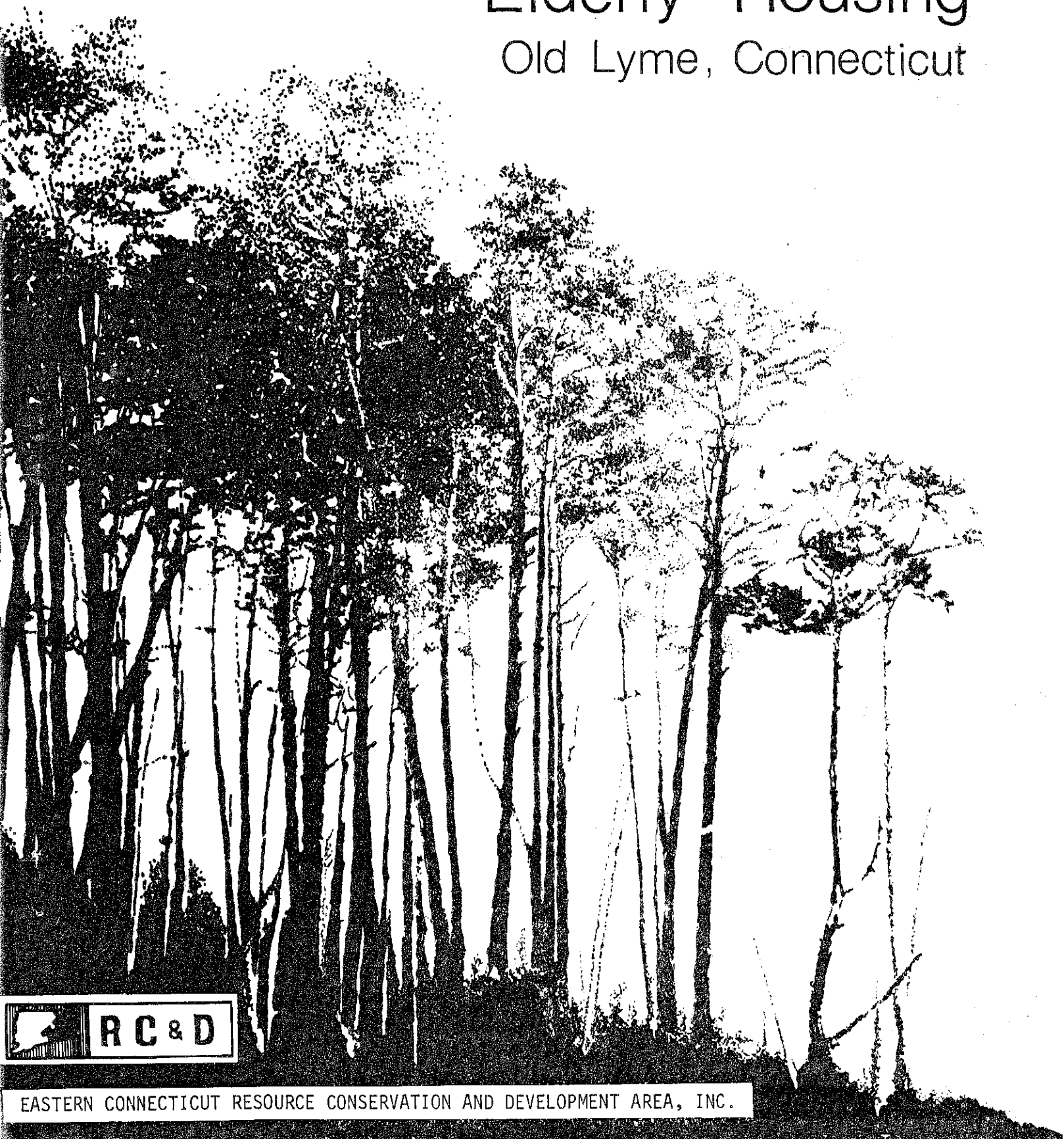


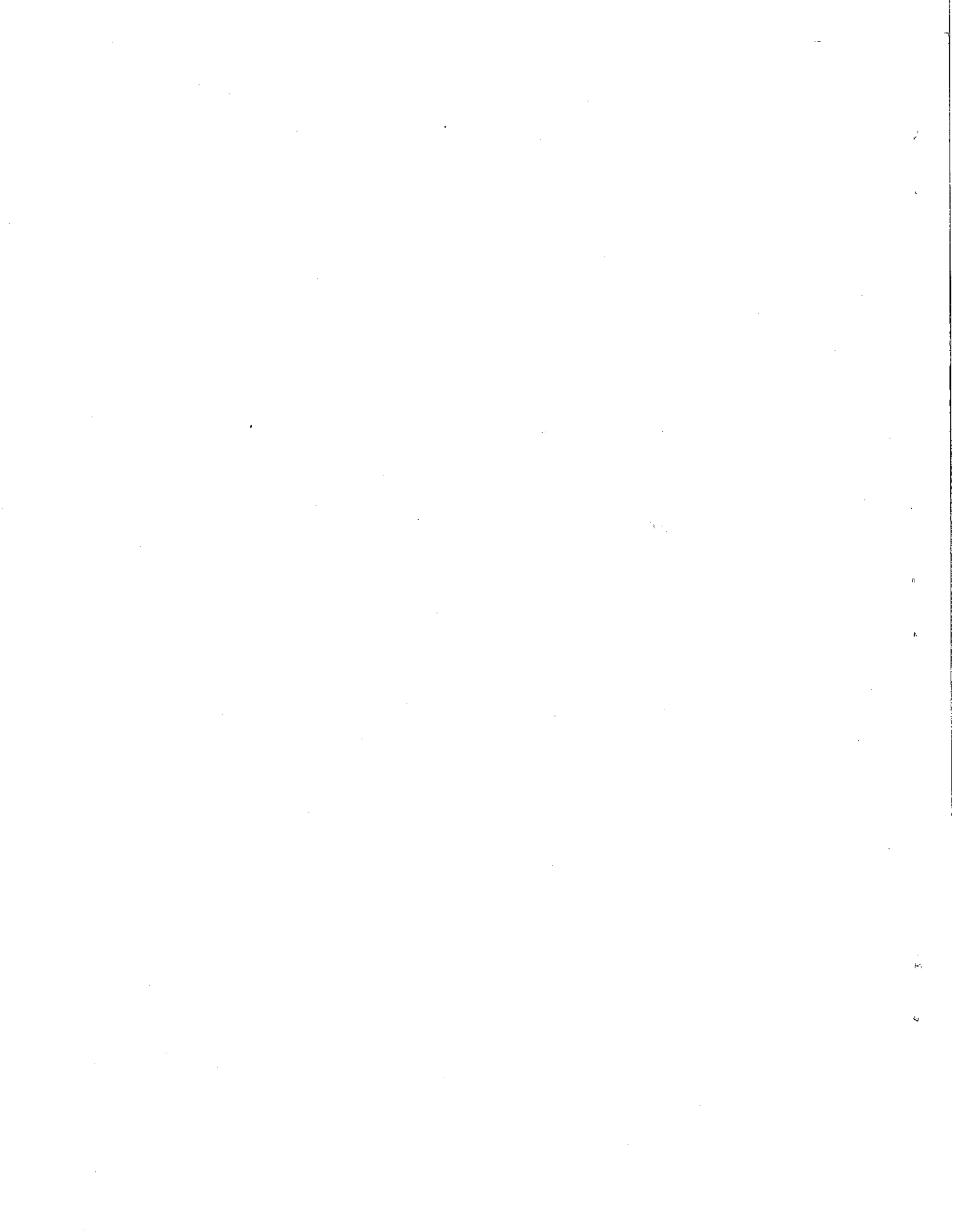
Environmental Review Team Report

Elderly Housing

Old Lyme, Connecticut



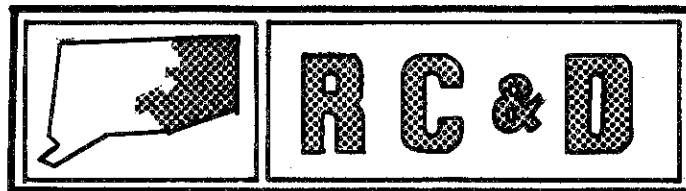
EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.



Environmental Review Team
Report
on

Elderly Housing
Old Lyme, Connecticut

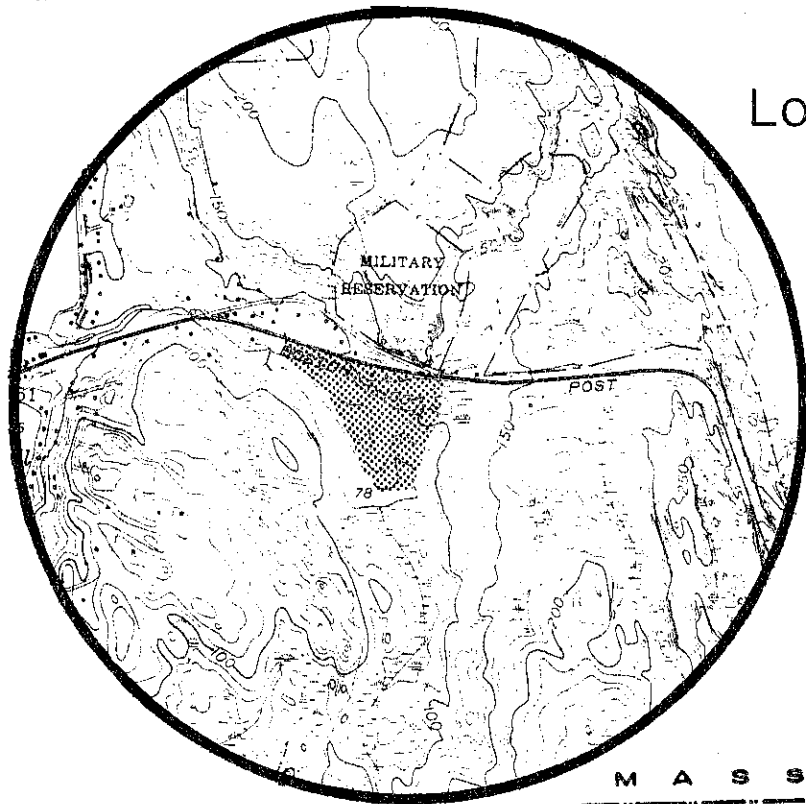
January 1980



eastern connecticut resource conservation & development area
environmental review team
139 boswell avenue
norwich, connecticut 06360

Location of Study Site

ELDERLY HOUSING
OLD LYME, CONNECTICUT



EASTERN CONNECTICUT
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

ENVIRONMENTAL REVIEW TEAM REPORT
ON
ELDERLY HOUSING SITE
OLD LYME, CONNECTICUT

This report is an outgrowth of a request from the Old Lyme Elderly Housing Corporation to the New London County Soil and Water Conservation District (S&WCD). The S&WCD referred this request to the Eastern Connecticut Resource Conservation and Development (RC&D) Area Executive Committee for their consideration and approval as a project measure. The request was approved and the measure reviewed by the Eastern Connecticut Environmental Review Team (ERT).

The soils of the site were mapped by a soil scientist of the United States Department of Agriculture (USDA), Soil Conservation Service (SCS). Reproductions of the soil survey map as well as a topographic map of the site were distributed to all ERT participants prior to their field review of the site.

