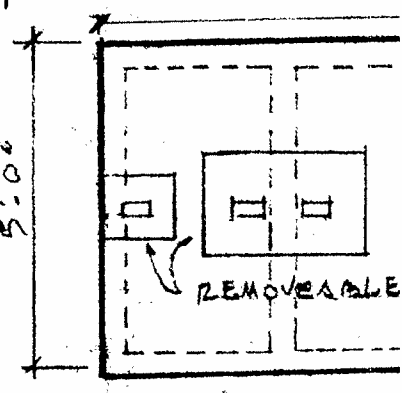
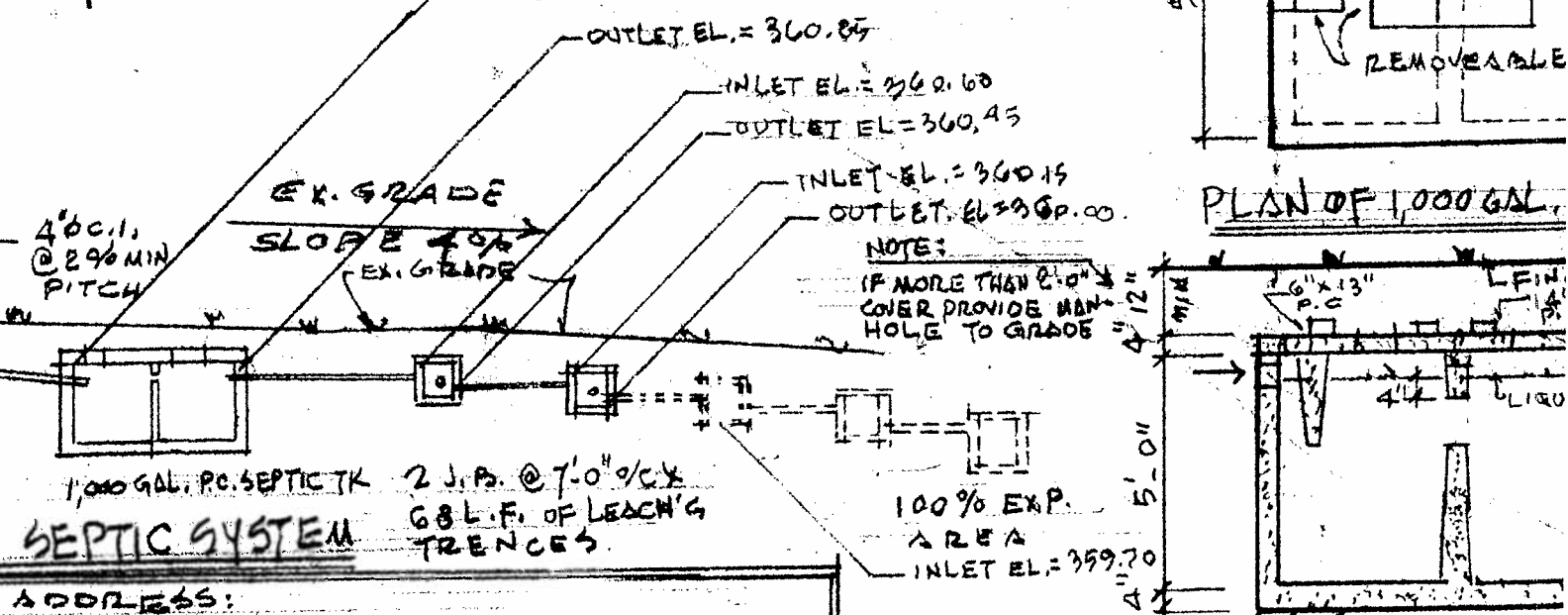
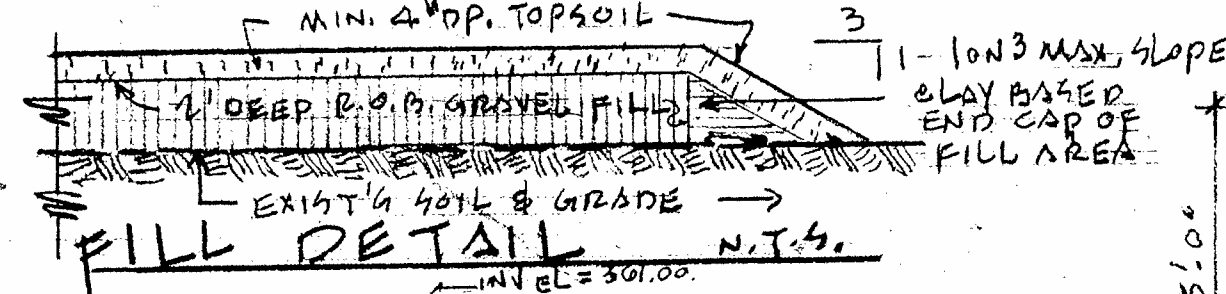


LEGEND

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 COVAT



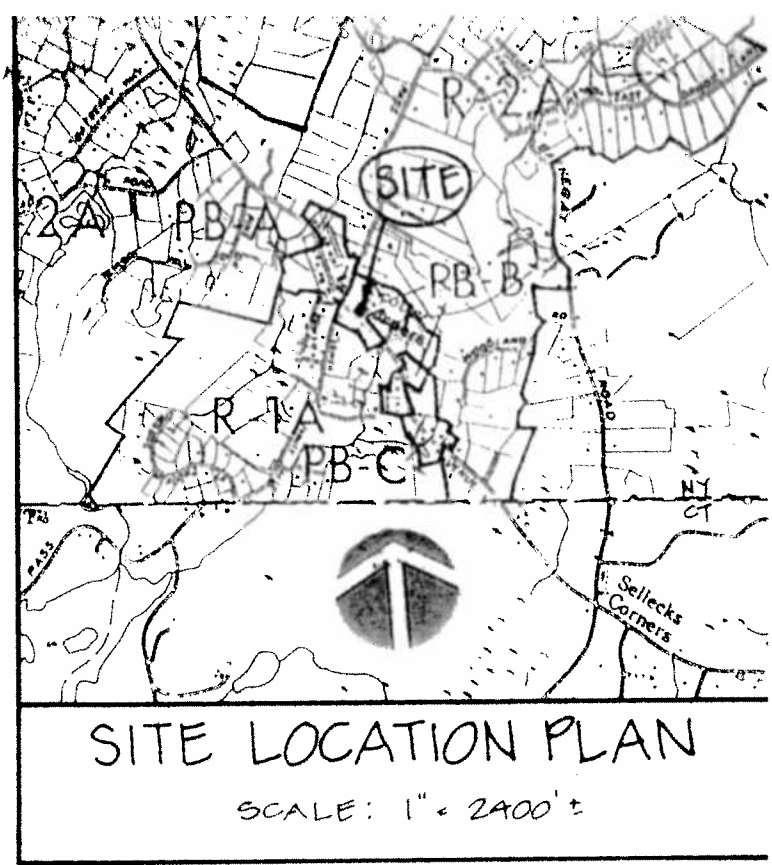
OWNER'S NAME & ADDRESS:
 THOMAS FERRARA & SUSAN BECKER - P.O. BOX 336 POUND RIDGE, NY, 10576

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 A

9456-1.9 55 WESTCHESTER AVE



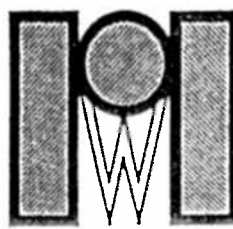
--- (901) --- EXISTING GRADE
--- (902) ---

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

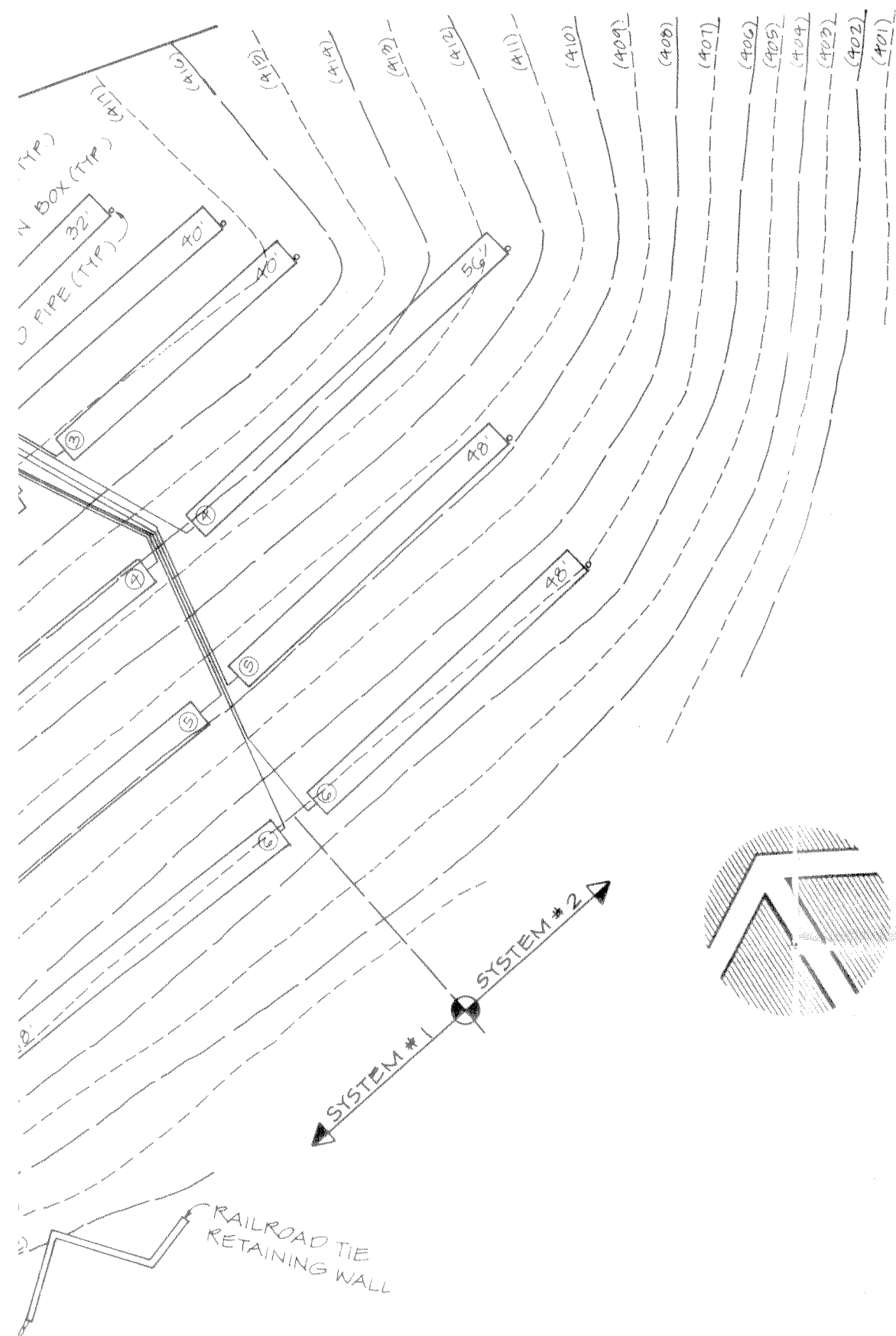
CLIENT :
RPS REALTY TRUST
733 THIRD AVENUE
NEW YORK, NY 10017

 **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

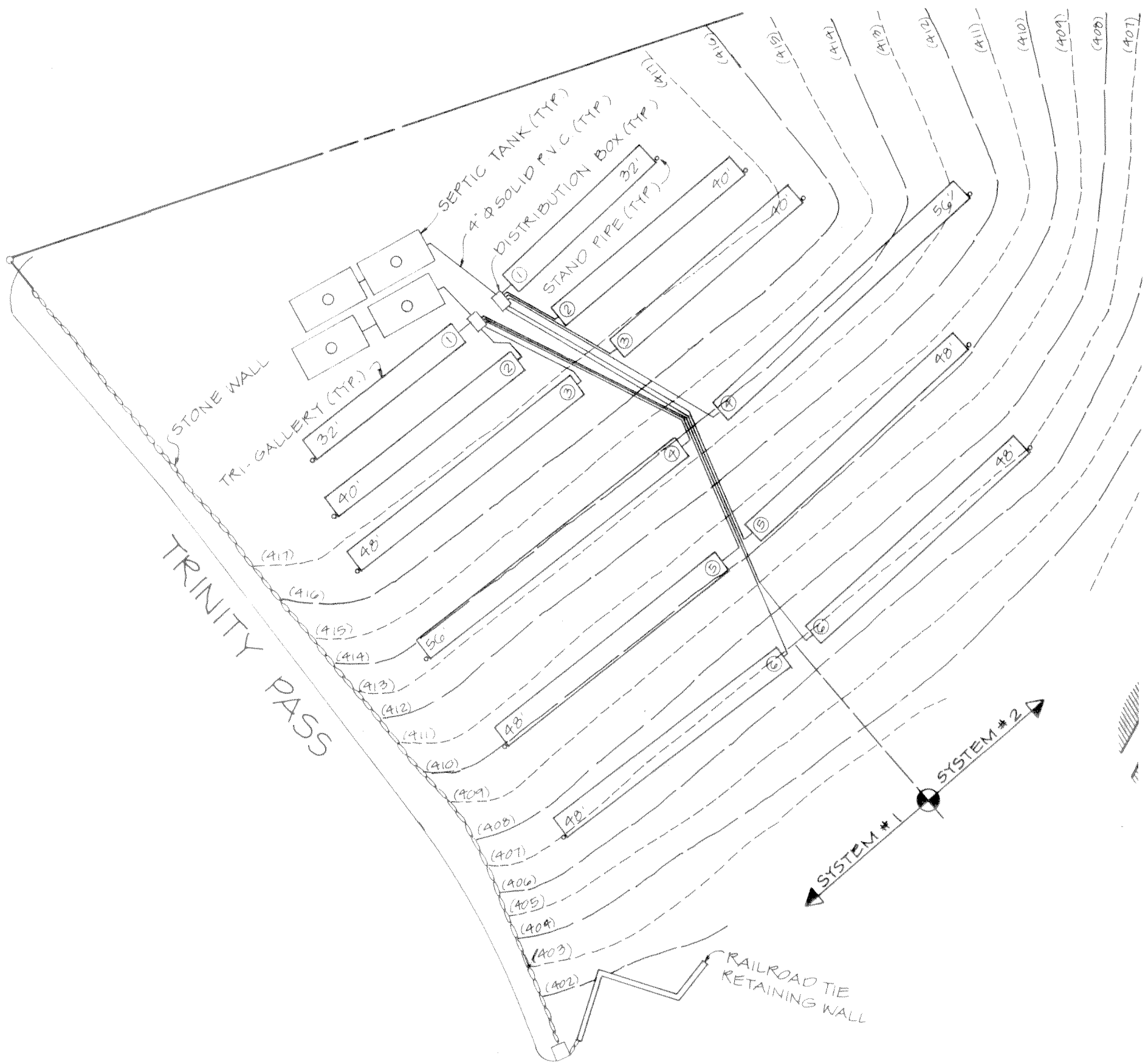




SYSTEM #2

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~~

~~IONAL IMPROVEMENTS:~~

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

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

~~PUMP CHAMBER SIZE: 43" x 70"~~

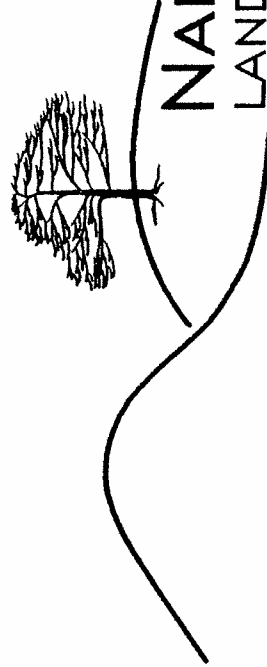
~~CAPACITY: 20.9 cf/in
1.74 cf/in
13.02 gal/in~~

~~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.

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



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:

**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

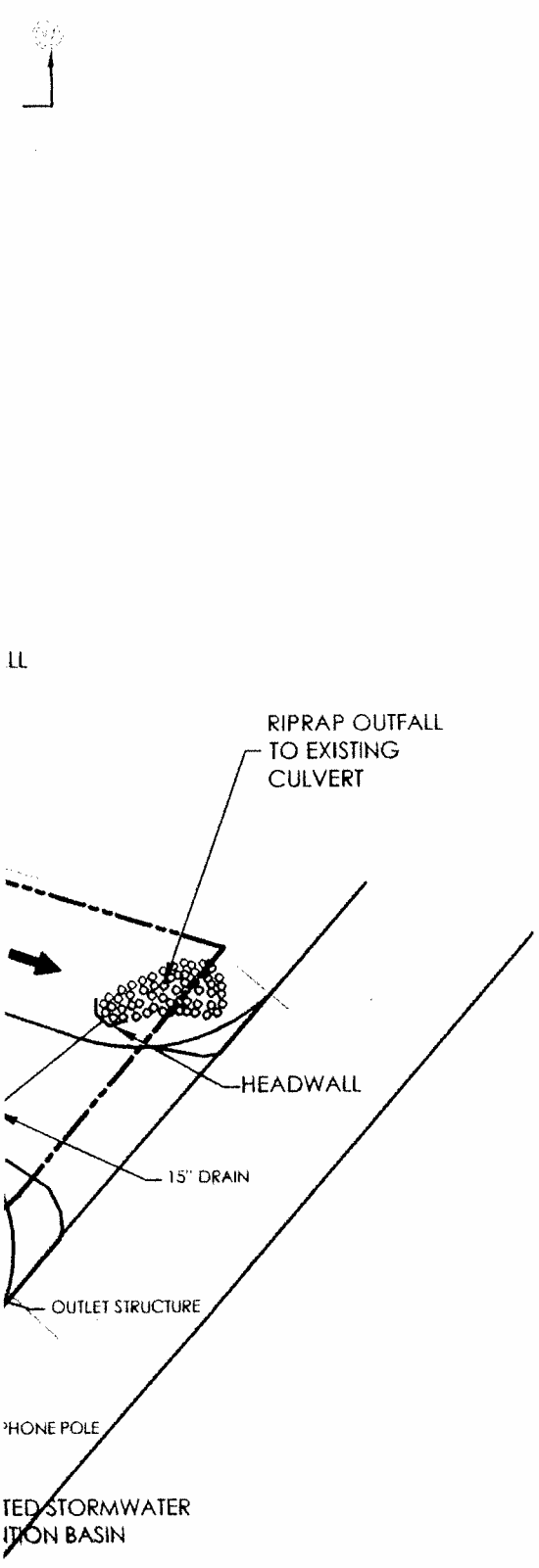
PUMP CYCLE DEPTH: 16.5"

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

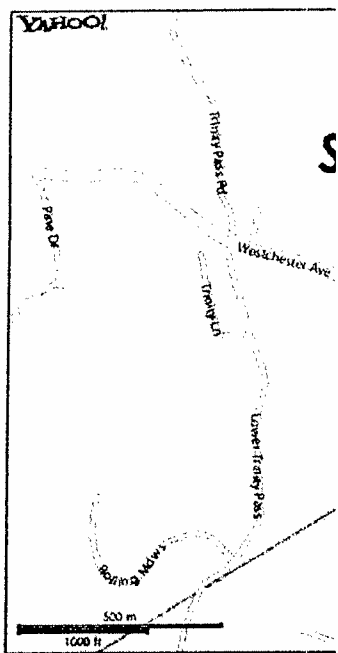
SYSTEM TESTED ON 10/30/08 WITH WCHD.

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
 location of the OWTS and certifies its
 plans.
 1 Basin.
 30 feet of the new SDS.



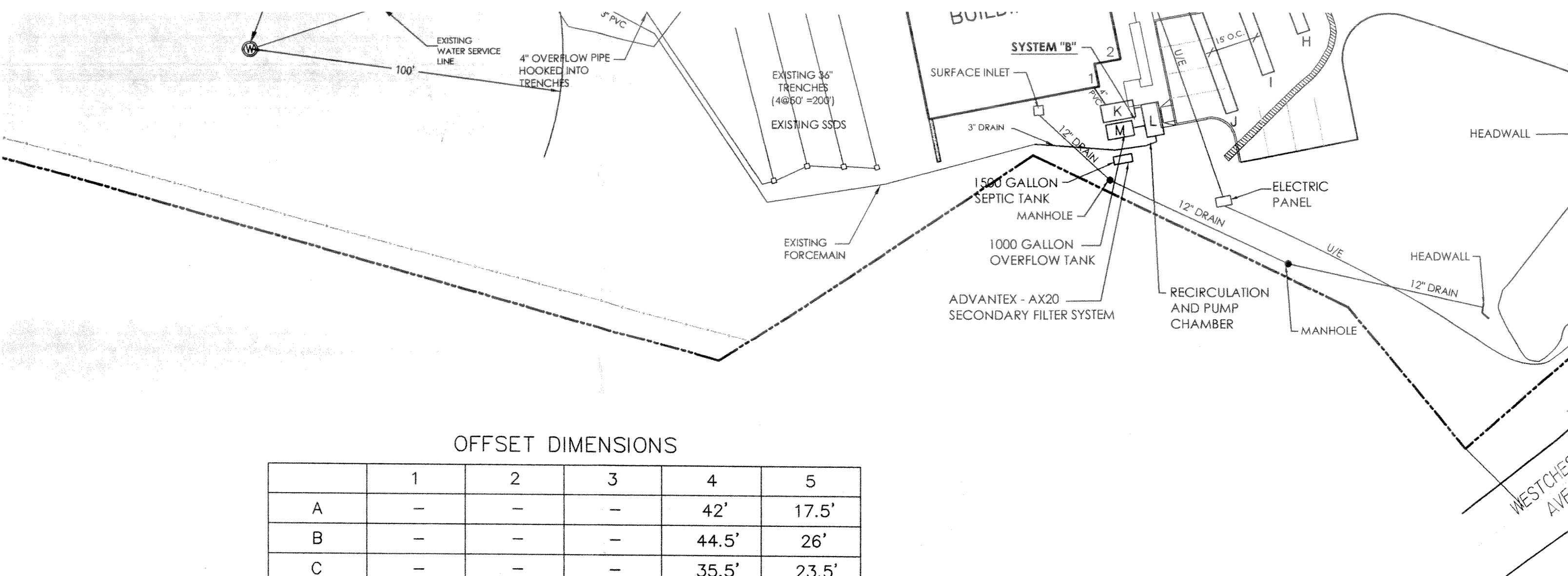
UNAUTHORIZED ALTER
 THIS DRAWING IS A VI
 OF THE NEW YORK STA



1	REV. EXIST.
No.	Revis

NADERMAN

A - H
 SCOTT

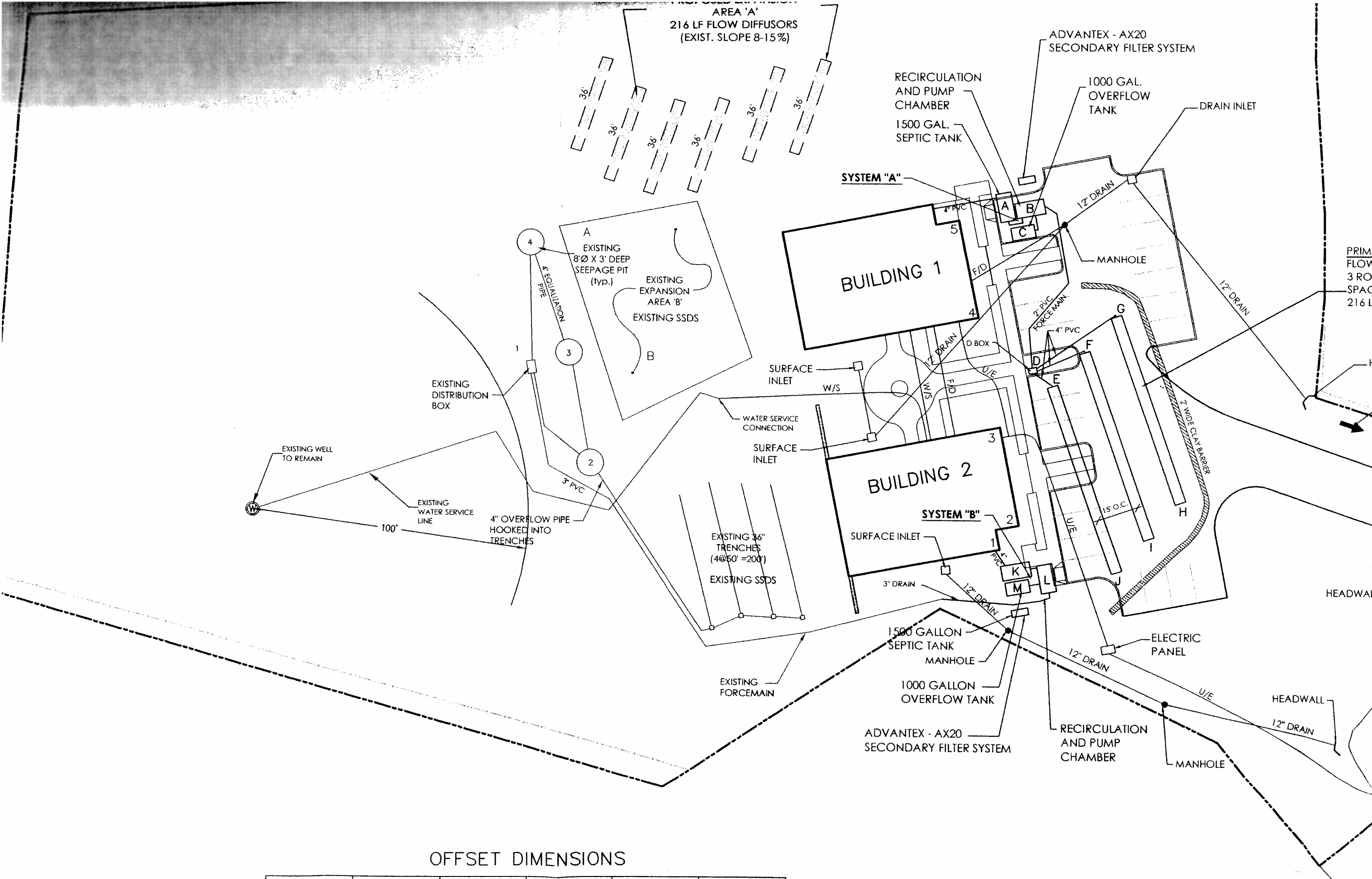


OFFSET DIMENSIONS

	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



AREA 'A'
216 LF FLOW DIFFUSORS
(EXIST. SLOPE 8-15%)

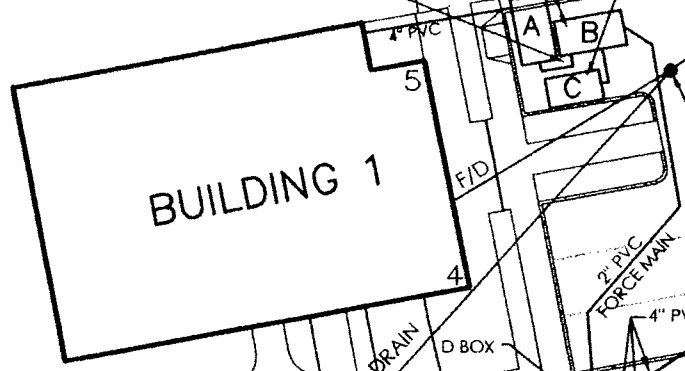
ADVANTEK - AX20
SECONDARY FILTER SYSTEM

RECIRCULATION
AND PUMP
CHAMBER
1500 GAL.
SEPTIC TANK

1000 GAL.
OVERFLOW
TANK

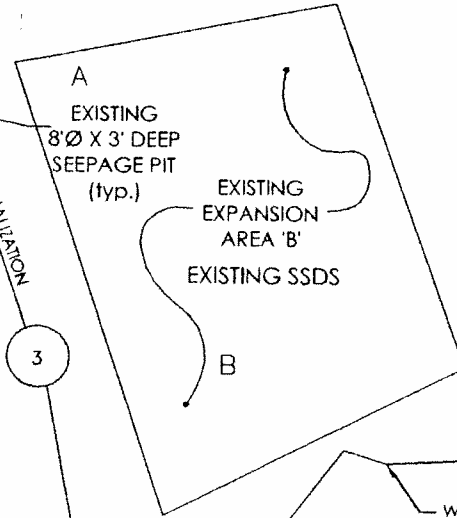
DRAIN INLET

SYSTEM "A"



MANHOLE

PRIMA
FLOW
3 ROW
SPACE
216 LF



EXISTING
DISTRIBUTION
BOX

SURFACE
INLET

WATER SERVICE
CONNECTION

SURFACE
INLET



SYSTEM "B"

SURFACE INLET

1500 GALLON
SEPTIC TANK
MANHOLE

1000 GALLON
OVERFLOW TANK

ADVANTEK - AX20
SECONDARY FILTER SYSTEM

RECIRCULATION
AND PUMP
CHAMBER

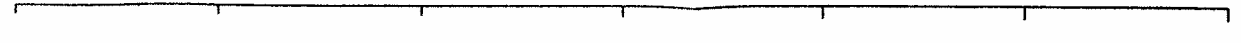
ELECTRIC
PANEL

MANHOLE

HEADWALL

HEADWALL

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 BUILDING #1

MAX FLOW 600 GPD

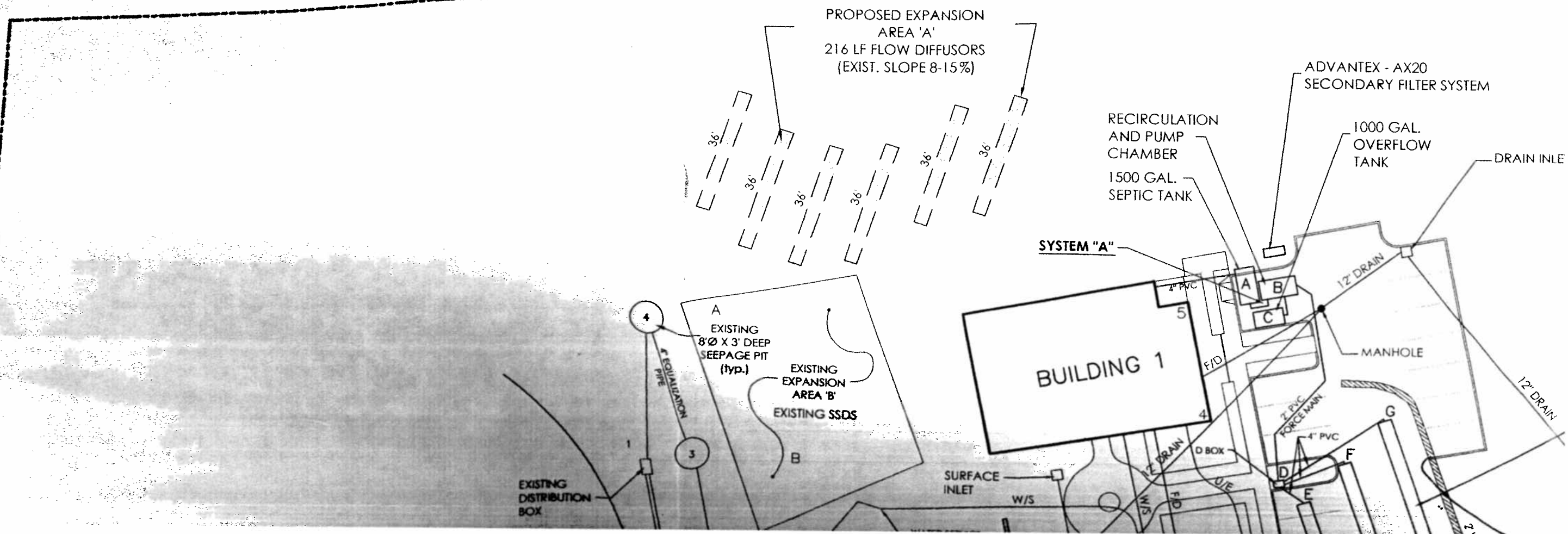
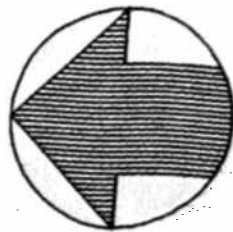
of Sheets: ONE (1)

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

Reviewed by: _____ Date _____

Recommended by: _____ Date _____

Accepted by: [Signature] 11/21/08
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:

EX 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

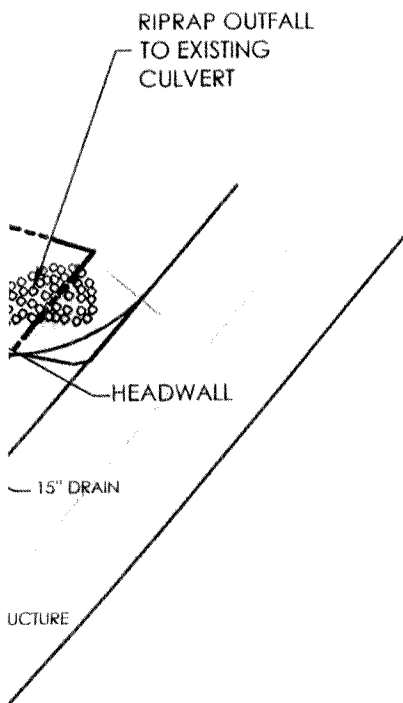
PUMP CHAMBER SIZE: 43" x 70"

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

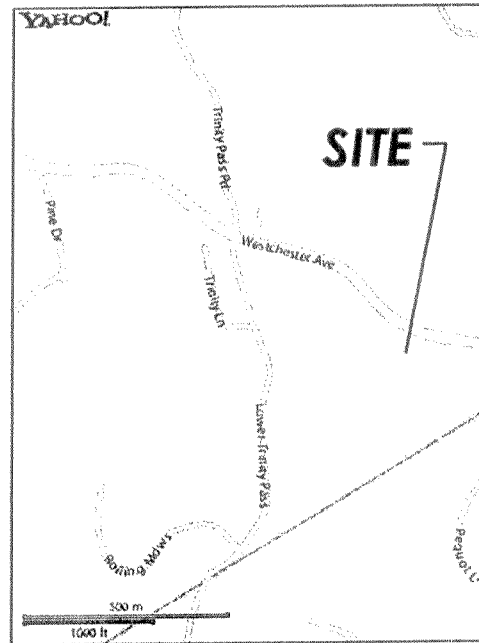
PUMP CYCLE DEPTH: 16.5"

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

SYSTEM TESTED ON 10/30/08 WITH WCHD.



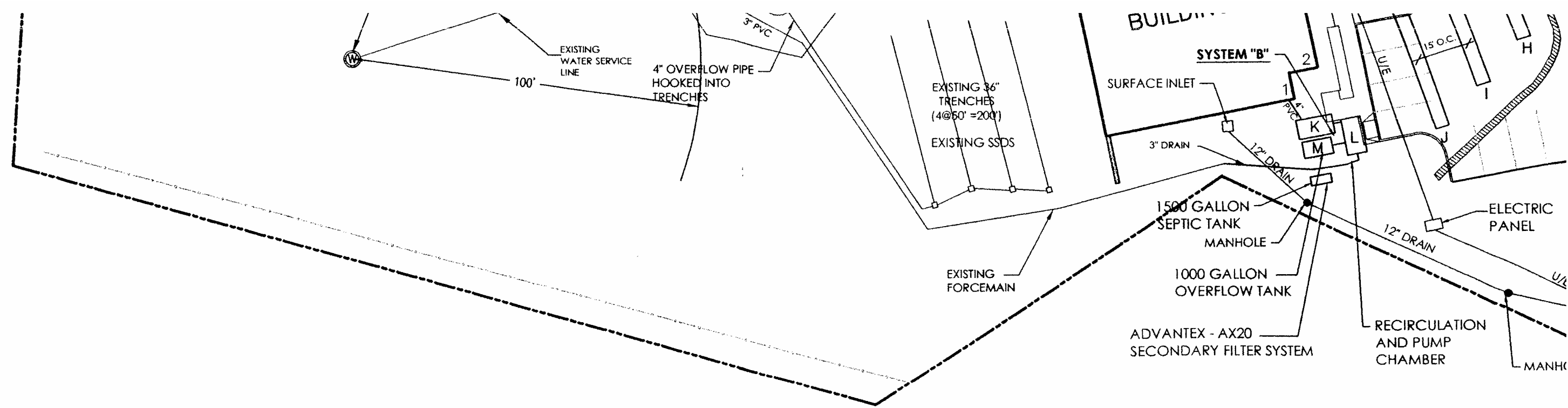
UNAUTHORIZED ALTERATIONS / THIS DRAWING IS A VIOLATION OF THE NEW YORK STATE EDUC



No.	Revision/Iss
1	REV. EXIST. WELL



A - HOI
 SCOTTS R



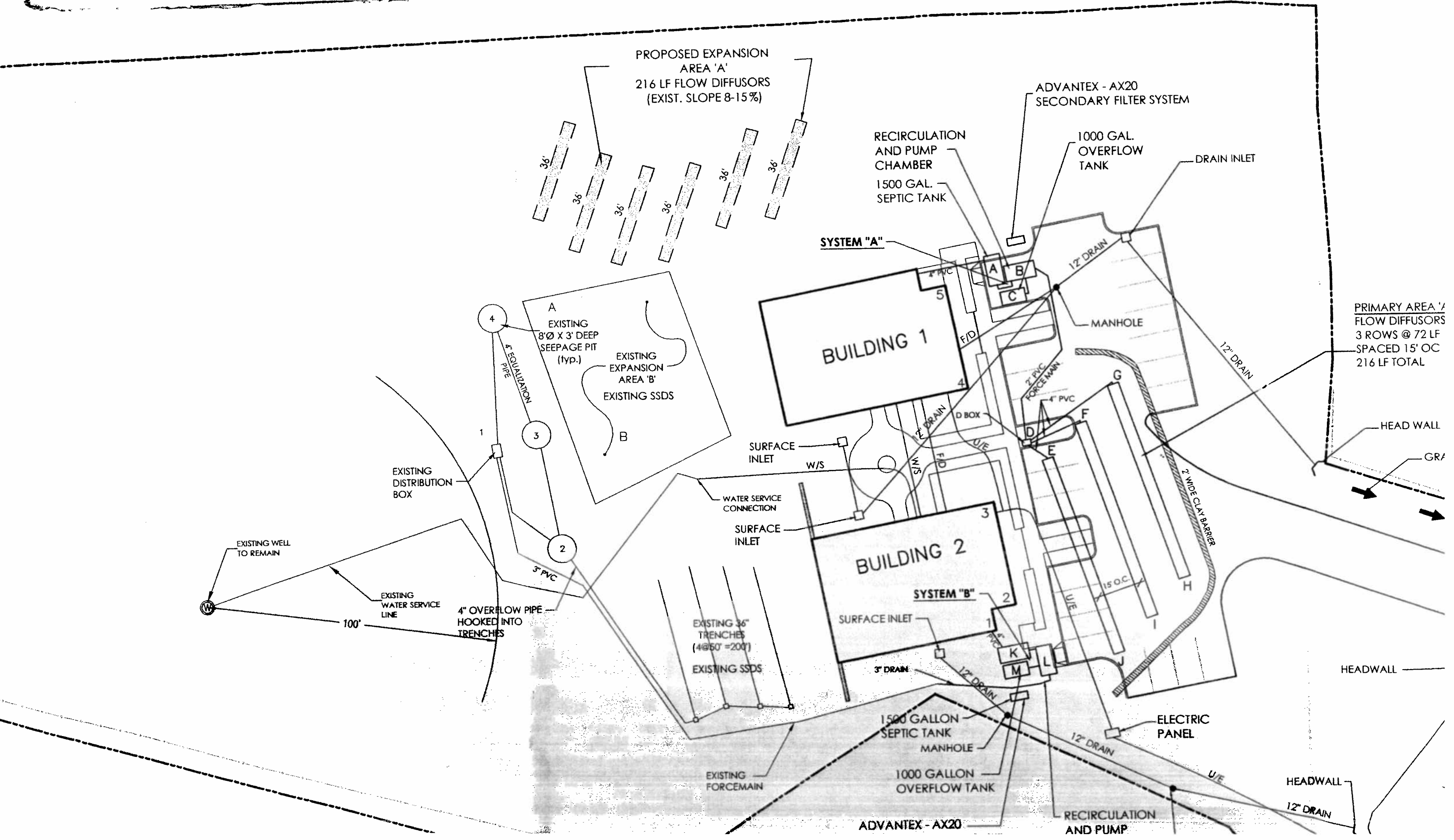
OFFSET DIMENSIONS

	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
gov.com

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality

PERMIT NUMBER: PR2057-14

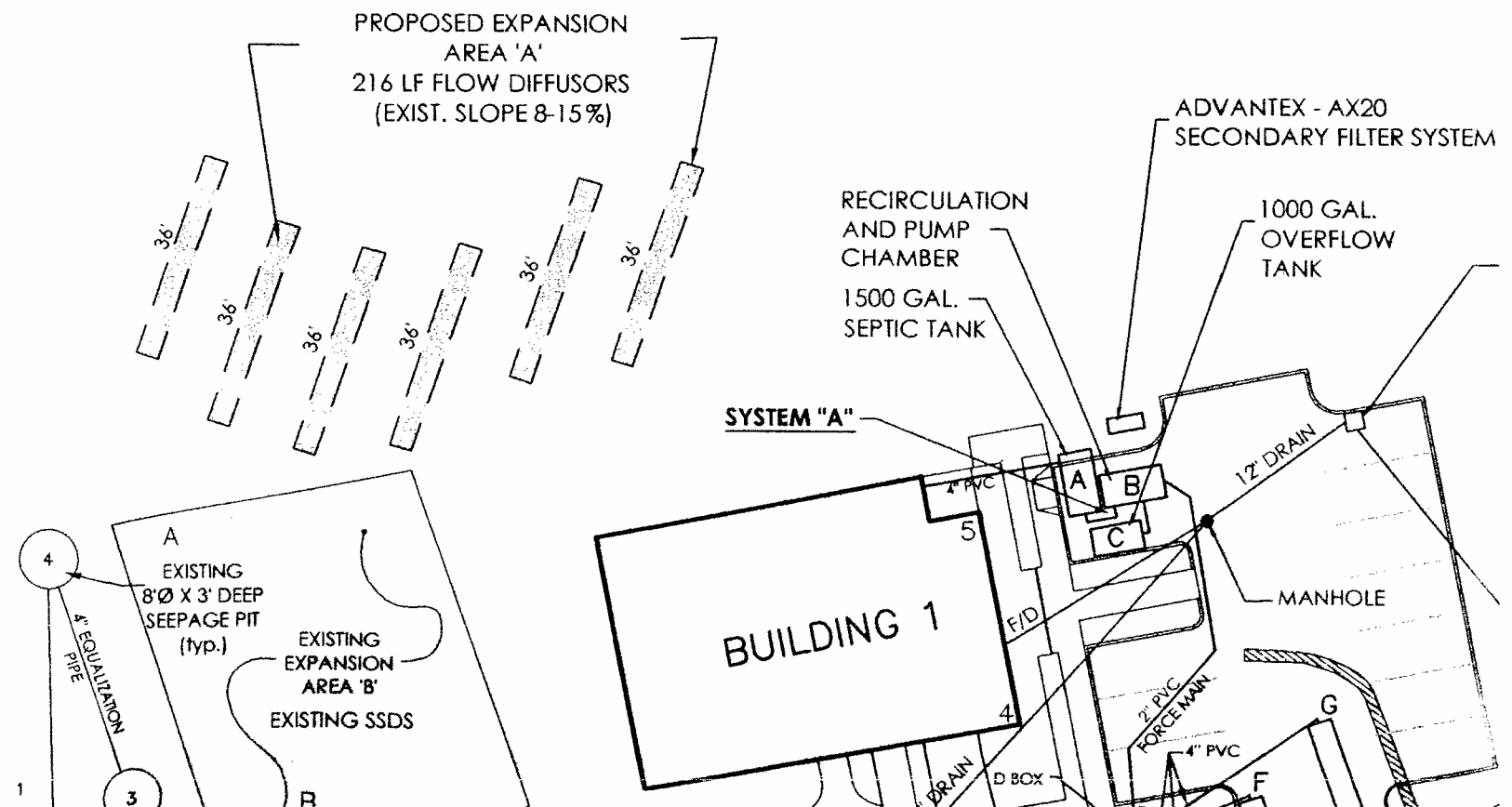
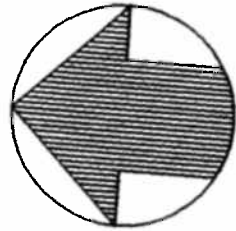
Name: Jim Arick, A Home Municipality: Powder Mill
Description: SSTB Improvement To Sewer Building #11
(New Septic tank + pump chamber) Max Flow 600 gpd
of Sheets: one (1)

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. H. 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	Stop Inches	Water Level Drop In Inches
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
	SUBBASE	SUBBASE	SUBBASE	SUBBASE
6"	GRAVEL	GRAVEL	GRAVEL	GRAVEL
12"	GRAVELLY LOAM FILL	GRAVELLY LOAM FILL	GRAVELLY SAND	SANDY LOAM
18"	↓		↓	↓
24"	VERY ROCKY		LARGE BOULDERS	↓
30"				FINE SANDS
36"				
42"				LARGE STONES
48"				
54"				
60"	↓	MOTTLING		
66"	ROCK	↓		
72"	ROCK	↓	FINE DENSE SAND	
78"		GROUNDWATER SEEPAGE	MOTTLING	
84"		↓	↓	↓

WAS GROUNDWATER ENCOUNTERED YES
 INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED 78"
 INDICATE LEVEL FOR WHICH WATER LEVEL RISES AFTER BEING ENCOUNTERED 78"
 DEEPTESTS MADE BY BARRY G. 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.

