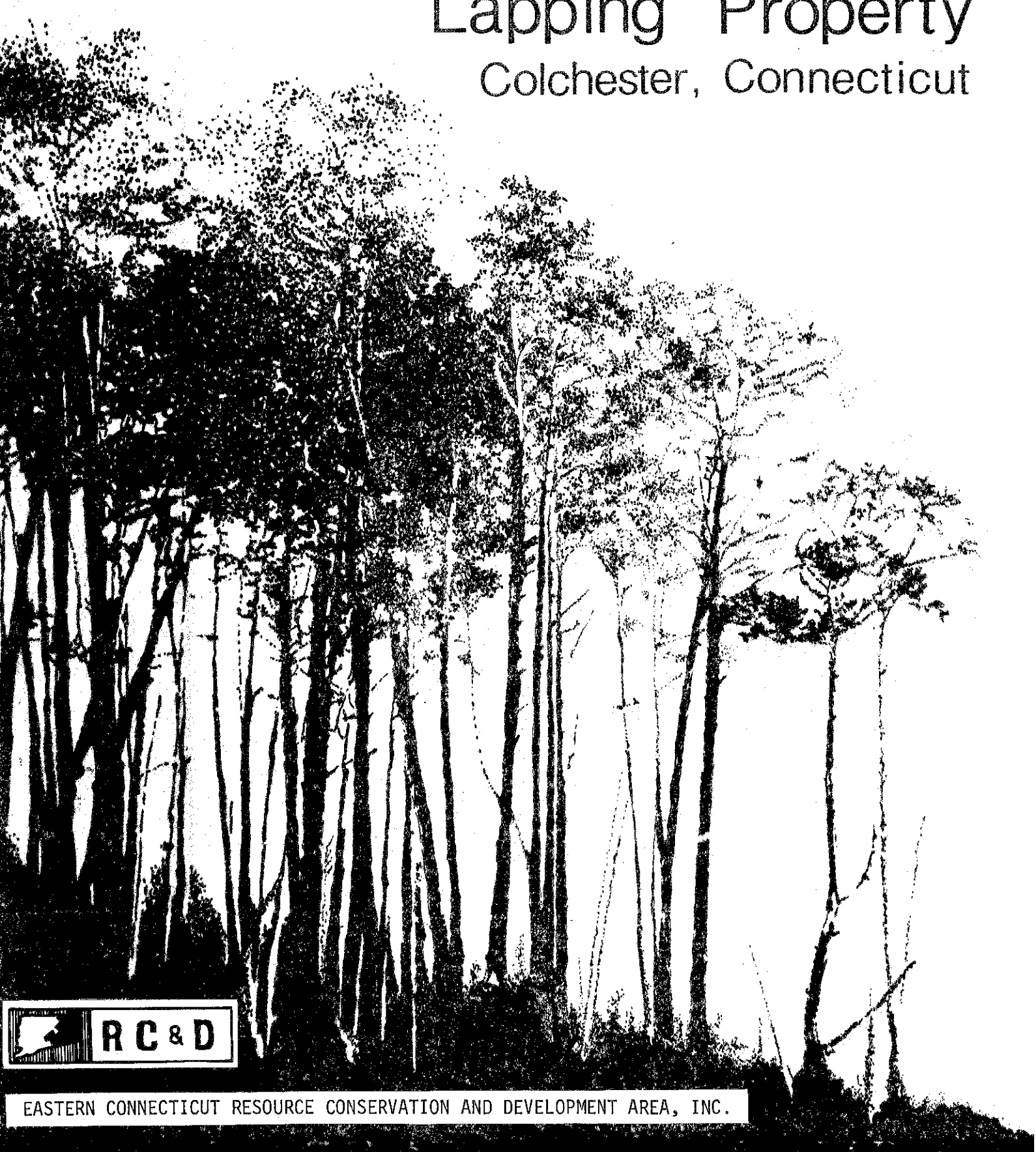


Environmental Review Team Report

Lapping Property Colchester, Connecticut



EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.