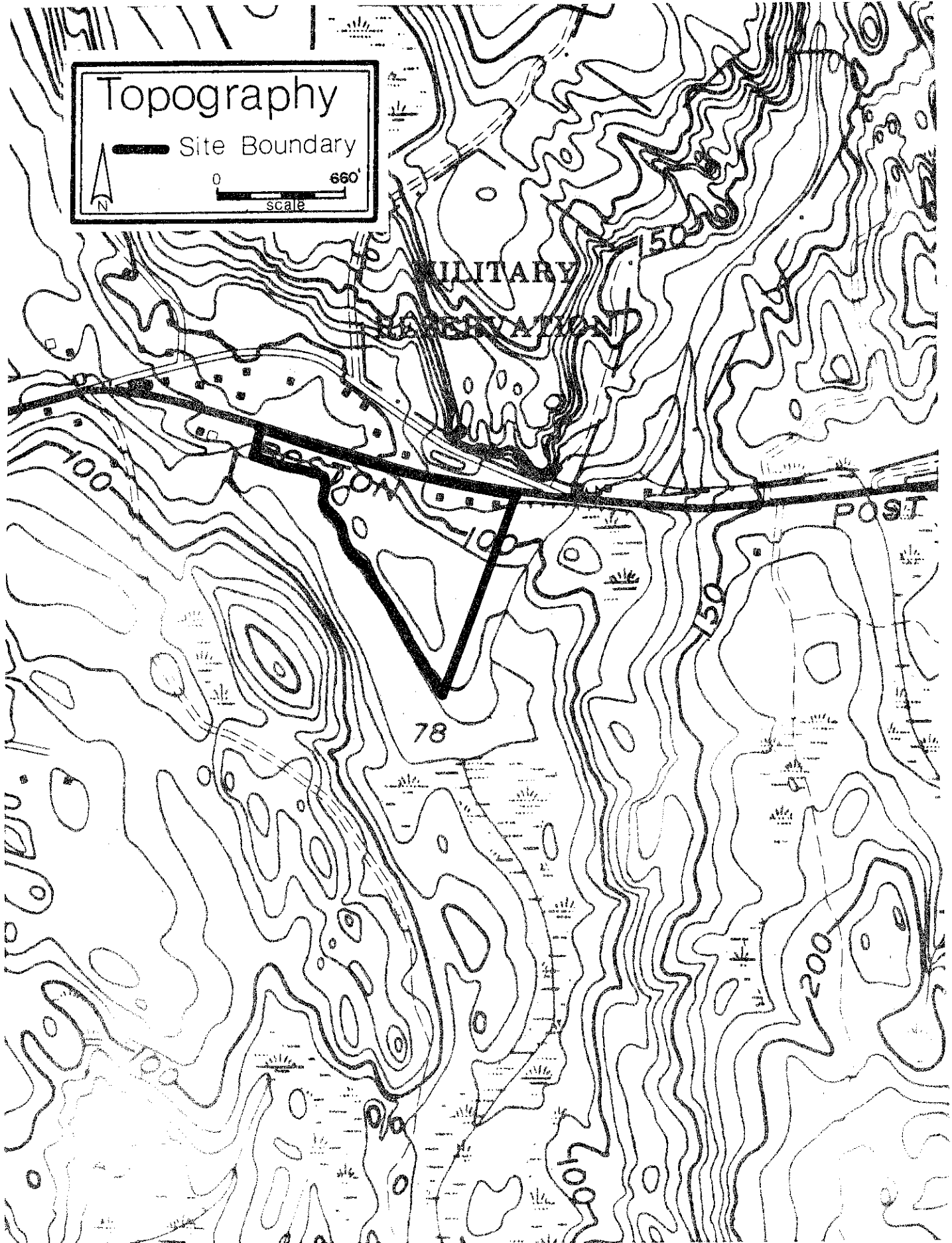
The ERT that field checked the site consisted of the following personnel: Gary Domian, District Conservationist, SCS; Michael Zizka, Geologist, Department of Environmental Protection (DEP); Rob Rocks, Forester, DEP; Don Capellaro, Sanitarian, State Department of Health; Ed Meehan, Regional Planner, Connecticut River Estuary Regional Planning Agency; Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Area.

The Team met and field checked the site on Thursday, December 27, 1979. Reports from each Team member were sent to the ERT Coordinator for review and summarization for the final report.

This report is not meant to compete with private consultants by supplying site designs or detailed solutions to development problems. This report identifies the existing resource base and evaluates its significance to the proposed development and also suggests considerations that should be of concern to the developer and the Town of Old Lyme. The results of this Team action are oriented toward the development of a better environmental quality and the long-term economics of the land use.

The Eastern Connecticut RC&D Project Committee hopes you will find this report of value and assistance in making your decisions on this particular site.

If you require any additional information, please contact: Ms. Jeanne Shelburn, Environmental Review Team Coordinator, Eastern Connecticut RC&D Area, 139 Boswell Avenue, Norwich, Connecticut 06360, 889-2324.



INTRODUCTION

The Lyme Elderly Housing Non-profit Corporation has requested the review of a 14½ acre site which is under option to purchase for the construction of 24 low/moderate income elderly apartments. The Non-profit Corporation intends to file an application with the Farmers Home Administration (FmHA) for a 50 year loan under the Rural Rental Housing Program. Prior to proceeding with the preparation of a pre-application to the FmHA, the Non-profit Corporation has sought an assessment of this site's suitability for establishment of elderly housing. A factor which will partially influence whether or not the Corporation will complete preparation of the pre-application and proceed with architectural/engineering services needed for the loan program, is a determination by the Team's soil scientist concerning the extent of prime farmland soils present on this parcel. Under a USDA policy statement (No. 1827, June 21, 1976) prime farmland should not be converted to non-agricultural purposes unless no suitable alternative sites are available and only when the action is in response to overriding public need.

The property is located on the south side of Route 51, approximately one mile east of Rogers Lake. The proposed building site consists of an open, rolling field with the highest elevation towards the south and southwest sides. The major portion of the area has recently been used for hay production. Field edges are populated with large white pines, beech, dogwood, barberry, mountain laurel and oak. The property slopes steeply to the southwest to a small waterbody/wetland area which eventually drains into Rogers Lake. Soils on the site range from a well-drained Hinckley to a moderately well-drained Ninigret. Ninigret soils, as noted on the soils map and soils limitation chart in the Appendix to this report, are designated prime agricultural soils and comprise approximately one-third of the site.