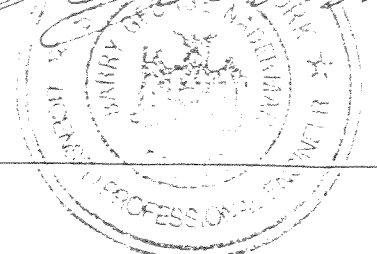
No. of Bedrooms 6 Septic Tank Capacity 1,500 Gals. Masonry Metal
 (3-2 BORM UNITS) 48"x18" FLOW DIFFUSORS

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

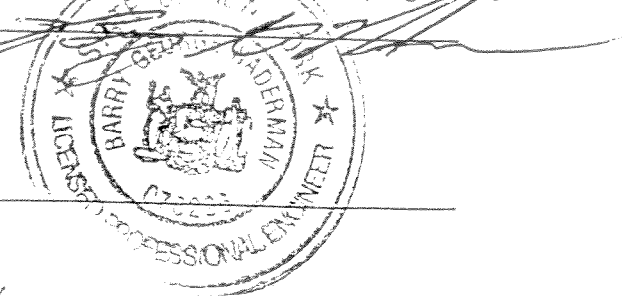
DESIGN
Soil Rate Used 16-20 Min/1" Drop: S.D. Usable Area Provided 9,600 S.F.

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" x 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**

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**

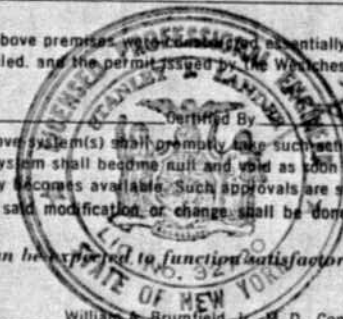
Water Supply: Public Supply From Private Supply Drilled By **BORIS CHURYK** Address **STAMFORD, CONN.**
Building Type **RESIDENTIAL** Number of Bedrooms **FLOW 600 GPD** Date Permit Issued

Erosion Control Completed Waived
Other Requirements

I certify that the system(s) as listed serving the above premises, was/were installed 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.**
S. D. 47-66 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:	33 Feet	<input type="checkbox"/> Bailed <input checked="" type="checkbox"/> Pumped	6 Hours	Static:	5 Feet	Make:	
Diameter:	6 Inches	Yield:	15 G.P.M. or Pumped	When Bailed or Pumped	290 Feet	Length	Slot Size
Material:	Heavy Duty Steel					Diameter	In.
TOTAL DEPTH OF WELL		290		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.
1 Ft. to 15 Ft.	clay & boulders
5 Ft. to 290 Ft.	granite
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	
Ft. to Ft.	

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

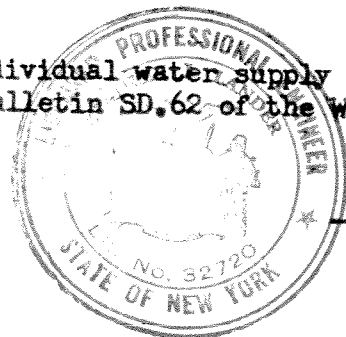
Storage Tank: Type gal. Capacity 82 Gal. (42 Gal. Min.)

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
	3						
	4						
	5						
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
	3						
	4						
	5						
P ₃	1	10:03	19	4'-0"	4'-3"	3"	6.3
	2	10:23	20	4'-0"	4'-3"	3"	6.6
	3						
	4						
	5						

- Notes:
- 1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.
 - 2) Depth measurements to be made from top of hole .

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

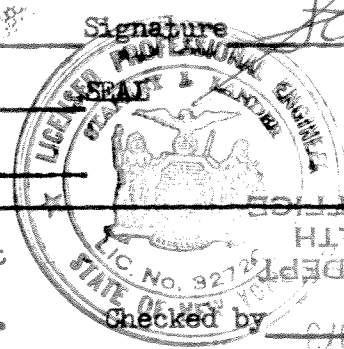
DEPTH	HOLE NO. <u>P1</u>	HOLE NO. <u>P2</u>	HOLE NO. <u>P3</u>	HOLE NO. <u>DEEP HOLE</u>
G.L.	TOPSOIL	TOPSOIL	TOPSOIL	TOPSOIL
6"	"	"	"	"
12"	SAND CLAY MIX	SAND CLAY MIX	SAND CLAY MIX	SAND CLAY MIX
18"	"	"	"	"
24"	"	"	"	"
30"	"	"	"	"
36"	SAND SOME STONE	SAND SOME STONE	SAND SOME STONE	SAND SOME STONE
42"	"	"	"	"
48"	"	"	"	"
54"	"	"	"	"
60"				"
66"				"
72"				"
78"				"
84"				"

NO WATER

INDICATE LEVEL AT WHICH GROUND WATER IS ENCOUNTERED
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

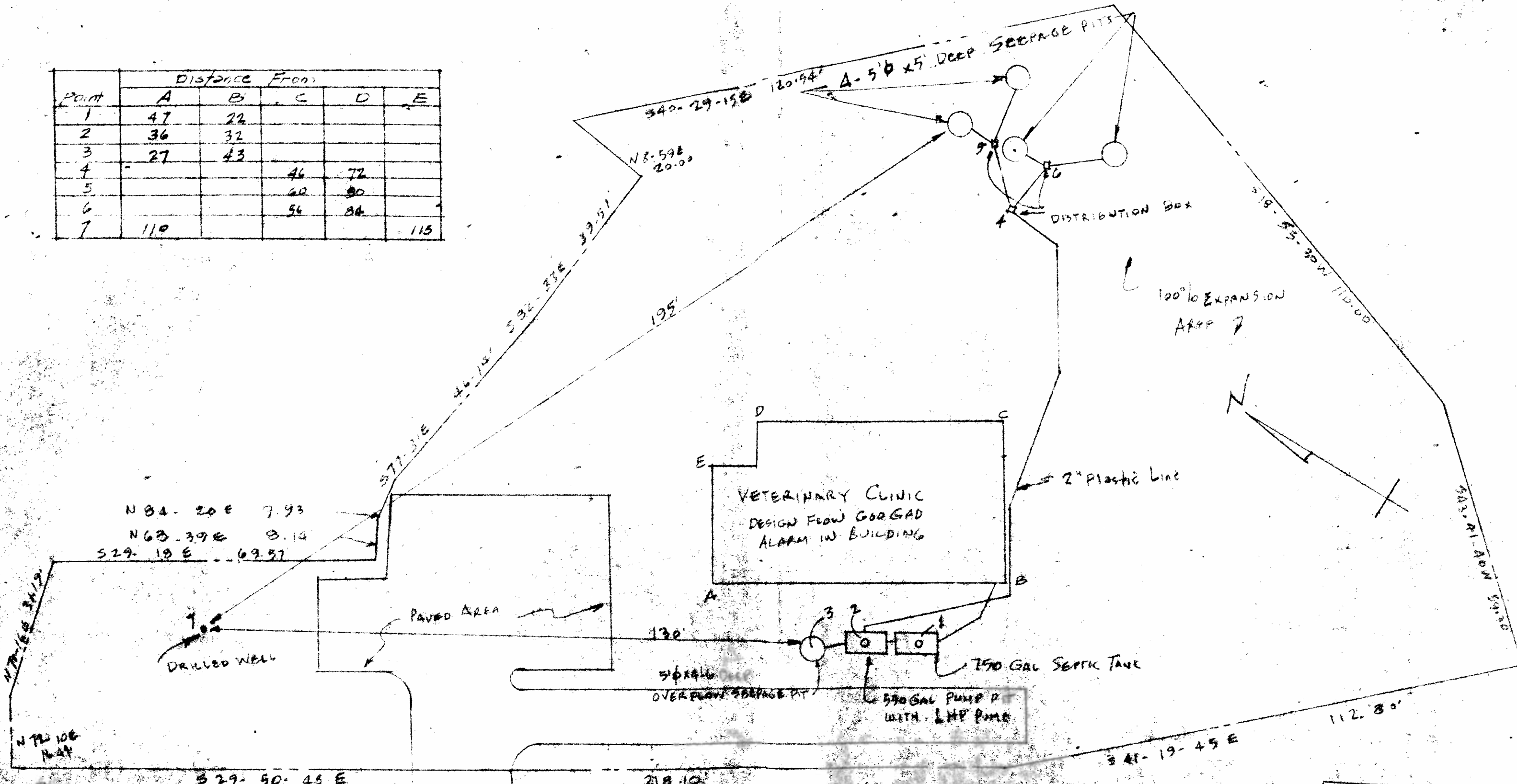
Name STANLEY J. LANDER Signature Stanley J. Lander
Address BOX 267
AMAWALK, N. Y. 10501
245-2645



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

RECEIVED

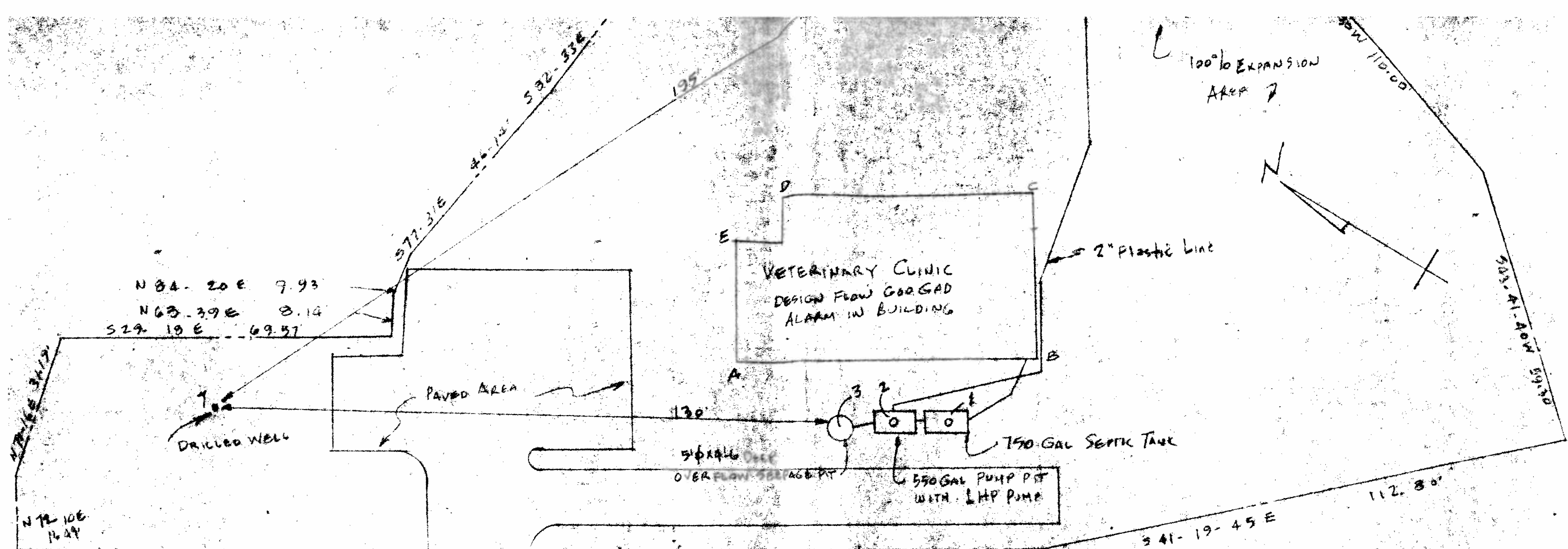
Point	Distance From				
	A	B	C	D	E
1	47	22			
2	36	32			
3	27	43			
4			46	72	
5			60	90	
6			56	84	
7	110				115



WESTCHESTER AVE

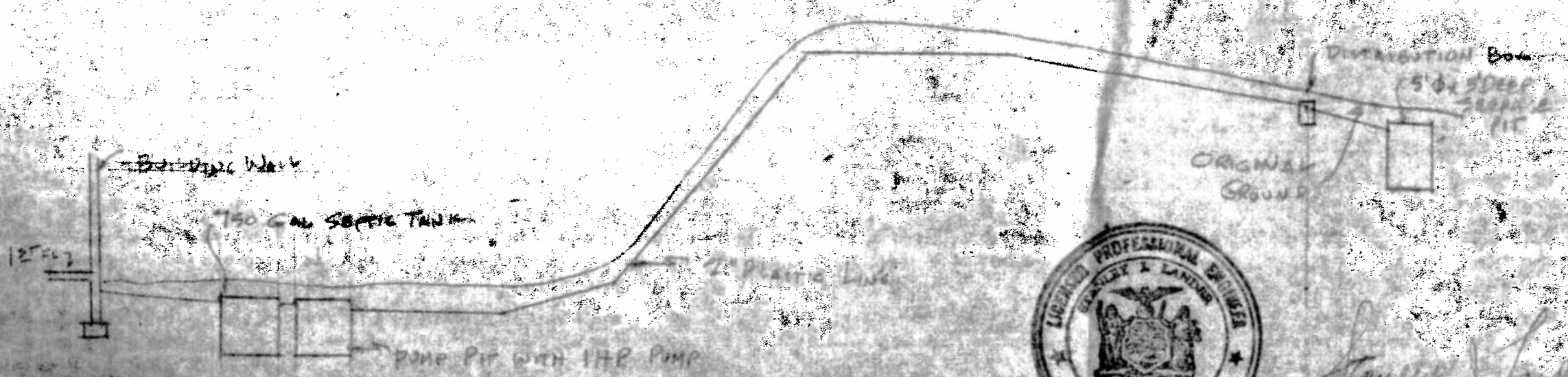
P L A N

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



PROFILE
 SCALE: HORIZ. 1" = 20'
 VERT. 1" = 10'



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

The lot shown hereon is 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} 24th Floor

Town/ Village: New York State: NY Zip: 10017

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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-
-

- 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

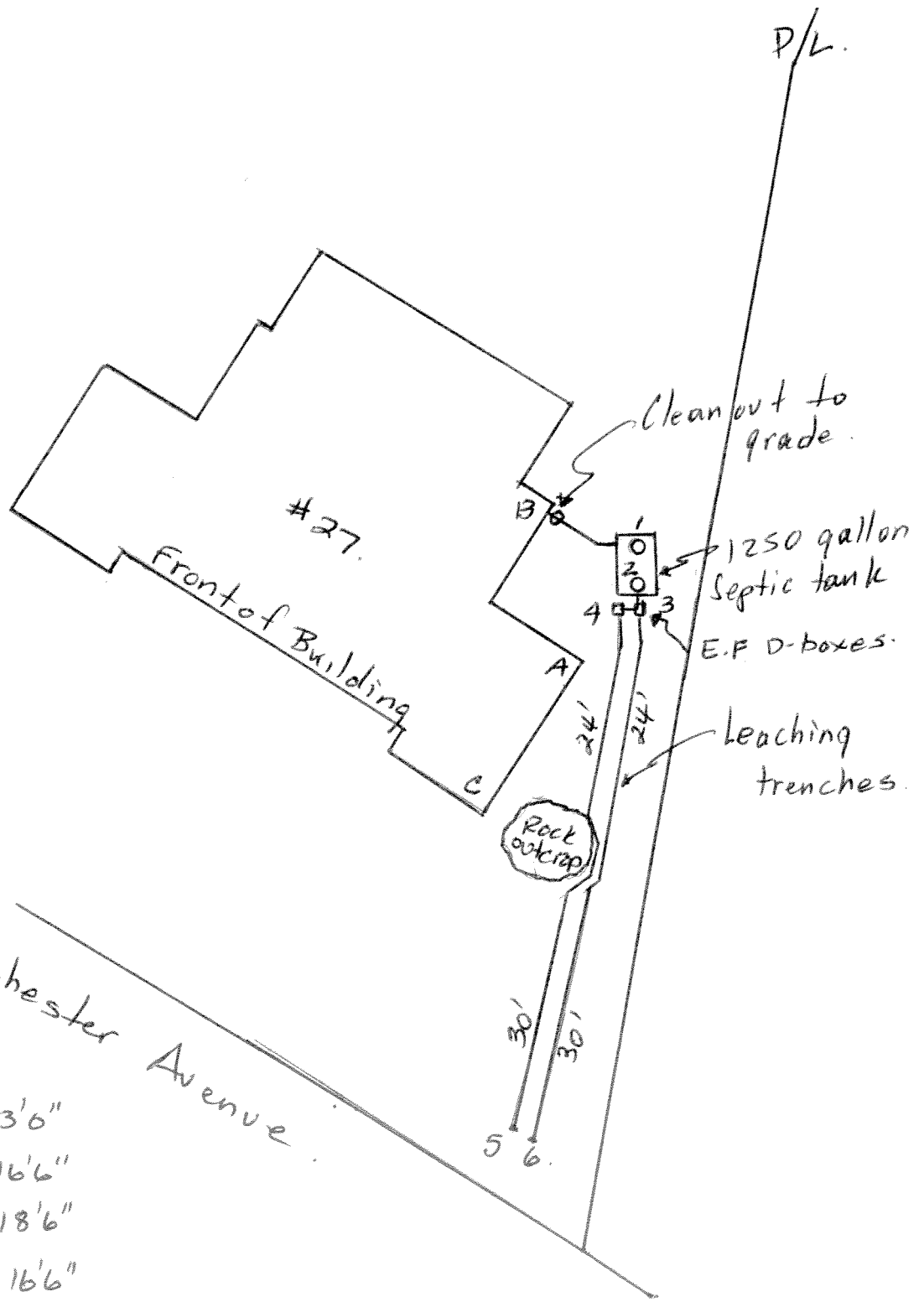
Contractor's Signature: Paul Skiadas

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

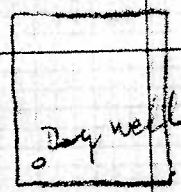
A2-253

J. Augustine McNally, Westchester Avenue

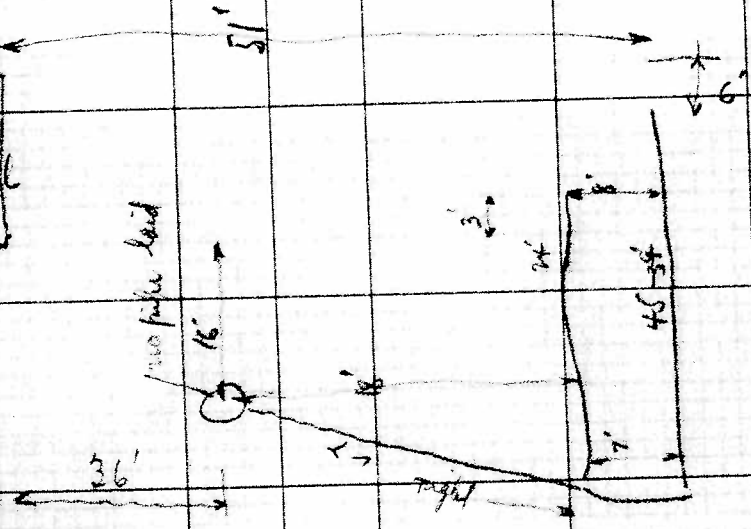
2-16-42 - J. Augustine McNally 300 gal. 80' x 24'

A

Westchester Ave → To Poundridge



300 gal
metal
tank



$$\frac{24}{39} \times 21 \text{ wide} = 111 \text{ ft}$$

$$\frac{45}{69} \times 21 \text{ wide} = 120 \text{ ft}$$

120 ft required
 3-6-42

$$\frac{24}{39} \times 21 \text{ wide} = 111 \text{ ft}$$

$$\frac{45}{69} \times 21 \text{ wide} = 120 \text{ ft}$$

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

HAG:I
c/c Stamford Water Company

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

A2-253A

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:

1. Owner _____ Mail Address 150 241 7th St. New York, N.Y.
Note: Owner must receive permit and approval. Check here if extra copies are requested.

2. Property location 150 241 7th St. Place New York, N.Y.
(Street) (Village, Town, City)

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

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

5. Lot area _____ No. of rooms 4 Bedrooms 1 Bathrooms 1
Extra Lavatories _____ Special Fixtures _____ Maximum Future Occupancy 4

6. Source of water supply City Water
Watershed on which system is located _____
Distance to nearest watercourse _____ Owner's wells _____ Adjacent wells _____

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

8. 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.

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

10. Absorption area: _____ ÷ _____ = _____ sq. ft. bottom area.
gals. waste (No. 7) Absorption rate from table

11. Absorption treatment, Trenches: 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.











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

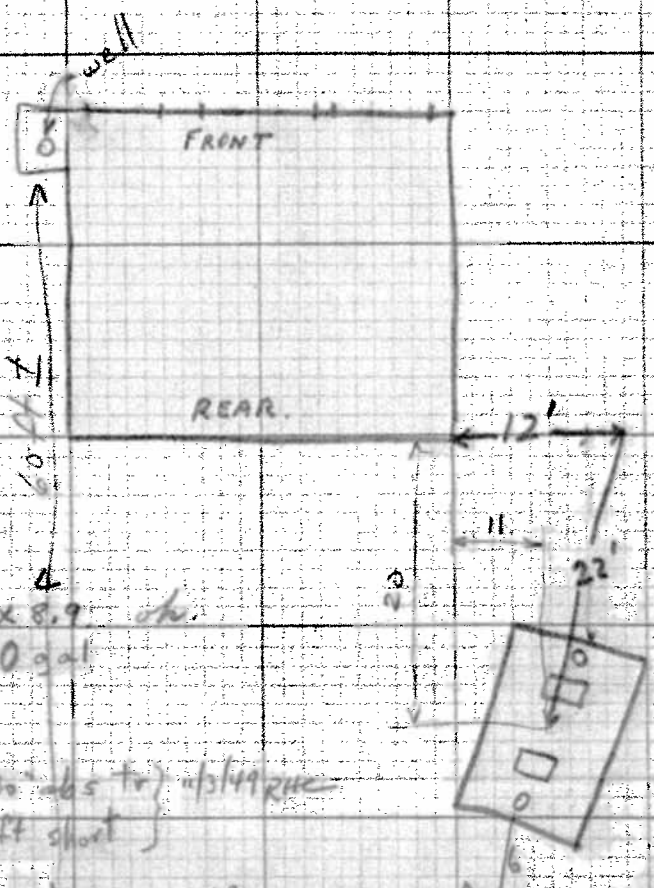
Town of Poundridge

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 ok.
vol = 1,240 gal.

120 LF x 30" dia tr) 11/3/49 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. Raboport, 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		Water Level		Soil Rate Min/in. drop
	Start	Stop		Start Inches	Stop 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.

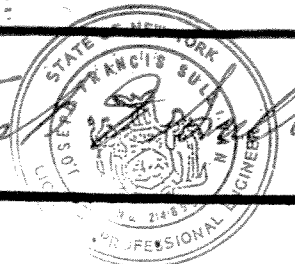
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLE

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

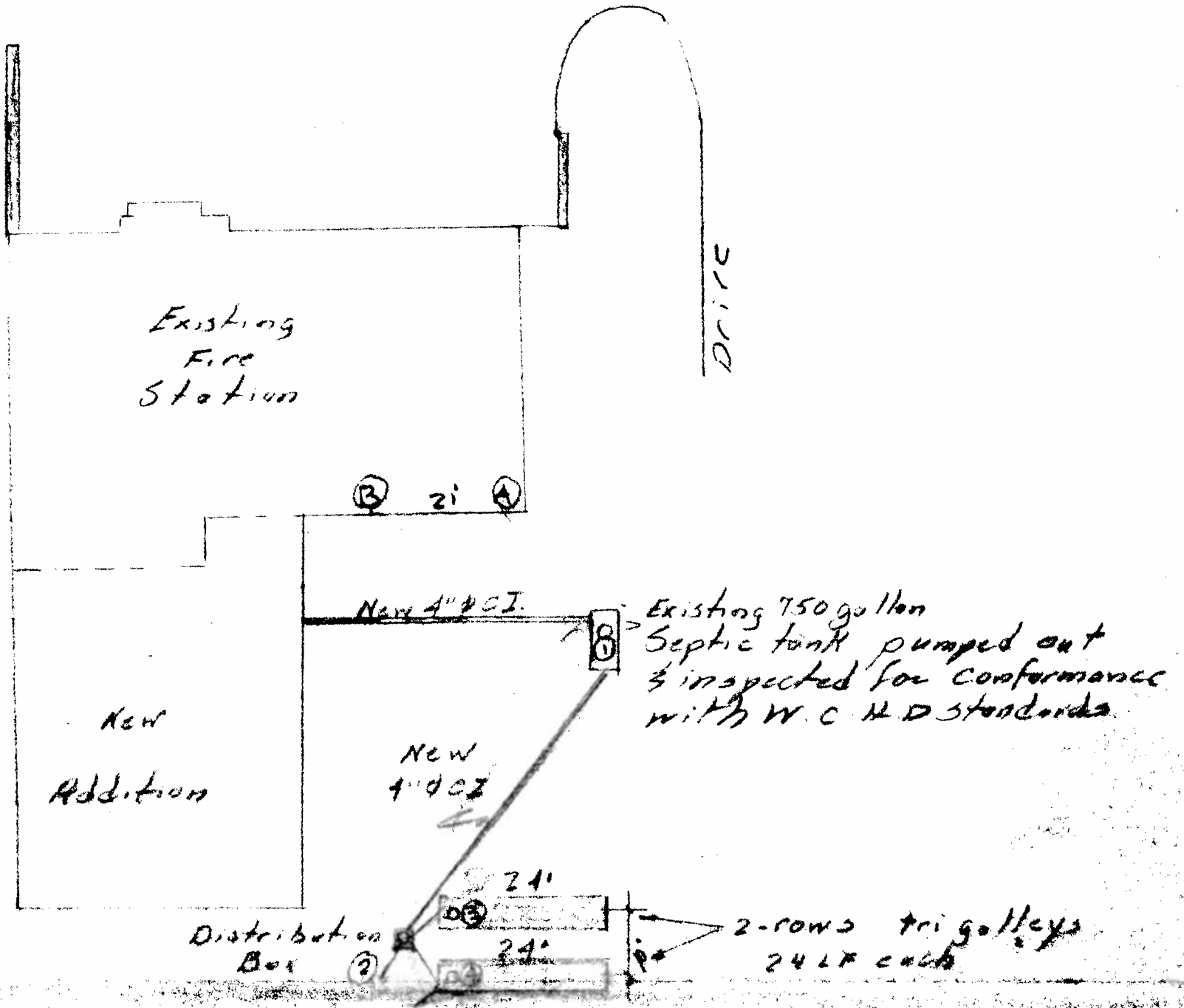
DESIGN
 Soil Rate Used 0-5 ML/1" Drop: S.B. Usable Area Provided -
450 gallons/day.
 No. of Bedrooms 4 Septic Tank Capacity 750 Gals. Masonry Metal
 Absorption Area Provided by 48 J.P.S. 24" 36" width trench. Other tri galleys

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



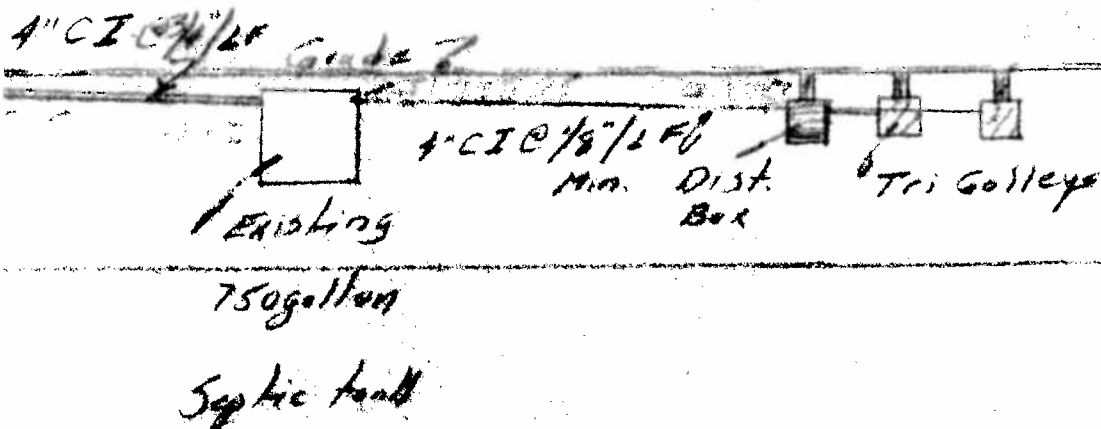
Norchester County Health Department
 Soil Rate Approved 0-5 ML/1" Drop. Checked by [Signature]
 Date [Signature]
 S.D. 87.6 (Rev. 5/78)

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

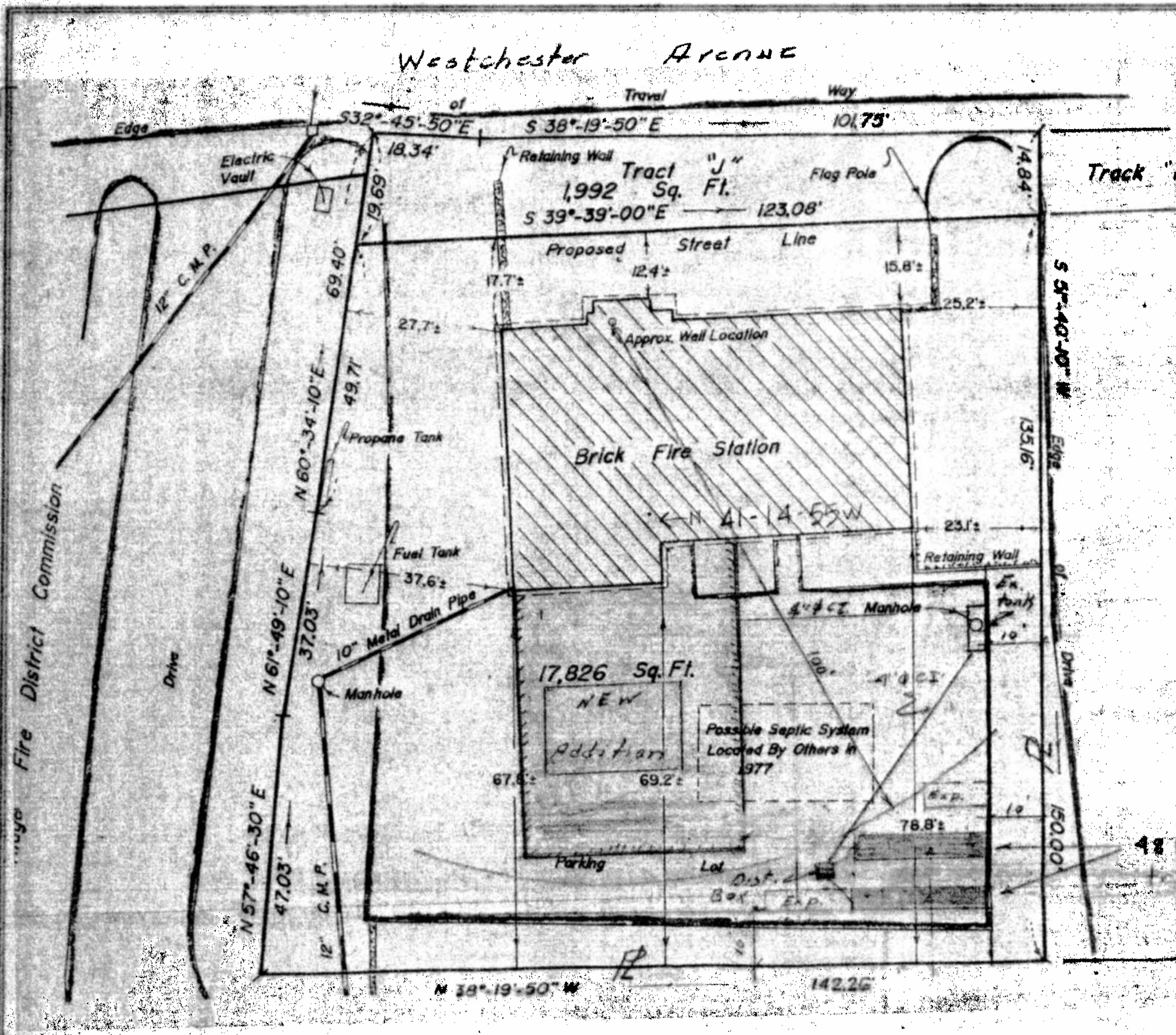
AS-BUILT SEWAGE DISPOSAL SYSTEM

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. ...*



PLAN

Scale 1" = 20'-0"

9320-59 78 WESTCHESTER AVE

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

ION OF SANITATION

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

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

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

To the Commissioner of Health: *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 sink*
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.....*150 ft.* Owner's wells.....*YES* Adjacent wells.....*65 ft.*

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.....*2*.....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.

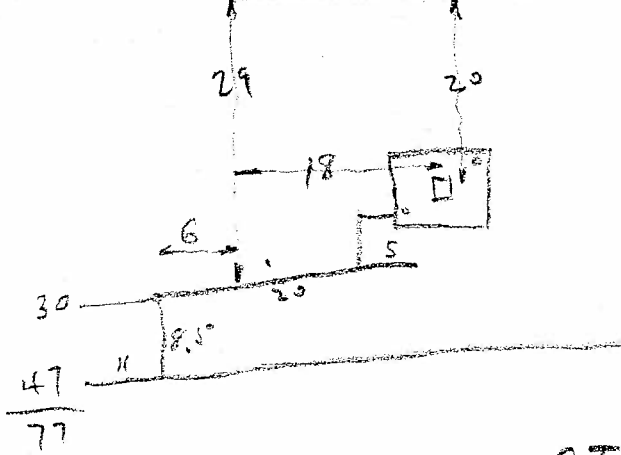
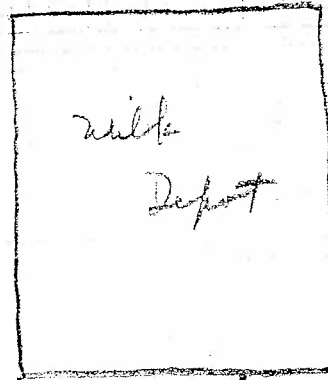
Town of Pound Ridge
John & Frank Di Tore, Westchester Avenue
4/19/51 - 500 gal. 75' x 24"

Westchester Ave



$5.3 \times 4.1 \times 4.1 = 660$

Drilled well



660 gal masonry S.T.
77 LF x 24" at 5'
5-28-51

P.S.D. Town of Pound Ridge Date: Permit 4/19/51¹⁵⁰

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

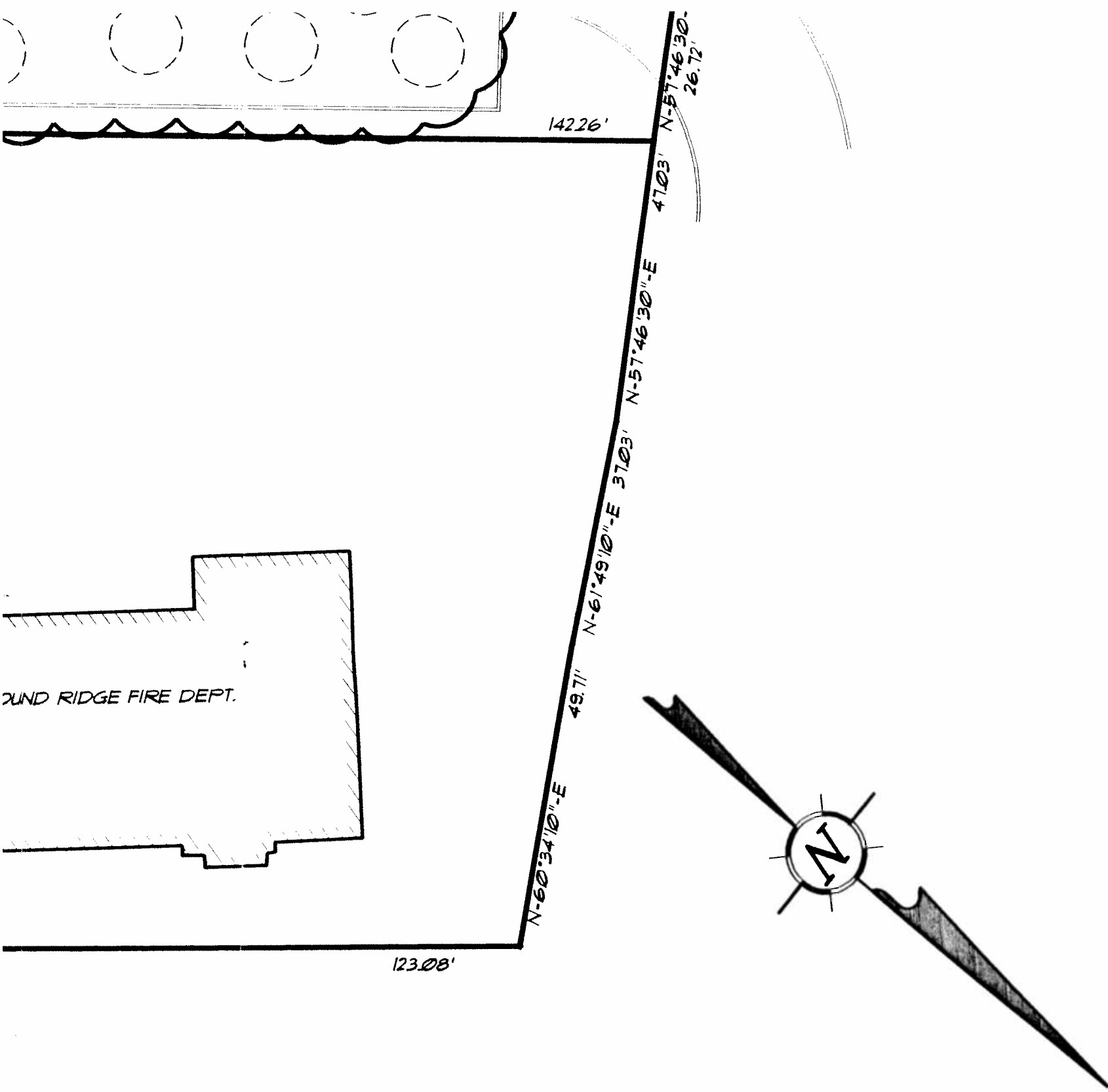
- I. *No portion of the system shall be backfilled or covered until inspected.*
Inspections are made during regular working hours only. Twenty-four hours' notice is required.
- II. The system shall not be used until it has been constructed in an approved manner, inspected and back-filled, and the written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

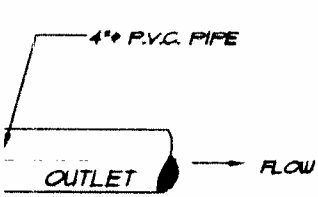
Commissioner of Health

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

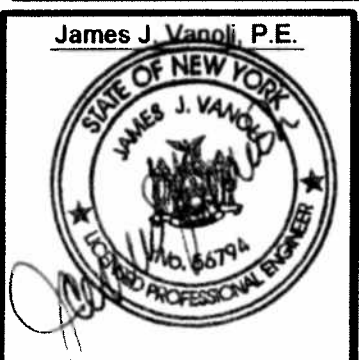
PROJECT LOCATION :
**SCOTTS CORNERS
POUND RIDGE
WESTCHESTER COUNTY, NEW YORK**

JJV, PE

*Consulting Engineering
Site Development*

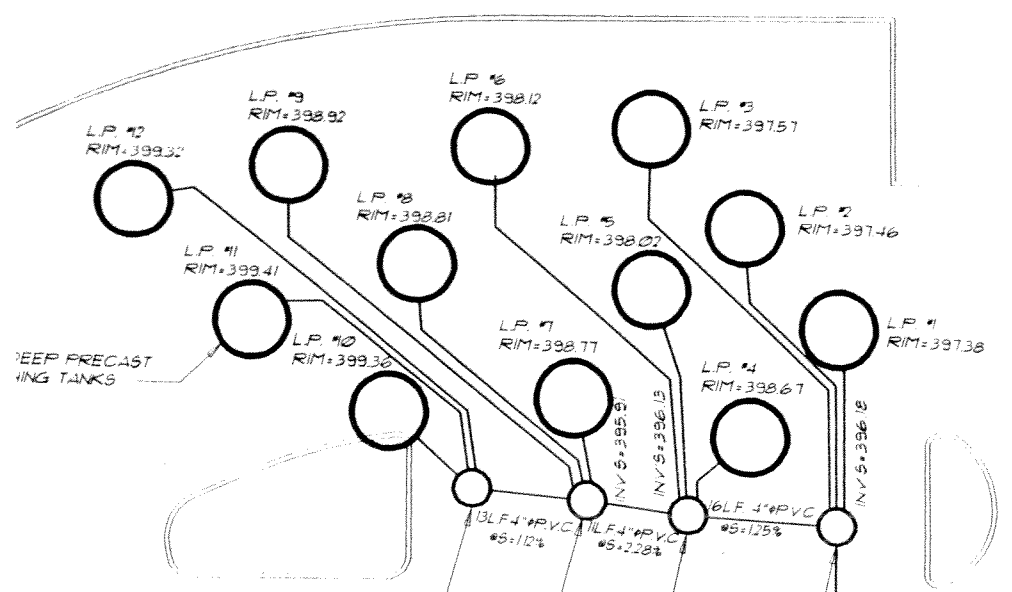
James J. Vanoli, P.E.
752 Old Kensico Road
Thornwood, New York 10594
Telephone 914.769.0902 Fax 914.747.3402

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

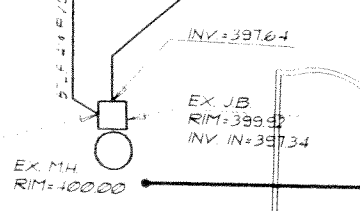
N-38°19'50" W

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

S-51°40'10" W

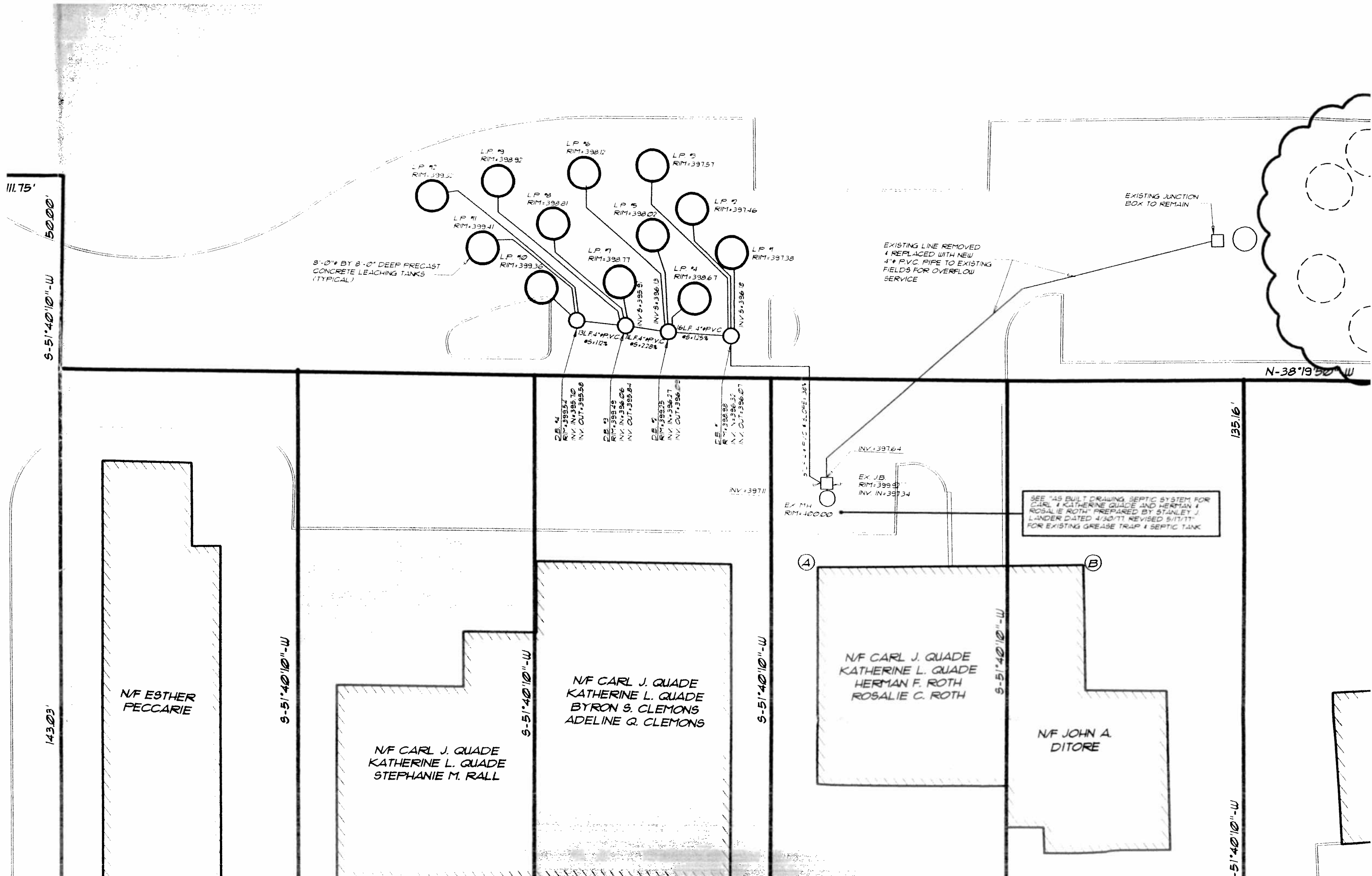
N/F CARL J. QUADE
 KATHERINE L. QUADE
 HERMAN F. ROTH
 ROSALIE C. ROTH

S-51°40'10" W

N/F JOHN A.
 DITORE

POUND RIDGE FIRE DEPT.