Environmental Review Team
Report
on

Lapping Property
Colchester, Connecticut

April 1979

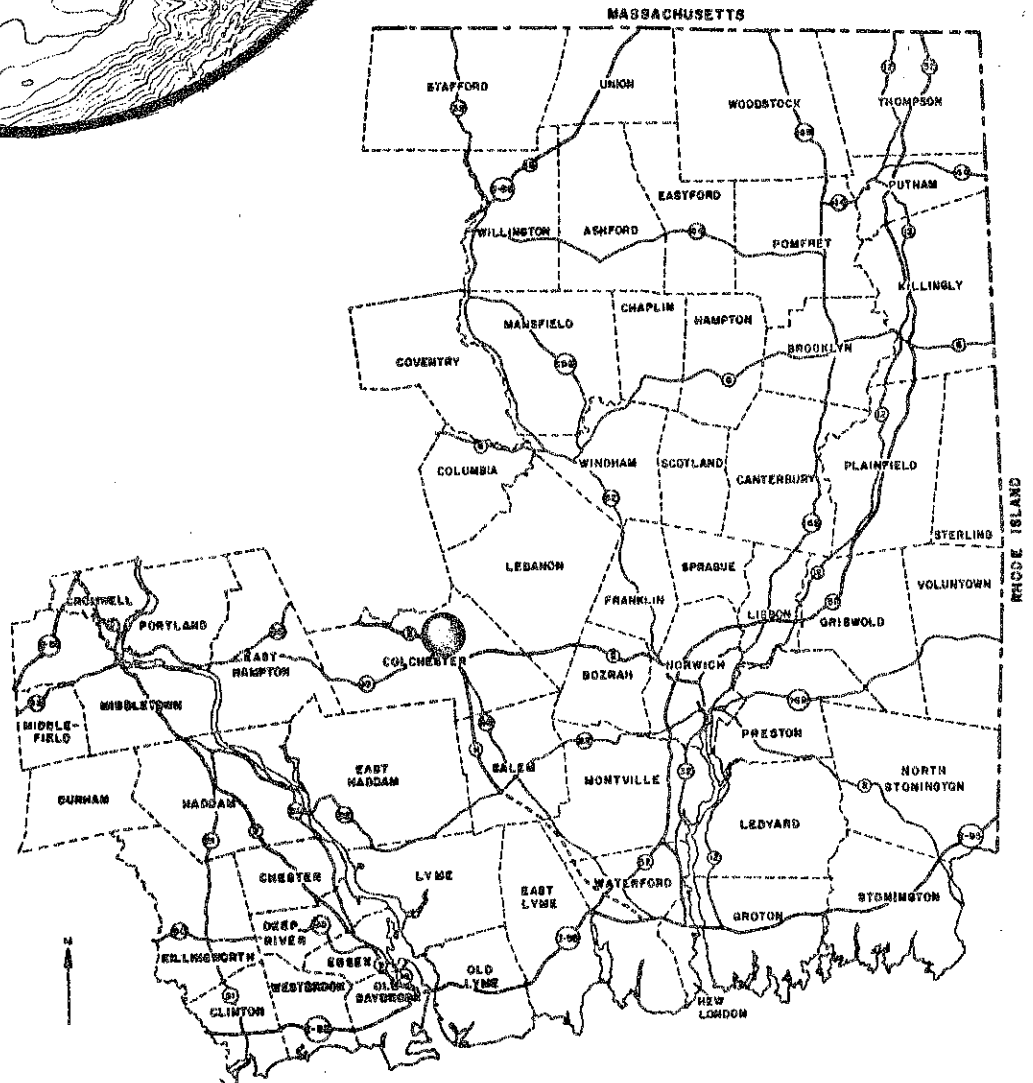
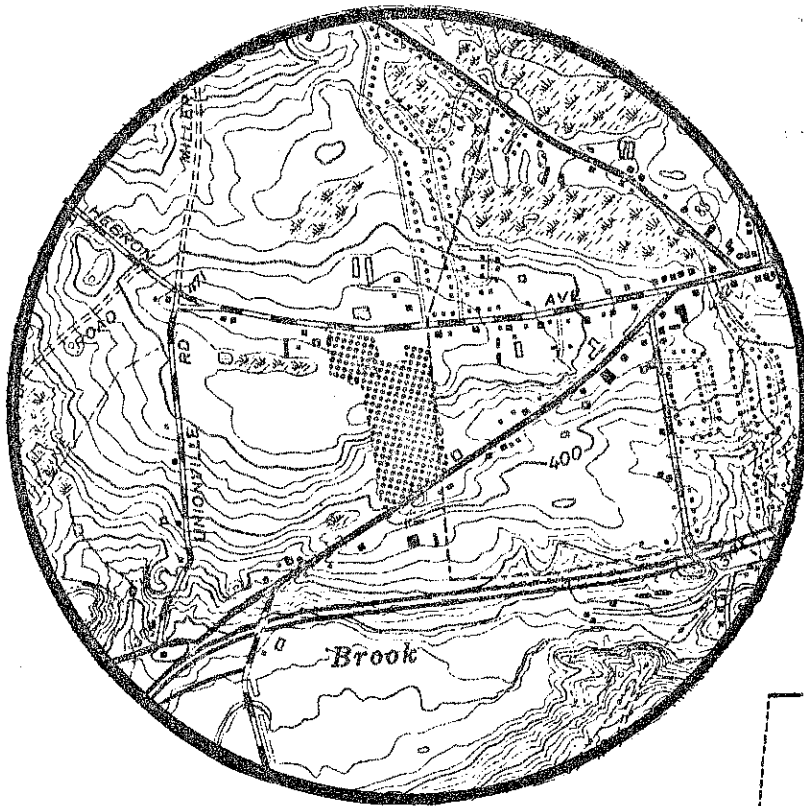