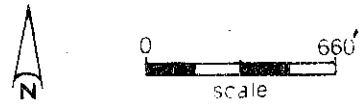
ENVIRONMENTAL ASSESSMENT

GEOLOGY

The proposed elderly housing site lies within the Old Lyme topographic quadrangle. A bedrock geologic map (Quadrangle Report No. 21, by L. Lundgren, Jr., 1967) and a surficial geologic map (Quadrangle Report No. 31, by R.F. Flint, 1975) of that quadrangle have been published by the Connecticut Geological and Natural History Survey (CGNHS). Bedrock, although exposed across the road from the site, was not observed in outcrop within the property and is unlikely to have any influence on construction activities. The rock may be generally described in brief as a gray, biotitic, quartz-feldspar gneiss, containing many layers of schist and amphibolite and lenses of quartzite, and extensively dissected by granitic intrusives.

The overburden (unconsolidated sediments overlaying bedrock) on the site may consist of two types of glacial deposits: till and stratified drift. The accompanying illustration shows the approximate distribution of the two materials, as adapted from CGNHS Quadrangle Report No. 31. Stratified drift is known to occupy most of the property. This type of sediment was formed when meltwater issuing from wasting glacier ice transported and deposited rock particles that had accu-

Surficial Geology





MILITARY

HEADQUARTERS

78

POST

LEGEND

-  Area thought to be underlain by coarse, sandy till.
-  Area underlain by stratified drift, primarily sand.

mulated within the ice mass. Larger particles dropped out near the retreating ice while smaller particles were carried farther away; hence, stratified drift deposits tend to be relatively well sorted by grain size, at least in individual layers. On this site, most of the stratified drift consists of sand. A pit at the southern corner of the property showed at least 10 feet of sand.

Till consists of rock particles that were deposited from the ice directly; that is, without substantial transportation by meltwater. Consequently, till commonly contains an unsorted mixture of rock particles of widely varying shapes and sizes. Necessarily, till and stratified drift are not always readily distinguished from one another. If till is distributed on the site as shown by CGNHS Quadrangle Report No. 31, its texture is probably similar to the stratified drift, except that it may be somewhat siltier and stonier.

HYDROLOGY

Although development of the site will probably cause slight to moderate runoff increases, these should be absorbed by the pond/wetland to the southwest of the site with no noticeable effects on peak flows in the outflow stream. The site should be contoured to minimize erosion problems from channeling of runoff in localized areas.

The groundwater table within the southwestern two thirds of the property is probably nearly level, with a very gentle slope to the west. The swales in the broad field would therefore be closer to the water table than the adjacent, relatively high areas. The swales also contain a very silty soil over the coarser substrata. Both of these natural features promote seasonally wet conditions in the swales while the adjoining land remains dry. These conditions must be considered when designing the layout of buildings, septic systems, and water-supply wells.

VEGETATION

The 14± acre site proposed for elderly housing is predominantly open field. A mixed hardwood stand and hardwood swamp make up the remainder of the property (see Vegetation Type Map). Preservation of the mixed hardwood stand along the pond will enhance the aesthetic quality and wildlife habitat value of the property after completion of the proposed development. The removal of dead branches from large trees in Stand A will reduce the hazard of personal injury.

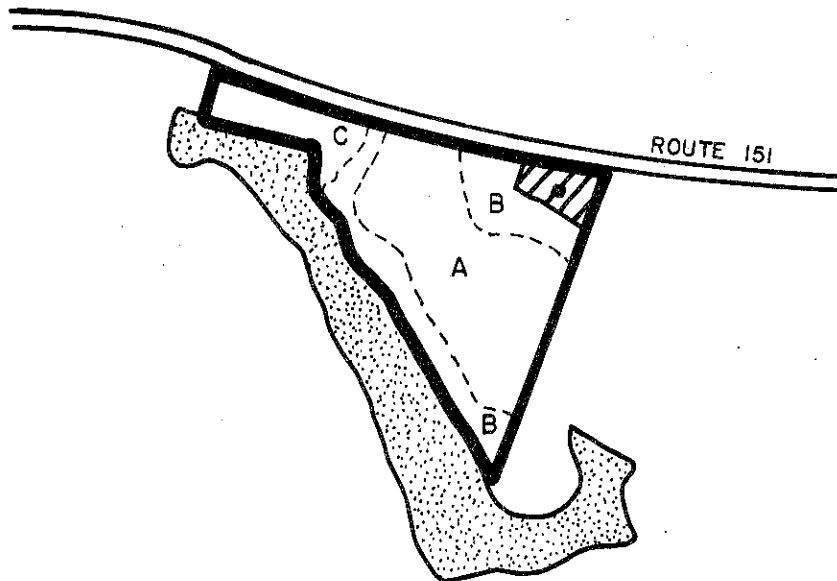
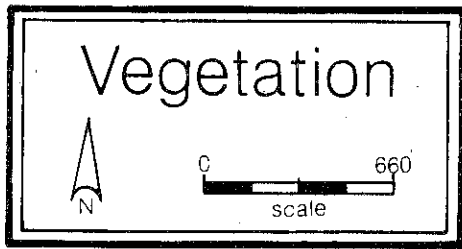
The high water table and poor soil aeration in the hardwood swamp/wetland (Stand C), limit vegetation growth to species that are tolerant of excessive moisture conditions, however early over-crowding often results in slow growing, poor quality trees, which rarely have value for timber products.

Many of the sawlog size trees in the mixed hardwood stand (Stand B) have healthy crowns, but also have occasional large dead branches. These branches may break, causing potential hazard to users of this area. As a precaution these branches should be properly removed prior to completion of the proposed development. This will eliminate, for the most part, the danger of dead branches causing injury to people enjoying this area.