N-60°34'10"



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

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

EXISTING JUNCTION
BOX TO REMAIN

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

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 ESTHER
PECCARIE

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

NF JOHN A.
DITORE

DE 4 RIM: 399.57 INV. IN: 395.10 INV. OUT: 395.59	DE 3 RIM: 399.79 INV. IN: 396.06 INV. OUT: 395.84	DE 2 RIM: 399.25 INV. IN: 396.27 INV. OUT: 396.09	DE 1 RIM: 399.98 INV. IN: 396.37 INV. OUT: 396.07
--	--	--	--

EX. MH
RIM: 400.00

EX. JB
RIM: 399.97
INV. IN: 397.34

INV: 397.64

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

143.03'

9'-51"40"10"-W

9'-51"40"10"-W

9'-51"40"10"-W

9'-51"40"10"-W

135.16'

-51"40"10"-W

N-38°19'50" W

S-28°52'50"-W

S-42°32'00"-E 17.98'
S-38°06'40"-E

111.75'

50.00'

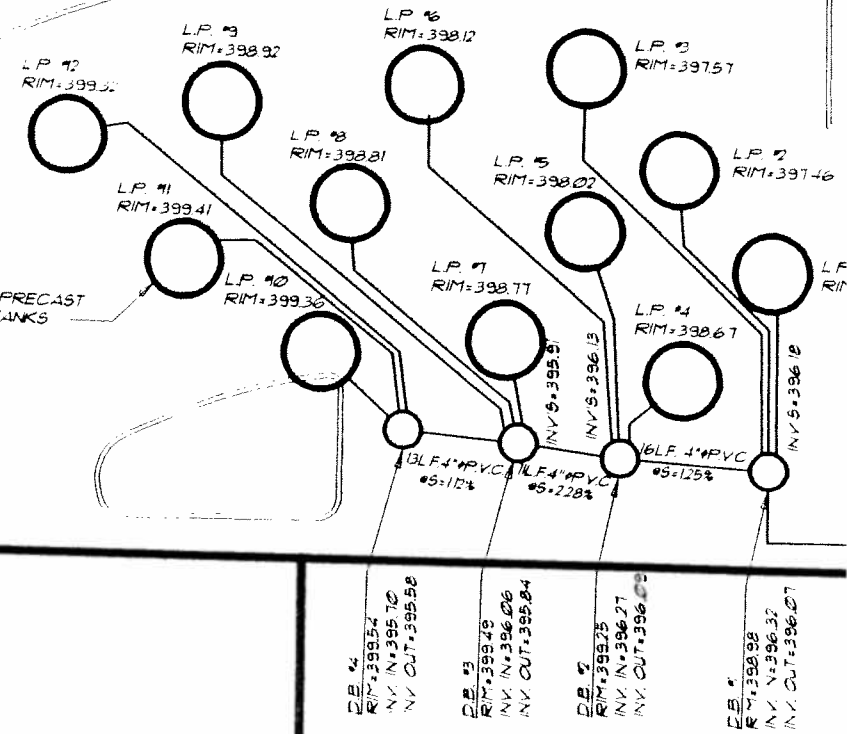
S-51°40'10"-W

143.03'

LINDA LANE

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'

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



NF ESTHER
PECCARIE

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

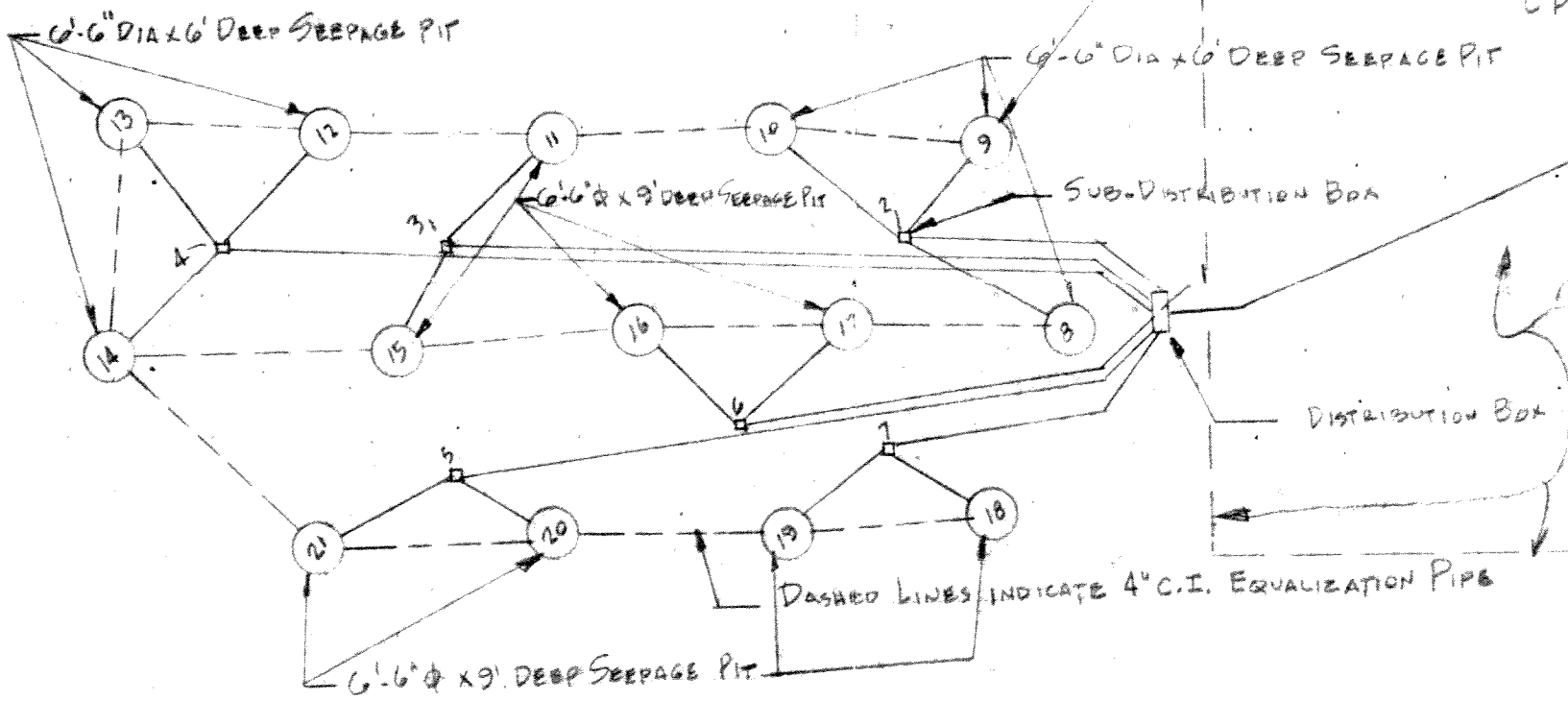
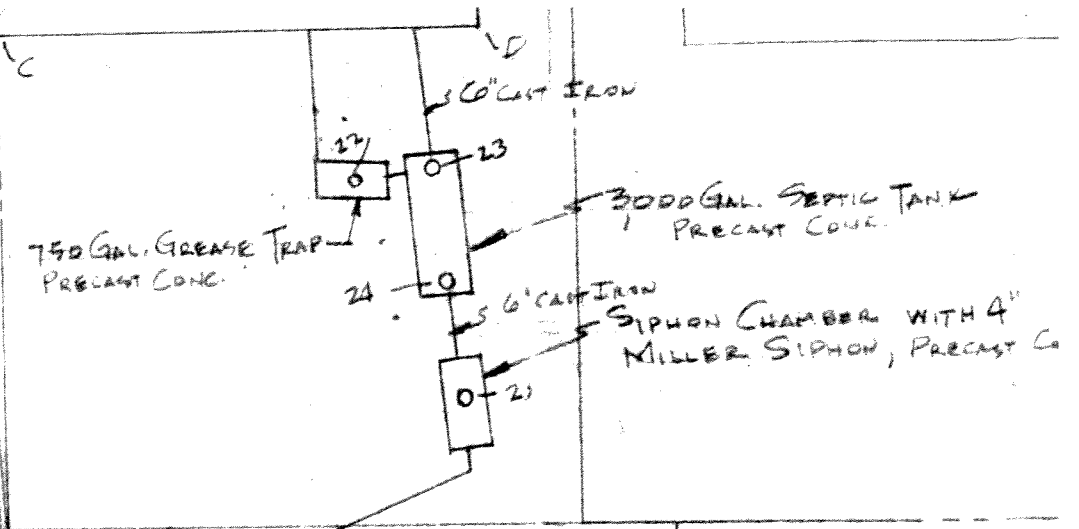
NF CARL J. QUADE
KATHERINE L. QUADE
BYRON S. CLEMONS
ADELINE Q. CLEMONS

INV. 397.11

S-51°40'10"-W

SEPTIC SYSTEM

SEPTIC SYSTEM



100% EXPANSION AREA

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

PROPERTY LINE

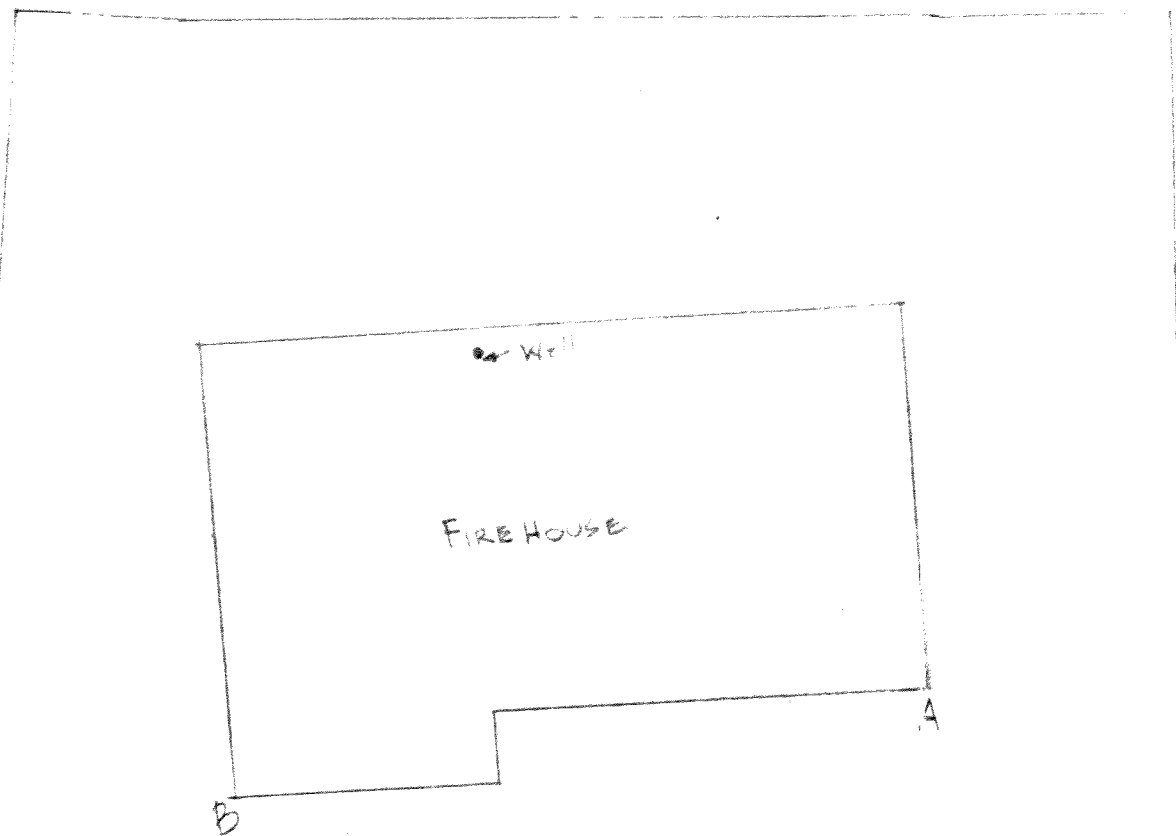
50 FEET TO
GROUND

AP. 207 LOCATION TOP OF BANK

NOTES:

1. GROUND SLOPES AS SHOWN INTO OTHER LAND OF QUAD-R-070. 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.

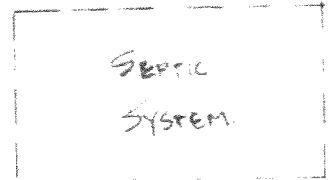


FIREHOUSE

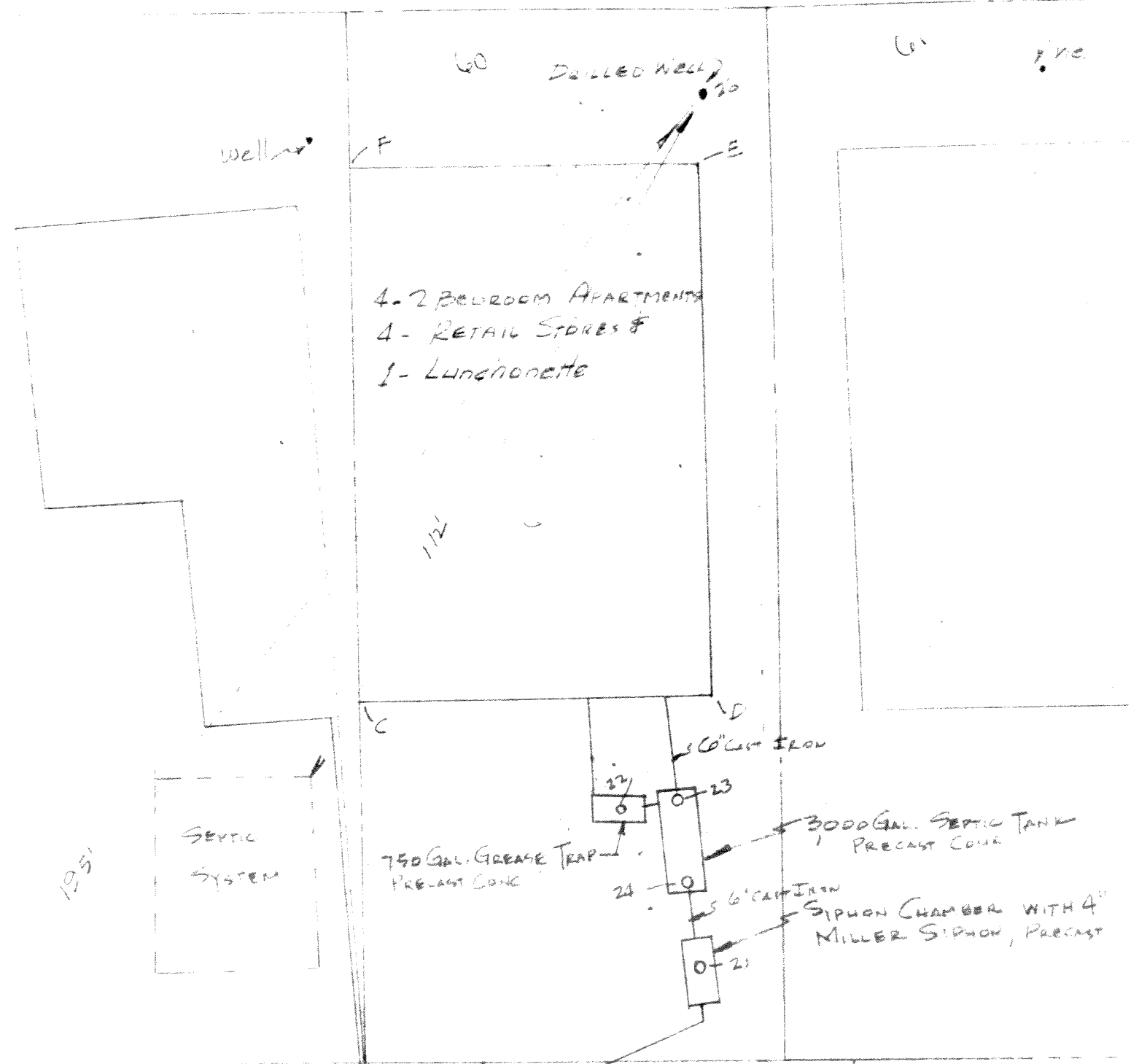
Well

B

A



SEPTIC SYSTEM

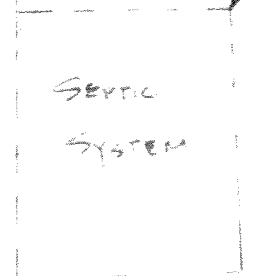


Well

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

1/2

195'



SEPTIC SYSTEM

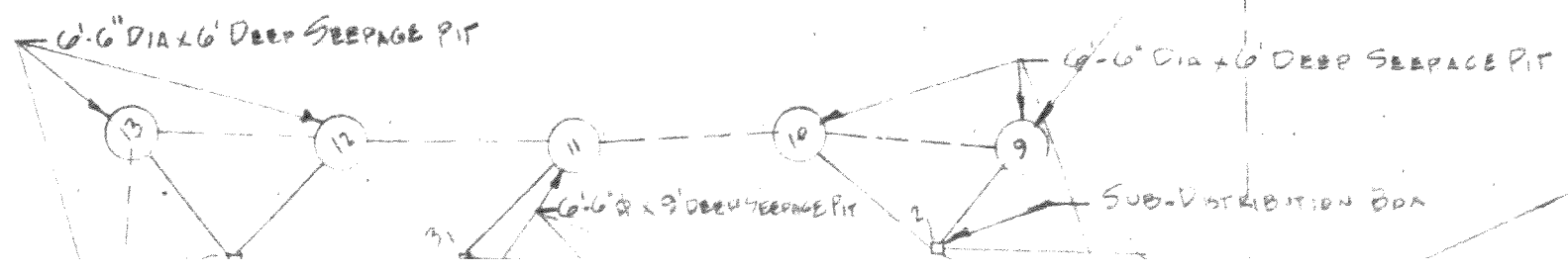
750 GAL. GREASE TRAP PRECAST CONC

10" DIA IRON

3000 GAL. SEPTIC TANK PRECAST CONC

5' 6" DIA IRON SIPHON CHAMBER WITH 4" MILLER SIPHON, PRECAST

PROPERTY LINE

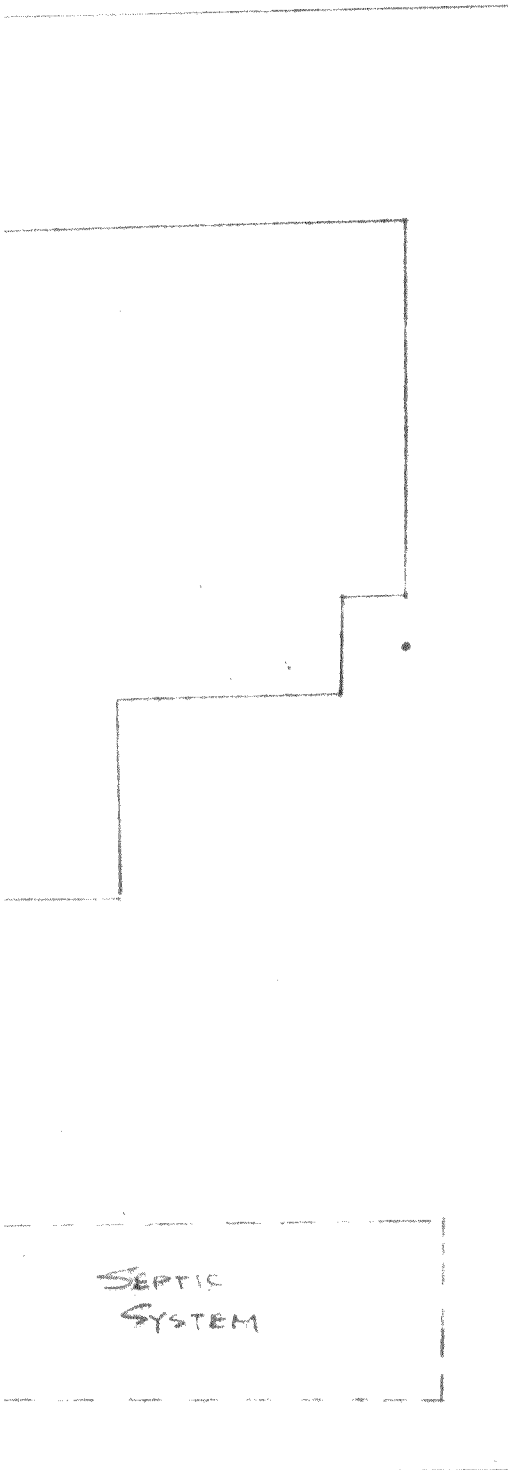


6'-6" DIA x 6' DEEP SEEPAGE PIT

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

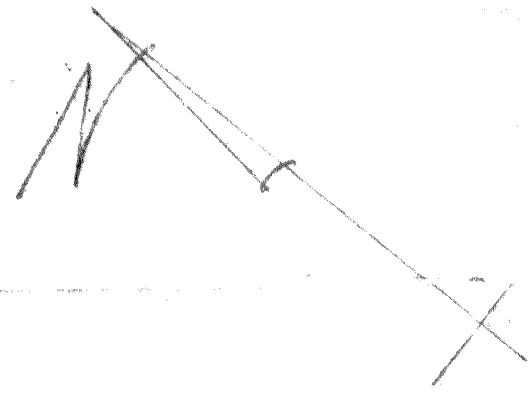
6'-6" DIA x 6' DEEP SEEPAGE PIT

SUB-DISTRIBUTION BDA



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'

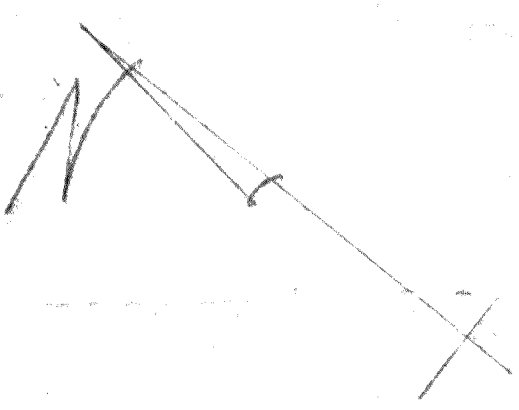
SEPTIC SYSTEM



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

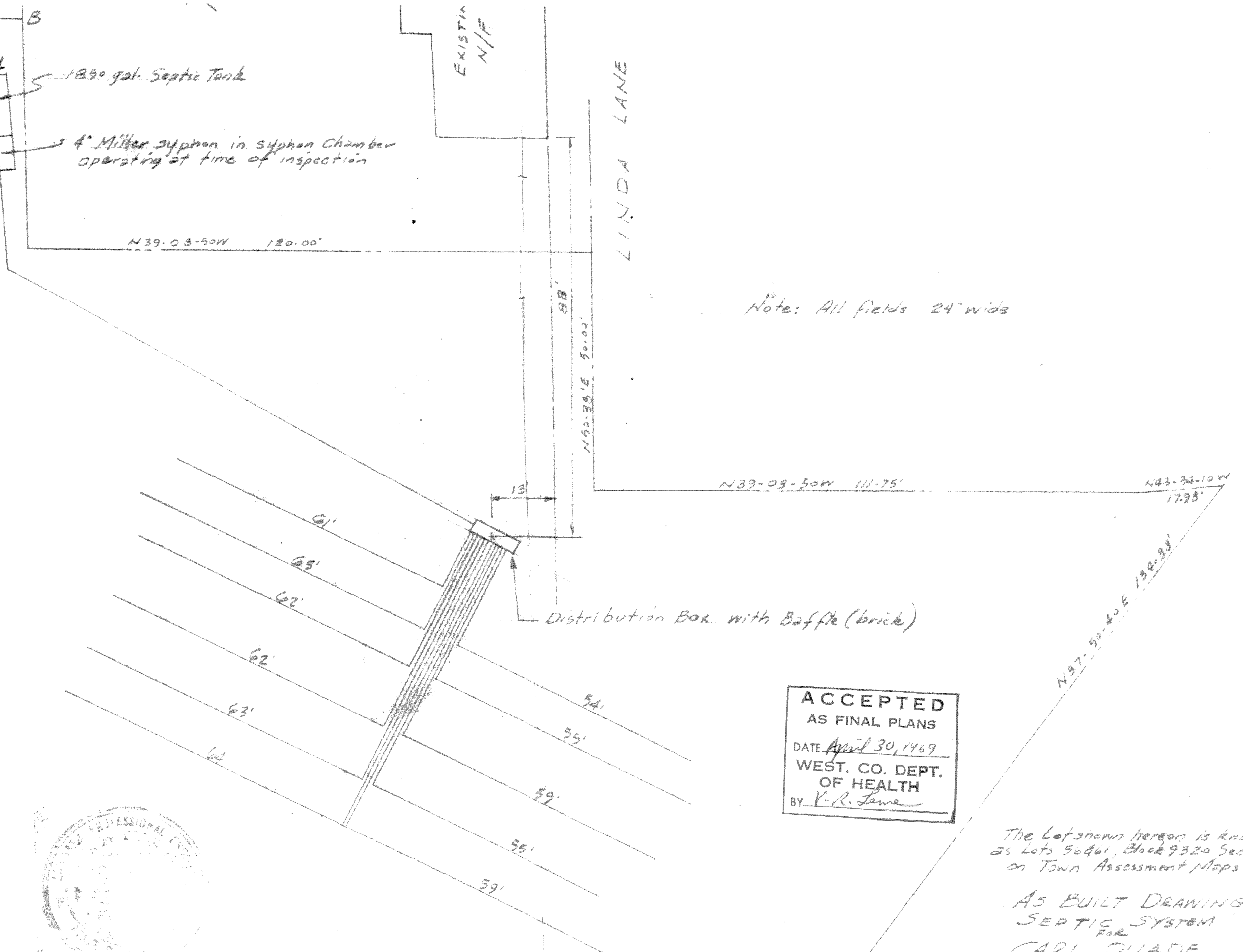
1890 gal. Septic Tank
4" Miller syphon in syphon chamber
operating at time of inspection

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'



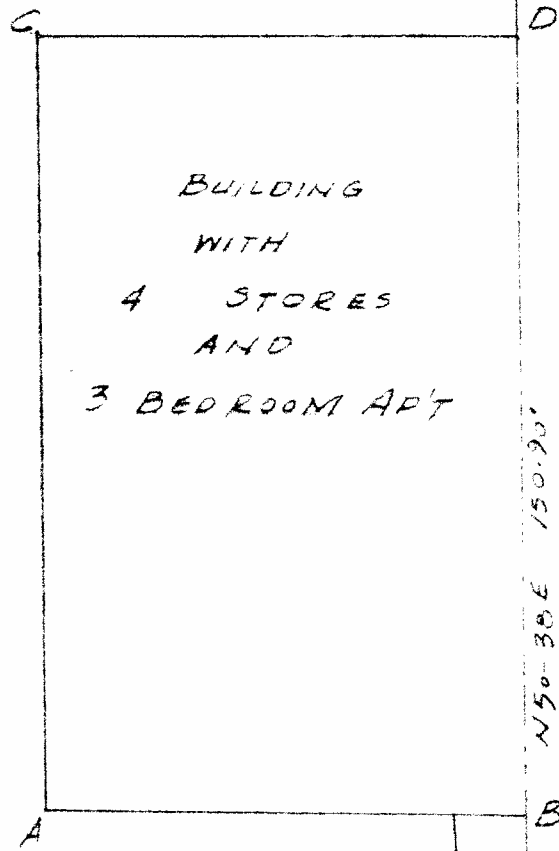
ACCEPTED
AS FINAL PLANS
DATE April 30, 1969
WEST. CO. DEPT.
OF HEALTH
BY V-R. Lane



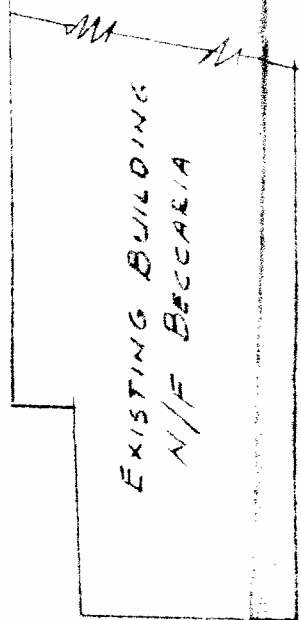
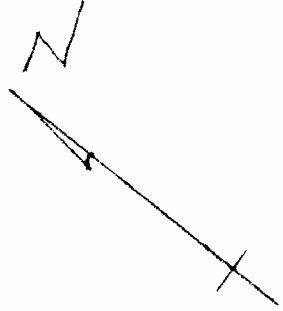
Stanley J. Lane
Stanley J. Lane, P.E.

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'

89'

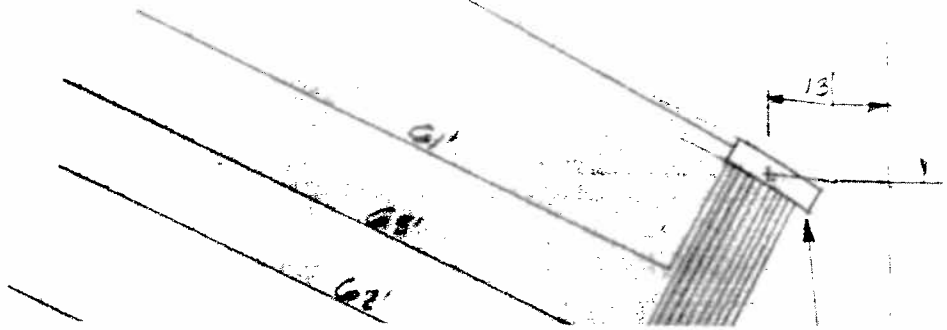
N 50-38 E 50.00'

Note: All fields 24' wide

N 33-09-50W 18.75'

N 43-24-10 W
17.95'

E 192.95'



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

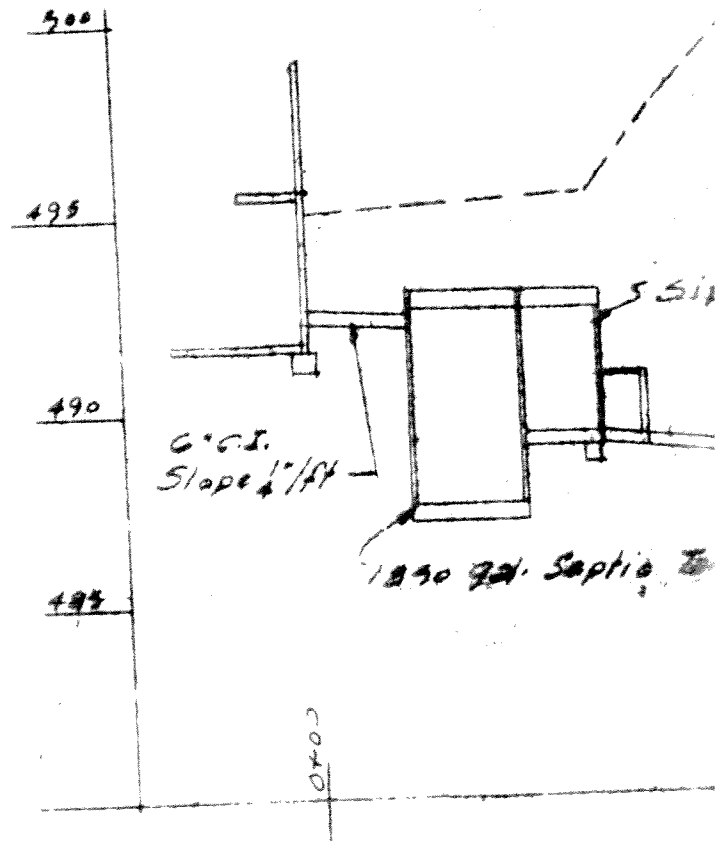
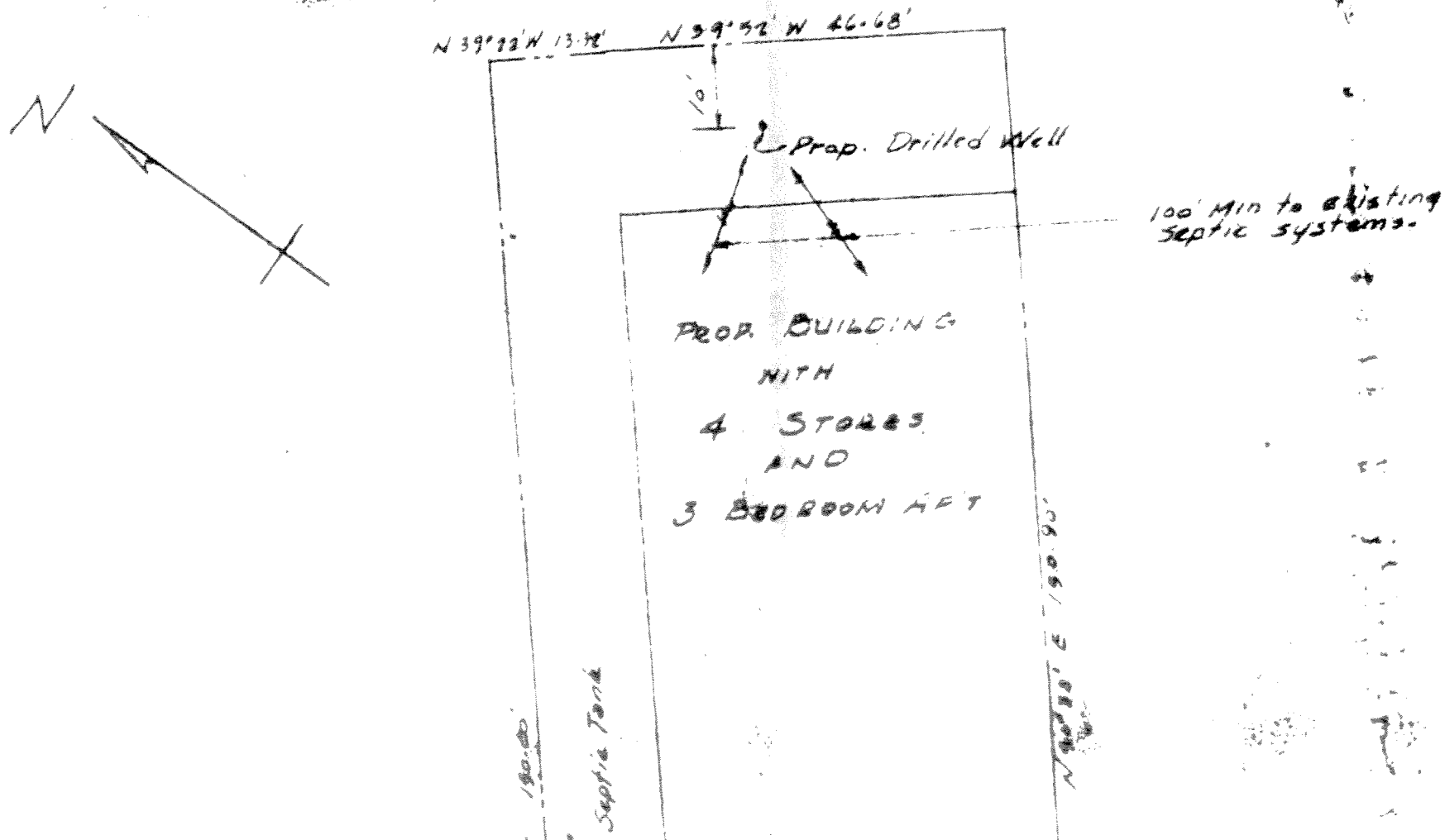
S 50-38 W 150.00'

W

ENGINEER'S REPORT

1. Design Flow: 4 stores @ 450 gal./day = 1800 gal./day + three bedroom apartment @ 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. = 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

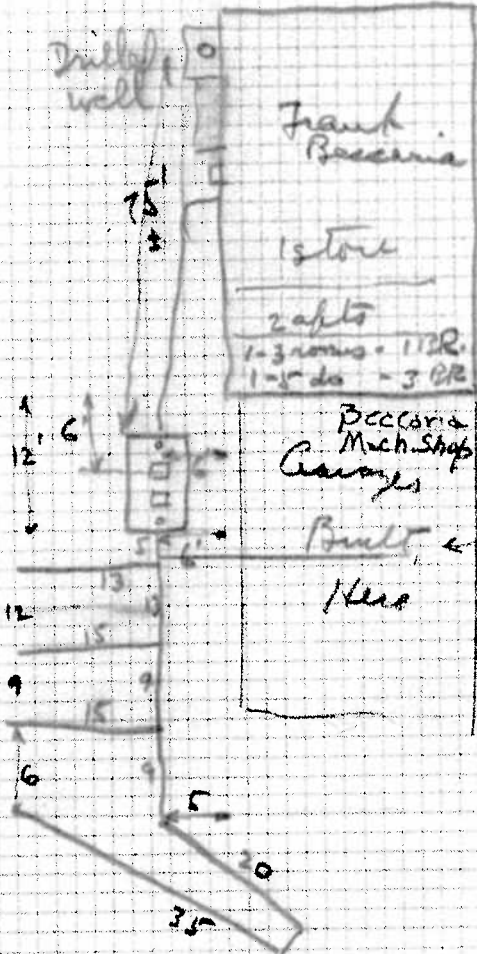
1000 gal masonry S.T.

134 LF x 24" abstrnd

8-29-47

7.9 x 40 x 12

1000
gals



30' of concrete
"added before
building
apartments"

Beccaria
Mech Shop
Garage

36
 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 Beccaria, R.F.D. 5, Ridgefield,

Connecticut, for the construction or provision of a sewage disposal system consisting of a 1000 gallon masonry septic tank and 130 linear feet of 30 inches wide absorption trench,

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

subject to the following conditions:

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

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

III. That such sewage disposal system shall be constructed in complete conformity with the application data and plans 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:

- Owner Frank Beccaria..... Mail Address R. 5 Ridgefield Town
Note: Owner must receive permit and approval. Check here for extra copy....
 - Property location Westchester ave...... Place Pound Ridge
(Street) (Village, Town, City)
 - Tax Map Location: Section..... Block 7326 Lot..... Subdivision.....
 - Construction: New, Replacement, Proposed Future Building New.....
 - Lot area 60 X 150. No. of rooms 8. Bedrooms 4. Bathrooms 2.....
Extra Lavatories 1. Special Fixtures..... Maximum Future Occupancy 7.....
 - 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
 - Daily Sewage Flow: No. of persons 7 x 75 gals. = 525..... gals. per day
 - 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.
 - 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.
 - Absorption area: 32.5 sq. ft...... -:- sq. ft.
gals. waste (No. 7) Absorption rate from table bottom area.
 - 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. Whiteley 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 Sh... 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. H...
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

PR3-1

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

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

Tests made by THE PEASE CO Date DEC. 30, 1958
 S.D. 27.5 3/18/57

Job Location

Westchester County Department of Health

PR 3-1

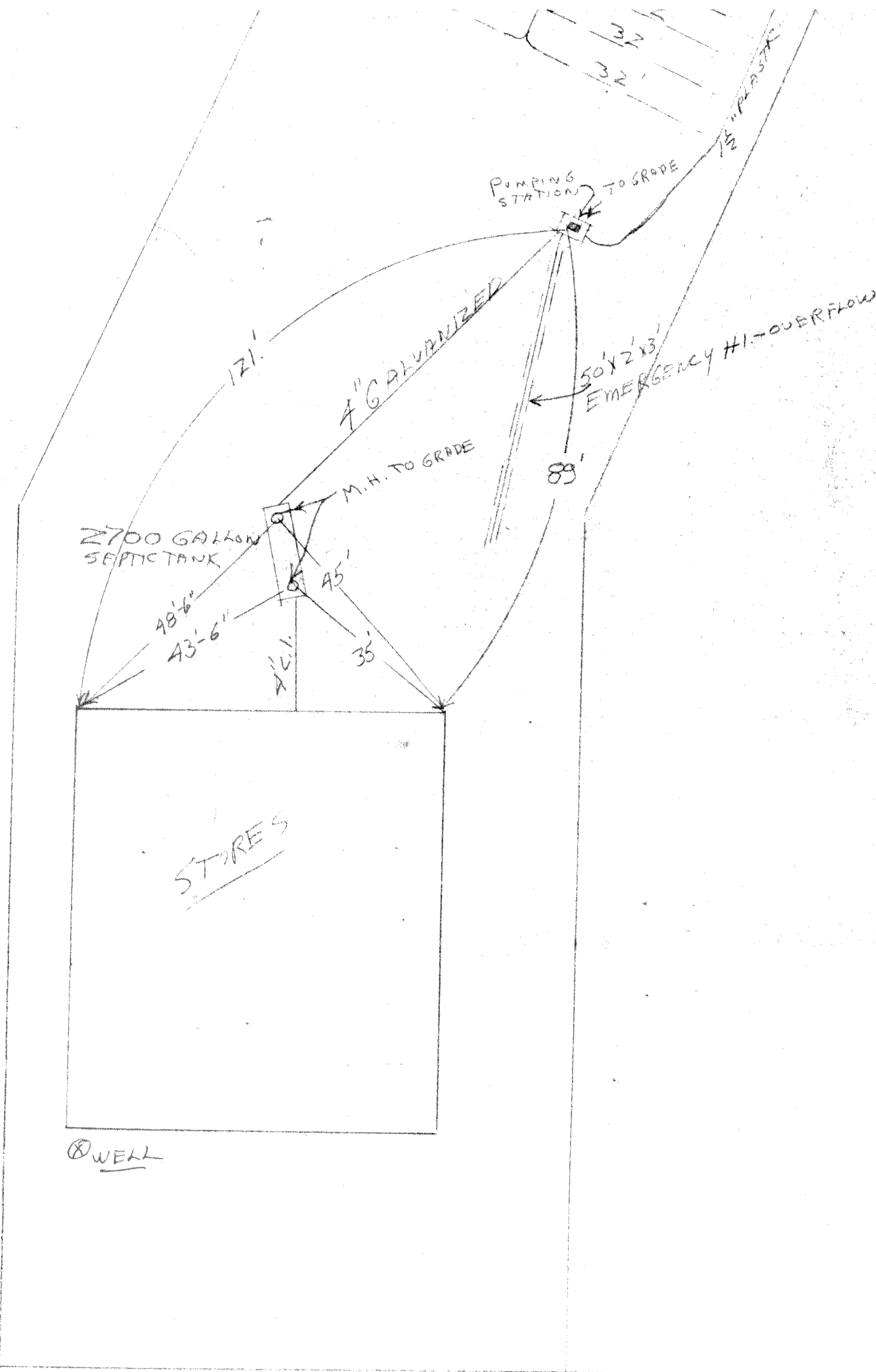
TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION

DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO. <u>1</u>	HOLE NO. _____	HOLE NO. _____	HOLE NO. _____
G.L.	TOP SOIL	_____	TOP SOIL	_____
6"	TOP SOIL	_____	TOP SOIL	_____
12"	SANDY LOAM	_____	SANDY LOAM	_____
18"	SANDY LOAM	_____	SANDY LOAM	_____
24"	SAND LOAM GRAVEL	_____	SANDY LOAM GRAVEL	_____
30"	SAND LOAM GRAVEL	_____	SAND & GRAVEL	_____
36"	_____	_____	_____	_____
42"	_____	_____	_____	_____
48"	_____	_____	_____	_____
54"	_____	_____	_____	_____
60"	_____	_____	_____	_____
66"	_____	_____	_____	_____
72"	_____	_____	_____	_____
78"	_____	_____	_____	_____
84"	_____	_____	_____	_____

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

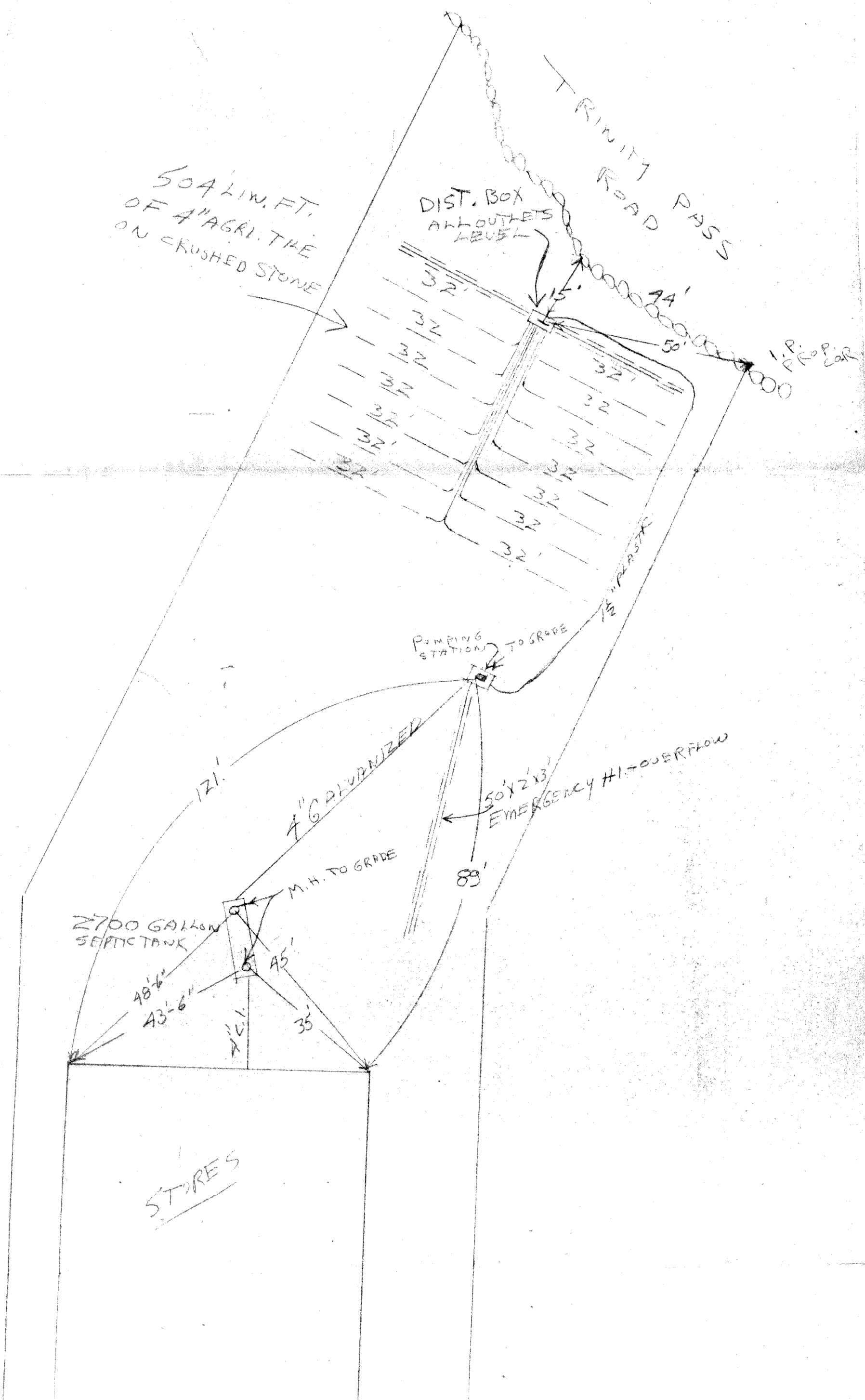
Tests made by J.H.E. P.F.A.S.E. CO. Date DEC. 30, 1958 . . .