eastern connecticut resource conservation & development area

environmental review team
139 boswell avenue
norwich, connecticut 06360

Location of Study Site

LAPPING PROPERTY
COLCHESTER, CONNECTICUT



EASTERN CONNECTICUT
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

ENVIRONMENTAL REVIEW TEAM REPORT
ON
THE LAPPING PROPERTY
COLCHESTER, CONNECTICUT

This report is an outgrowth of a request from the First Selectman of Colchester 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. The request was approved and the measure was reviewed by the Eastern Connecticut Environmental Review Team (ERT).

The soils of the site were mapped by a soil scientist from the United States Department of Agriculture, Soil Conservation Service (SCS). Reproductions of the soil survey map, a table of soils limitations for certain land uses and a topographic map showing property boundaries were distributed to all Team members prior to their review of the site.

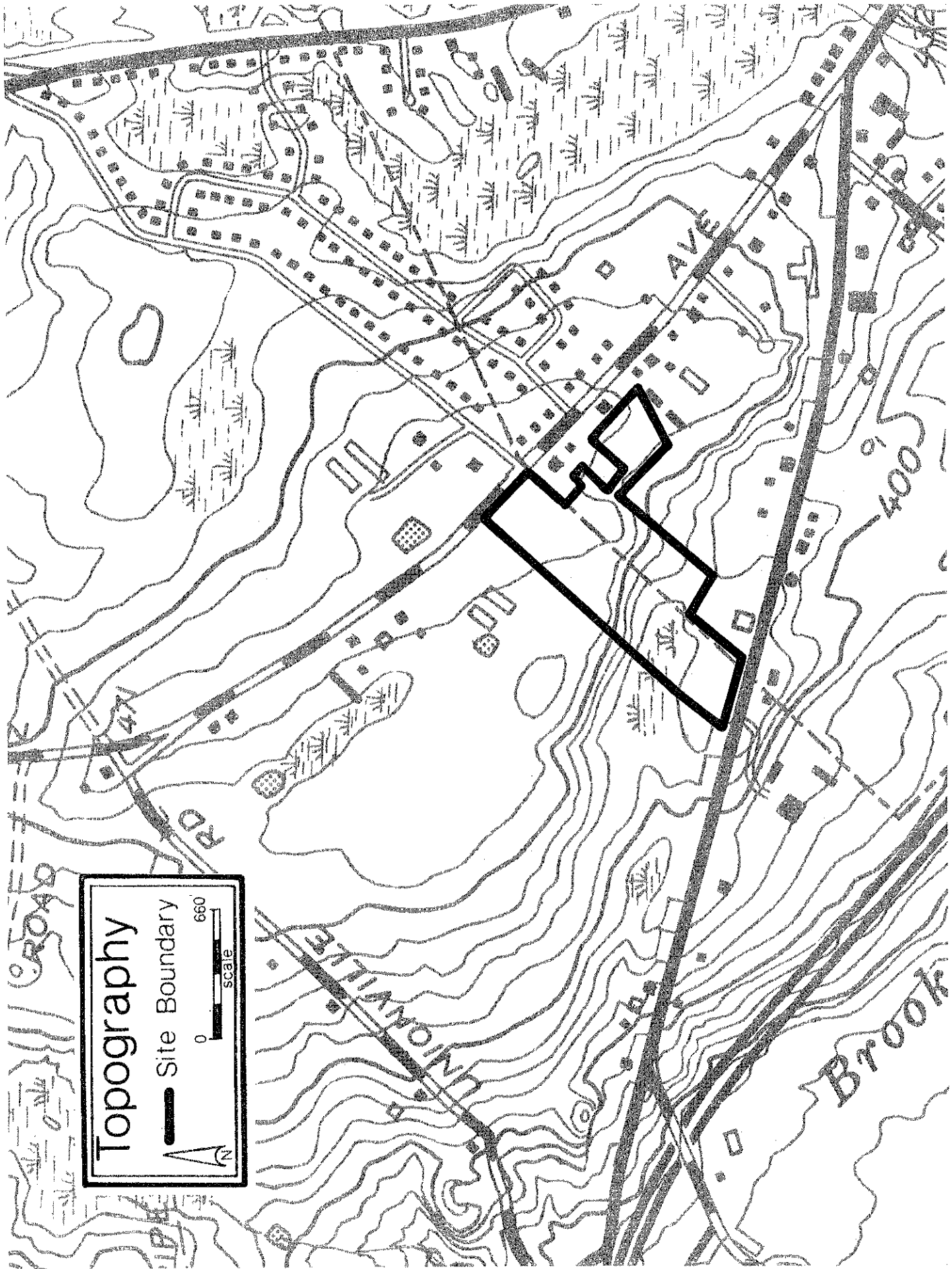
The ERT that field-checked the site consisted of the following personnel: Gary Parker, District Conservationist, Soil Conservation Service (SCS); Rob Rocks, Forester, Connecticut Department of Environmental Protection (DEP); Michael Zizka, Geologist, DEP; Andy Petracco, Recreation Specialist, DEP; Don Capellaro, Sanitarian, State Department of Health; Gerhard Amt, Regional Planner, Southeastern Connecticut Regional Planning Agency; and Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Area.

The Team met and field checked the site on Thursday, February 15, 1978. Reports from each contributing 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. As requested by the Town, this report, which identifies the existing resource base of the Lapping Property, shall constitute the environmental assessment portion of the Town's open space application for Federal Department of the Interior, Heritage Conservation and Recreation Service funds to assist in the acquisition of this property.

The Eastern Connecticut RC&D Area Committee hopes that this report will be of value and assistance in making any decisions regarding 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.



DESCRIPTION OF THE PROPOSAL

The Eastern Connecticut Environmental Review Team was asked to prepare an environmental assessment for proposed future development of the Lapping Property in Colchester. The 25 acre site is presently owned by the Town and is located between Hebron Road to the north and Old Route 2 to the south. The Recreation Commission plans to develop additional baseball fields and parking areas, a football field, soccer field, track, and picnic area. The additional improvements are needed to accommodate the increasing local demand for organized sports facilities.