VEGETATION TYPE DESCRIPTIONS

	A	B	C
Stand Type	Open Field	Mixed Hardwoods	Hardwood swamp/ wetland
Acres	7	4	2
Main Stand Size Class*	-	Pole to sawlog-size	Pole
Stocking Level	-	Fully-stocked	Fully-stocked
Main Stand Quality	-	Medium. Largest trees have dead branches.	Poor. Small, broken crowns.
Overstory Components	-	Pignut hickory, white oak, black oak, red maple, black birch, American beech.	Red maple in clumps.
Understory Components	-	Flowering dogwood, red-stemmed dogwood, sassafras, gray birch, highbush blueberry, bluebeech, burning- bush, shadbush, crab apple, hawthorn, multiflora-rose, green brier, fox grape, oriental bittersweet, barberry, bayberry.	Highbush blueberry, sweet pepperbush, speckled alder, multi- flora rose, green brier.
Ground Cover	Grasses, deer tongue, goldenrod.	Grasses, club moss, Japanese honeysuckle.	Tussock sedge, sphagnum moss, skunk cabbage.

- * Seedling size - trees less than 1 inch in diameter at 4 1/2 feet above the ground (dbh).
 Sapling size - trees 1 to 5 inches in dbh.
 Pole size - trees 5 to 11 inches in dbh.
 Sawlog size - trees 11 inches and greater in dbh.



VEGETATION TYPE DESCRIPTIONS

- TYPE A Open field, 7 acres.
- TYPE B Mixed hardwoods, fully stocked, pole to sawlog-size, 4 acres.
- TYPE C Hardwood swamp/wetland, fully stocked, pole-size, 2 acres.

LEGEND

- Road
- Property Boundary
- Vegetation Type Boundary
- Pond
- Residential Area, 1 acre

Enlarging the pond by raising the water level may drown the vegetation which exists in the hardwood swamp (Stand C). If this happens, the hardwood swamp now dominated by clumps of red maple will give way to a growth of water tolerant shrubs and sedges. During the transition period, the red maple are extremely susceptible to windthrow, as their dead root systems no longer function as an anchor for the tree.

At present, this stand has a high windthrow potential. This condition is a result of shallow root systems, caused by the high water table and saturated soils acting as a lubricant. Trees are thus unable to become securely anchored.

SOILS

A detailed soils map of this site and detailed soils descriptions are included in the Appendix to this report, accompanied by a chart which indicates soil limitations for various urban uses. As the soil map is an enlargement from the original 1,320'/inch scale to 660'/inch, the soil boundary lines should not be viewed as absolute boundaries, but as guidelines to the distribution of soil types on the site. The soil limitation chart indicates the probable limitations of each of the soils for on-site sewage disposal, buildings with basements, streets and parking, and landscaping. However, limitations, even though severe, do not preclude the use of the land for development. If economics permit large expenditures for land development and the intended objective is consistent with the objectives of local and regional development, many soils and sites with difficult problems can be used. The soils map, with the publication, New London County Interim Soil Survey Report, can aid in the identification and interpretation of soils and their uses on this site. "Know Your Land: Natural Soil Groups for Connecticut" can also give insight to the development potentials of the soils and their relationship to the surficial geology of the site.

The site occupies an outwash terrace which is oriented in a northwestern direction. The terrace abuts glacial till deposits north of the Boston Post Road. Several large boulders are found on the property in the northwestern corner and in the southwestern portion of the property. Most of the terrace is nearly level, but sloping topography occurs toward the center of the property, defining the terrace breaks. A short steep terraced break occurs along the south edge of the property along the water body.

The sloping terraces or outwash plains are occupied by Hinckley gravelly sandy loam. The soils are designated by the soil unit mapping symbol 60C, Hinckley soils formed in water sorted outwash. The soils are excessively drained and have rapid permeability in the surface layer and subsoil and very rapid permeability in the substratum. Runoff is slow.

The nearly level to gently sloping terraces or outwash plains are occupied by Ninigret fine sandy loam. The soils are designated by the soil unit mapping symbol 25A. Ninigret soils formed in water sorted outwash. The soils are moderately well drained and have moderately rapid permeability. The seasonal high-water table is 18 to 24 inches. Surface runoff is slow to moderate.

A gravel pit and several large boulders were found on the property. An ad hoc symbol (✓) a check mark, on the northwest corner of the property on the soil map, indicates the presence of bedrock close to the soil surface.

The Hinckley soils compose approximately two-thirds of the open land that was investigated. Approximately one-third of the open land in the study site was Ninigret soil.

The Hinckley soils limit development by their sandy and gravelly texture. Excessive permeability severely limits the use of this soil for septic tank absorption fields due to the possibility of polluting groundwater wells. Droughtiness is a limitation to establishing lawns and shrubs.

The Ninigret soils have development limitations due to their seasonal high water table, frost heaving potential and stability. The seasonal highwater table and moderately rapid permeability, severely limits the use of this soil for septic tank absorption fields. Wetness and the potential pollution of groundwater wells are the major factors. Limitations to construction are the tendency for cutbanks to cave, and instability of shallow excavations. Establishing roads and streets are moderately limited due to frost action.

Prime Farmlands

The Hinckley soils, mapped as 60C do not qualify as prime farmlands due to the sloping topography found within the mapping unit. However, the soils do qualify as Additional Farmlands of Statewide Importance.

The Ninigret soils, mapped as 25A, have soils within the mapping unit that qualify as Prime Farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is the land that is best suited to producing food, feed, forage, fiber and oilseed crops. It has the soil quality, growing season, and moisture supply needed to economically produce a sustained high yield of crops when it is treated and managed using acceptable farming methods. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment.

Prime farmland may presently be used for crops, pasture, woodland, or other land, but not urban and built up land or water areas. It should either be used for producing food or fiber or be available for these uses.

There are nine criteria that a soil must meet to be qualified as Prime Farmland. The criteria deal with moisture supply, soil temperatures, pH, water table, salt content, flooding occurrence, erodibility, permeability, and coarse fragments in the surface layer.

The designation of certain soil mapping units as prime farmland does not constitute a recommendation for a particular land use by the USDA Soil Conservation Service.

WATER SUPPLY

No public water supply is available to this site. The nearest source of public water service is in East Lyme, approximately 1.7 miles east of the project site. The Old Lyme Town Plan, September 15, 1975, recommends that long range

consideration be given to the possible extension of the East Lyme water system west along the Boston Post Road to serve this higher density development around Rogers Lake. The Plan recommends that this service be in place by 1985.