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



50' LIN. FT.
OF 4" AGR. TUBE
ON CRUSHED STONE

DIST. BOX
ALL OUTLETS
LEVEL

TRINITY
ROAD PASS

1 P.
PROP. CAR

PUMPING
STATION
TO GRADE

4" GALVANIZED

50' x 2' x 3'
EMERGENCY HI-OVERFLOW

2700 GALLON
SEPTIC TANK

M.H. TO GRADE

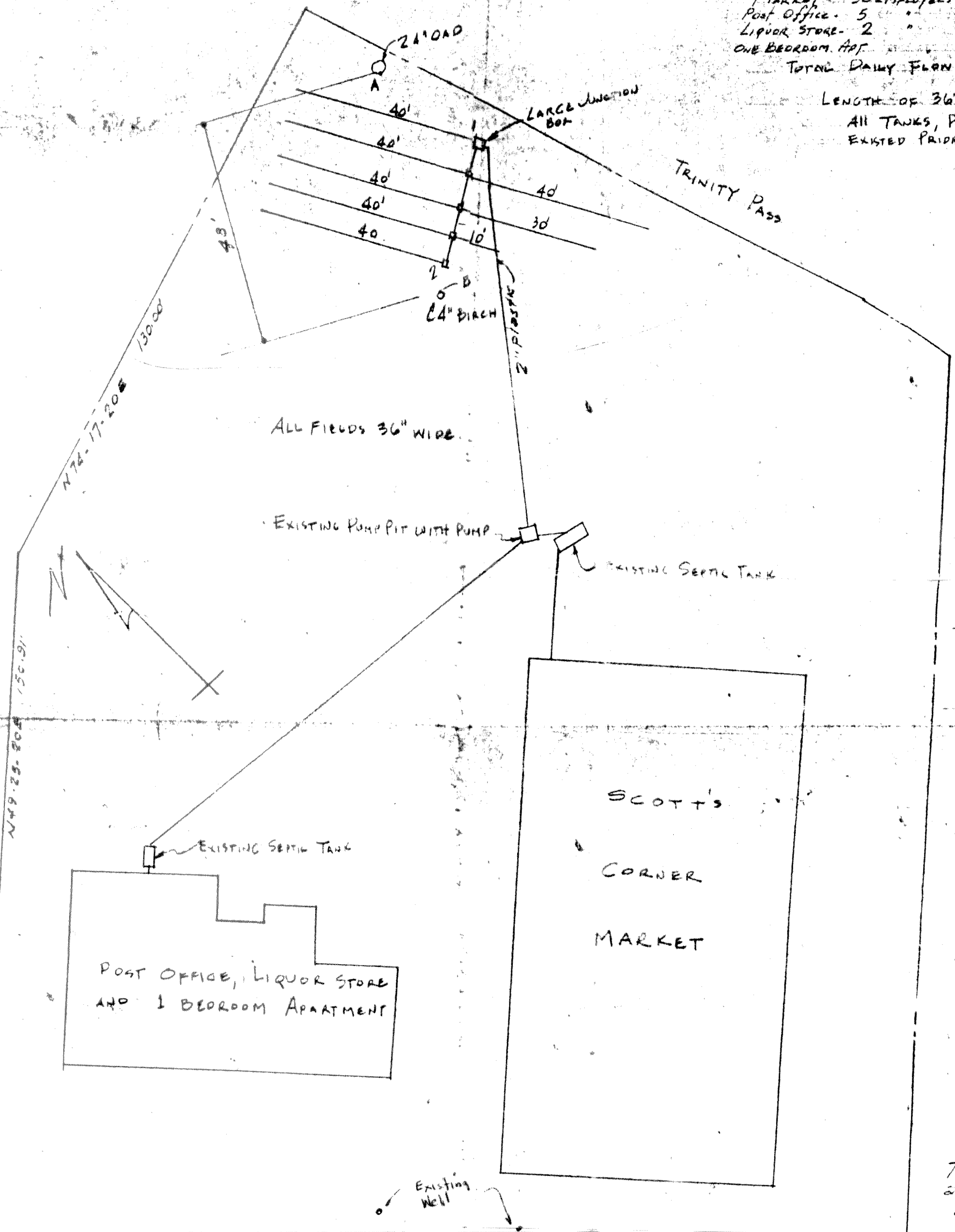
STORES

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

DESIGN

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

LENGTH OF 36" T
ALL TANKS, PUM
EXISTED PRIOR

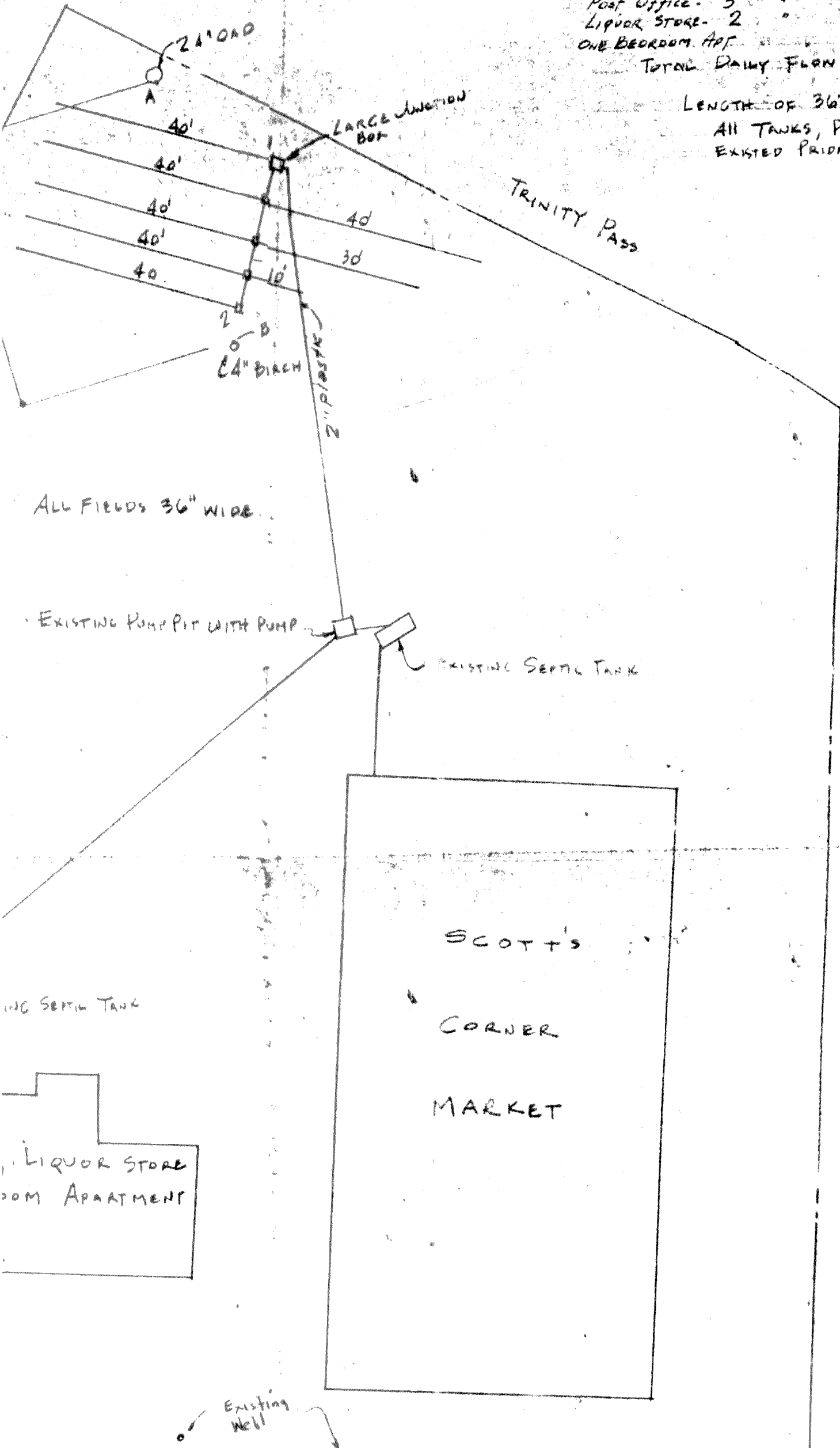


T1
25
0

DESIGN FLOW

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

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



ALL FIELDS 36" WIDE.

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

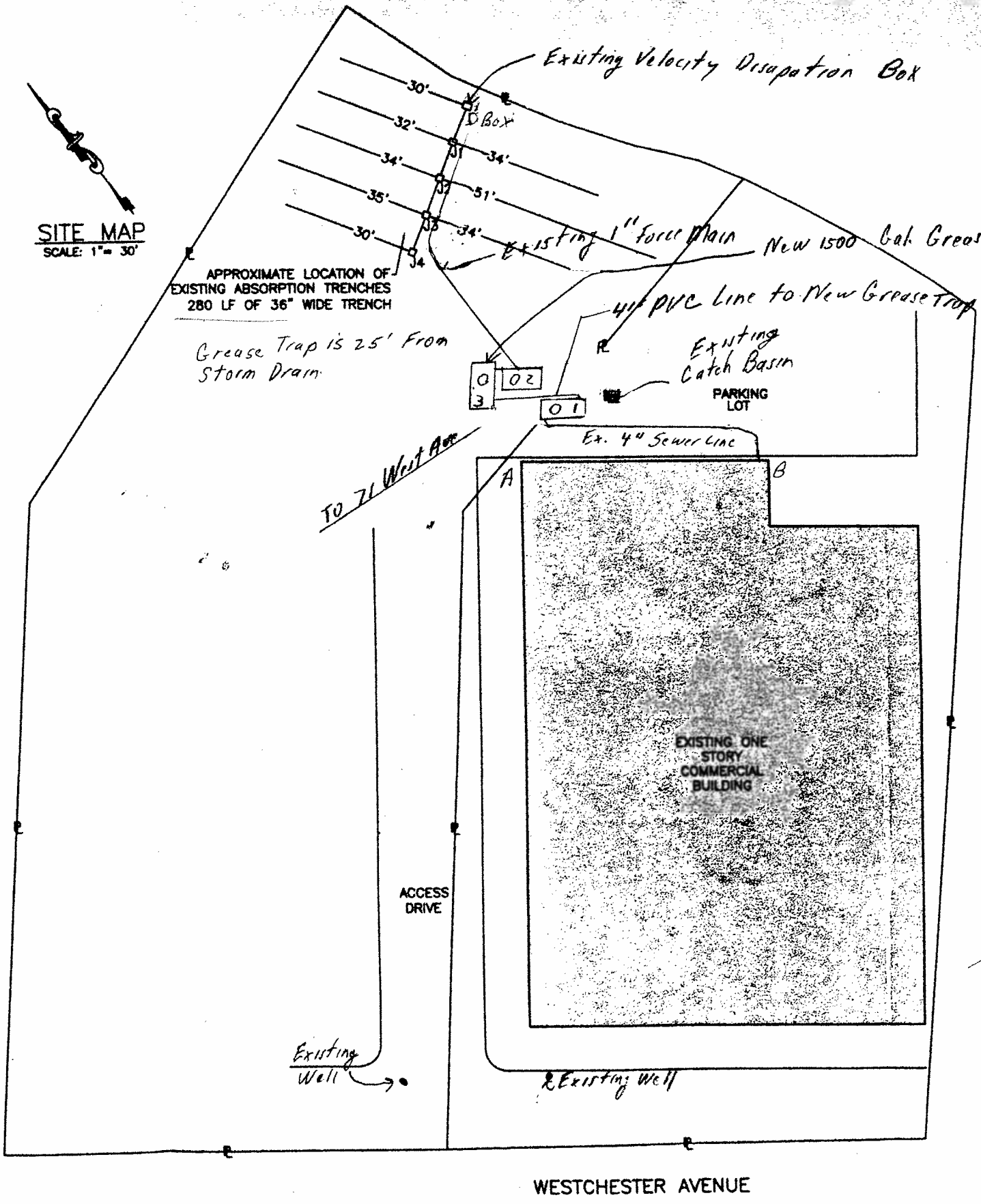
I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), in accordance with the standards, rules and regulations of the State of New York and the approval issued by the Westchester County Department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



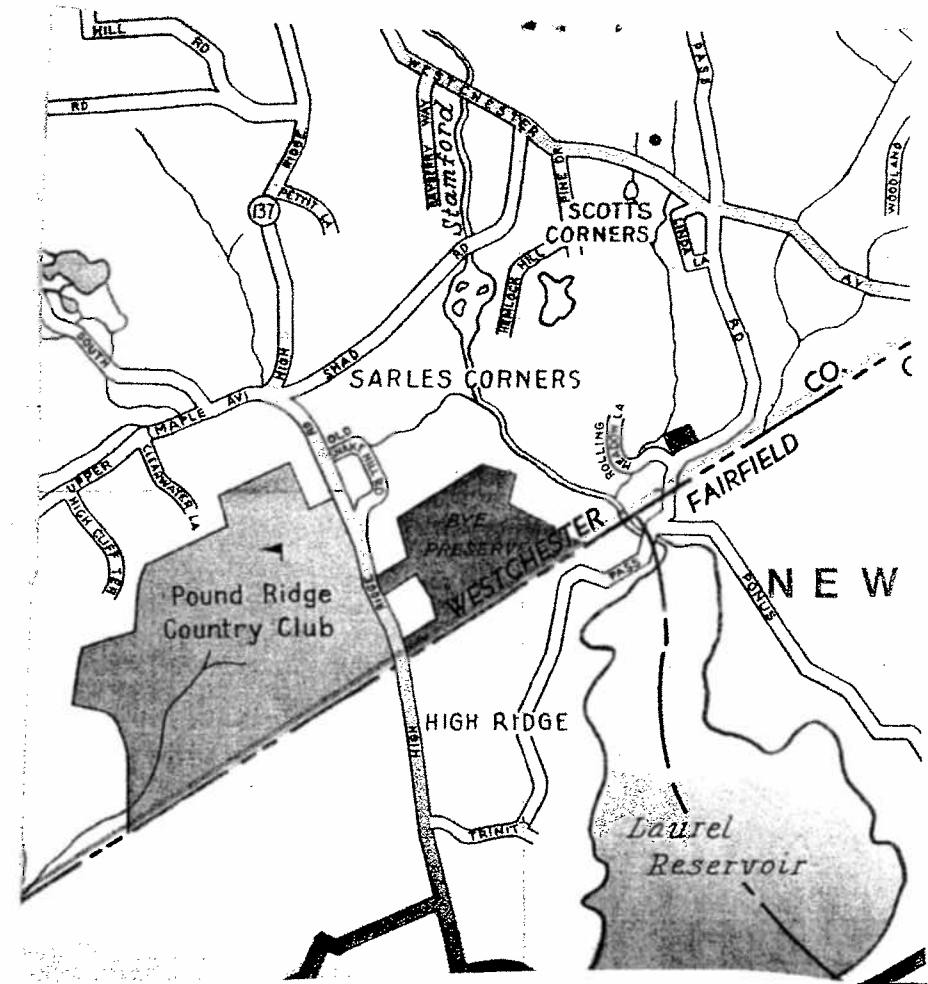
John P. Annicelli, P.E.
Troy La. Bedford, N. Y. 10506
914-273-3682.

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

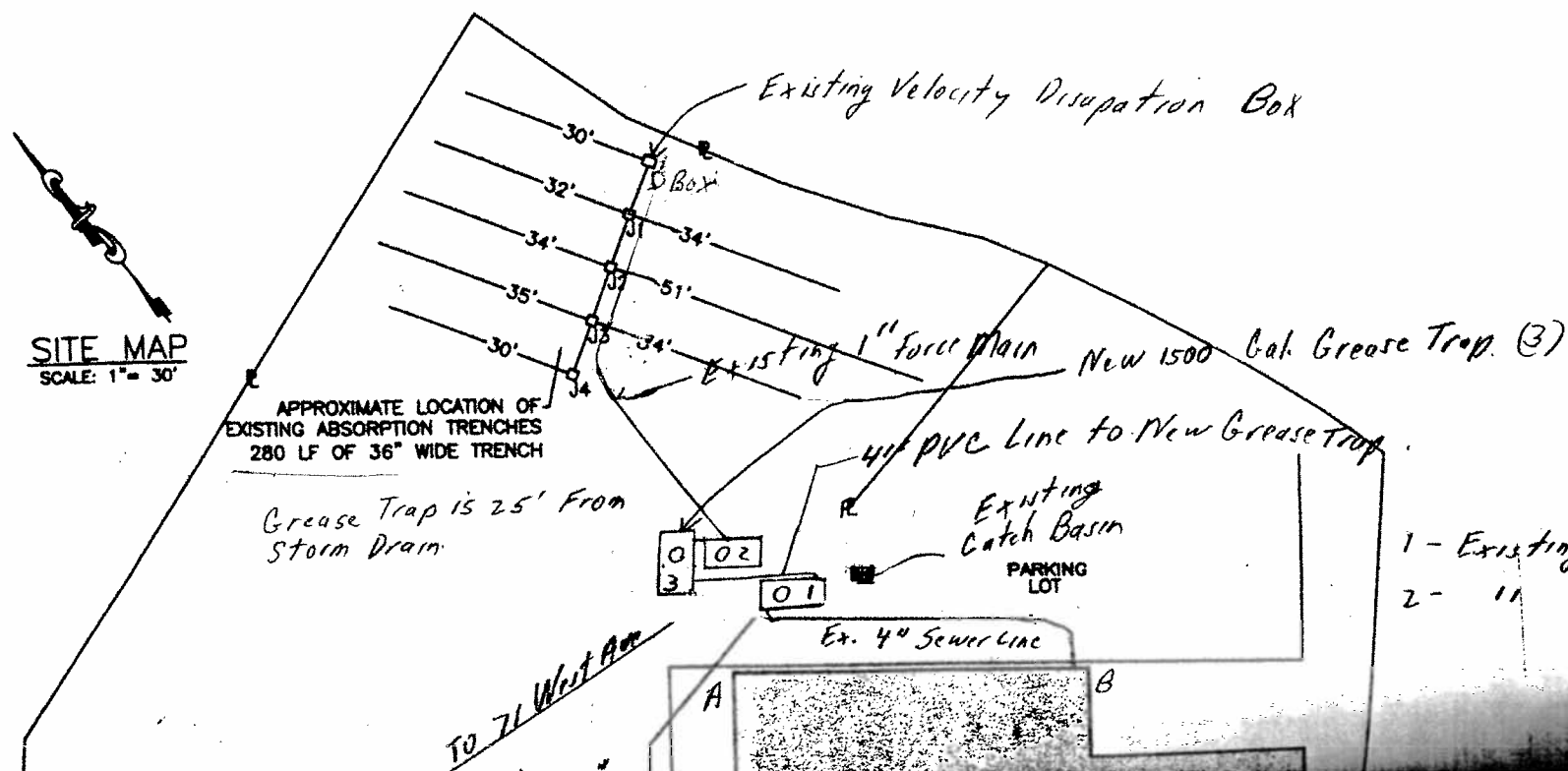
NOTE

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.

WCDOH File # PR2012-12

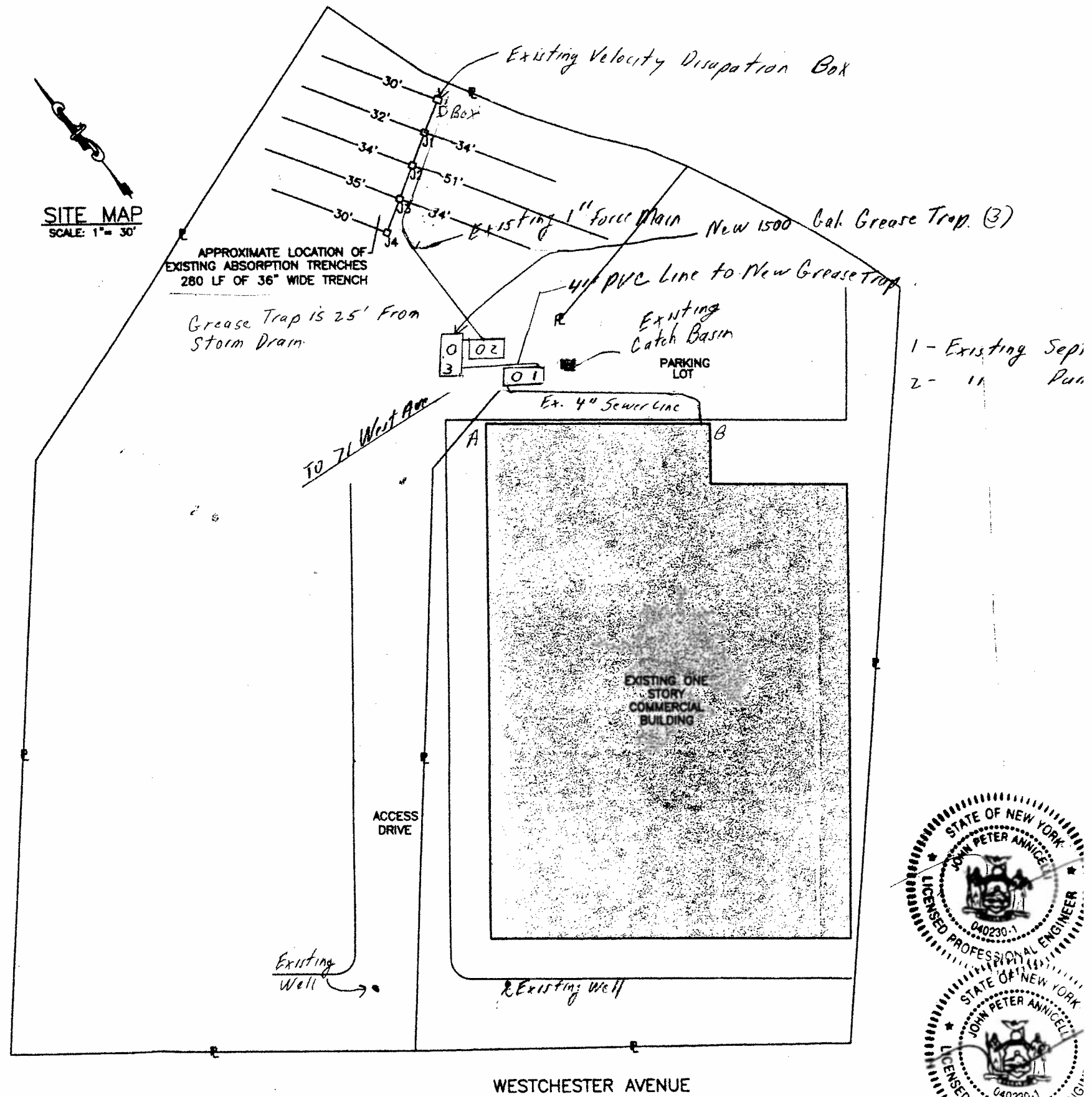
ACCEPTED
AS FINAL PLANS

DEC 03 2012

WEST. CO. DEPT. OF HEALTH

BY *[Signature]*

* GREASE TRAP ONLY *



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:	_____	_____		

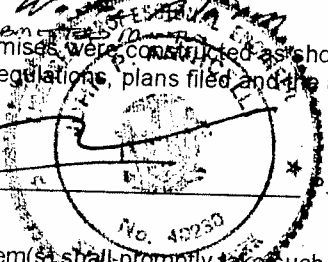
Erosion Control (EC) Completed _____

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

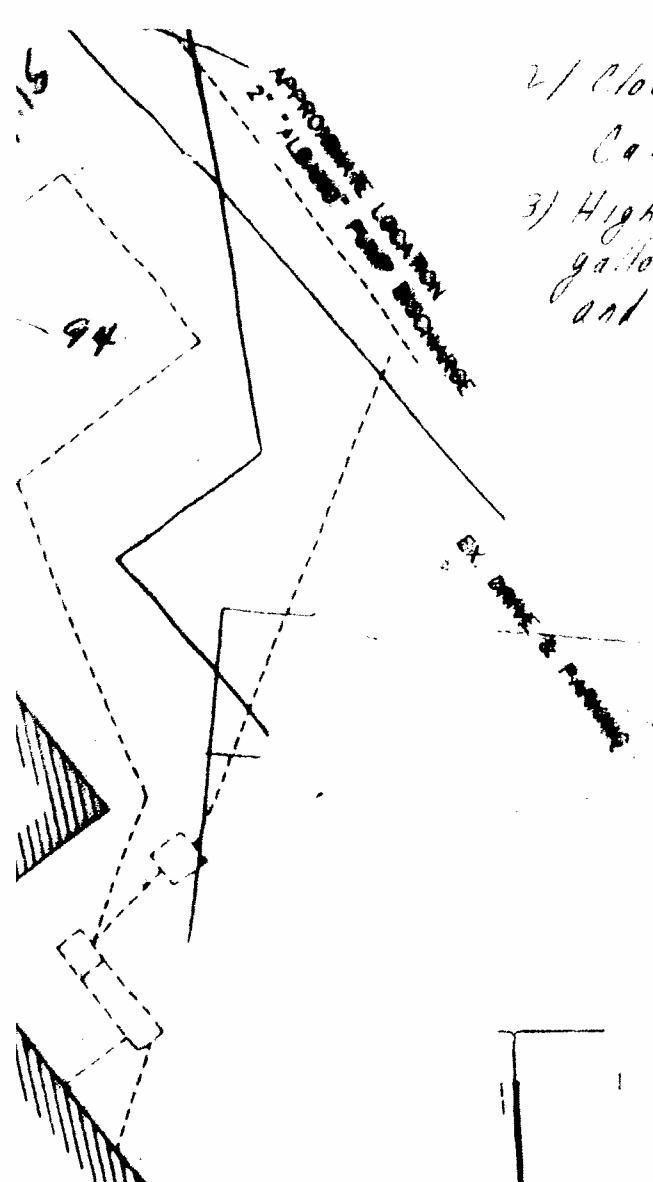
I certify that the system(s) as listed serving the above premises were constructed as shown on the plans of the completed work (copies of which are attached), in accordance with the rules and regulations, plans filed and the approval issued by the Westchester County Department of Health.

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: _____

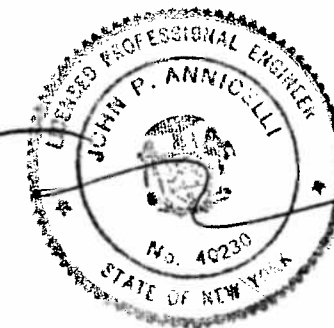


- 2) Clock timer to pump installed in No Star Electric Room.
Calibrated 4 Pumps each 12 hours 310 gal / pumping Centipex Pump Control Panel with Time Clock.
- 3) High Water Alarm in overflow Tank set to 600 gallons. Alarm light & audible in North Star Restaurant and Overflow Tank to be pumped when Alarm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



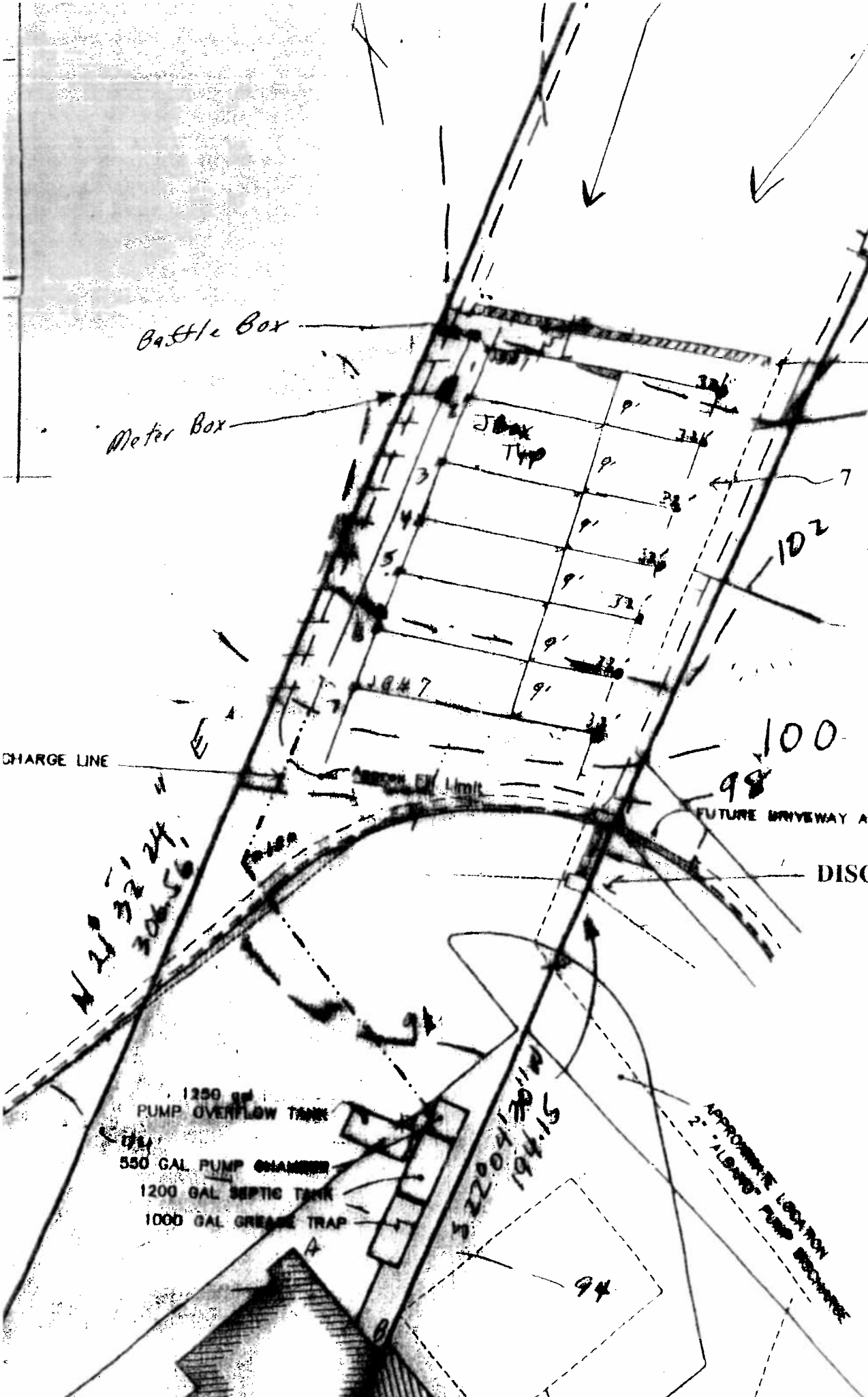
W2004 E110# PR207-04B
ACCEPTED
 AS FINAL PLANS
 DEC 17 2009
 WEST. CO. DEPT. OF HEALTH
 BY *[Signature]*
 MAX DAILEY FLOW 695 gpd

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

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.



- 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

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

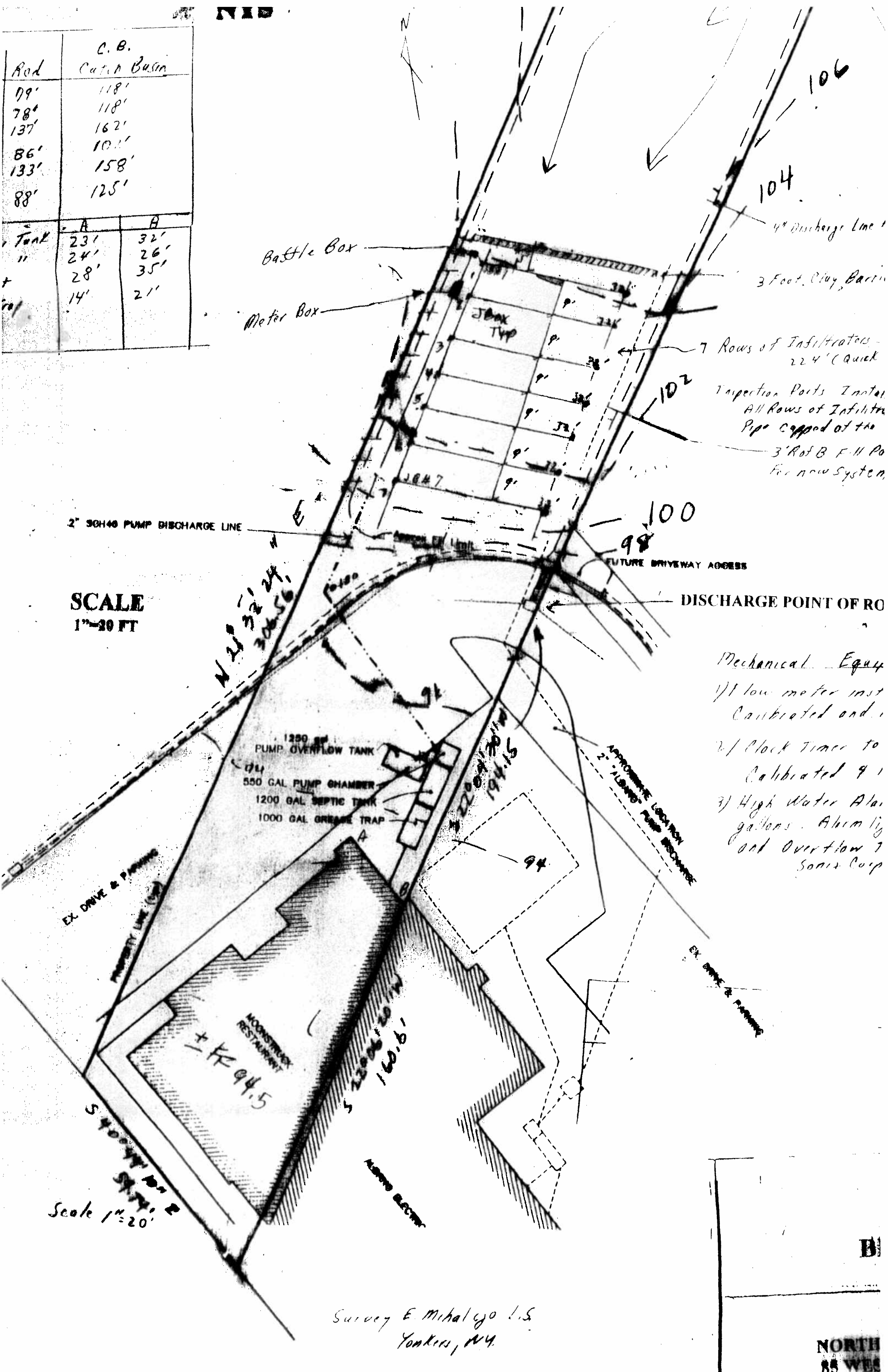
3' Rot B F.H. Package
 for new system

DISCHARGE POINT OF ROOF LEADERS

- Mechanical Equipment
- 1) Flow meter installed Mc Crometer Ultra May 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

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'

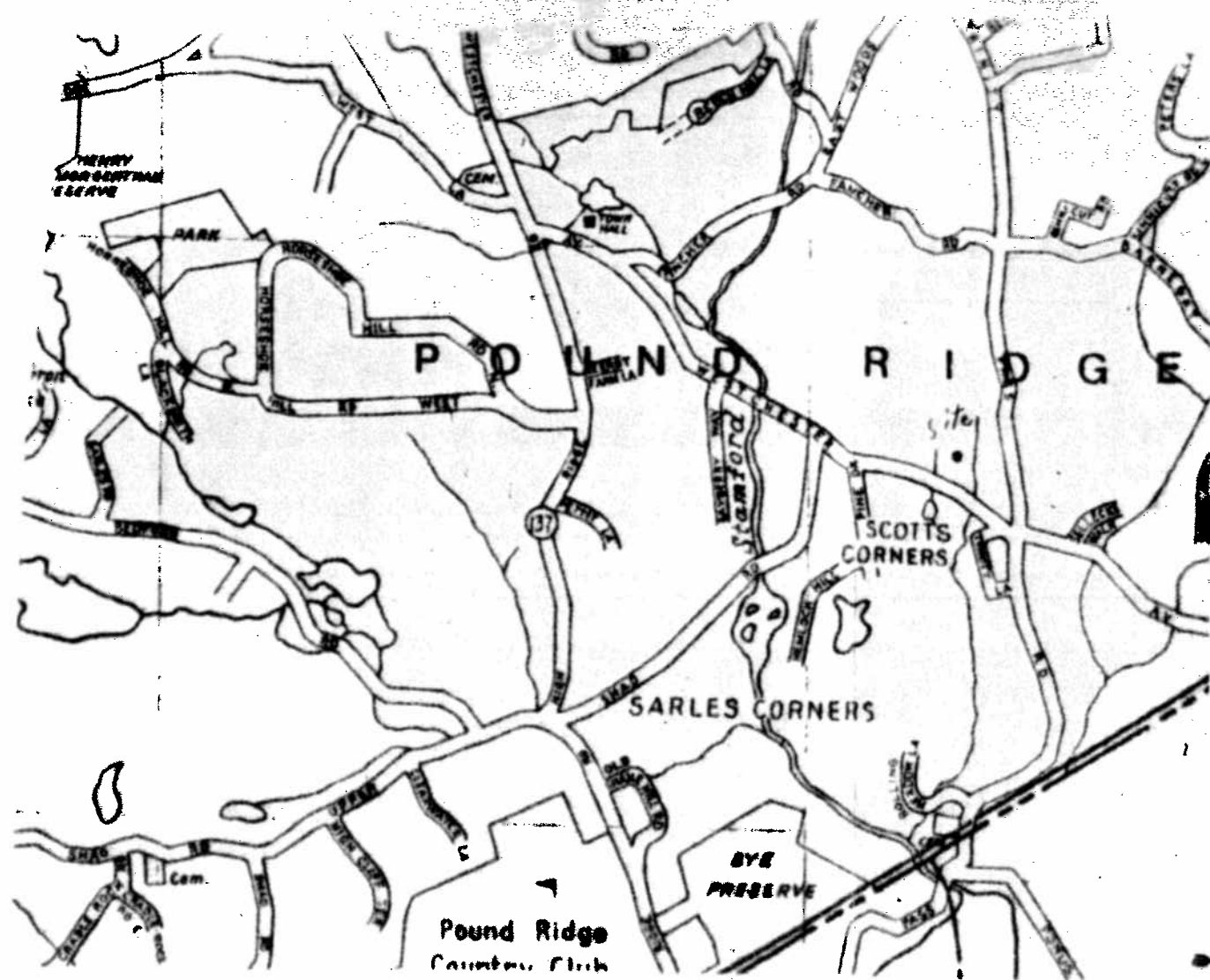


SCALE
1"=20 FT

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

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

NORTH
85 WBS



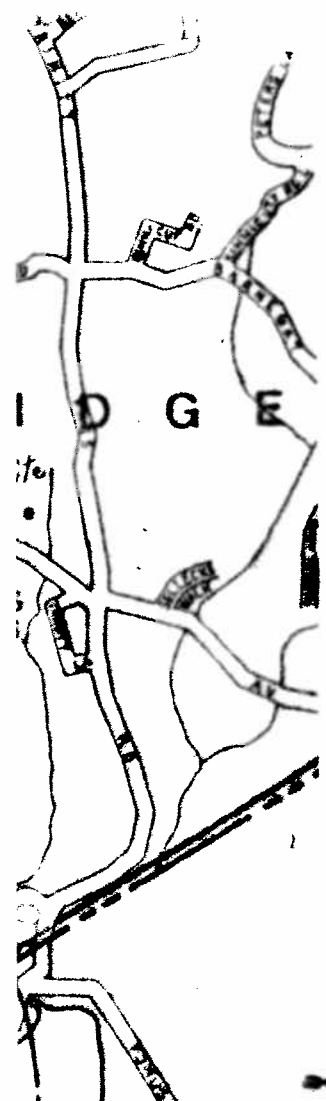
**LOCATION MAP
NTS**

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'
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 to
 2) Pump Readings to be
 1) Water Use - Meas
 if Flow to OWTS
 3) The Design Profer
 Supply Line to No.
 NOT to have



Note

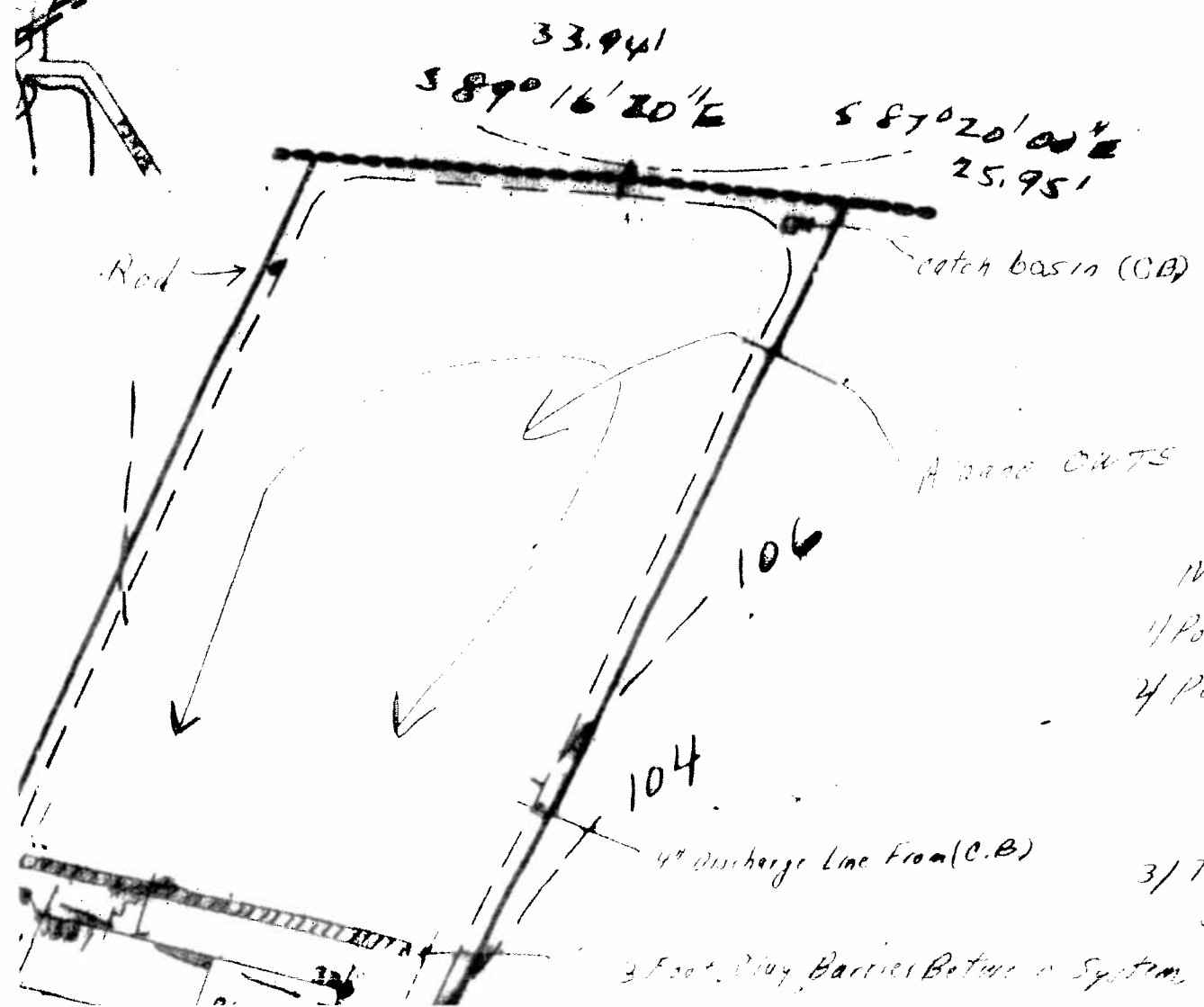
The Design Professional has supervised the construction of the OWTs and certifies to its installation and it is in accordance with the approved plans

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

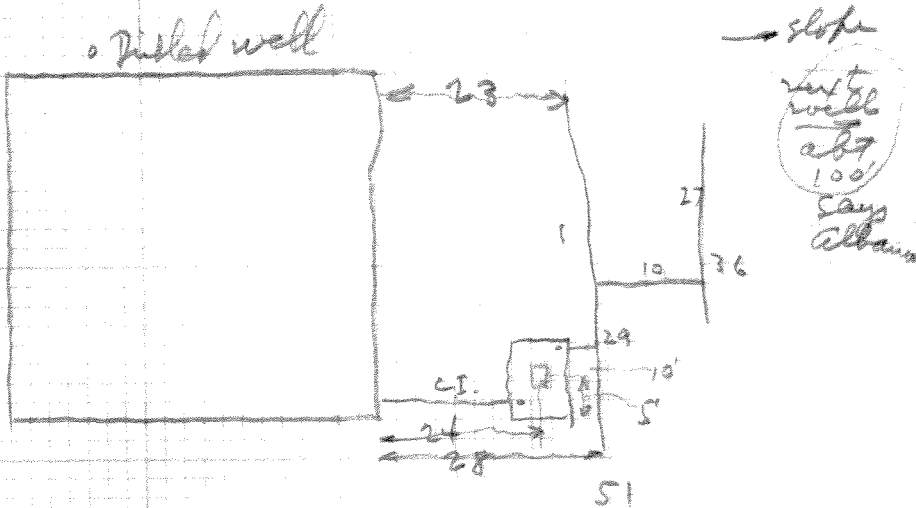
Alfred Albano, Westchester Avenue

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

Westchester Ave

6.8 x 40 x 40 = 810 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 Coutermarsh, 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..... inside dimensions: Length..... 7'-0"..... width..... 4'..... effective depth..... 4'-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

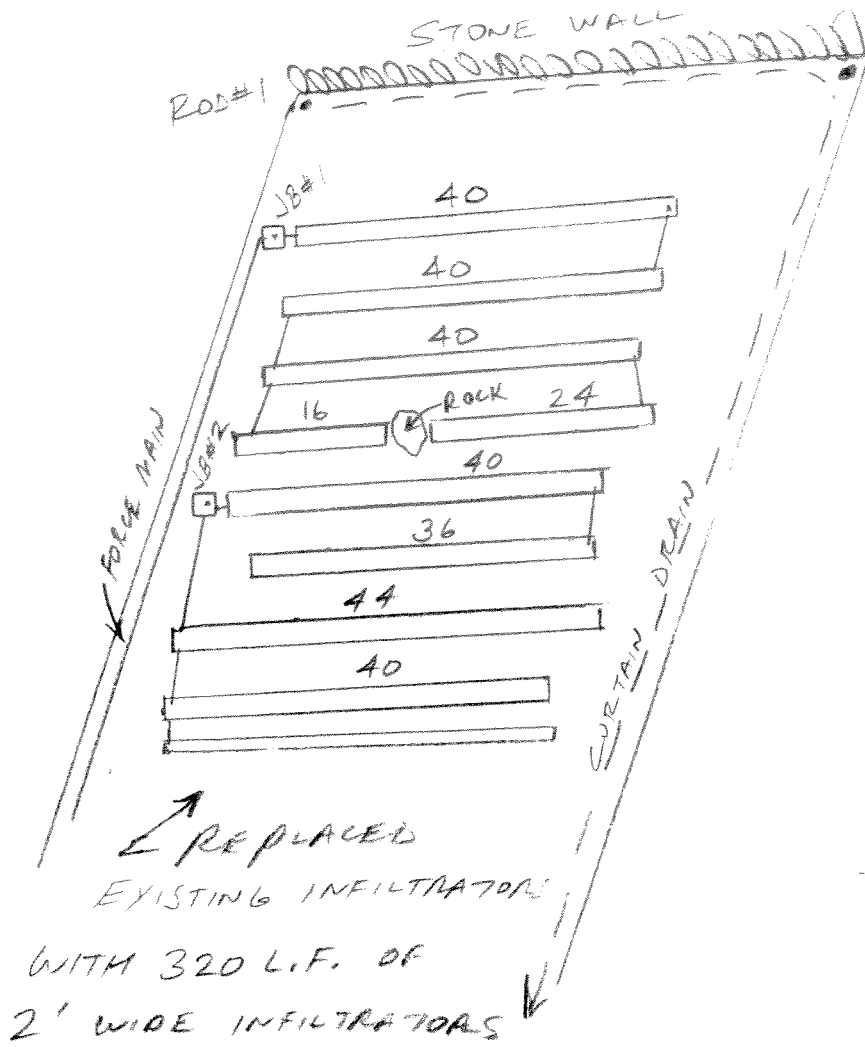
Contractor's Name (print): UNITED SEPTIC & EXCAVATION Date Repair/Remediation Completed: 6-18-14

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

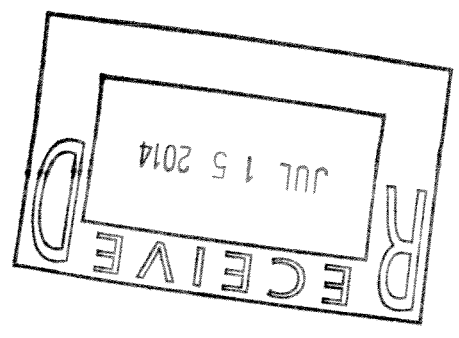
Upon completion please remit to:

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

[Handwritten Initials]



	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

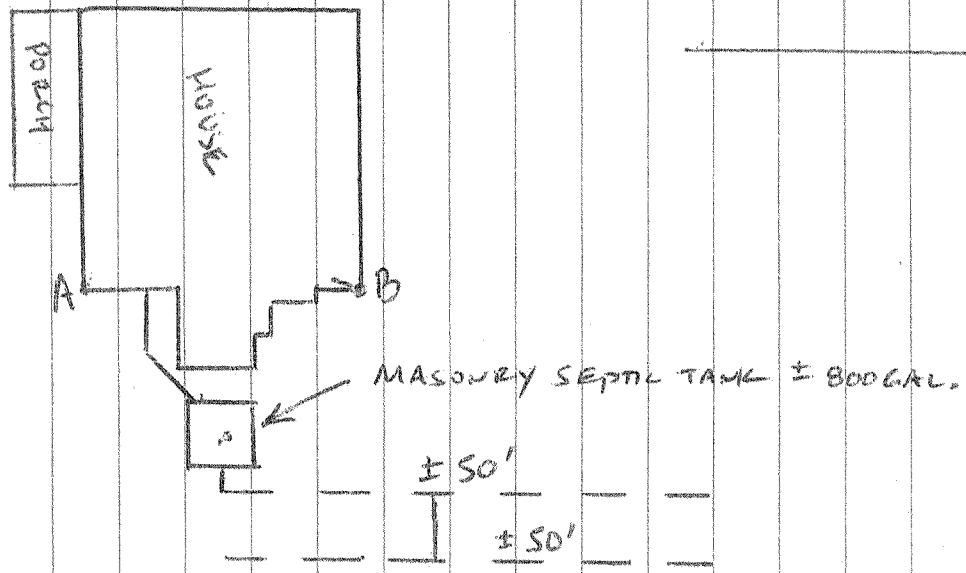
83 WESTCHESTER AVE.