Although Colchester contains considerable land devoted to open space uses, the Lapping Property is the only one which contains facilities owned by the Town and available to the general public for active recreation use. The following table enumerates the open space land in Colchester at the present time:

EXISTING OPEN SPACE AND RECREATION FACILITIES TOWN OF COLCHESTER, CONNECTICUT

| <u>Public Open Space</u> | <u>Acres</u> |
|---------------------------------------------------|--------------|
| Salmon River State Forest | 2,140 |
| Town Land (Old Railroad ROW) | 8 |
| Town Green | 5 |
| State Fish and Game Access Areas | 30 |
| Town Land (Vicinity of sanitary landfill) | 140 |
| Open Space in Beechwood Subdivision (undeveloped) | 16 |
| <u>Restricted Open Space</u> | |
| Norwich Reservoir Property | 1,060 |
| East Haddam Fish and Game Club | 1,000 |
| Colchester Fish and Game Club | 90 |
| Lincoln Lake Lodge | 10 |
| New Britain Hunting and Fishing Club | 120 |
| <u>Public Recreation</u> | |
| School Playground | 45 |
| Lapping Property (Town) | 18 |
| Boat Launching Site at PickereI Lake (State) | 2 |
| Day Pond State Park | 184 |

SOURCE: Plan of Development, 1972, Colchester, Connecticut

ENVIRONMENTAL ASSESSMENT DESCRIPTION OF THE ENVIRONMENT

PRESENT/PAST LAND USES

The Lapping Property was purchased for town recreational purposes in September 1969. Prior to that time the site was primarily farmland with a Little League Field developed on the northernmost portion of the parcel.

SOCIO-ECONOMIC CONDITIONS

Colchester's population increased from 6,603 to an estimated 7,900 in 1978.* SCRPA projects a population of 8,300 by 1980 and 9,500 by 1990. The population is predominantly white, with 200 persons, or about 3% of the population, indicated as non-white by the 1970 Census of Population. Although the Borough of Colchester contains a small commercial center and there are small businesses scattered throughout the Town, many wage-earners residing in Colchester find employment in the major urban areas of Hartford, Norwich, and New London, all of which are accessible over excellent highways.

EXISTING TRANSPORTATION ROUTES

Access to the Lapping Property is excellent. It has frontage on both Old Hebron Road and Old Route 2. The intensity of recreation development proposed for the site should generate the need for more off-street parking space than is presently available. Adequate parking areas should be included in the site plan to preclude the need for parking on the road shoulders.

SURFACE AND SUBSURFACE GEOLOGIC CONDITIONS

Bedrock underlying the site has been mapped and described in The Bedrock Geology of the Moodus and Colchester Quadrangles, Connecticut Geological and Natural History Survey Quadrangle Report No. 27, by Lawrence Lundgren, Jr., Lawrence Ashmead, and George L. Snyder (1971). The bedrock is part of a unit known as the Brimfield Schist. This unit consists primarily of weak, coarse-grained, well-foliated rocks that are rich in the minerals biotite, muscovite, quartz, and plagioclase. Less common, but locally prominent, minerals include sillimanite, garnet, and hornblende. Small amounts of iron oxide and iron sulfide minerals are present within much of the rock. The iron oxides, which are colored in various shades of red, brown, and yellow, no exposures were observed on the site itself.

The bedrock is covered by a blanket of glacial till, a deposit consisting of rock particles of varied shapes and sizes. Although the upper few feet of the till may be rather granular and loose in some places, deeper parts are usually very tightly compact, a result of both the mode of deposition (beneath glacier ice) and

* Connecticut Department of Health.

the rotten-weathering characteristic of the parent rocks (which resulted in a high percentage of fine materials).

No commercially valuable mineral deposits are believed to exist on the site.

SOILS

The soils found on the Lapping Property fall into the following categories:

1) The Canton series consists of gently sloping, sloping, moderately steep and steep, well-drained soils on uplands. They formed in a fine sandy loam mantle underlain by friable gravelly sand glacial till. Canton soils have moderately rapid or rapid permeability. Major limitations are related to slope and stoniness.