The water supply for the initial 24 units of elderly housing is expected to be from on-site sources. By definition this would become a community public supply, thus needing approval of the Public Water Supply Section of the State Department of Health Services. The FmHA has established guidelines which require the applicant for a Rural Rental Housing Loan to document as part of the pre-application submission, a report attesting that the quality and quantity of on-site water meets state and local health standards. It would be expected that prime consideration would be given for the location of a well site in order to secure adequate groundwater protection. In general, a protection-control radius of 150-200 feet, depending upon the type, yield and demand on the well, is necessary from any potential source of pollution.

On this site, it may be feasible to establish either a dug or drilled community well in the stratified drift, or a drilled community well in the underlying bedrock. The feasibility of the former type of well may initially be examined by further inspection of the stratified drift. Overall depth, thickness of saturated section, and textural characteristics of the section would be relevant data for such an examination. If the saturated section is thick and is composed largely of medium-grained sand or coarser particles, a drilled well, properly screened, probably would provide the highest and most reliable yields. If the section is not thick and is composed largely of fine-grained sand or smaller particles, a dug well may be the more practical option. Any final decisions on whether to use a certain type of well should, of course, be preceded by pumping tests of reasonable duration. These tests would be particularly critical to a decision to employ a dug well, since such wells are relatively shallow and may be affected by seasonal variations in the level of the water table.

A bedrock-based well probably would supply smaller yields than a stratified-drift-based well but the former may be more reliable, especially if the saturated section penetrated by the latter is thin. Bedrock that is covered by as much overburden as appears to be present on most of the site is unlikely to be affected as to yields by water-table flucturations. Bedrock yields are virtually impossible to predict because they depend upon the number and size of water-bearing fractures that are intersected by a well and because the distribution of such fractures in bedrock is irregular. Nevertheless, most bedrock wells will supply at least 3 gallons per minute (gpm) on a sustainable basis. If it is assumed that each of the 24 housing units would contain two persons and that each person would require 60 gallons of water a day to meet his/her needs, a well supplying 2 gpm would meet volume requirements (although a slightly higher yield would be desirable to provide a safety margin). Nevertheless, adequate storage facilities would be needed to meet peak demand periods, where withdrawal rates would be many times greater than the actual bedrock recharge rate.

If a stratified-drift-based community well is used, it should be located as far as possible and upslope (northeast) from septic system leaching fields. Large separating distances are also desirable for, but less crucial to, a bedrock-based well.

WASTE DISPOSAL

No municipal sewers exist in Old Lyme, therefore waste disposal will be by on-site septic system. The Non-profit Corporation initially plans to construct 24 dwelling units, probably in three structures of eight (8) units each. Elderly housing units are composed of small one to two person households, apartments have modest utilities (no dishwashers or garbage disposers) and washing machines do not usually exceed one per structure. The volume of waste water flow from this development will be low and certainly well below what could occur should this site be developed to the density permitted in the zoning regulations. As part of the non-profit organization's pre-application to the FmHA, documentation must be prepared as to site soil conditions and percolation tests. The applicant will be required to provide assurances that this development will not pollute groundwater. The local Health Director must review and approve on-site waste disposal plans and inspect installation of systems. FmHA will consider reports from SCS as adequate documentation of soil types and limitations. The proposed elderly housing site is within Old Lyme's Sewer Avoidance area. On-site septic systems are proposed for this area and no future municipal sewers are planned. The sewer avoidance program contemplates the creation of a Water Pollution Control Authority to carry out the operation of regular pumping, tank/system inspections and groundwater monitoring.

Based on visual observations, consideration of the topography and soil mapping data the most favorable area for this purpose would be in the upper, rear portion of the site. The soil in this area (small borrow pit) was sandy and appeared to be well drained. Ground elevation also appeared to be sufficiently elevated above the groundwater table. In order to confirm and establish criteria for a possible sewage disposal system(s) design, an adequate number of deep observation pits and soil percolation tests should be made. The use of this area, in lieu of the lower and expected less favorable terrain (low soil porosity, seasonal high groundwater, proximity to a well site) would probably require the pumping of sewage effluent. In addition, if each building is not served by a separate subsurface sewage disposal system, it will then become necessary to have the system approved by the state as a public sewage system.

ROADS AND UTILITIES

The proposed elderly housing site is accessible and has frontage on State Route 51, known as the Boston Post Road. This road is State maintained, and is classified for State highway purposes as a major rural collector. This road has the existing capacity to accommodate the minor additional traffic impacts which would be generated by a 24 unit elderly housing development. Prior to designing an entrance into the elderly housing site the non-profit organization's engineer should meet with CONNDOT (Department of Transportation) district officials to discuss location requirements and sight line distances. In its natural state the road frontage of the proposed site is 10-12 feet below the grade of the Boston Post Road. Recontouring of this site's frontage to provide for a level access road will be necessary to assure safe intersection with the State highway.

SERVICES TO SUPPORT DEVELOPMENT

These elderly units will require fire, police, solid waste disposal and transportation services. The access road into the development and parking areas are not normally turned over for public use and would be retained under the ownership/maintenance responsibilities of the non-profit corporation. Volunteer fire service is available in Old Lyme. The fire station is located in the village area on Lyme Street, approximately 3 1/2 miles away from the site. Restoration of the pond adjacent to the site would provide the elderly community with a readily accessible fire pond. Police protection can be adequately provided by Old Lyme's Resident State Troopers and Constable force. In designing the special features of these elderly units the non-profit organization should include in their loan application the installation of emergency communication equipment in each unit. The provision of a centralized fire alarm/emergency medical system connected to Old Lyme's communication room and soon-to-be-established 911 program would improve the response time of fire, police and ambulance to this complex. The solid waste generated by the residents of this complex is not expected to be significant. Old Lyme is now conducting a study of its town landfill site and alternative solid waste transfer methods to provide for long term municipal waste disposal.