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

Separate Sewerage 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 sewerage 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. E. Hauld
D 47.60 Westchester County Department of Health

FILE COPY

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

CONSTRUCTION PERMIT 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. E. Hauld
SD 46.64 Westchester County Department of Health

FILE COPY

APPROVED

Designs
Maintenance
Installation
Cleaning
Septic Tanks

JUL 13 '65

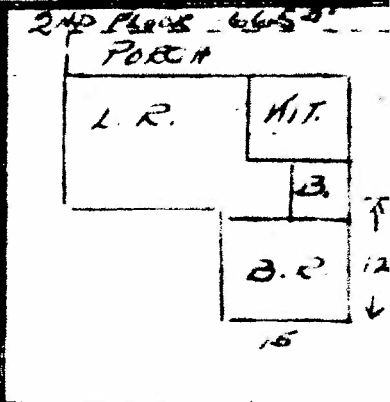
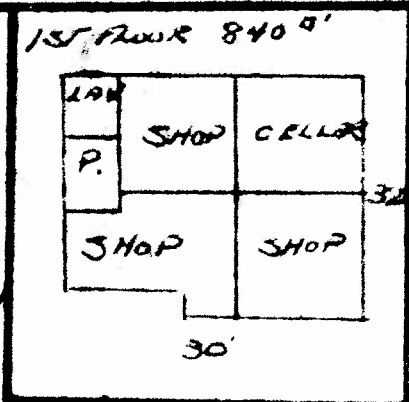
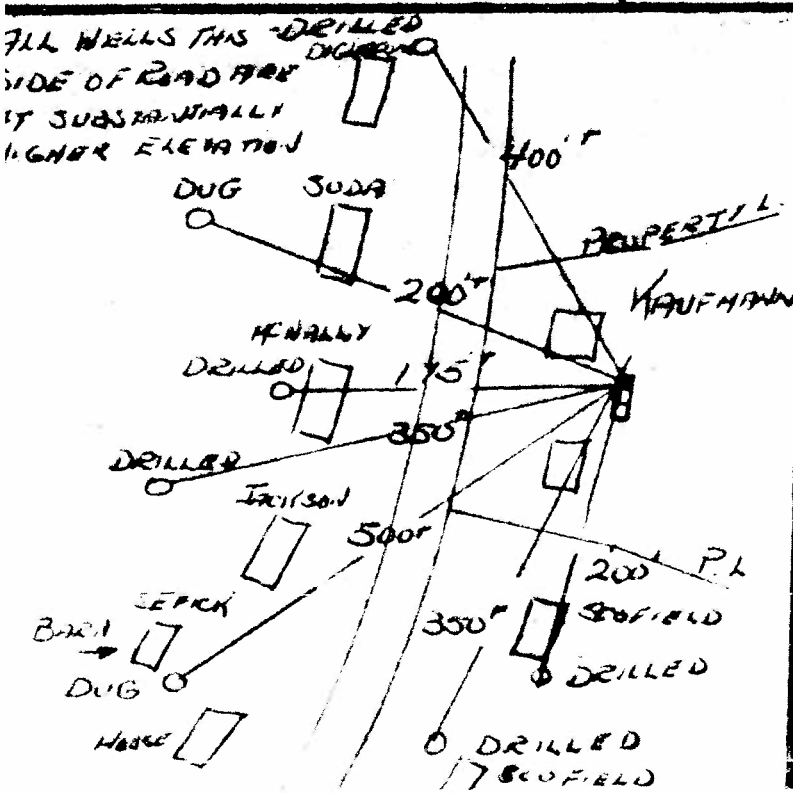
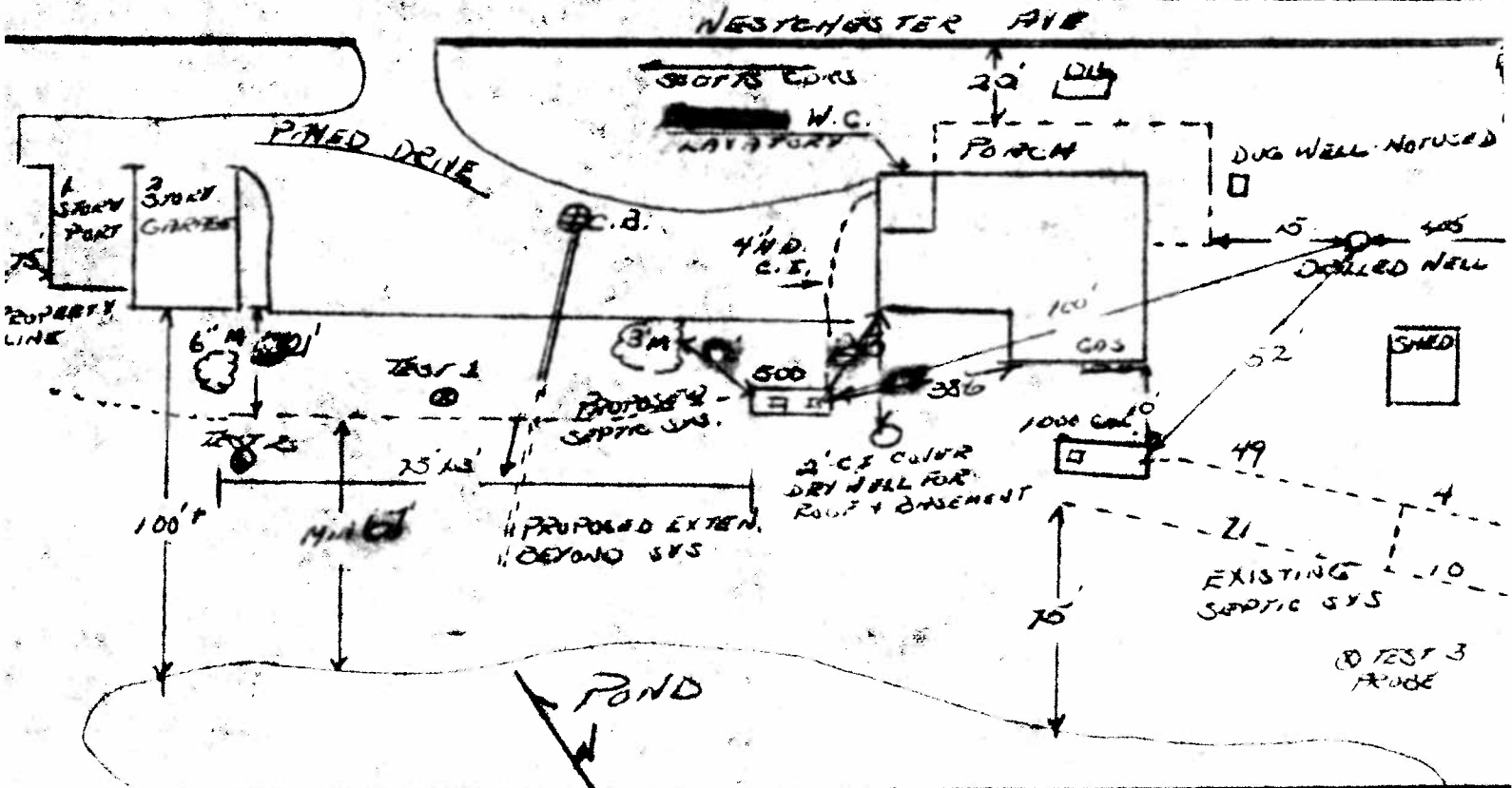
West. Co. Dept.
of Health

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

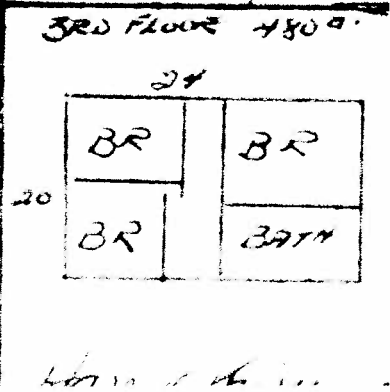
By *J. G. Hand*

1059065

KAUFMANN MILDRED O. WESTCHESTER AVE POUND RIDGE / SEG 2 - BLOCK 10 - LOT 945C
EXISTING SEPTIC SYS + PROPOSED FOR W.C. + LAB - ELEC. OVERHEAD - 2 GAS TANKS SURFACE -
6-ACRE AREA



ELEC OVERHEAD
ROOF-DRAIN DRAINS
TO GRADE + DRINKING
WELLS 2 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)

PLOT PLAN SEPARATE SEWERAGE DISPOSAL SYSTEM PROFILE

Check off items required to be shown on plans

- | | |
|--|---|
| <input checked="" type="checkbox"/> 1. Identification (Name-Title) | <input checked="" type="checkbox"/> 1. Identification |
| <input checked="" type="checkbox"/> 2. Scale, north point, date | <input checked="" type="checkbox"/> 2. Scales, date |
| <input checked="" type="checkbox"/> 3. SEWERAGE DISPOSAL SYSTEM: | <input checked="" type="checkbox"/> 3. Section - main system |
| <input type="checkbox"/> Dimensions; <input type="checkbox"/> Sewer Line | <input checked="" type="checkbox"/> 4. Pipe Invert Elevations |
| <input type="checkbox"/> Septic Tank; <input type="checkbox"/> Distr. Box | <input type="checkbox"/> Building; <input type="checkbox"/> Tank; |
| <input checked="" type="checkbox"/> Trenches; <input type="checkbox"/> Spacing | <input type="checkbox"/> Distr. Box; <input type="checkbox"/> Trenches; |
| <input type="checkbox"/> Other. | <input checked="" type="checkbox"/> Curtain Drain. |
| DISTANCES (Nearest Foot) TO: | <input checked="" type="checkbox"/> 5. Ground Level Elevations |
| <input checked="" type="checkbox"/> 4. Street lines, name street | (Before and After Grading) |
| <input checked="" type="checkbox"/> 5. Property Lines | <input type="checkbox"/> Building; <input type="checkbox"/> Tank; |
| <input checked="" type="checkbox"/> 6. Buildings and Structures | <input type="checkbox"/> Distr. Box; <input type="checkbox"/> Trenches; |
| <input checked="" type="checkbox"/> 7. Driveways, paved areas | <input type="checkbox"/> Curtain Drain. |
| <input checked="" type="checkbox"/> 8. Watercourses, ponds, etc. | <input checked="" type="checkbox"/> 6. Ground Water Elevation |
| <input checked="" type="checkbox"/> 9. Storm and Ground Water Disposal | <input checked="" type="checkbox"/> 7. Ledge Rock Elevation |
| <input type="checkbox"/> Street; <input type="checkbox"/> Area; <input type="checkbox"/> Roof; | <input checked="" type="checkbox"/> 8. Flow Line Elevations |
| <input checked="" type="checkbox"/> Footing; <input type="checkbox"/> Cellar; <input type="checkbox"/> Other | <input type="checkbox"/> Watercourses |
| <input checked="" type="checkbox"/> 10. Drilled wells within 500 ft. | <input checked="" type="checkbox"/> Adj. ponds, etc. |
| <input checked="" type="checkbox"/> 11. Dug wells or springs within 500' | <input checked="" type="checkbox"/> 9. Well Water Elevation |
| <input checked="" type="checkbox"/> 12. Curtain Drains to discharge pt. | <input checked="" type="checkbox"/> 10. Curtain Drain Discharge Elevation |
| <input checked="" type="checkbox"/> 13. Water, oil, gas, electric services and tanks (underground) | |
| <input checked="" type="checkbox"/> 14. Trees, over 6" diameter, when grown | Reviewed By <input type="checkbox"/> |
| <input checked="" type="checkbox"/> 15. Contours, before & after grading in or above sewage disposal area. | Date <input type="checkbox"/> |

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 9411
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
APR 19 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, Sr. 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. Turtak Address Roseton, NY
Other Requirements No use of the addition shall be made for any other purpose, water or sewerage, until replacement done

FILE COPY

I represent that I am wholly and completely responsible for the design and location of the proposed system(s); 1) that the separate sewage disposal system above described will be constructed as shown on the approved plan or approved amendment thereto and in accordance with the standards, rules and regulations of the Westchester County Department of Health, and that on completion thereof a "Certificate of Construction Compliance" satisfactory to the Commissioner of Health will be submitted to the Department, and a written guarantee will be furnished the owner, his successors, heirs or assigns by the builder, that said builder will place in good operating condition any part of said sewage disposal system during the period of two (2) years immediately following the date of the issuance of the approval of the Certificate of Construction Compliance of the original system or any repairs thereto; 2) that the drilled well described above will be located as shown on the approved plan and that said well will be installed in accordance with the standards, rules and regulations of the Westchester County Department of Health.

Date 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, Sr. Eng.
SD 47.66 Westchester County Department of Health

COUNTY OF WESTCHESTER DEPARTMENT OF HEALTH - Division of Environmental Sanitation

DESIGN DATA SHEET - SEPARATE SEWAGE SYSTEM FILE NO. _____

Owner E. Colombo & J. Matromaru 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

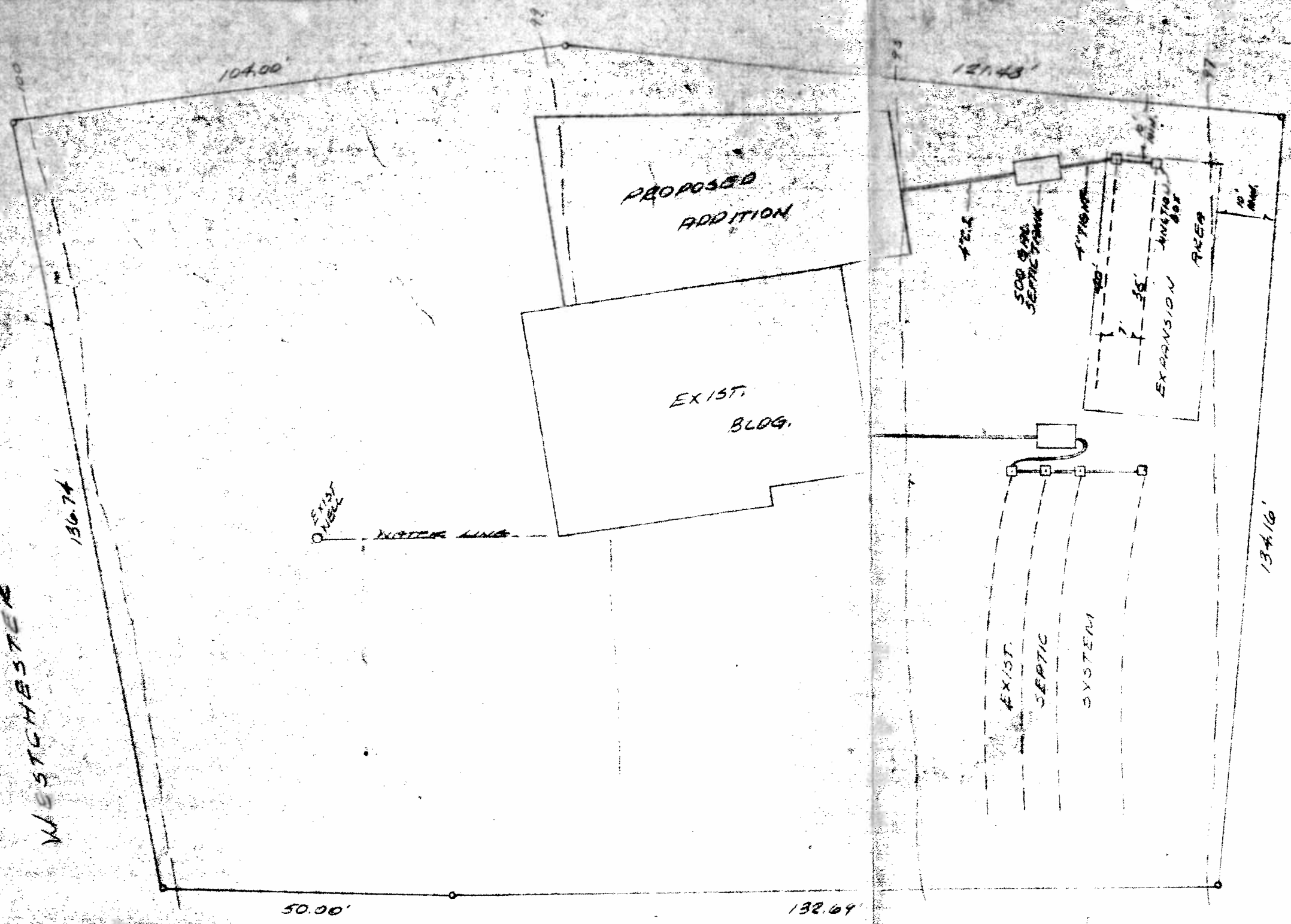
DESIGN
 Soil Rate Used 4 Min/1" Drop: S.D. Usable Area Provided Double the System
 Maximum 8 persons/day @ 15 gpd/person/day = 120 gallons/day
 No. of Bedrooms _____ Septic Tank Capacity 500 Gals. Masonry Metal
 Absorption Area Provided By 75 L.F. x 24" 36" width trench. Other _____

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

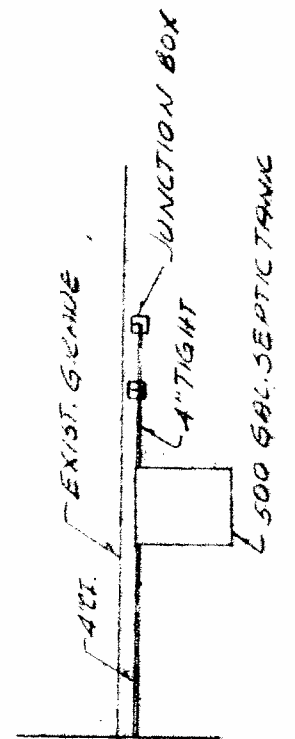
WESTCHESTER AVE.



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

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

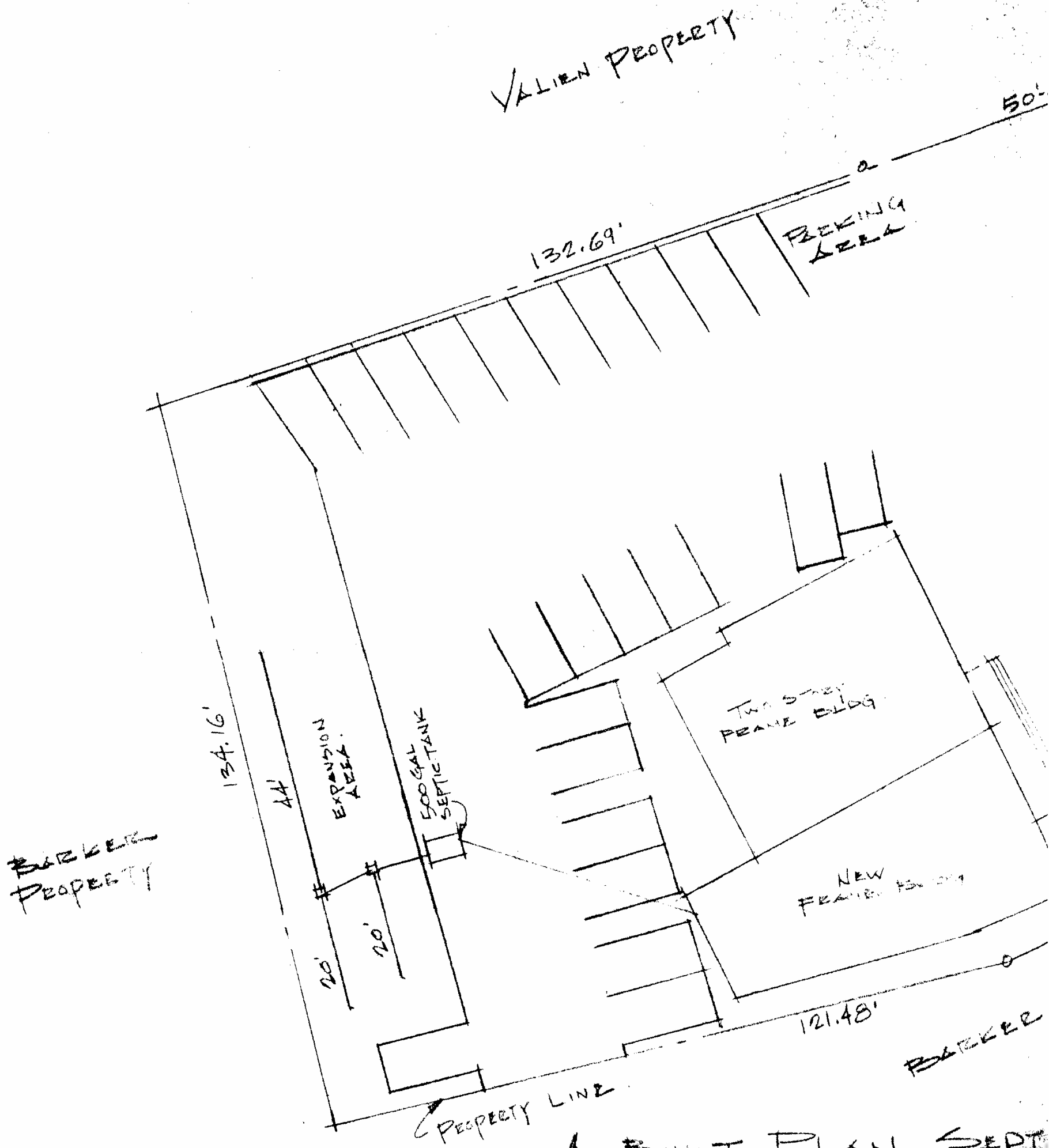
JOHN P. ANNICELLI P.E. NYS. LIC. NO.



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

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

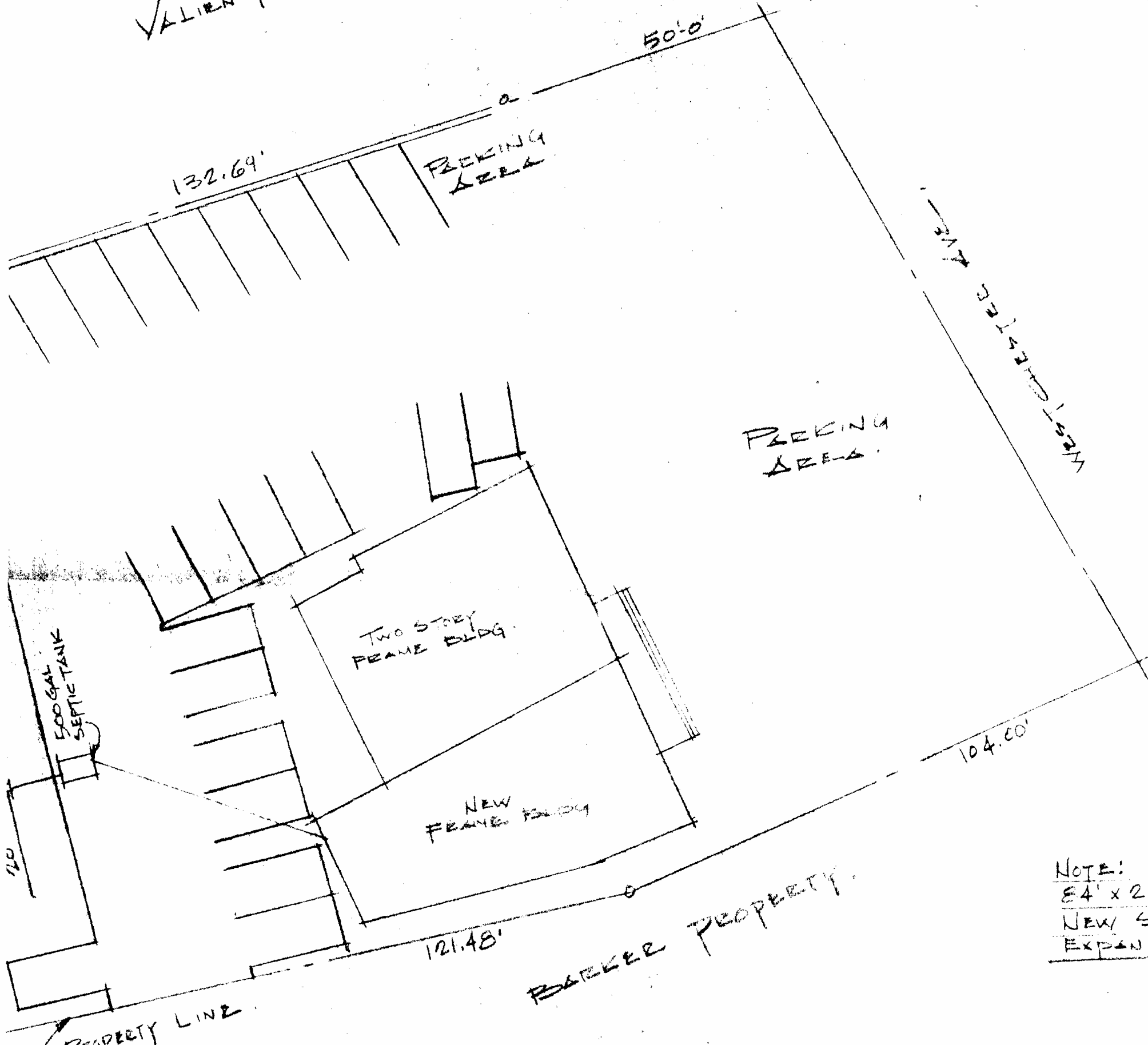
SEPARATE SEWAGE SYSTEM
F. COLOMBO & J. MASTROMAURO
WESTCHESTER AVE.
TOWN OF POUND RIDGE
WESTCHESTER CO., N.Y.
SCALE AS SHOWN APRIL 10, 1973
JOHN P. ANNICELLI P.E.
TEDDY LANE BEDFORD N.Y.



AS BUILT PLAN SEPT
SCALE 1"=2'

NO TRUCKS MACHINERY BUILDING MATERIALS NOR EXCAVATED EARTH ALLOWED IN SEWAGE DISPOSAL AREA. CONSTRUCTION OF THE SYSTEM IS TO BE IN ACCORDANCE WITH THESE PLANS AND ANY REVISIONS THERE TO AND THE RULES AND REGULATIONS OF THE PERMIT ISSUING GOVERNMENTAL AGENCY.

VALIEN PROPERTY



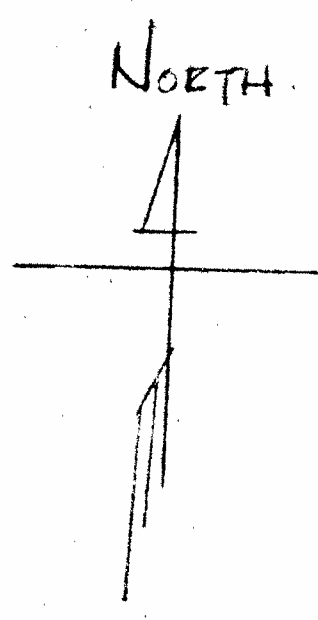
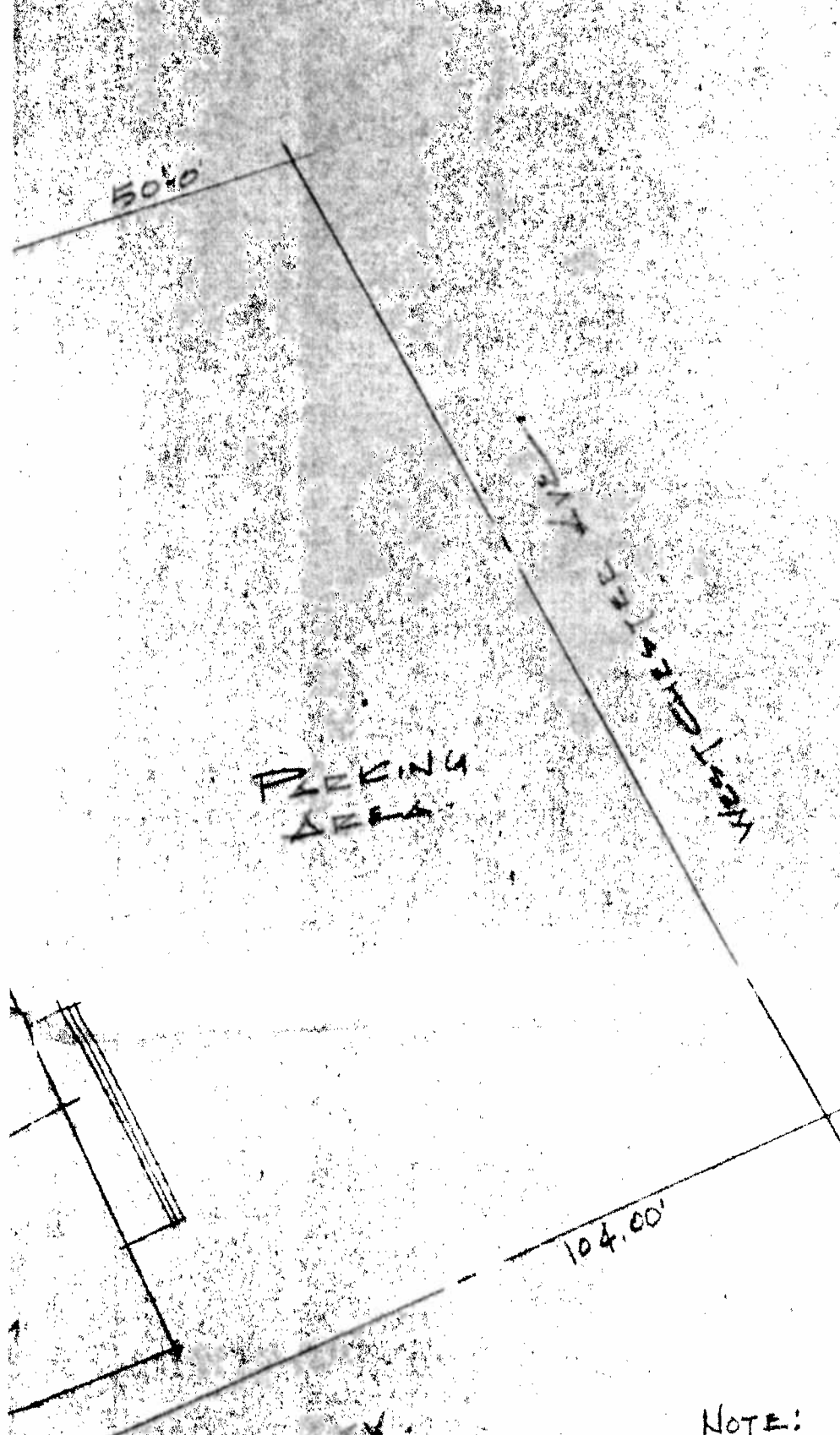
NOTE:
 8'4" x 2' T
 NEW SYS
 EXPANSION

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**
WCDH File No. **PR 75-257**

CERTIFICATE OF CONSTRUCTION COMPLIANCE

H1-604
94-35-10
7

Located at _____ Section _____ Block **9400**

Owner **Paradise Assoc** Lot **21** Job _____

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

Consisting of **1000** Gal. Masonry, Metal Septic Tank **187** 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 Min/in.drop
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

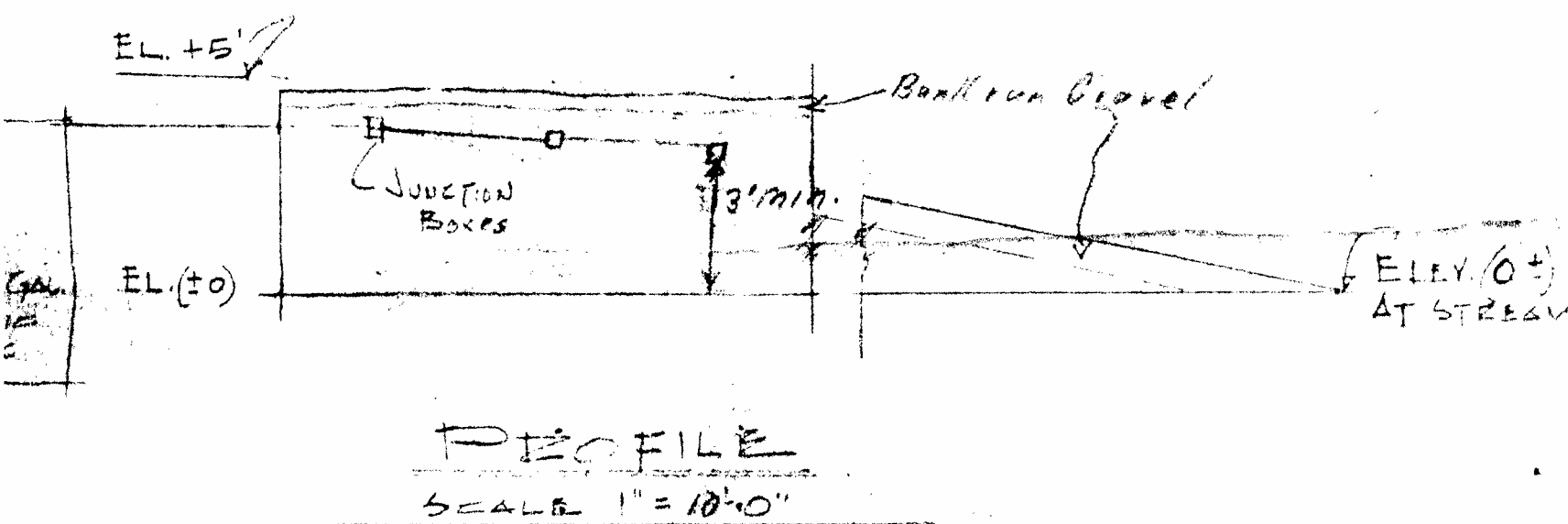
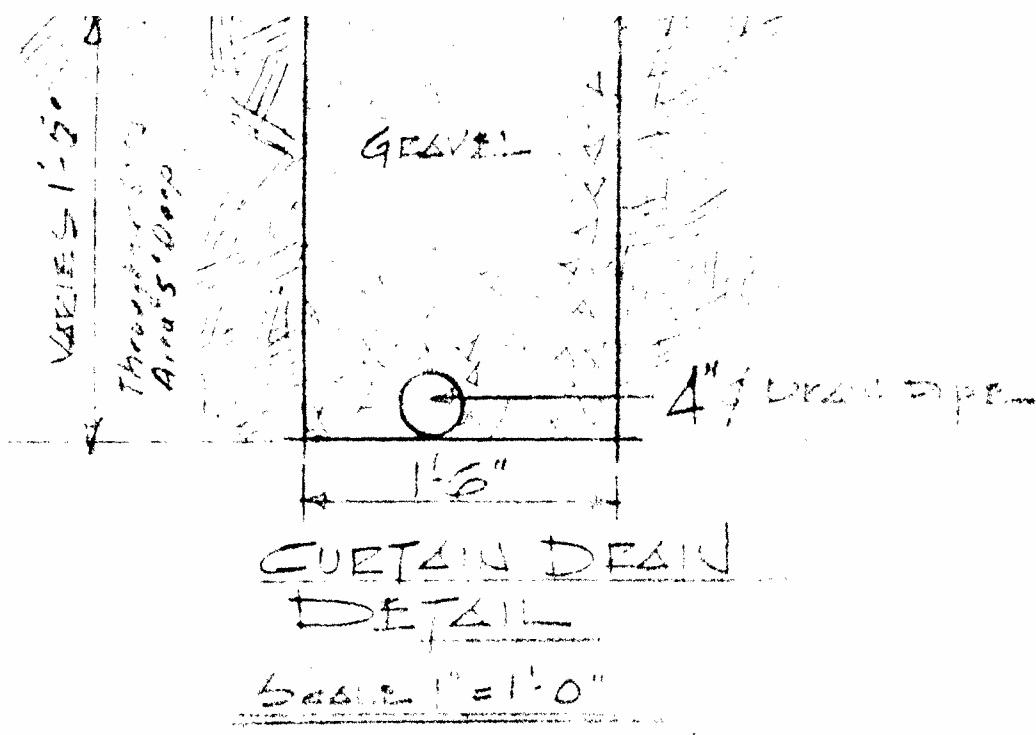
DESIGN
 Soil Rate Used 11-15 Min/l" Drop: S.D. Usable Area Provided Double
011A
 No. of Bedrooms 600 gallons/day Septic Tank Capacity 500 Gals. Masonry Metal
 Absorption Area Provided By 155 L.F.x24" 36" width trench other

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

Signature _____
 SEAL

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

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



ELEV. (+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"

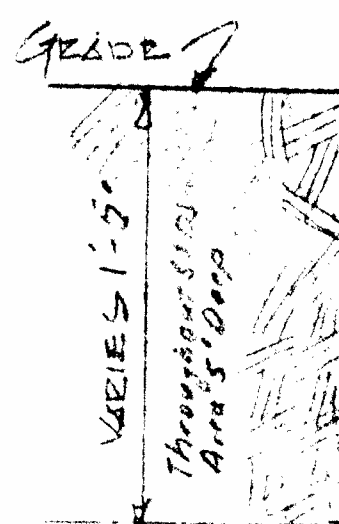
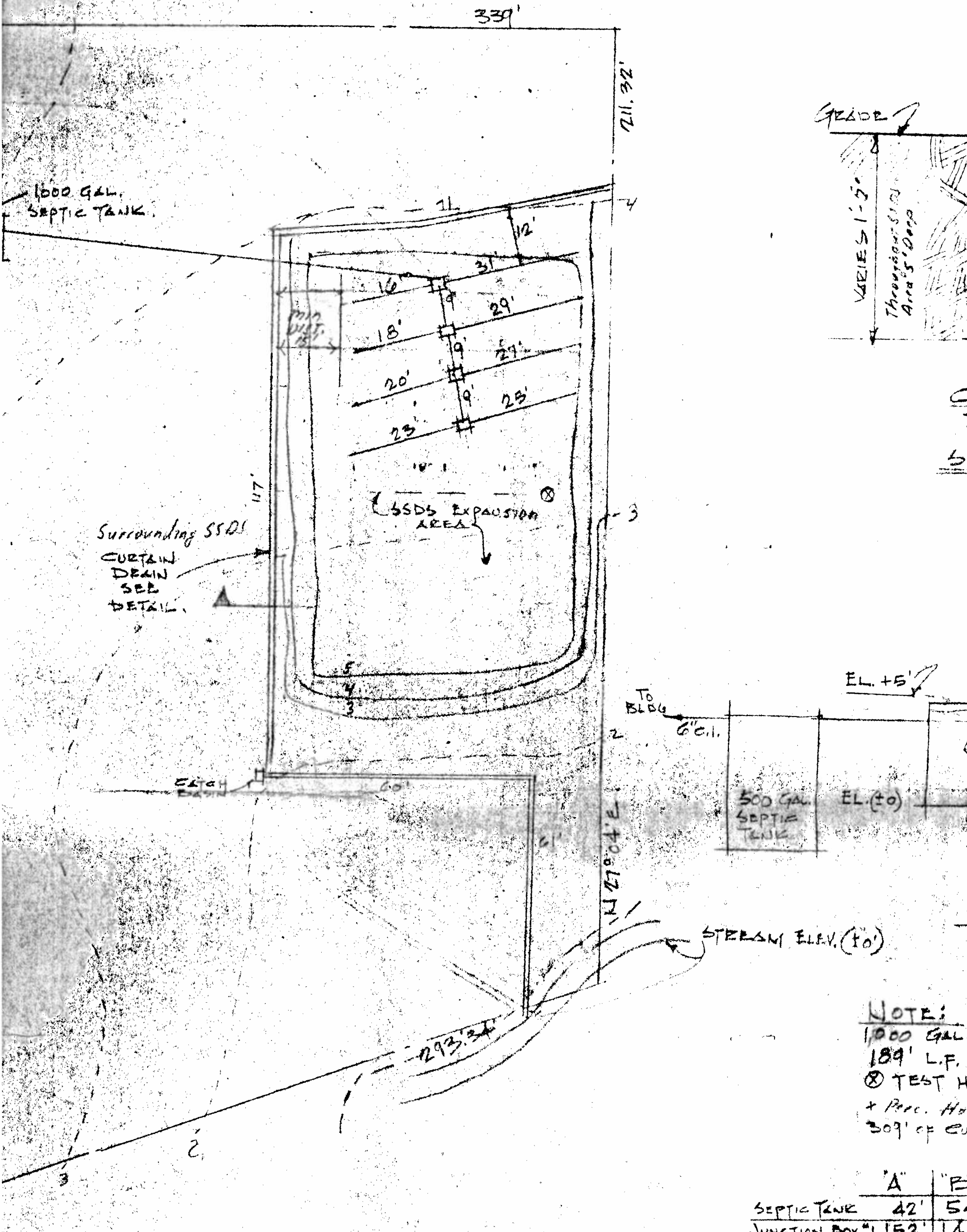
ACCEPTED
 AS FINAL PLANS
 DATE July 26, 1976
 WEST. CO. DEPT.
 OF HEALTH
 BY V.R. Lave

REVISION AS BUILT JULY 13, 1976.

BADENWELL 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



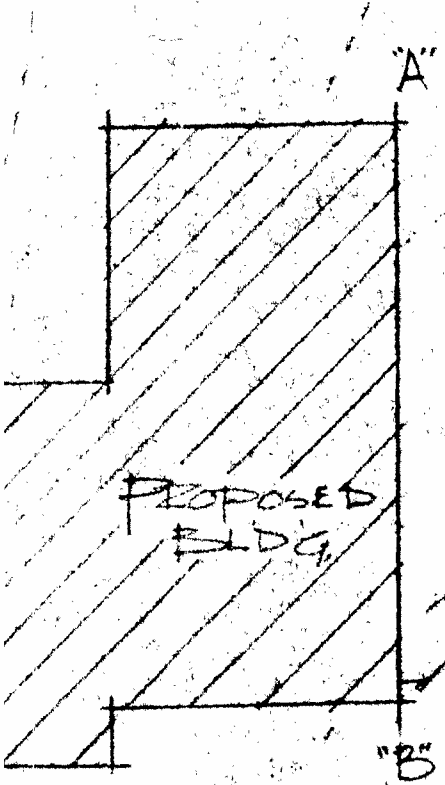
NOTE:
 1000 GAL.
 189' L.F.
 ⊗ TEST H
 + Perc. H
 309' of CU

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

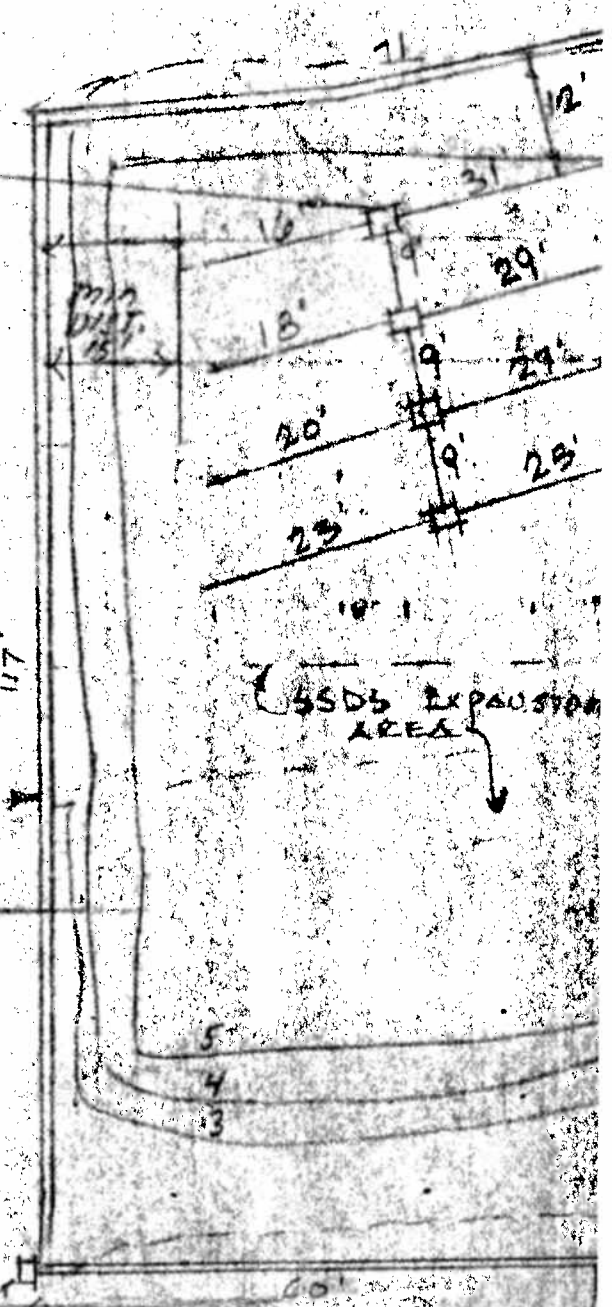
SITE PLAN
 SCALE 1" = 20'-0"

--- Existing Contours
 ——— New Contours

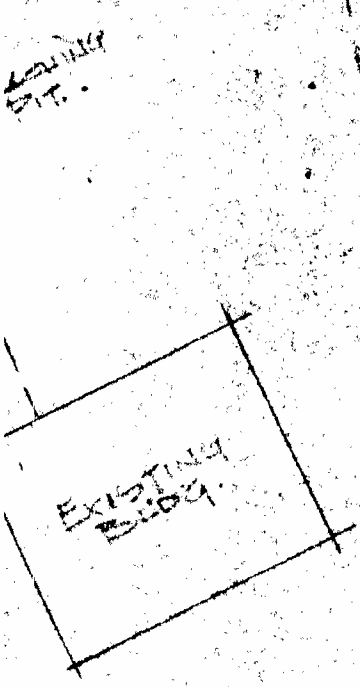
100' MIN.



1000 GAL. SEPTIC TANK



Surrounding SSDS CURTAIN DRAIN SEE DETAIL



N82°12'20" E

SITE PLAN
SCALE 1" = 20'-0"

----- Existing Contour
 _____ New Contour

293.34

WESTCHESTER AVE

S 63° 40' E

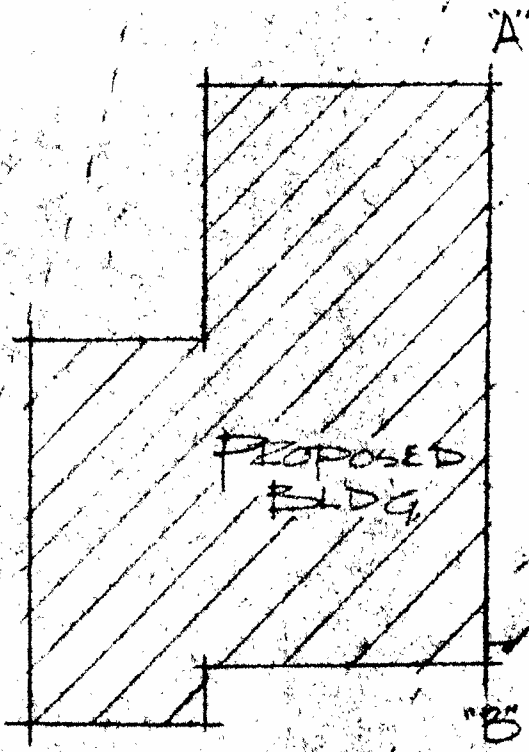
100' MIN.

80.00'
N 11° 59' E

EXISTING BLDG.

LEACHING PIT.

100.00'



EXISTING BLDG.

SEPTIC TANK

LEACHING FIELD

LEACHING PIT.

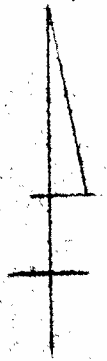
EXISTING BLDG.

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.

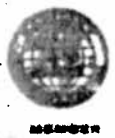
With proper maintenance these systems can be expected to function satisfactorily and are not likely to create an unsanitary condition.

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 MACKAY
PRESIDENT



KAISER - BATTISTONE, INC.

Sewage Systems Specialists

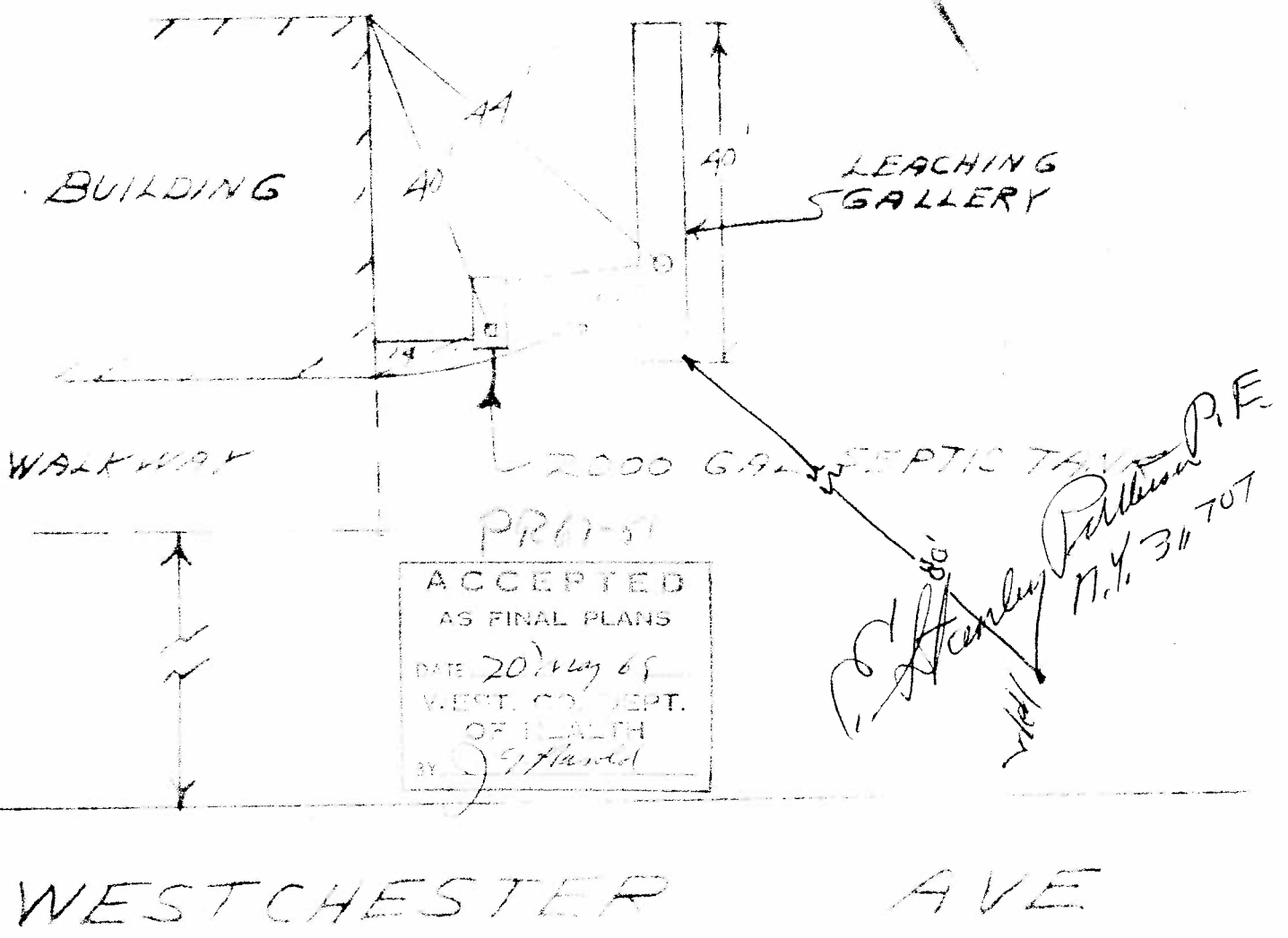
- CLEANING
- REPAIRS
- INSTALLATIONS
- ELECTRIC POWER
- DRAIN CLEANING
- SEWAGE TREATMENT PLANTS
- CHLORINATION EQUIPMENT

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 _____

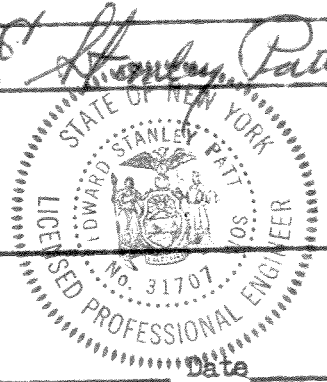
Absorption Area Provided By L.F.x24" 36" width trench. Other _____

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: _____

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

Entire System Replaced

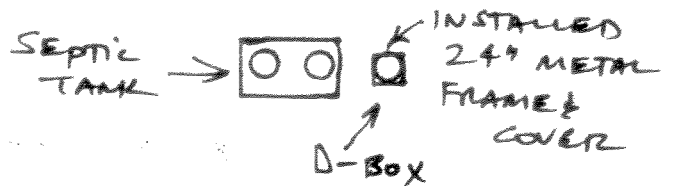
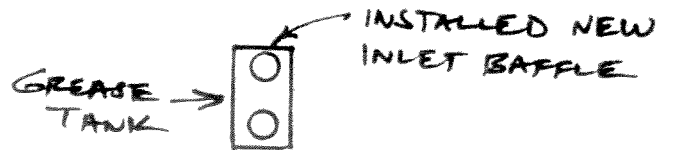
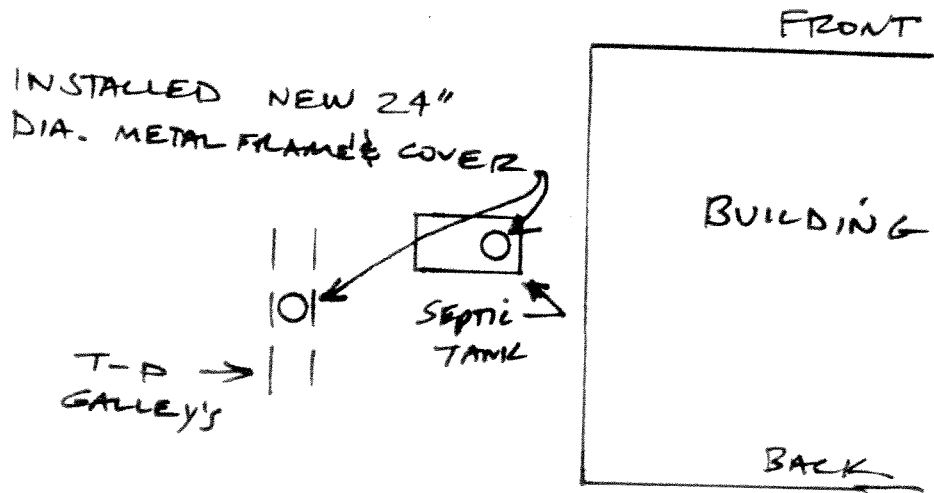
Covers of septic tank/grease trap/Obox
with seal tight lids
installed new baffle at inlet of
grease trap

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 THE CHAMBERS IN GOOD CONDITION.</u>
		<u>FANTRATORS</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. :

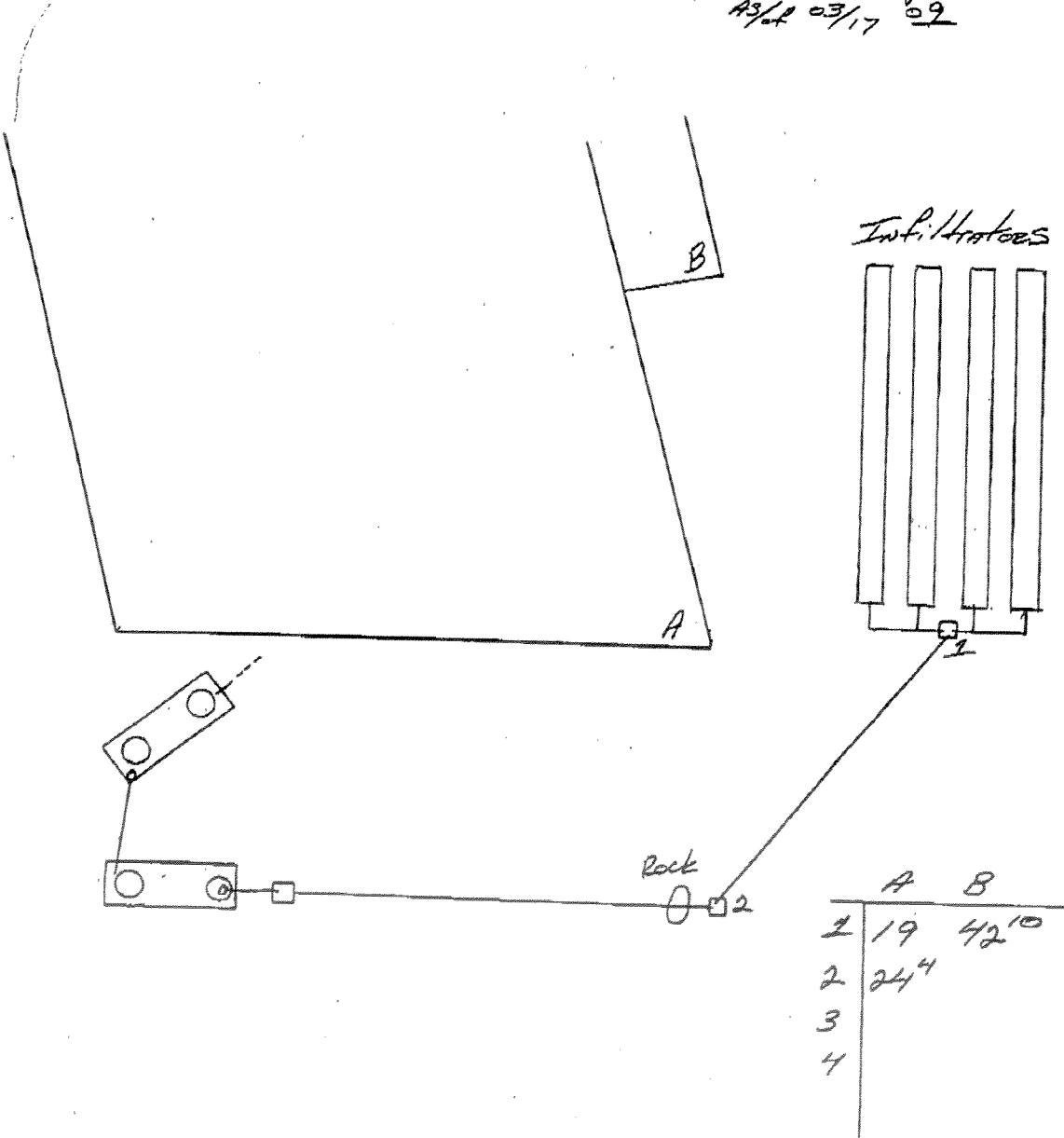
Jan. 25 2007 03:24AM P1



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 Lot: 27 R.S. Lot:
Becker Sarah

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:

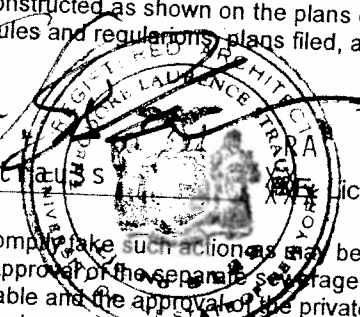
Public Water Supply Public Water Source:

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 of ___, 20__.

Well Driller Signature: *[Signature]*

Notary Public, Westchester County.

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
 Bureau of Environmental Quality
 118 North Bedford Road
 Mount Kisco, NY 10549

DESIGN DATA SHEET - SEPARATE SEWAGE SYSTEM FILE NO. _____

Owner Thomas Ferrara/Sarah Becker Address 38 Westchester Avenue, Scotts Corners

Located at (Street) _____ Sec. 8 Block 9455 Lot 27

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

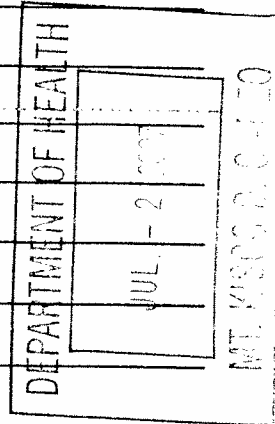
Notes:

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

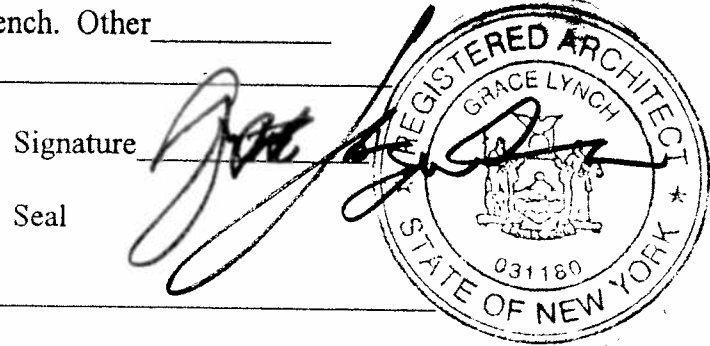
DEPTH G.L.	HOLE NO. <u>1</u>	HOLE NO. <u>2</u>	HOLE NO. <u>3</u>	HOLE NO. _____
	Topsoil	Topsoil	Topsoil	
6"	Topsoil	Topsoil	Topsoil	
12"				
18"	Sandy Loam	Sandy Loam	Sandy Loam	
24"	"	"	"	
30"				
36"	Fine graded sand with small to medium stones			
42"	"	"	"	
48"	"	"	"	
54"	"	"	"	
60"	"	"	"	
66"	"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

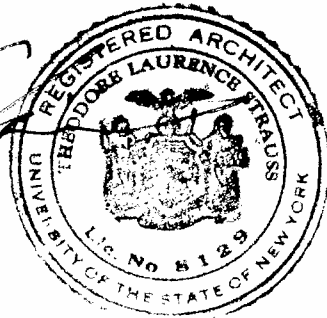
RE: Permit No. PR 2007-18 - 38 Westchester Avenue, Poundridge, NY.

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)

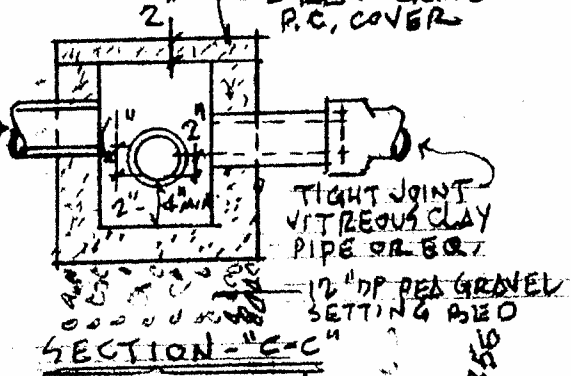
Are hereby accepted as conforming to the provisions of Chapter
873, Article VIII, Section 873.708.1 of the Westchester County Sanitary Code, subject to the provisions
of the Certificate of Construction Compliance issued this date.

Reviewed by: _____ Date _____

Recommended by: _____ Date _____

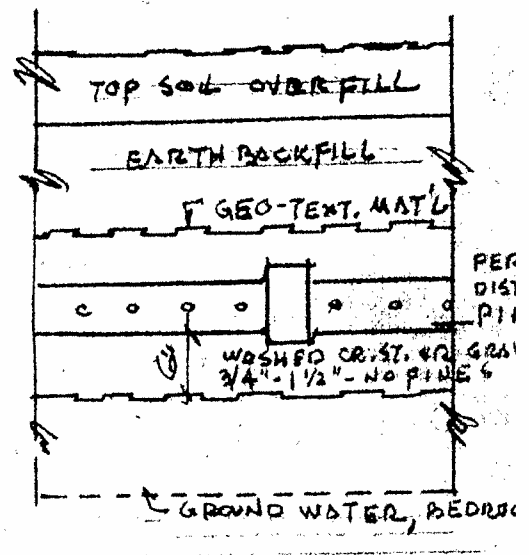
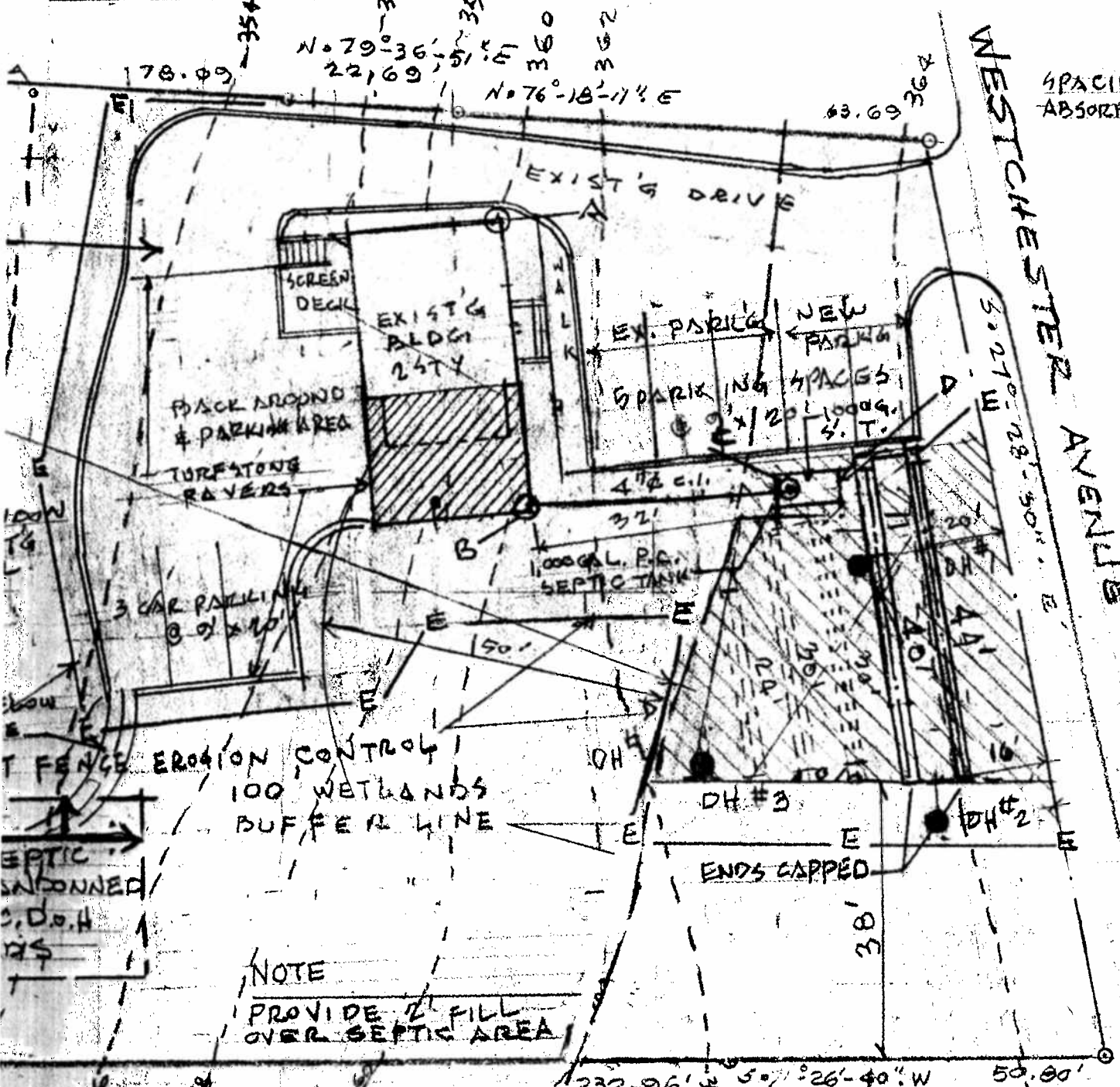
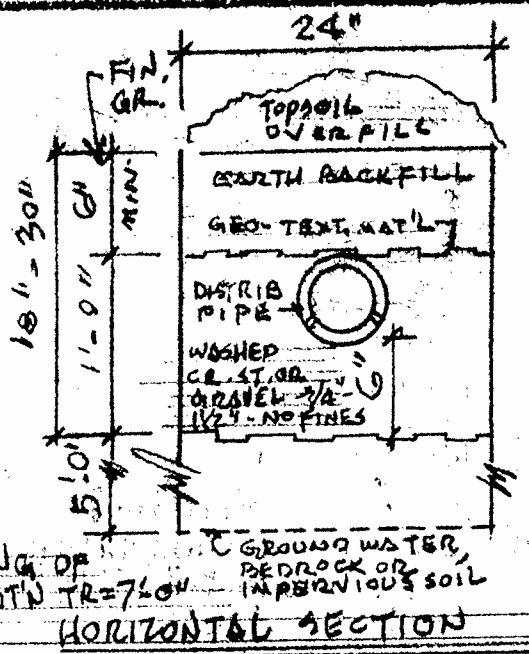
Accepted by: Fuelberg 5/23/08
Dist. _____

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.



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" WAS GRAVEL FREE OF FINES OR SILT.
5. TRENCH COURSE TO BE COVER WITH GEO-TEXTILE MATERIAL OR APPROVED EQUAL.

SEPTIC SYSTEM ANALYSIS & NOTES

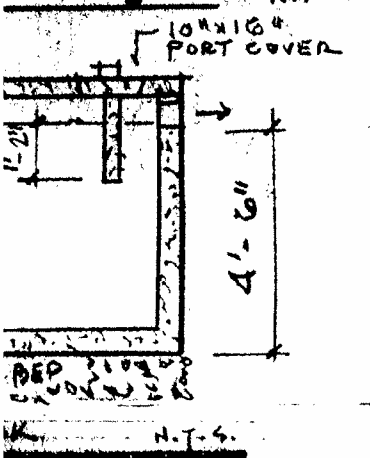
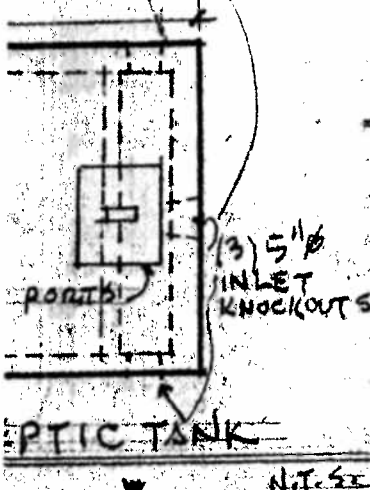
1. NO KNOWN WELLS WITHIN 100' OF PROPOSED S.S.R.A. OR WITHIN 200' IN LINE WITH DRAINAGE TO PROPOSED S.S.R.A.
2. 100 YEAR FLOOD PLAIN 100' FROM S.S.R.A.
3. NO WATER COURSES, WETLANDS OR STREAMS WITHIN 100' OF S.S.R.A.
4. ALTERED EXISTING RESIDENCE INTO OFFICE BUILDING FOR 5 OFFICES + RECEPTION + CONFERENCE 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	MINIMAL

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

date: 6/24/07
revision: 8/16, 9/19, 10/10, 10/17, 5/09, 8/11

drawn by: T.L.S.
checked by: G.L.
scale: AS SHOWN
job no.: 2500
drawing no.: 3

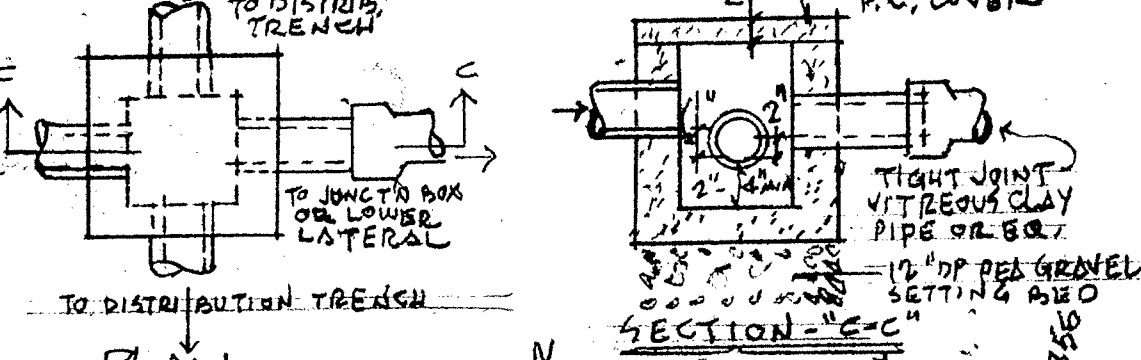
drawing title: AS-BUILT
• PLOT & SEPTIC PLAN

THEODORE LAURENCE STRAUSS and ASSOCIATES
architects • planning consultants
111 W. 42nd St., New York, NY 10018 • 212-241-9254

NOTES FOR JUNCT'N BOX

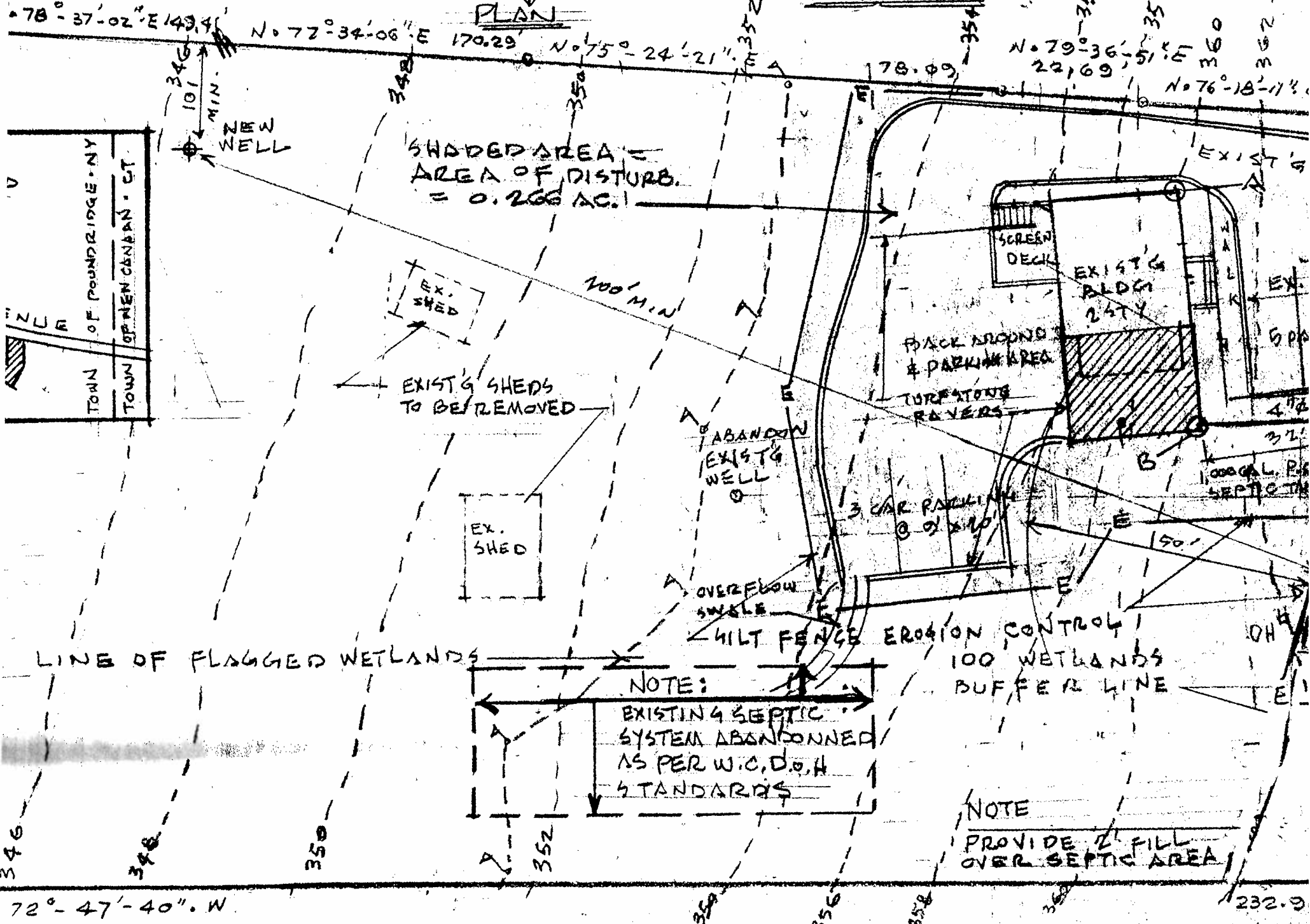
- JUNCTION BOX TO BE MIN. 12'x12'
- MIN. 12" SOLID PIPE FROM JUNCT'N BOX TO LEACH'G FIELD
- MAX. 12" COVER FROM FIN. GRADE TO TOP OF JUNCTION BOX

JUNCTION BOX DETAILS



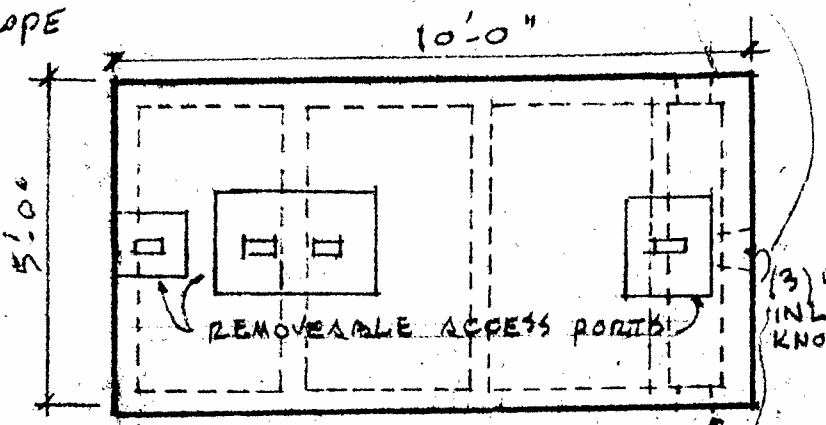
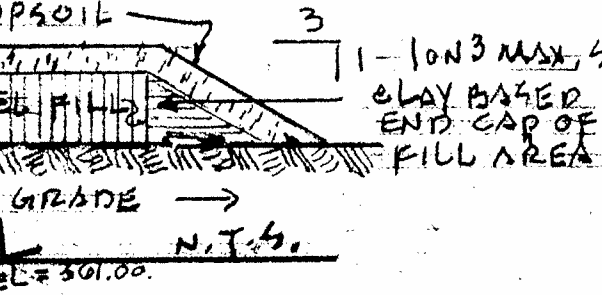
JUNCTIC

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. ON NOV. 9, 2006. WETLANDS FLAGGING BY STEPHEN COVEMAN

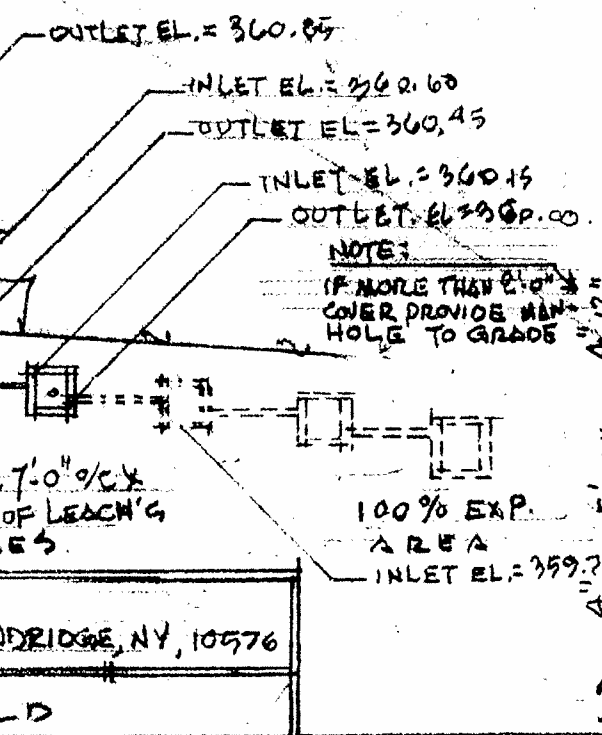


SEPTIC SYSTEM ANALYSIS

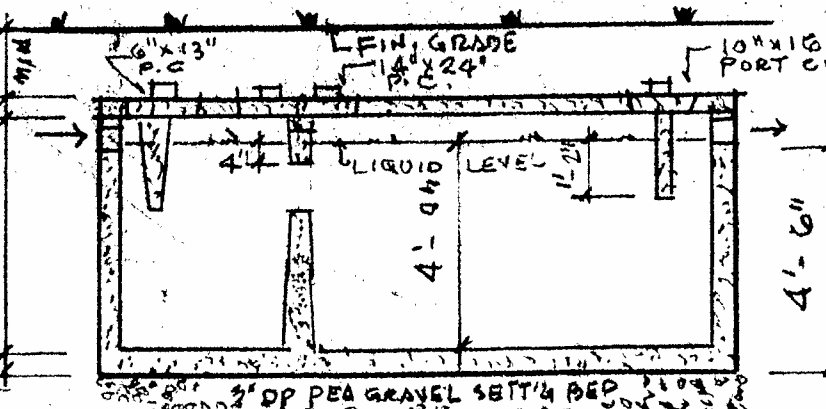
1. NO KNOWN WELLS WITHIN 100'
2. 100 YEAR FLOOD PLAIN I
3. NO WATERCOURSES, WETLAND
4. ALTERED EXISTING RE
5. SEPTIC TANK REQUIR
6. LEACHING FIELDS
7. 100% EXPANSION ARE

CLIMATIC & GE

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



PLAN OF 1000 GAL. PC SEPTIC TANK

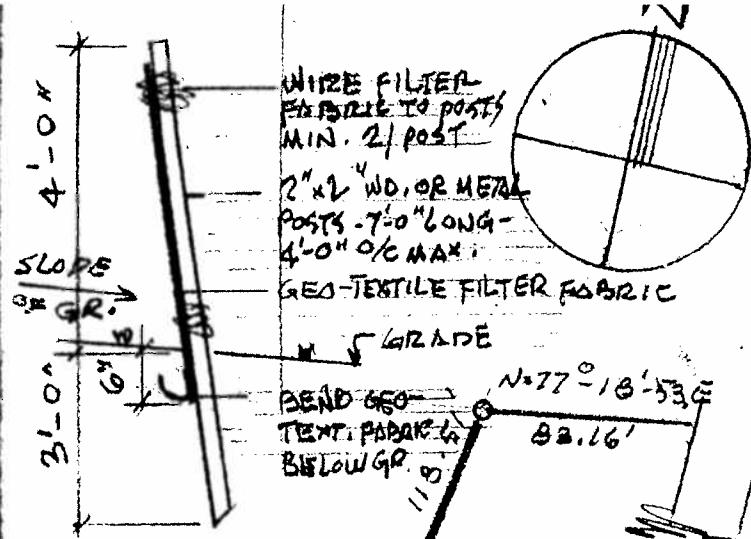


WATER SHED: UPPER LONG

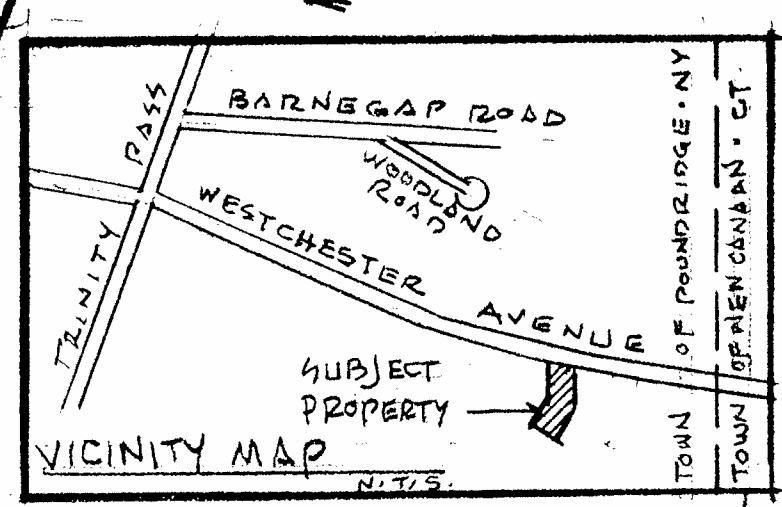
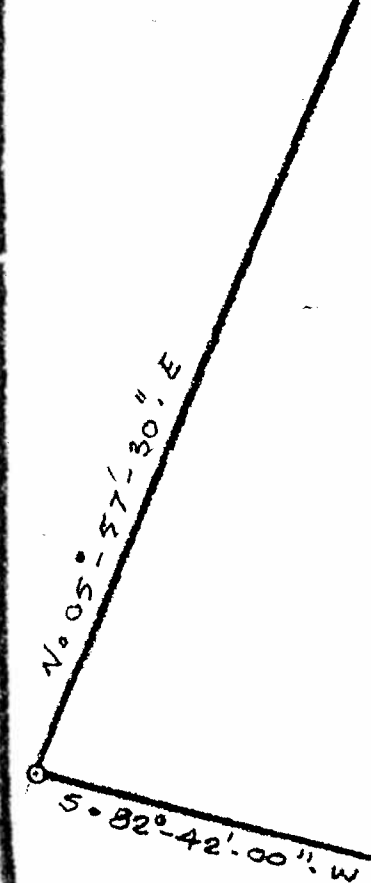


ESTIMATED COMPLETION DATE: 12/30/07

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



WIRE FILTER DETAIL

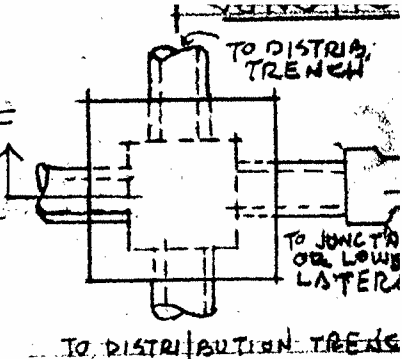


LEGEND

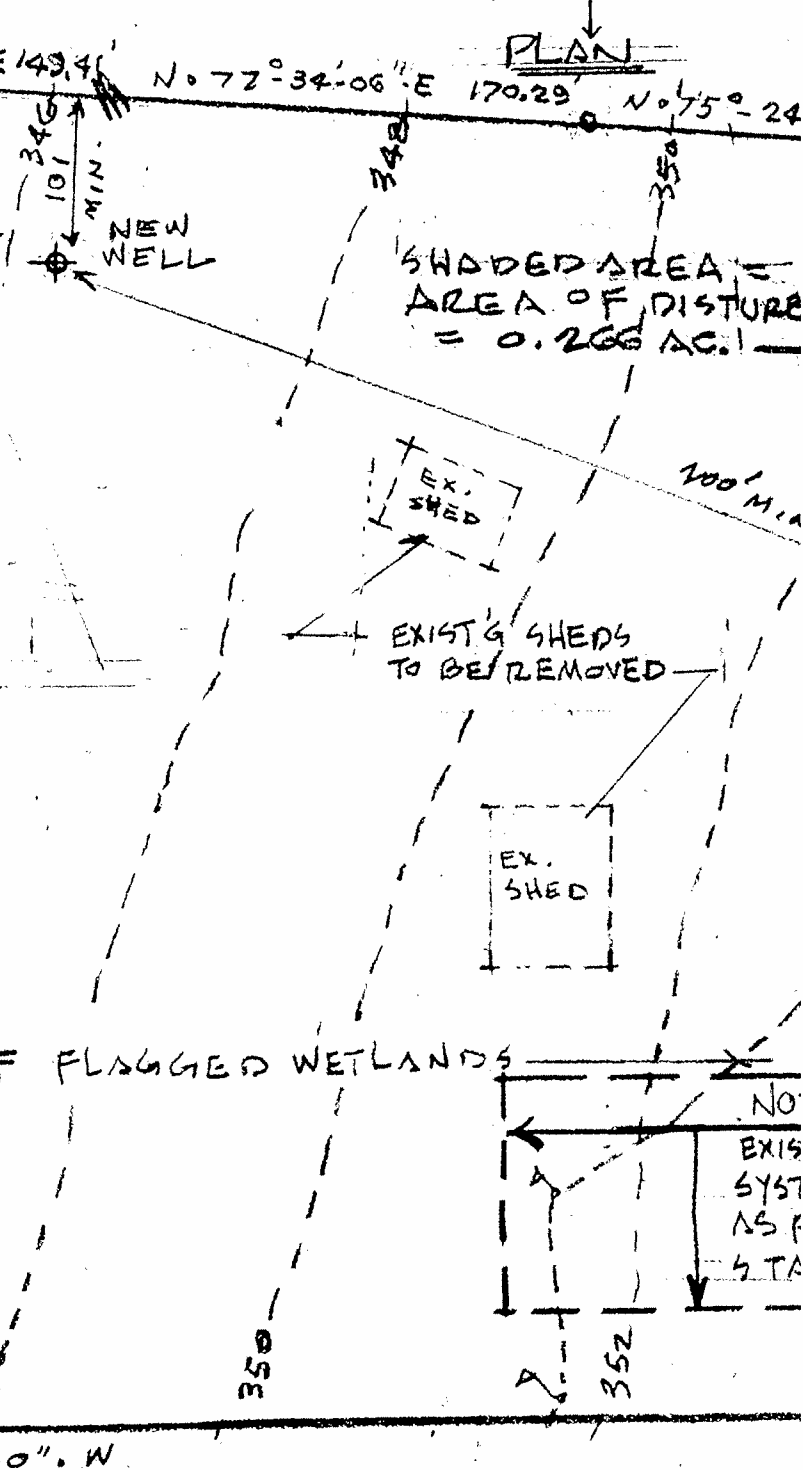
- AC - 53.5'
- BC - 35.5'
- AD - 58.75'
- BD - 46.0'
- AB - 45.33'
- BE - 53.0'

NOTES FOR JUNCT'N BOX

- JUNCTION BOX TO BE MIN. 12"x12"
- MIN. 12" SOLID PIPE FROM JUNCT'N BOX TO LEACH'G FIELD
- MAX. 12" COVER FROM FIN. GRADE TO TOP OF JUNCTION BOX.