The proposed site is located approximately 3 1/2 miles north of Old Lyme's retail/personal service area and about 3/4 miles from Laysville neighborhood center. Laysville center does have a small grocery/general store complex; however, because of the absence of sidewalks along Route 51 elderly residents would probably not want to make this trip on foot. Elderly residents who are unable to drive will have to rely on neighbors for transportation and/or the Estuary Council of Senior Clubs' dial-a-ride van service. The Senior Club's transportation program is subsidized by the Towns of Old Lyme and Lyme. This service provides door-to-door transportation to seniors/handicapped for shopping, medical, hot lunch programs and social purposes.

COMPATIBILITY WITH SURROUNDING LAND USES

With the exception of two small residential lots adjacent to the northeast corner of the proposed elderly housing site the 12-14 acre parcel is surrounded by vacant land. This area of Old Lyme is now zoned for two residential densities: the road frontage for a depth of 400 feet is in the R-20 zone (20,000 sf lots) and the remainder of the site is in RU-80 zone (80,000 sf lots). The use of this site for residential purposes is consistent with the Town Plan; however, the non-profit organization will have to petition the Zoning Commission for amendments to permit multiple dwellings, lower minimum floor area requirements, and variations to building/lot design standards prior to constructing elderly housing on this site.

ALTERNATIVE LAND USES

The current property owner has stated that over 20 years ago this site was used for agricultural crop production. However, in recent times only hay has been taken from this site because of its small crop yield, seasonal wet areas and expensive cost of fertilization. A portion of this site has been identified as meeting the technical criteria of prime farmland as established by the USDA Soil

Conservation Service. The FmHA will have to weigh the soil scientist's and New London County District Board's position on the taking of this land for non-agricultural purposes against the difficult realities which the Lyme's Non-profit Board has encountered in finding a site of reasonable cost and suitable building characteristics. Of equal consideration is the possibility that should this site be lost to elderly housing, the alternative use may not be agriculture but as stated by the present property owner, a residential subdivision or sand/gravel excavation.

AESTHETIC QUALITY

This site offers an opportunity to design an elderly housing complex on a parcel of rolling and flat topography. Orientation of the units to take advantage of the site's existing natural buffers and pond/wildlife area would enhance the complex's residential atmosphere.

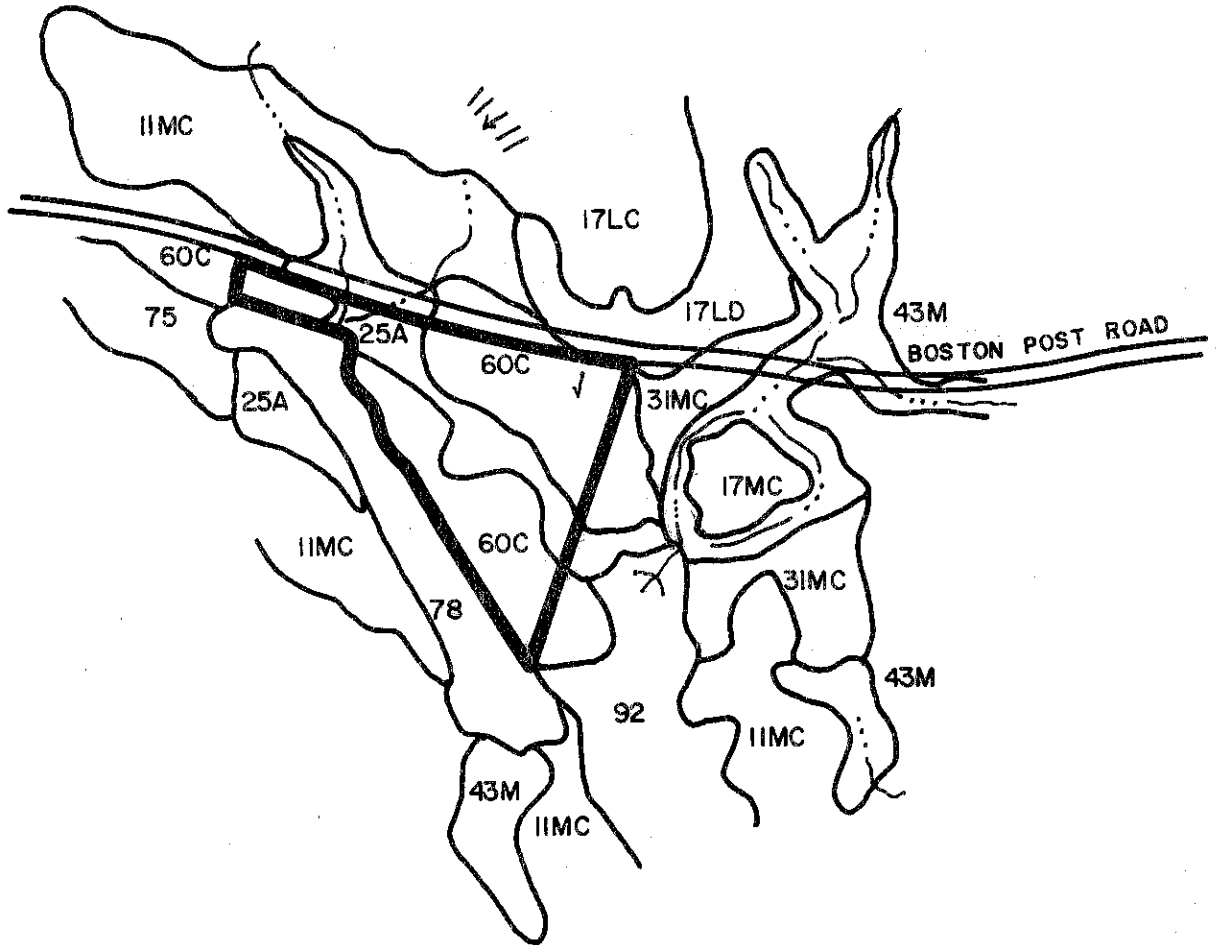
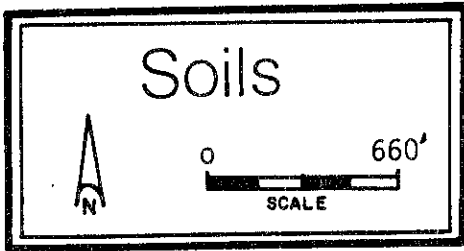
SOURCES AND SIGNIFICANCE OF IMPACT

Evaluation of the natural resource base of the site reveals several areas of potential concern to the Lyme Elderly Housing Non-profit Corporation. These concerns relate to establishment of on-site wells and on-site septic systems in the Hinckley soils. Due to the rapid permeability which is a characteristic of these soils, caution should be taken in location of these on-site facilities. Septic systems should be located downslope of wells to minimize potential infiltration of effluent into the groundwater supply for the wells.