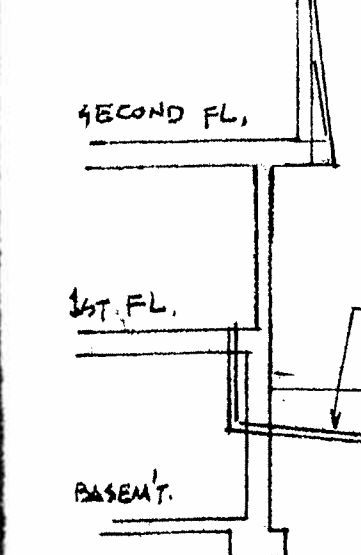
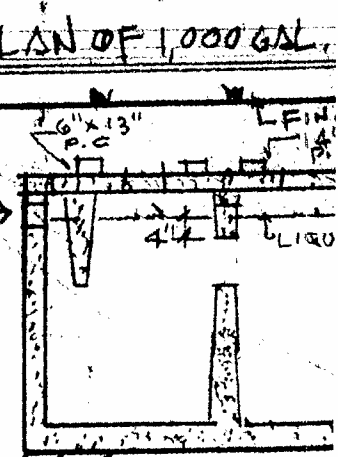
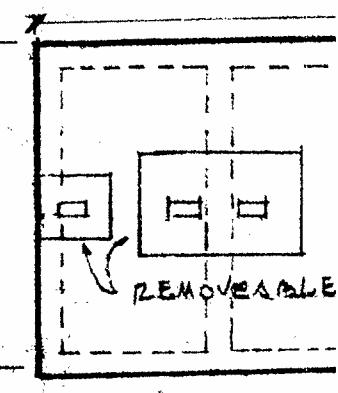
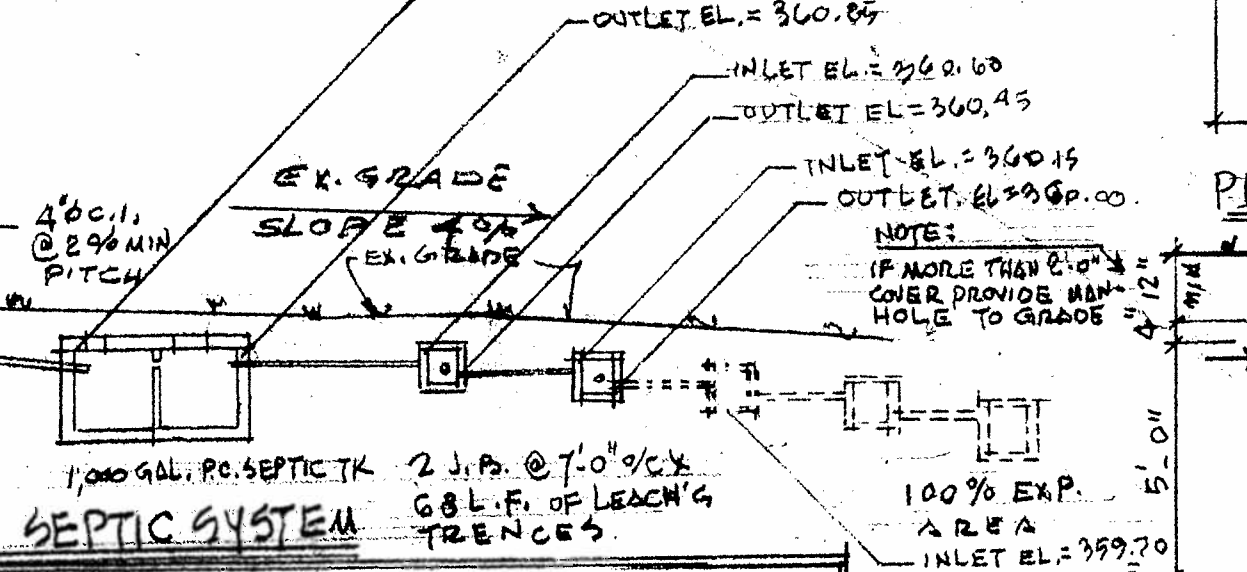
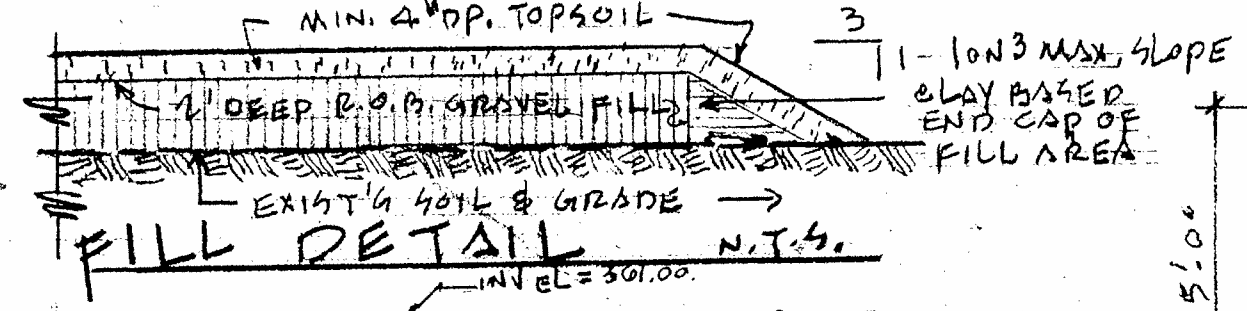


PLAN



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



SECTION THRU SEPTIC SYSTEM

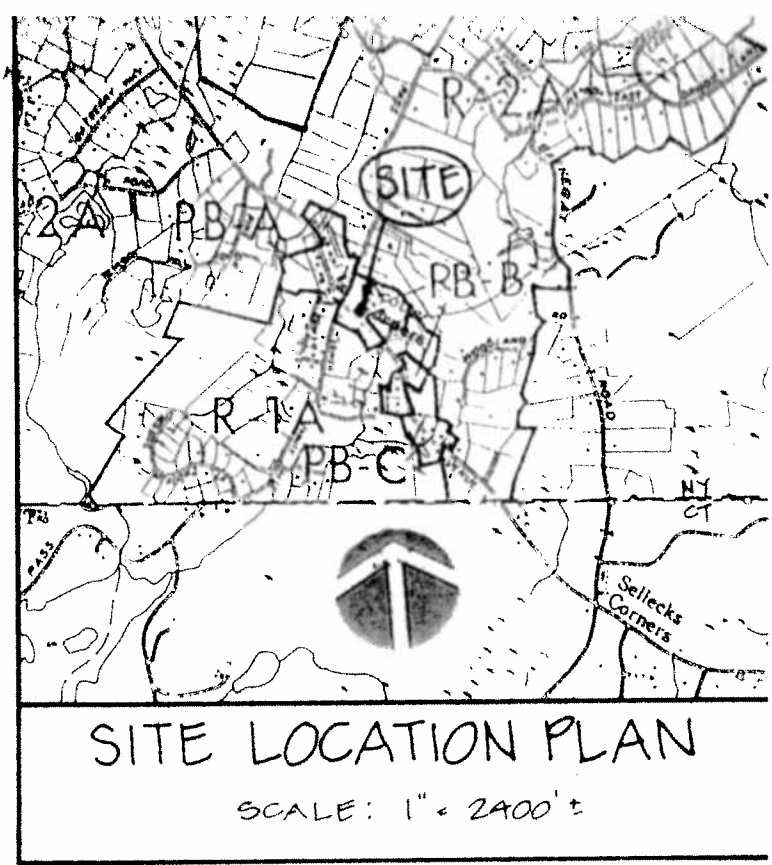
OWNER'S NAME & ADDRESS:
THOMAS FERRARA & SUSAN BECKER - P.O. BOX 336 POUND RIDGE, NY, 10576

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



--- (901) --- EXISTING GRADE
--- (902) ---

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)

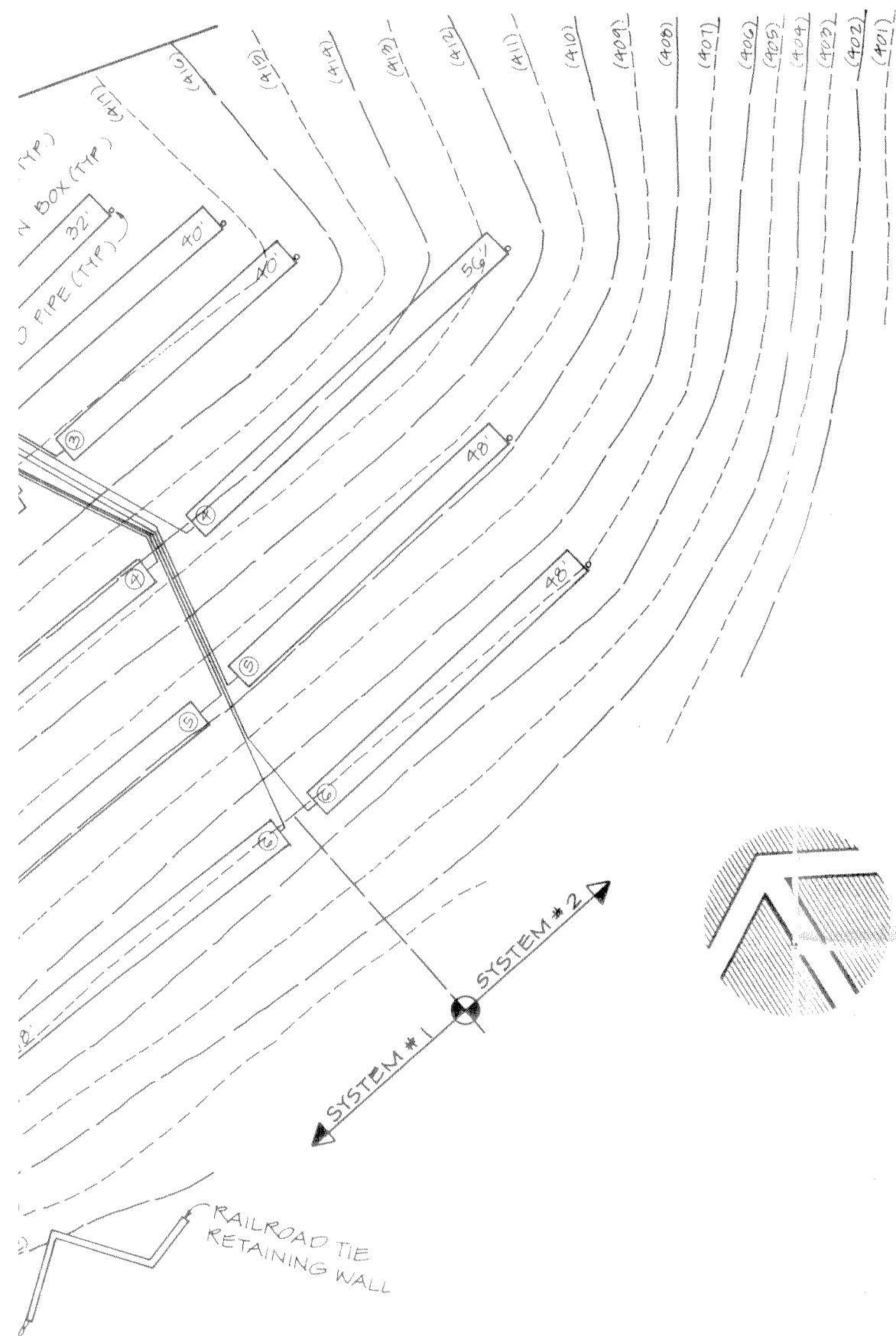


SCALE : 1" = 20'
DATE : 11 29 93
DRAWN BY : TR
CHECKED BY : RWL
JOB No. : 92089
DRAWING No. :

S-1

ITEM #2

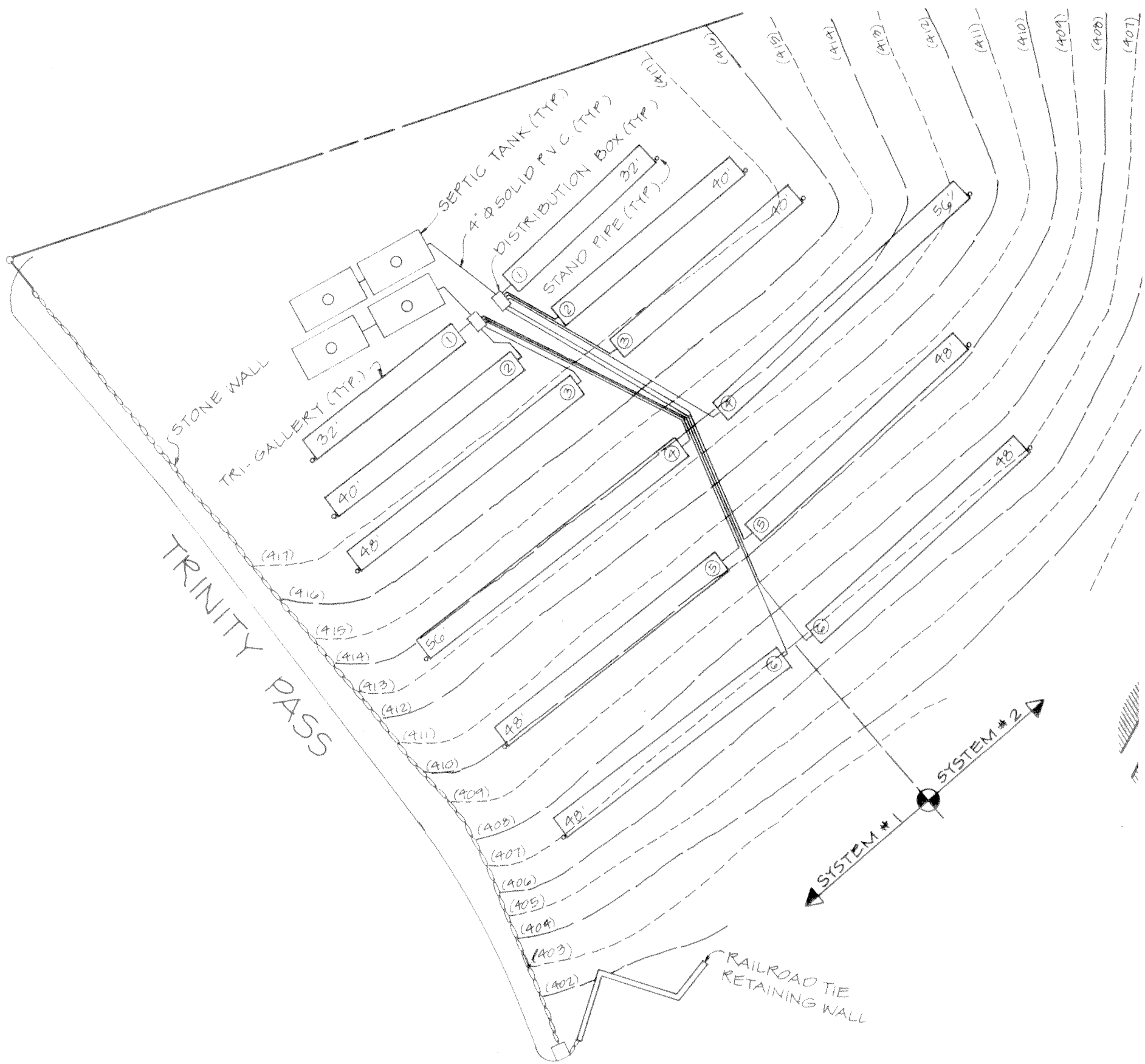
NO	@ DIST. PIPE END	INVERT	
		IN	OUT
	-	416.64	416.54
	-	416.49	416.39
	-	416.00	415.73
	416.33	415.66	-
	416.13	415.46	-
	415.57	414.90	-
	411.89	411.23	-
	408.93	408.26	-
	405.98	405.31	-



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~~

~~IONAL IMPROVEMENTS:~~

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

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

~~PUMP CHAMBER SIZE: 43" x 70"~~

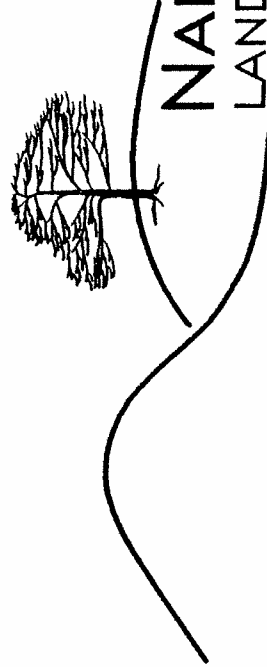
~~CAPACITY: 20.9 cf/in
1.74 cf/in
13.02 gal/in~~

~~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.

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



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:

**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

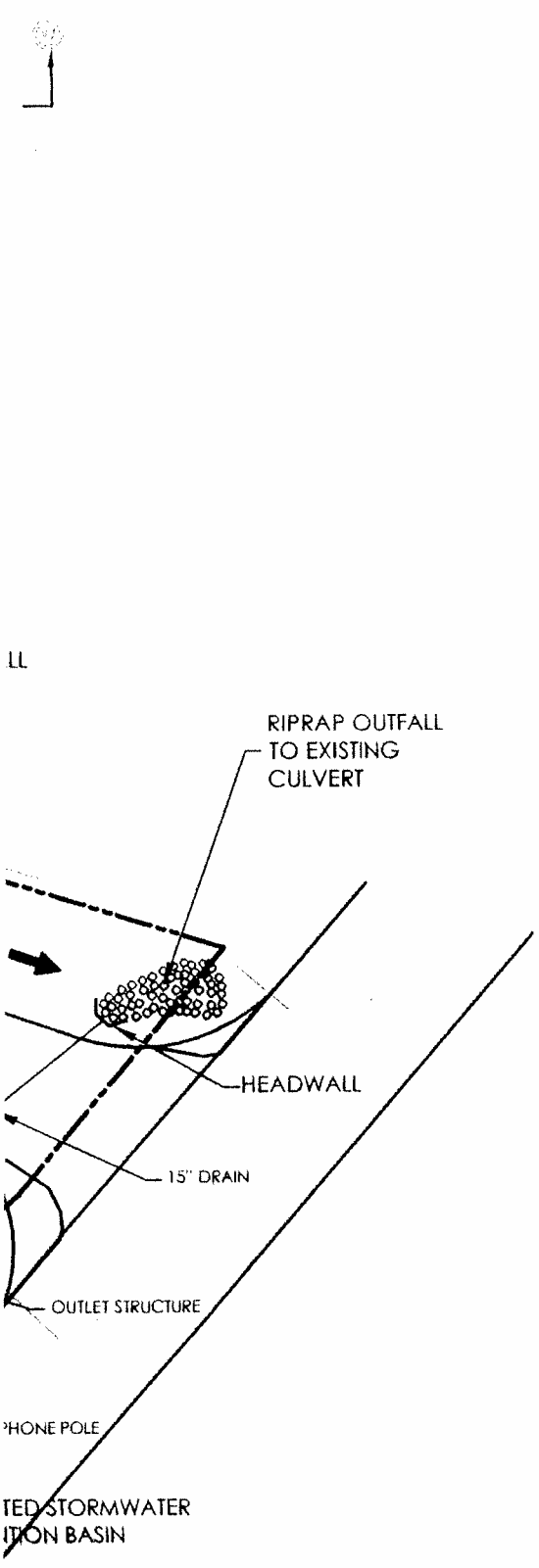
SYSTEM TESTED ON 10/30/08 WITH WCHD.

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

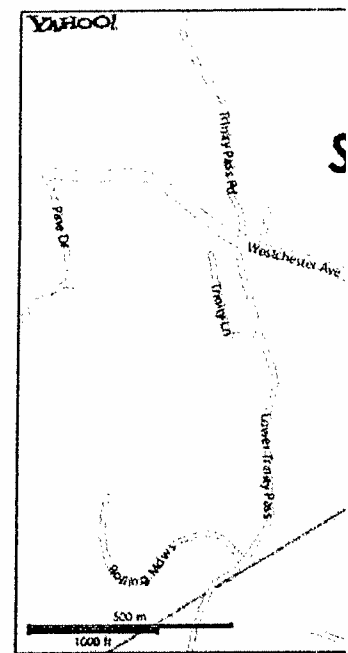
with the Rules and Regulations for
 surface Sewage Treatment Systems

uction of the OWTS and certifies its
 plans.

Basin.
 0 feet of the new SDS.



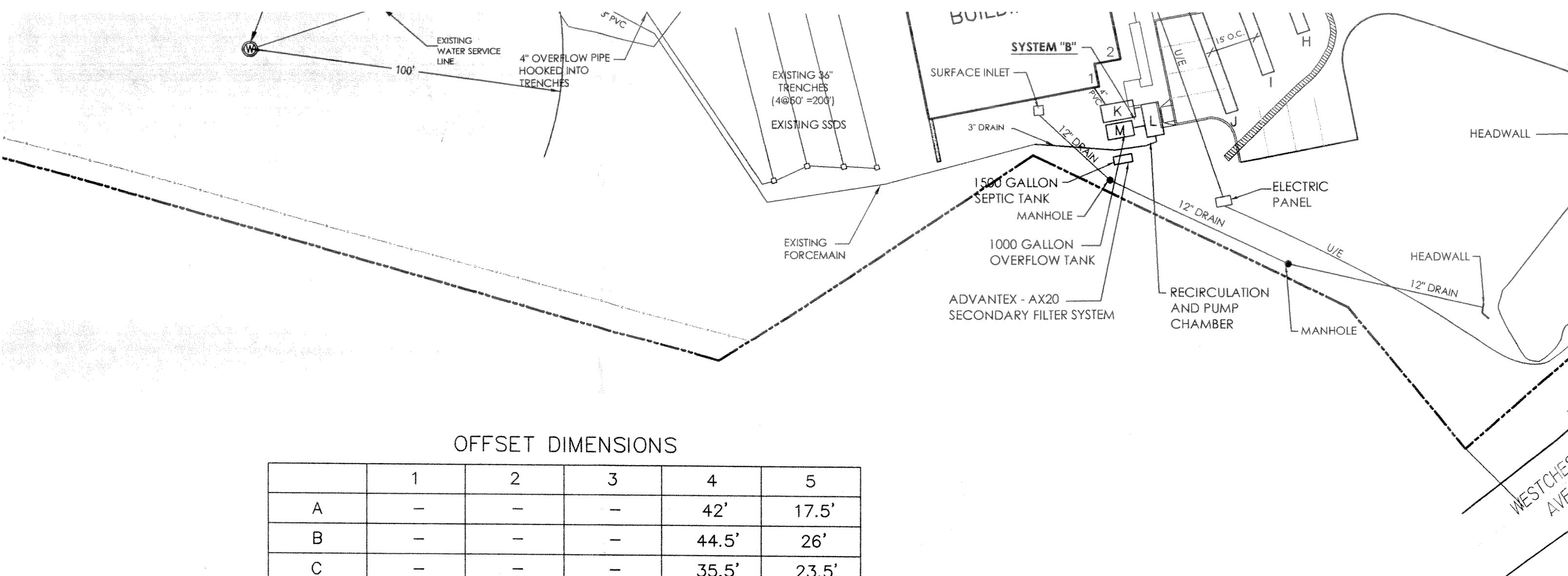
UNAUTHORIZED ALTER
 THIS DRAWING IS A VI
 OF THE NEW YORK STA



1	REV. EXIST.
No.	Revis

NADERMAN

A - H
 SCOTT

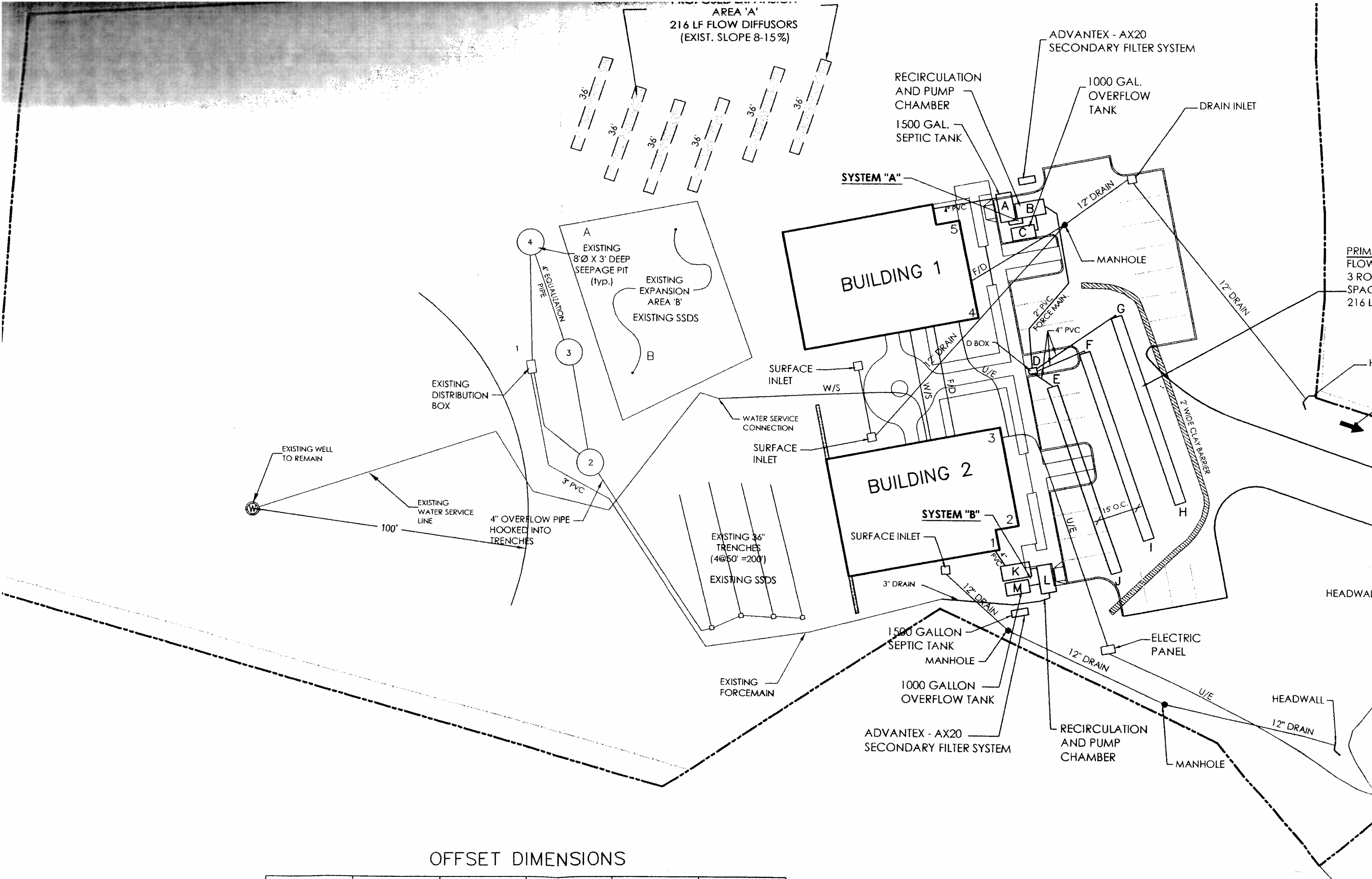


OFFSET DIMENSIONS

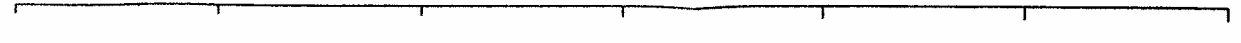
	1	2	3	4	5
A	-	-	-	42'	17.5'
B	-	-	-	44.5'	26'
C	-	-	-	35.5'	23.5'
D	-	-	24'	27.5	-
E	-	53.5'	24.5'	-	-
F	-	68'	40.5'	-	-
G	-	81.5'	56'	-	-
H	-	61.5'	74'	-	-
I	-	49'	68'	-	-
J	-	40'	67.5'	-	-
K	10'	17'	-	-	-
L	20'	22'	-	-	-
M	15.5'	23'	-	-	-

PLAN
SCALE: 1" = 30'

WESTCHESTER AVE



OFFSET DIMENSIONS



WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality

PERMIT NUMBER: PL 2007-13

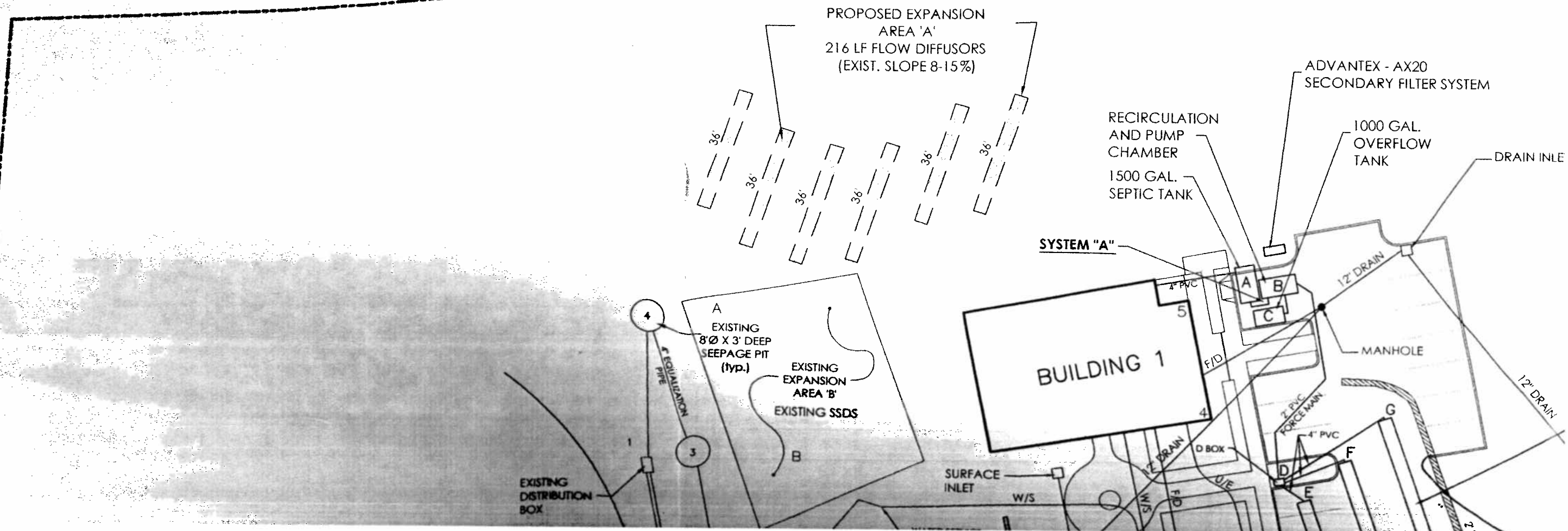
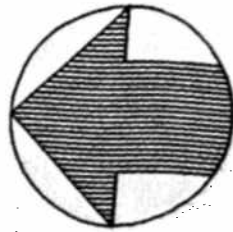
Name: Joan Arnold, A Home Municipality: Penn Hills
Description: NEW SSTS TO SERVE (Bldg #1)
MAX FLOW 600GPD
of Sheets: ONE (1)

Are hereby accepted in accordance with the provisions of Chapter
873, Article VIII, Section 873.708.1
of the Westchester County Health 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

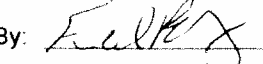
Well Driller (WD) Company Name: NYDEC Reg. #:

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

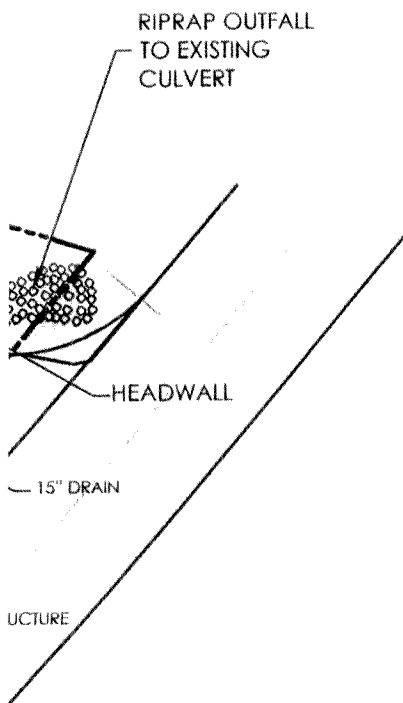
PUMP CHAMBER SIZE: 43" x 70"

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

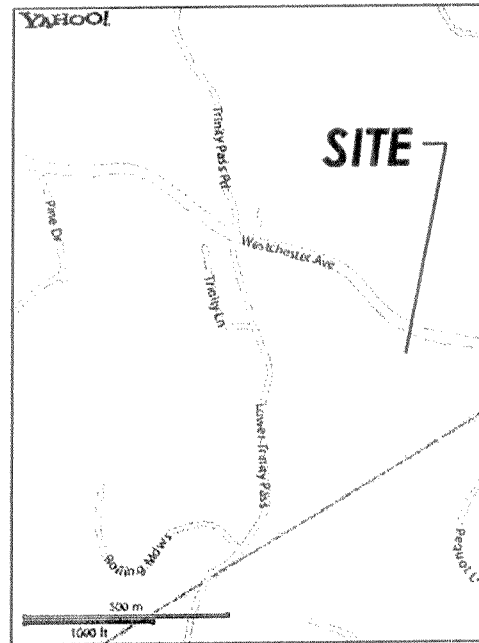
PUMP CYCLE DEPTH: 16.5"

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

SYSTEM TESTED ON 10/30/08 WITH WCHD.



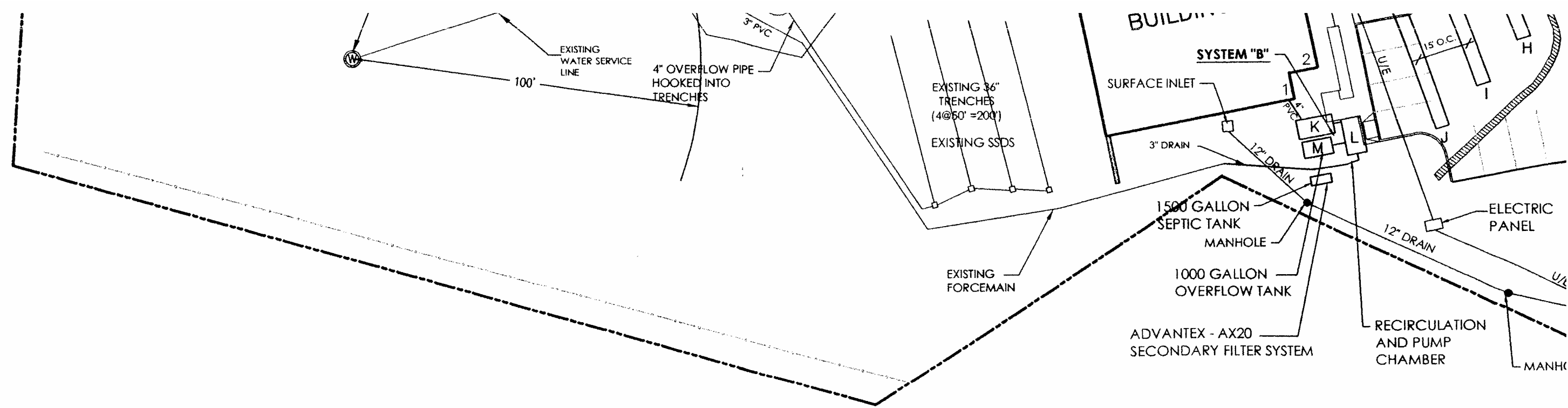
UNAUTHORIZED ALTERATIONS / THIS DRAWING IS A VIOLATION OF THE NEW YORK STATE EDUC



No.	Revision/Iss
1	REV. EXIST. WELL



A - HOI
 SCOTTS R



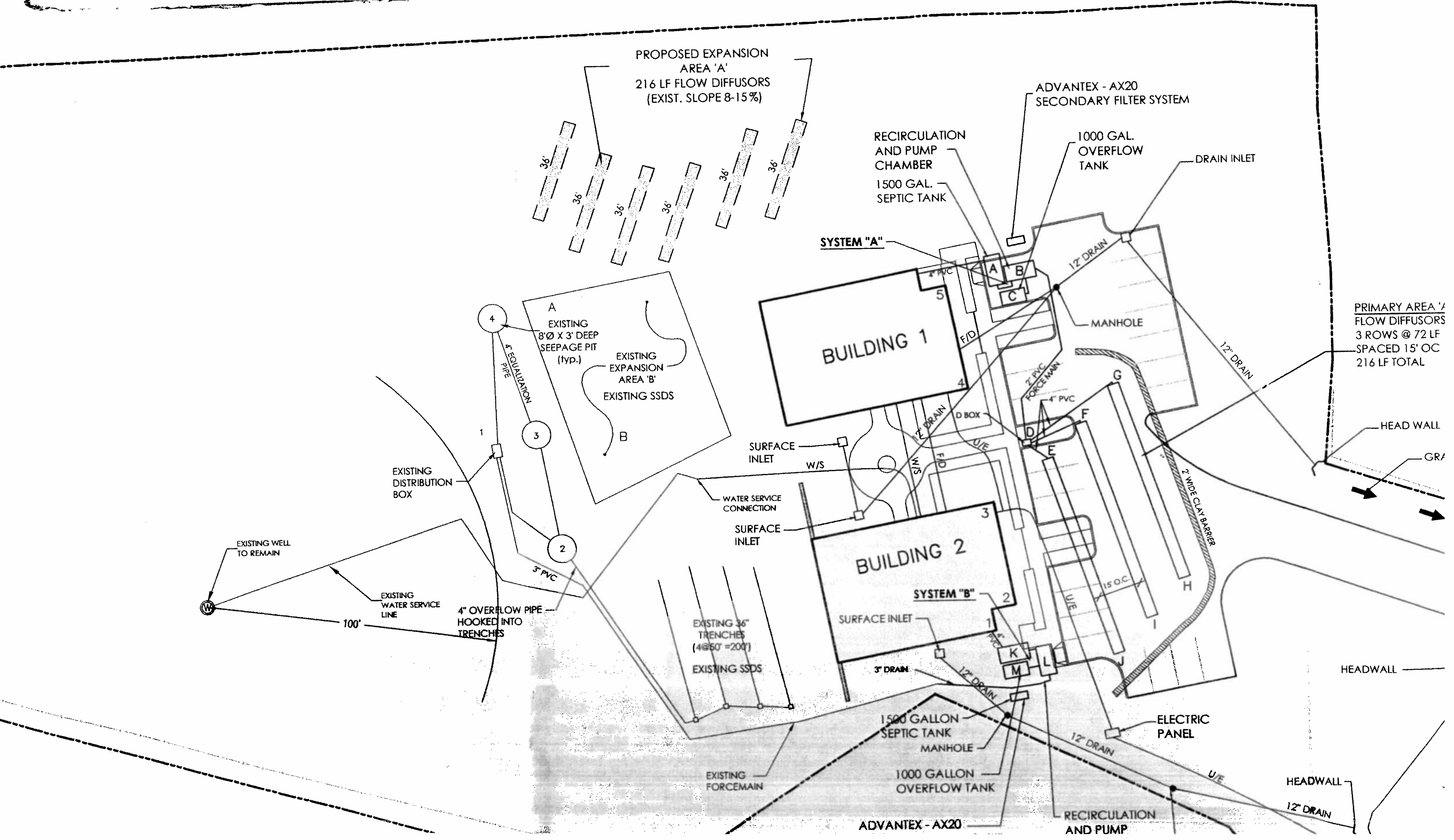
OFFSET DIMENSIONS

	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
gov.com

WESTCHESTER COUNTY DEPARTMENT OF HEALTH
Bureau of Environmental Quality

PERMIT NUMBER: PR2007-14

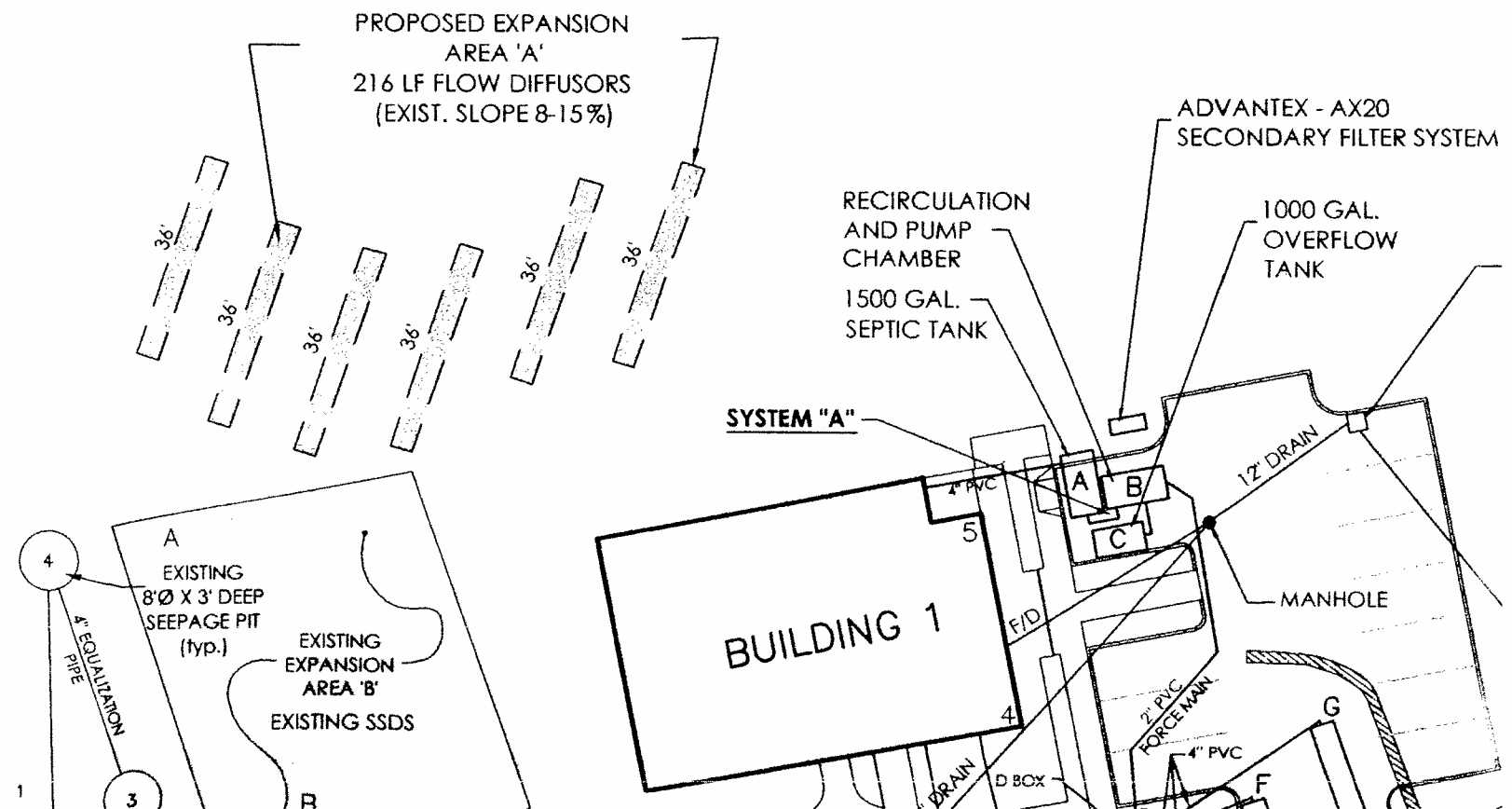
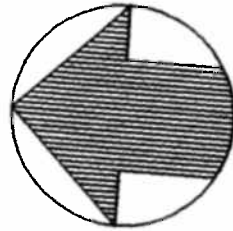
Name: Jim Arick, A Home Municipality: Powder Mill
Description: SSTB Improvement To Sewer Building #11
(New Septic tank + pump chamber) Max Flow 600 gpd
of Sheets: one (1)

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
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. NADOFFMAN, 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 BOULGERS	↓
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 - WCHD

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

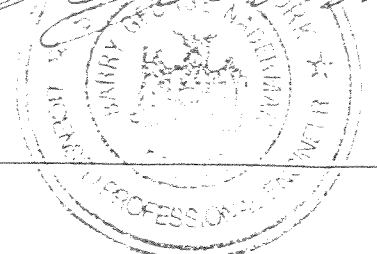
No. of Bedrooms 6 Septic Tank Capacity 1,500 Gals. Masonry Metal
 (3-2 BORM UNITS) 48"x18" FLOW DIFFUSORS

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 D.C.S.E. 314.8715.