Water from on-site sources can be obtained from wells drilled in the bedrock or dug wells in the stratified drift. Dug wells on this site may have higher yields, but are subject to seasonal fluctuations in the water table. Bedrock based wells may have lower yields, but would not be subject to seasonal fluctuation.

Minor grading alterations may be necessary for access to the site, however, the general Team opinion indicates that the site is suitable for its proposed use for clustered elderly housing units.

Appendix



LEGEND

<u>Symbol</u>	<u>Soil Name</u>	<u>Slope</u>
60C	Hinckley gravelly sandy loam	3-15%
25A	Ninigret fine sandy loam	0-5%

SOIL NAME/MAPPING
SYMBOLS

USE AND LIMITATIONS OF SOILS

	Septic tank	Dwellings	Dwellings with	Local roads	Lawns
	absorption fields	without basements	basements	and streets	
25A (PF)	Severe:wetness	Moderate: wetness			
	Minegret fine sandy loam, 0-5% slopes				Moderate:frost Slight action
60C	Moderate: slope Excessive drainage may cause pollution	Moderate: slope		Moderate: slopes	Moderate:slope droughty, small stones
17MC	Severe: slope depth to bedrock				
	Hollis-Rock Out- crop complex 3-15% slopes				
31MC	Severe: perc's slowly; wetness	Severe: frost action	Severe: wetness	Severe: Frost action	Severe: large stones, wet- ness
	Woodbridge and Rainbow, extremely stony soils 3-15% slopes				
43M	Severe: wetness perc's slowly	Severe:wetness frost action	Severe:wetness	Severe:wetness,Severe: frost action	Severe: large stones, wet- ness
	Ridgebury, Liecester & Whitman extremely stony fine sandy loams				
17 LC	Moderate for Charlton:slope, large stones severe for Hollis: shallow to bedrock, rockiness				
	Charlton-Hollis Fine sandy loams 3-15% slopes				
11 MC	Severe: large stones fine sandy loam 3-15% slopes	Severe:large stones	Severe:large stones	Severe:large stones	
	Canton & Charlton extremely stony fine sandy loam 3-15% slopes				
75	Severe:wetness				
	Scarboro sandy loam				

SOIL INTERPRETATIONS FOR URBAN USES

The ratings of the soils for elements of community and recreational development uses consist of three degrees of "limitations:" slight or no limitations; moderate limitations; and severe limitations. In the interpretive scheme various physical properties are weighed before judging their relative severity of limitations.

The user is cautioned that the suitability ratings, degree of limitations and other interpretations are based on the typical soil in each mapping unit. At any given point the actual conditions may differ from the information presented here because of the inclusion of other soils which were impractical to map separately at the scale of mapping used. On-site investigations are suggested where the proposed soil use involves heavy loads, deep excavations, or high cost. Limitations, even though severe, do not always preclude the use of land for development. If economics permit greater expenditures for land development and the intended land use is consistent with the objectives of local or regional development, many soils and sites with difficult problems can be used.

Slight Limitations

Areas rated as slight have relatively few limitations in terms of soil suitability for a particular use. The degree of suitability is such that a minimum of time or cost would be needed to overcome relatively minor soil limitations.

Moderate Limitations

In areas rated moderate, it is relatively more difficult and more costly to correct the natural limitations of the soil for certain uses than for soils rated as having slight limitations.

Severe Limitations

Areas designated as having severe limitations would require more extensive and more costly measures than soils rated with moderate limitations in order to overcome natural soil limitations. The soil may have more than one limiting characteristic causing it to be rated severe.

About the Team

The Eastern Connecticut Environmental Review Team (ERT) is a group of professionals in environmental fields drawn together from a variety of federal, state, and regional agencies. Specialists on the Team include geologists, biologists, foresters, climatologists, soil scientists, landscape architects, archeologists, recreation specialists, engineers and planners. The ERT operates with state funding under the supervision of the Eastern Connecticut Resource Conservation and Development (RC&D) Area.

The Team is available as a public service at no cost to Connecticut towns.

PURPOSE OF THE TEAM

The Environmental Review Team is available to help towns and developers in the review of sites proposed for major land use activities. To date, the ERT has been involved in reviewing a wide range of projects including subdivisions, sanitary landfills, commercial and industrial developments, sand and gravel operations, elderly housing, recreation/open space projects, watershed studies and resource inventories.

Reviews are conducted in the interest of providing information and analysis that will assist towns and developers in environmentally sound decision-making. This is done through identifying the natural resource base of the project site and highlighting opportunities and limitations for the proposed land use.

REQUESTING A REVIEW

Environmental reviews may be requested by the chief elected officials of a municipality or the chairman of town commissions such as planning and zoning, conservation, inland wetlands, parks and recreation or economic development. Requests should be directed to the Chairman of your local Soil and Water Conservation District. This request letter should include a summary of the proposed project, a location map of the project site, written permission from the landowner allowing the Team to enter the property for purposes of review, and a statement identifying the specific areas of concern the Team should address. When this request is approved by the local Soil and Water Conservation District and the Eastern Connecticut RC&D Executive Council, the Team will undertake the review on a priority basis.

For additional information regarding the Environmental Review Team, please contact Jeanne Shelburn (889-2324), Environmental Review Team Coordinator, Eastern Connecticut RC&D Area, 139 Boswell Avenue, Norwich, Connecticut 06360.