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

EXPANSION AREA
"A"

36"
 DEEP

HOLE #	CLOCK TIME			Elapse Time Min.	Depth to Water From Grd Surface		PERCOLATION	Soil Rate Min/In Drop
	Hole Number	Run No.	Start		Stop	Start Inches	Stop 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>	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"	↓	↓	↓	↓

EXPANSION RATE

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.

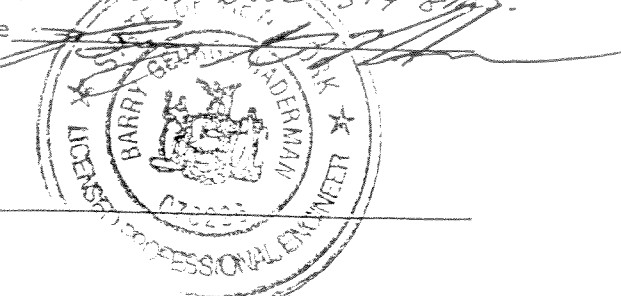
No. of Bedrooms 6 Septic Tank Capacity 1,500 Gals. Masonry X Metal
(3-2 BORM UNITS) 48" x 18" FLOW DIFFUSERS

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

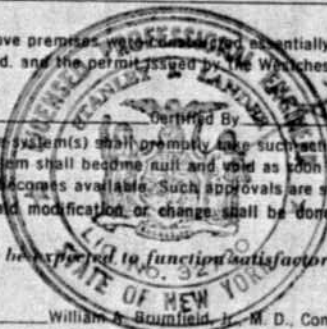
I certify that the system(s) as listed serving the above premises, with the exception of any modifications, are essentially as shown on the plans of the completed work (copies of which are attached), and in accordance with the standards, rules and regulations, plans filed, and the permit issued by the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

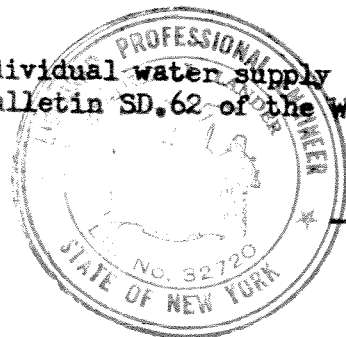
Storage Tank: Type gal. Capacity 82 Gal. (42 Gal. Min.)

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
	3						
	4						
	5						
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
	3						
	4						
	5						
P ₃	1	10:03	19	4'-0"	4'-3"	3"	6.3
	2	10:23	20	4'-0"	4'-3"	3"	6.6
	3						
	4						
	5						

Notes:

- 1) Tests to be repeated at same depth until approximately equal soil rates are obtained at each percolation test hole. All data to be submitted for review.
- 2) Depth measurements to be made from top of hole .

TEST PIT DATA REQUIRED TO BE SUBMITTED WITH APPLICATION
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE NO. <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

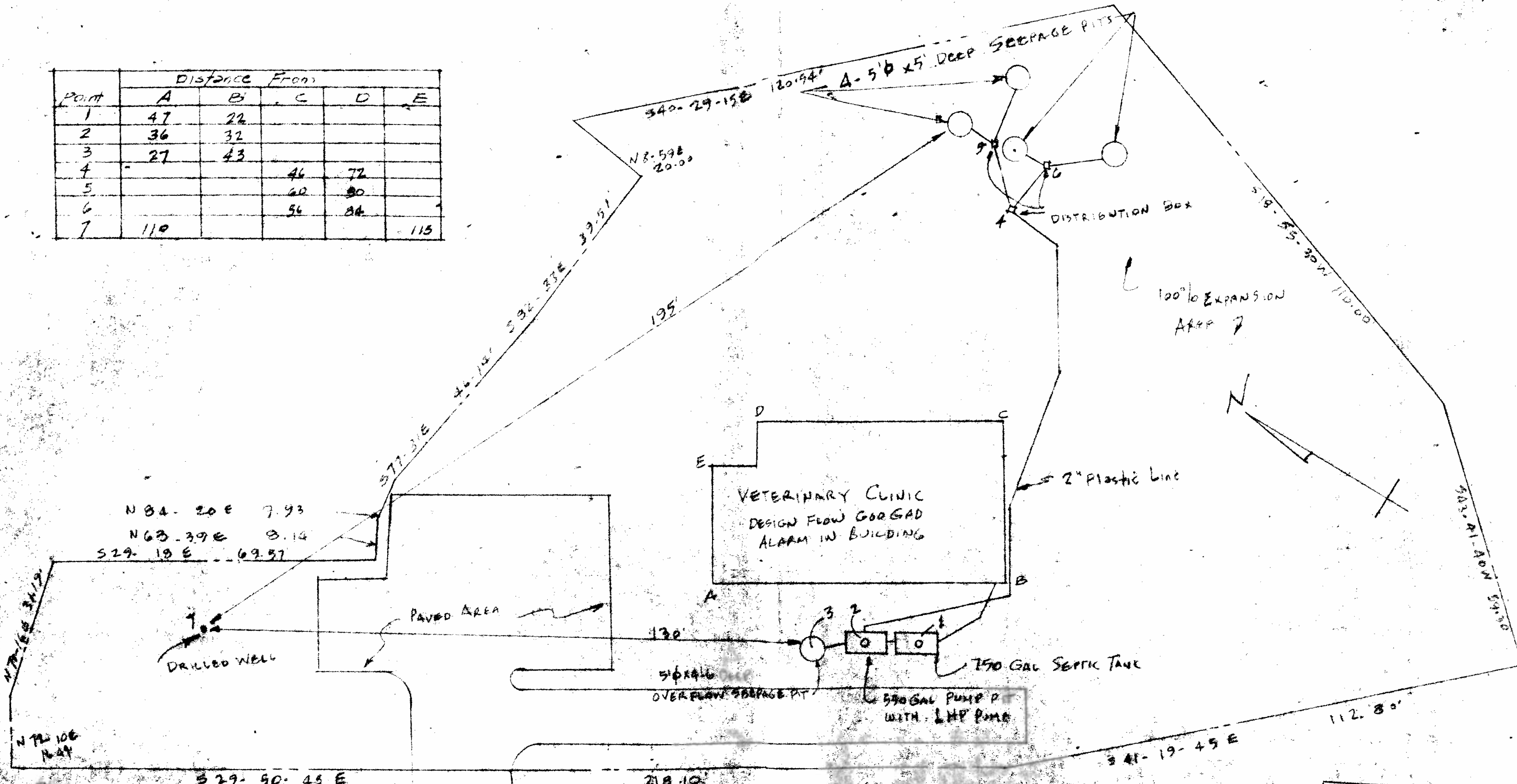
Name STANLEY J. LANDER Signature Stanley J. Lander
 Address BOX 267
AMAWALK, N. Y. 10501
245-2645



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

RECEIVED

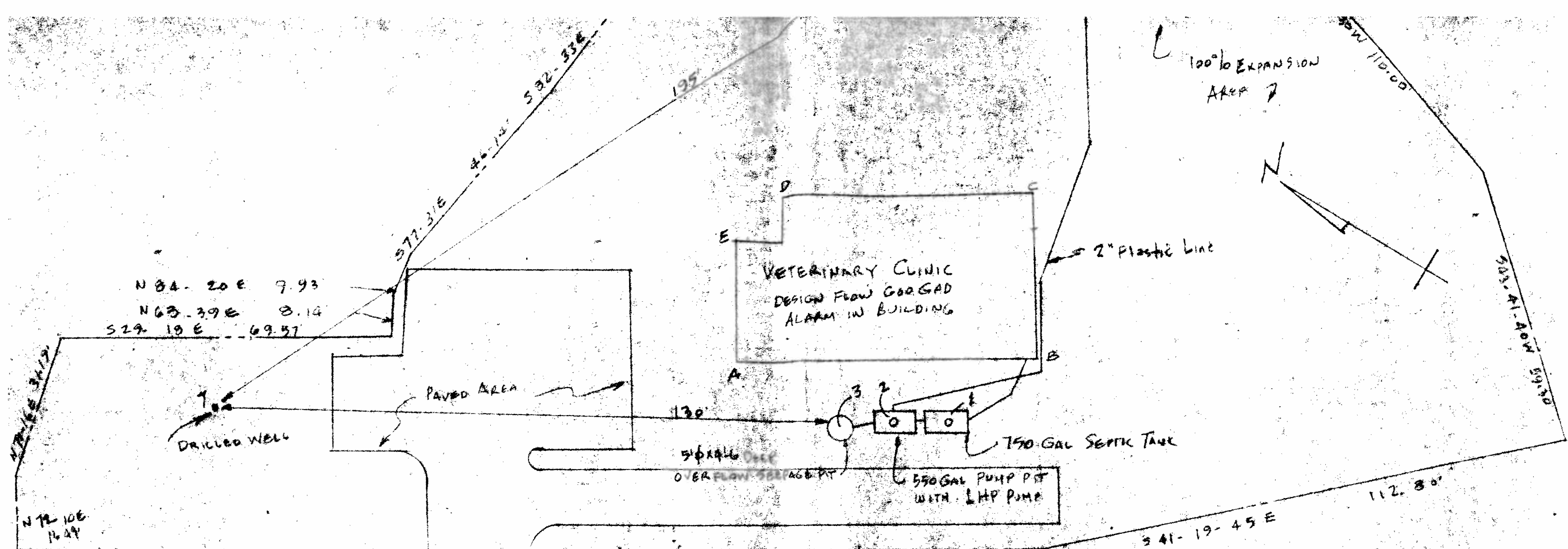
Point	Distance From				
	A	B	C	D	E
1	47	22			
2	36	32			
3	27	43			
4			46	72	
5			60	90	
6			56	84	
7	110				115



WESTCHESTER AVE

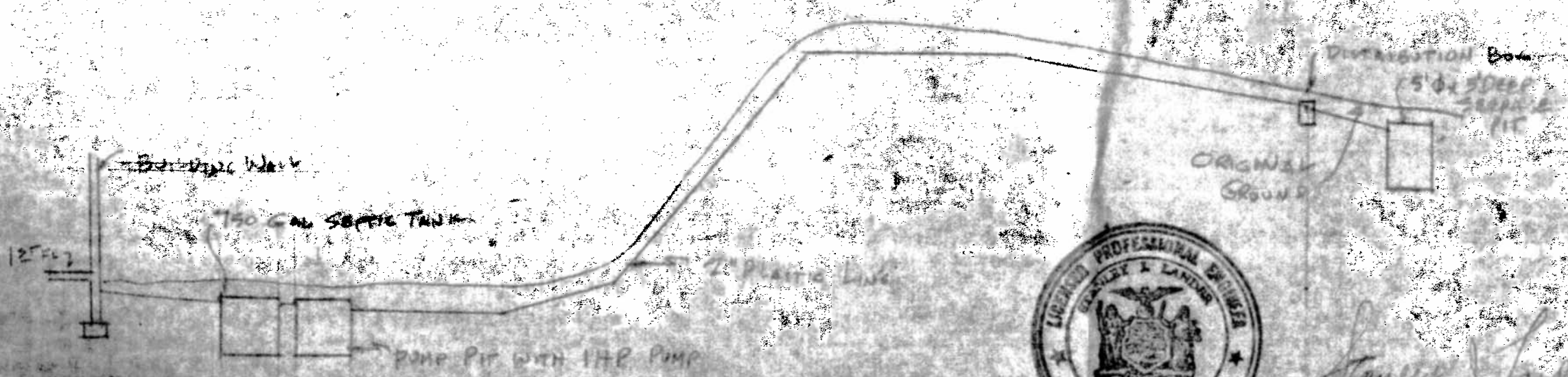
P L A N

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



WESTCHESTER AVE
 PLAN
 SCALE 1" = 20'

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



PROFILE
 SCALE: HORIZ. 1" = 20'
 VERT. 1" = 10'



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

The lot shown hereon is known as
 1/4 Lot 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 Weiss 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

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

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

- 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

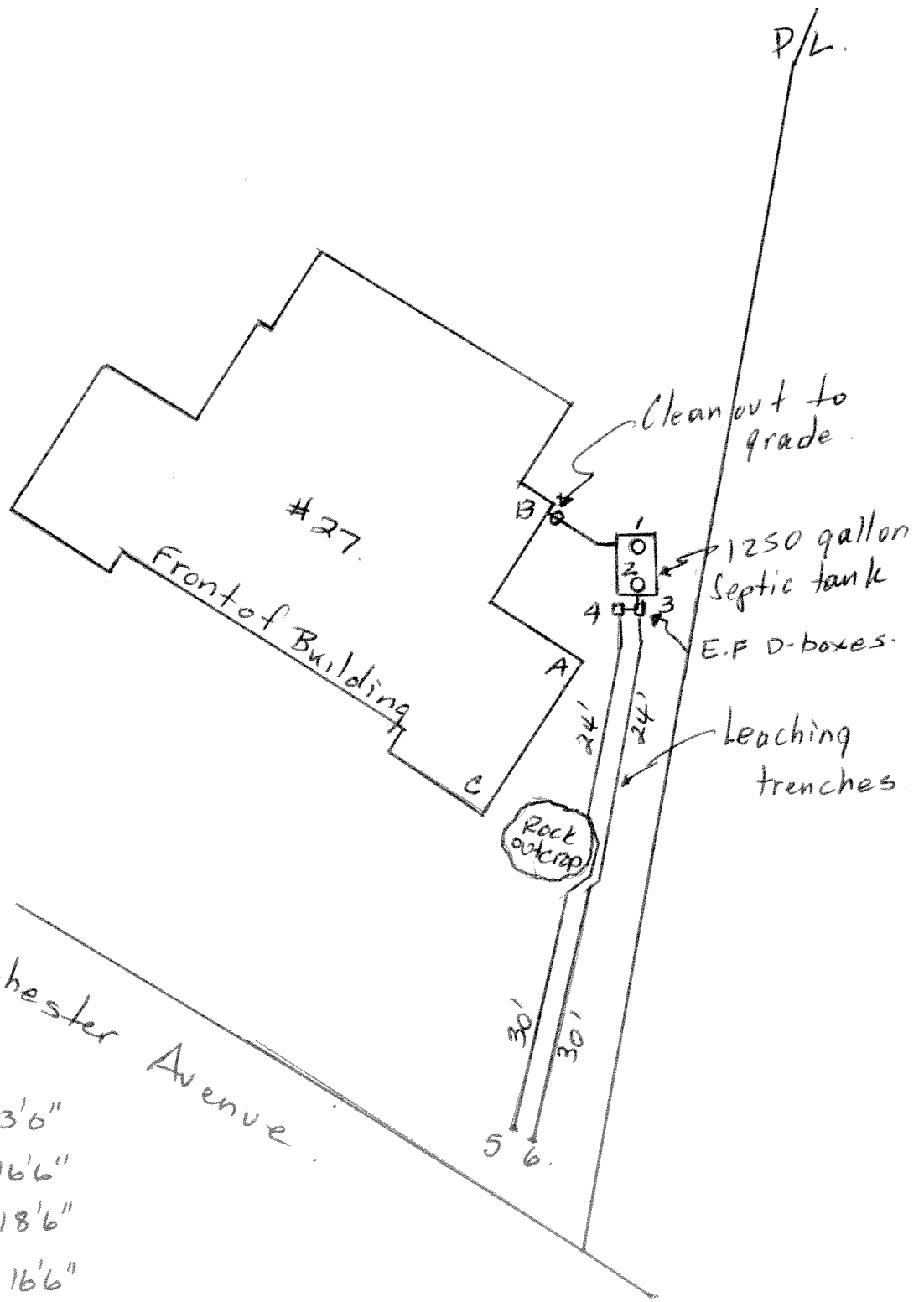
Contractor's Signature: Paul Skiadas

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

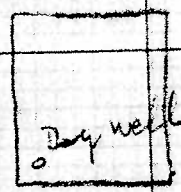
A2-253

J. Augustine McNally, Westchester Avenue

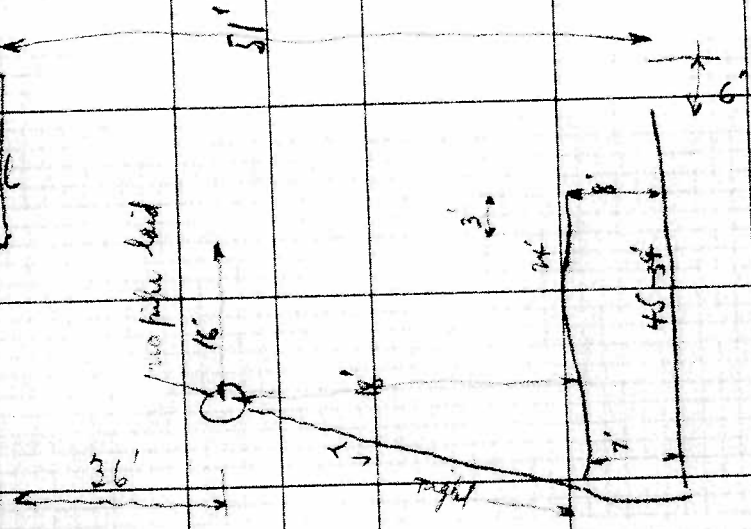
2-16-42 - J. Augustine McNally 300 gal. 80' x 24'

A

Westchester Ave → To Poundridge



300 gal
metal
tank



$$\frac{24}{34} \times 21 \text{ wide} = 111 \text{ ft}$$

$$\frac{45}{69} \times 21 \text{ wide} = 120 \text{ ft}$$

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
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CHARLES C. SWEET, M. D.
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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

HAG:I
c/c Stamford Water Company

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

A2-253A

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:

1. Owner _____ Mail Address 150 241 7th St. 2nd floor
Note: Owner must receive permit and approval. Check here if extra copies are requested.

2. Property location Monticello Ave Place Yonkers
(Street) (Village, Town, City)

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

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

5. Lot area _____ No. of rooms 4 Bedrooms 1 Bathrooms 1
Extra Lavatories _____ Special Fixtures _____ Maximum Future Occupancy 3 or 4

6. Source of water supply well on site
Watershed on which system is located _____
Distance to nearest watercourse _____ Owner's wells _____ Adjacent wells _____

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

8. 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.

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

10. Absorption area: _____ ÷ _____ = _____ sq. ft. bottom area.
gals. waste (No. 7) Absorption rate from table

11. Absorption treatment, Trenches: 14 inches wide; 52-80 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											

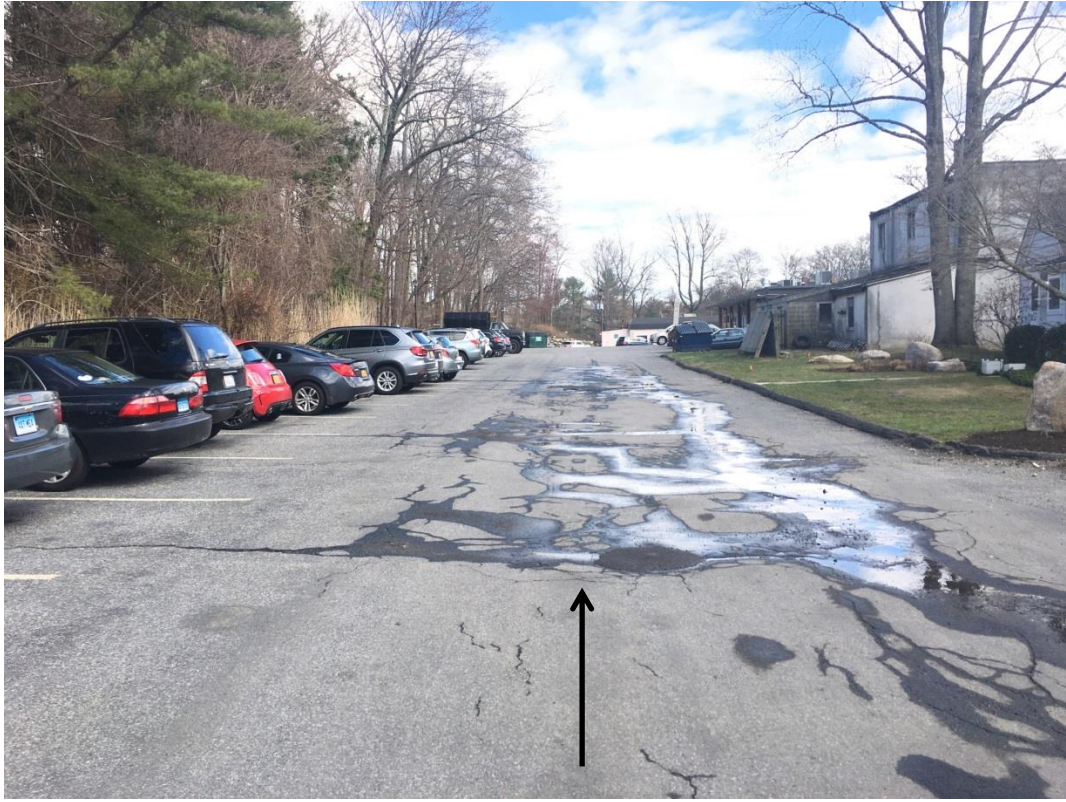
POUND RIDGE WASTEWATER TASK FORCE

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.











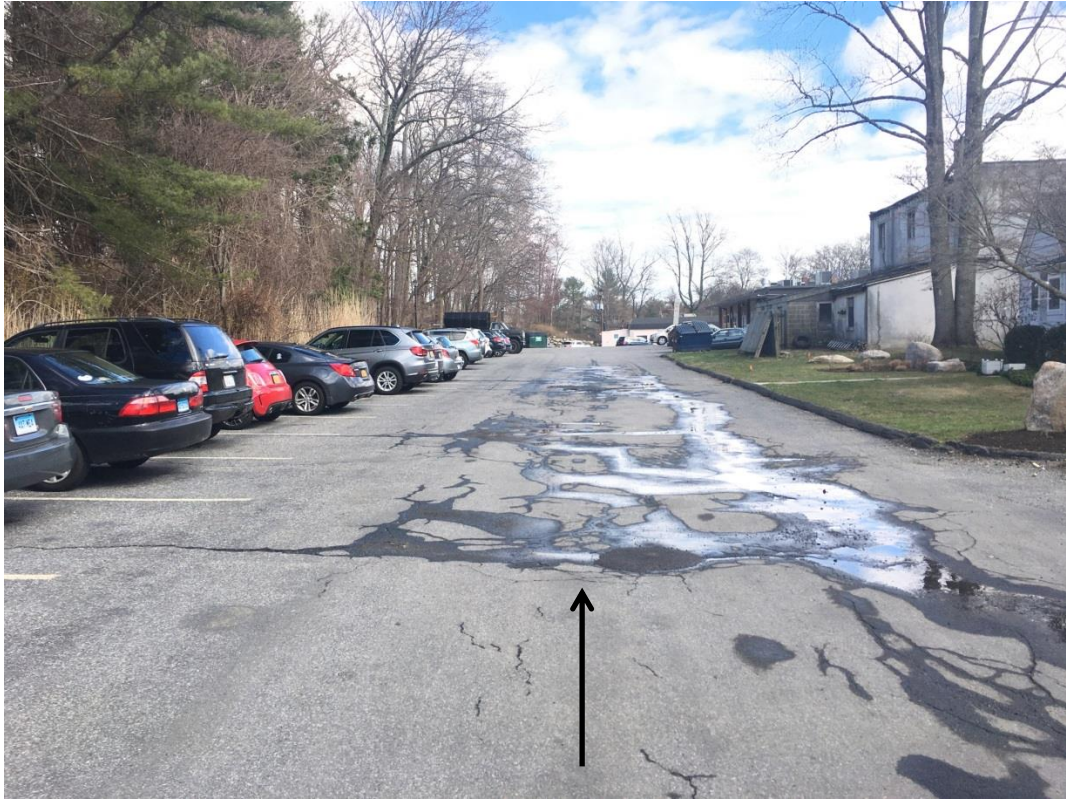
POUND RIDGE WASTEWATER TASK FORCE

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.





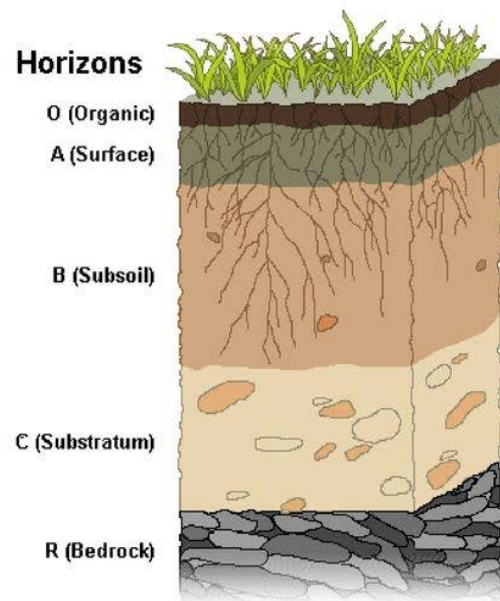






WHAT IS A SOIL PROFILE?

- Cross section of soil layers revealing all soil horizons
- O Horizon = organic material (humus)
- A Horizon = topsoil
- B Horizon = subsoil
- C Horizon = partially weathered parent material
- R Horizon = bedrock



Horizon suffixes

- a: Highly decomposed organic matter (used only with O)
- e: Moderately decomposed organic matter (used only with O)
- g: Strong gley.
- i: Slightly decomposed organic matter (used only with O)
- p: Plow layer or other artificial disturbance
- w: Weak color or structure within B (used only with B)

See [Soils Horizons](#) for further details/descriptions.

Ce—Catden muck, 0 to 2 percent slopes

Typical profile

- Oa1 - 0 to 2 inches: muck*
- Oa2 - 2 to 79 inches: muck*

Properties and qualities

- Depth to restrictive feature: More than 80 inches*
- Natural drainage class: Very poorly drained*
- Runoff class: Negligible*
- Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)*
- Depth to water table: About 0 to 6 inches*
- Hydrologic Soil Group: B/D*

ChB—Charlton fine sandy loam, 3 to 8 percent slopes

Typical profile

Scotts Corner Wastewater Management & Water Supply Study
 JUNE 25, 2019 - FINAL
 PAGE 180

Ap - 0 to 7 inches: fine sandy loam
Bw - 7 to 22 inches: gravelly fine sandy loam
C - 22 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

ChC—Charlton fine sandy loam, 8 to 15 percent slopes

Typical profile

Ap - 0 to 7 inches: fine sandy loam
Bw - 7 to 22 inches: gravelly fine sandy loam
C - 22 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

ChD—Charlton fine sandy loam, 15 to 25 percent slopes

Typical profile

Ap - 0 to 7 inches: fine sandy loam
Bw - 7 to 22 inches: gravelly fine sandy loam
C - 22 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

CIB—Charlton fine sandy loam, 3 to 8 percent slopes, very stony

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: fine sandy loam
Bw - 4 to 27 inches: gravelly fine sandy loam
C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

CIC—Charlton fine sandy loam, 8 to 15 percent slopes, very stony

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: fine sandy loam
Bw - 4 to 27 inches: gravelly fine sandy loam
C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

CID—Charlton loam, 15 to 25 percent slopes, very stony

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: sandy loam

Properties and qualities

Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

CIE—Charlton loam, 25 to 35 percent slopes, very stony

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: sandy loam

Properties and qualities

Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

CIF—Charlton loam, 35 to 45 percent slopes, very stony

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

CrC—Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky

Description of Chatfield, Very Stony

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 2 inches: fine sandy loam
Bw - 2 to 30 inches: gravelly fine sandy loam
2R - 30 to 40 inches: bedrock

Properties and qualities

Depth to restrictive feature: 20 to 41 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

Description of Charlton, Very Stony

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: fine sandy loam
Bw - 4 to 27 inches: gravelly fine sandy loam
C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

CsD—Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky

Description of Chatfield, Very Stony

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 2 inches: fine sandy loam
Bw - 2 to 30 inches: gravelly fine sandy loam
2R - 30 to 40 inches: bedrock

Properties and qualities

Depth to restrictive feature: 20 to 41 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

Description of Charlton, Very Stony

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: fine sandy loam
Bw - 4 to 27 inches: gravelly fine sandy loam
C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

CtC—Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 2 inches: fine sandy loam
Bw - 2 to 30 inches: gravelly fine sandy loam
2R - 30 to 40 inches: bedrock

Properties and qualities

Depth to restrictive feature: 20 to 41 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

CuD—Chatfield-Hollis-Rock outcrop complex, 15 to 35 percent slopes

Description of Chatfield, Extremely Stony

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 2 inches: fine sandy loam
Bw - 2 to 30 inches: gravelly fine sandy loam
2R - 30 to 40 inches: bedrock

Properties and qualities

Depth to restrictive feature: 20 to 41 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: B

Description of Hollis, Extremely Stony

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 7 inches: gravelly fine sandy loam
Bw - 7 to 16 inches: gravelly fine sandy loam
2R - 16 to 26 inches: bedrock

Properties and qualities

Depth to restrictive feature: 8 to 23 inches to lithic bedrock
Natural drainage class: Somewhat excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches

Hydrologic Soil Group: D

Description of Rock Outcrop

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Hydrologic Soil Group: D

Ff—Fluvaquents-Udifluents complex, frequently flooded

Description of Fluvaquents

Typical profile

H1 - 0 to 5 inches: gravelly silt loam

H2 - 5 to 70 inches: very gravelly silt loam

Properties and qualities

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)

Depth to water table: About 0 inches

Hydrologic Soil Group: A/D

Description of Udifluents

Typical profile

H1 - 0 to 4 inches: gravelly silt loam

H2 - 4 to 70 inches: very gravelly loam

Properties and qualities

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)

Depth to water table: About 24 to 72 inches

Hydrologic Soil Group: A

HrF—Hollis-Rock outcrop complex, 35 to 60 percent slopes

Description of Hollis, Very Stony

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 7 inches: gravelly fine sandy loam

Bw - 7 to 16 inches: gravelly fine sandy loam

2R - 16 to 26 inches: bedrock

Properties and qualities

Depth to restrictive feature: 8 to 23 inches to lithic bedrock
Natural drainage class: Somewhat excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Hydrologic Soil Group: D

Description of Rock Outcrop

Typical Profile

R - 0 to 79 inches: bedrock

Properties and qualities

Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Hydrologic Soil Group: D

LeB—Leicester loam, 2 to 8 percent slopes, very stony

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 26 inches: sandy loam
C - 26 to 60 inches: sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 6 to 18 inches
Hydrologic Soil Group: A/D

LcA—Leicester loam, 0 to 3 percent slopes, stony

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 26 inches: sandy loam
C - 26 to 60 inches: sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 12 inches
Hydrologic Soil Group: A/D

LcB—Leicester loam, 3 to 8 percent slopes, stony

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 26 inches: sandy loam
C - 26 to 60 inches: sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 6 to 18 inches
Hydrologic Soil Group: A/D

NcA—Natchaug muck, 0 to 2 percent slopes

Typical profile

Oa1 - 0 to 12 inches: muck
Oa2 - 12 to 31 inches: muck
2Cg1 - 31 to 39 inches: silt loam
2Cg2 - 39 to 79 inches: fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 14.17 in/hr)
Depth to water table: About 0 to 6 inches
Hydrologic Soil Group: B/D

NdA—Natchaug and Catden mucks, ponded, 0 to 2 percent slopes

Description of Natchaug

Typical profile

Oa1 - 0 to 12 inches: muck
Oa2 - 12 to 31 inches: muck
2Cg1 - 31 to 39 inches: silt loam
2Cg2 - 39 to 79 inches: fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 14.17 in/hr)
Depth to water table: About 0 to 6 inches
Hydrologic Soil Group: B/D

Description of Catden

Typical profile

Oa1 - 0 to 2 inches: muck
Oa2 - 2 to 79 inches: muck

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 0 to 6 inches
Hydrologic Soil Group: B/D

PnB—Paxton fine sandy loam, 3 to 8 percent slopes

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 15 inches: fine sandy loam
Bw2 - 15 to 26 inches: fine sandy loam
Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: 18 to 39 inches to densic material
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Hydrologic Soil Group: C

PnC—Paxton fine sandy loam, 8 to 15 percent slopes

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 15 inches: fine sandy loam
Bw2 - 15 to 26 inches: fine sandy loam
Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: 20 to 39 inches to densic material
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Hydrologic Soil Group: C

PoB—Paxton fine sandy loam, 0 to 8 percent slopes, very stony

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material

A - 2 to 10 inches: fine sandy loam

Bw1 - 10 to 17 inches: fine sandy loam

Bw2 - 17 to 28 inches: fine sandy loam

Cd - 28 to 67 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: 20 to 43 inches to densic material

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)

Depth to water table: About 18 to 37 inches

Hydrologic Soil Group: C

PoD—Paxton fine sandy loam, 15 to 25 percent slopes, very stony

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material

A - 2 to 10 inches: fine sandy loam

Bw1 - 10 to 17 inches: fine sandy loam

Bw2 - 17 to 28 inches: fine sandy loam

Cd - 28 to 67 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: 20 to 43 inches to densic material

Natural drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)

Depth to water table: About 18 to 37 inches

Hydrologic Soil Group: C

RgB—Ridgebury complex, 0 to 8 percent slopes, very stony

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 6 inches: loam

Bw - 6 to 10 inches: gravelly fine sandy loam

Bg - 10 to 19 inches: gravelly fine sandy loam

Cd - 19 to 66 inches: gravelly loam

Properties and qualities

Depth to restrictive feature: 15 to 35 inches to densic material

Natural drainage class: Poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)

Depth to water table: About 0 to 6 inches
Hydrologic Soil Group: D

Sh—Sun loam

Typical profile

H1 - 0 to 9 inches: loam
H2 - 9 to 27 inches: loam
H3 - 27 to 60 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 inches
Hydrologic Soil Group: C/D

Sm—Sun loam, extremely stony

Typical profile

H1 - 0 to 9 inches: loam
H2 - 9 to 27 inches: loam
H3 - 27 to 60 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 inches
Hydrologic Soil Group: C/D

SuB—Sutton loam, 3 to 8 percent slopes

Typical profile

Ap - 0 to 9 inches: loam
Bw1 - 9 to 17 inches: fine sandy loam
Bw2 - 17 to 30 inches: sandy loam
C1 - 30 to 39 inches: sandy loam
C2 - 39 to 60 inches: sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 12 to 27 inches

Hydrologic Soil Group: B/D

Ub—Udorthents, smoothed

Typical profile

H1 - 0 to 4 inches: gravelly loam
H2 - 4 to 70 inches: very gravelly loam

Properties and qualities

Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 18 to 48 inches

Uf—Urban land

Typical profile

M - 0 to 10 inches: cemented material

Properties and qualities

Depth to restrictive feature: 0 inches to manufactured layer

UhB—Urban land-Charlton complex, 3 to 8 percent slopes

Description of Urban Land

Typical profile

M - 0 to 10 inches: cemented material

Properties and qualities

Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Hydrologic Soil Group: D

Description of Charlton

Typical profile

Ap - 0 to 7 inches: fine sandy loam
Bw - 7 to 22 inches: gravelly fine sandy loam
C - 22 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)

Depth to water table: More than 80 inches

Hydrologic Soil Group: B

UrB—Urban land-Ridgebury complex, 0 to 8 percent slopes

Description of Urban Land

Typical profile

M - 0 to 10 inches: cemented material

Properties and qualities

Depth to restrictive feature: 0 inches to manufactured layer

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Hydrologic Soil Group: D

Description of Ridgebury, Somewhat Poorly Drained

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

A - 1 to 7 inches: loam

Bw - 7 to 13 inches: loam

Bg - 13 to 21 inches: fine sandy loam

Cd - 21 to 60 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: 15 to 35 inches to densic material

Natural drainage class: Somewhat poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)

Depth to water table: About 10 to 18 inches

Hydrologic Soil Group: D

UwB—Urban land-Woodbridge complex, 3 to 8 percent slopes

Description of Urban Land

Typical profile

M - 0 to 10 inches: cemented material

Properties and qualities

Depth to restrictive feature: 0 inches to manufactured layer

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Hydrologic Soil Group: D

Description of Woodbridge

Typical profile

Ap - 0 to 7 inches: fine sandy loam
Bw1 - 7 to 18 inches: fine sandy loam
Bw2 - 18 to 30 inches: fine sandy loam
Cd - 30 to 65 inches: gravelly fine sandy loam

Properties and qualities

Depth to restrictive feature: 20 to 39 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 30 inches
Hydrologic Soil Group: C/D

W—Water

WdB—Woodbridge loam, 3 to 8 percent slopes

Typical profile

Ap - 0 to 6 inches: loam
Bw1 - 6 to 18 inches: gravelly loam
Bw2 - 18 to 29 inches: gravelly loam
Cd - 29 to 65 inches: gravelly loam

Properties and qualities

Depth to restrictive feature: 20 to 39 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 30 inches
Hydrologic Soil Group: C/D

APPENDIX C SMART GROWTH ASSESSMENT & SEXUAL HARRASSMENT FORMS



Smart Growth Assessment Form

This form should be completed by the applicant's project engineer or other design professional.¹

Applicant Information

Applicant: Town of Pound Ridge

Project No.:

Project Name: Scotts Corner Wastewater Management and Water Supply Engineering Report

Is project construction complete? Yes, date: No

Project Summary: (provide a short project summary in plain language including the location of the area the project serves)

The Scotts Corner area is the commercial center of Pound Ridge and consists of 41, primarily commercial, properties that have individual wells and septic systems with a history of problems and inadequate separation. A Engineering Plan for Study Area wide wastewater management system has been prepared that consists of a septic tank effluent collection system and tertiary treatment with disinfection prior to

Section 1 – Screening Questions

1. Prior Approvals

1A. Has the project been previously approved for Environmental Facilities Corporation (EFC) financial assistance? Yes No

1B. If so, what was the project number(s) for the prior approval(s)? Project No.:

Is the scope of the project substantially the same as that which was approved? Yes No

IF THE PROJECT WAS PREVIOUSLY APPROVED BY EFC'S BOARD AND THE SCOPE OF THE PROJECT HAS NOT MATERIALLY CHANGED, THE PROJECT IS NOT SUBJECT TO SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOCK.

2. New or Expanded Infrastructure

2A. Does the project add new wastewater collection/new water mains or a new wastewater treatment system/water treatment plant? Yes No

Note: A new infrastructure project adds wastewater collection/water mains or a wastewater treatment/water treatment plant where none existed previously

2B. Will the project result in either: Yes No

An increase of the State Pollutant Discharge Elimination System (SPDES) permitted flow capacity for an existing treatment system;

OR

An increase such that a Department of Environmental Conservation (DEC) water withdrawal permit will need to be obtained or modified, or result in the Department of Health (DOH) approving an increase in the capacity of the water treatment plant?

Note: An expanded infrastructure project results in an increase of the SPDES permitted flow capacity for the wastewater treatment system, or an increase of the permitted water withdrawal or the permitted flow capacity for the water treatment system.

¹ If project construction is complete and the project was not previously financed through EFC, an authorized municipal representative may complete and sign this assessment.

IF THE ANSWER IS "NO" TO BOTH "2A" and "2B" ON THE PREVIOUS PAGE, THE PROJECT IS NOT SUBJECT TO FURTHER SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOCK.

3. Court or Administrative Consent Orders

- 3A. Is the project expressly required by a court or administrative consent order? Yes No
- 3B. If so, have you previously submitted the order to EFC or DOH? Yes No
If not, please attach.

Section 2 – Additional Information Needed for Relevant Smart Growth Criteria

EFC has determined that the following smart growth criteria are relevant for EFC-funded projects and that projects must meet each of these criteria to the extent practicable:

1. Uses or Improves Existing Infrastructure

- 1A. Does the project use or improve existing infrastructure? Yes No
Please describe:
Project will replace existing septic systems and wells

2. Serves a Municipal Center

Projects must serve an area in either 2A, 2B or 2C to the extent practicable.

- 2A. Does the project serve an area limited to one or more of the following municipal centers?

- i. A City or incorporated Village Yes No
- ii. A central business district Yes No
- iii. A main street Yes No
- iv. A downtown area Yes No
- v. A Brownfield Opportunity Area Yes No
(for more information, go to www.dos.ny.gov & search "Brownfield")
- vi. A downtown area of a Local Waterfront Revitalization Program Area Yes No
(for more information, go to www.dos.ny.gov and search "Waterfront Revitalization")
- vii. An area of transit-oriented development Yes No
- viii. An Environmental Justice Area Yes No
(for more information, go to www.dec.ny.gov/public/899.html)
- ix. A Hardship/Poverty Area Yes No
Note: Projects that primarily serve census tracts and block numbering areas with a poverty rate of at least twenty percent according to the latest census data

Please describe all selections:

The Scotts Corner area contains the Town's three (3) Business Districts with a Main Street and a Downtown area.

2 of 3
Effective October 1, 2018

- 2B. If the project serves an area located outside of a municipal center, does it serve an area located adjacent to a municipal center which has clearly defined borders, designated for concentrated development in a municipal or regional comprehensive plan and exhibit strong land use, transportation, infrastructure and economic connections to an existing municipal center? Yes No

Please describe:

Not applicable

- 2C. If the project is not located in a municipal center as defined above, is the area designated by a comprehensive plan and identified in zoning ordinance as a future municipal center? Yes No

Please describe and reference applicable plans:

Not applicable

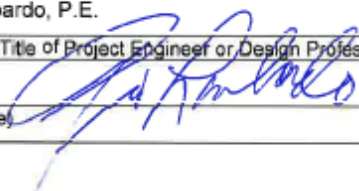
3. Resiliency Criteria

- 3A. Was there consideration of future physical climate risk due to sea-level rise, storm surge, and/or flooding during the planning of this project? Yes No

Please describe:

Wastewater treatment and disposal facilities are located above floodplains and areas that would be subject to storm surge of flooding. Location not affected by sea level rise.

Signature Block: By entering your name in the box below, you agree that you are authorized to act on behalf of the applicant and that the information contained in this Smart Growth Assessment is true, correct and complete to the best of your knowledge and belief.

Applicant: Town of Pound Ridge NY	Phone Number: 617-964-2924
Pio Lombardo, P.E.	
(Name & Title of Project Engineer or Design Professional or Authorized Municipal Representative)	
	May 20, 2019
(Signature)	(Date)

APPENDIX A

Sexual Harassment Prevention Certification Form

By submission of this application, each applicant and each person signing on behalf of the applicant certifies, and in the case of a partnering application each party thereto certifies as to its own organization, under penalty of perjury, that the applicant has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of section two hundred one-g of the labor law.

Grantee Name: Town of Pound Ridge

Signature: 

Print Name and Title: Kevin Hansan, Supervisor

Date: 5/21/2019