2) The Charlton series consists of gently sloping, sloping, moderately steep, and steep, well-drained soils on uplands. They formed in friable glacial till. Charlton soils have moderate to moderately rapid permeability. Major limitations are related to slope and stoniness.

3) The Hollis series consists of gently sloping, sloping, moderately steep and steep, shallow, well-drained soils on uplands where relief is influenced by the underlying bedrock. They formed in glacial till less than 20 inches deep, over granite, gneiss, and schist bedrock. Hollis soils have moderate permeability. Major limitations are related to depth to bedrock, rockiness, and slope.

4) The Leicester series consists of nearly level, poorly drained soils on uplands. They formed in friable glacial till. Leicester soils have moderately rapid permeability and a high water table at or near the surface 7 to 9 months of the year. Major limitations are related to wetness and stoniness.

5) The Ridgebury series consists of nearly level, poorly drained soils on drumlins, and rounded or elongated hills of uplands. They formed in compact glacial till. Ridgebury soils have moderate to moderately rapid permeability in the surface layer and subsoil, slow or very slow permeability in the substratum (fragipan), and a high water table at or near the surface 7 to 9 months of the year. Major limitations are related to stoniness, wetness, and slow permeability in the substratum.

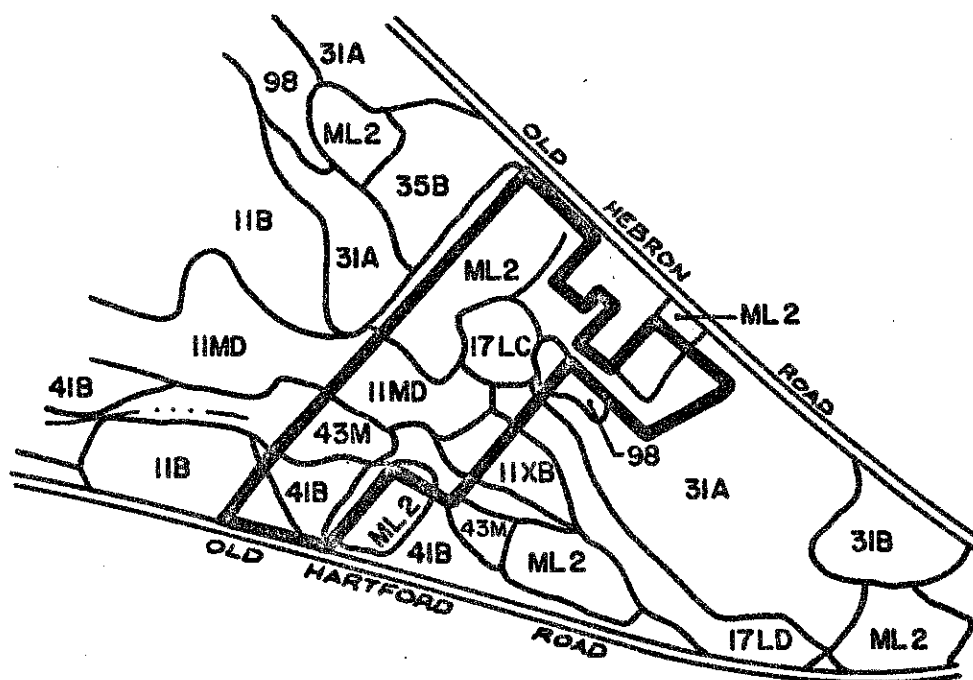
6) The Sutton series consists of nearly level and gently sloping, moderately well drained soils on uplands. They formed in friable glacial till. Sutton soils have moderate or moderately rapid permeability, and a seasonal high water table at 18 to 24 inches. Major limitations are related to stoniness and wetness.

7) Udorthents are areas that have been disturbed, to an extent that the natural layers are no longer recognizable. This occurs when soil material has been removed, or filling occurs and the soil profile is buried and no longer a major factor in interpreting an area for land use.

8) The Whitman series consists of nearly level, very poorly drained soils on uplands. They formed in compact glacial till. Whitman soils have moderate to moderately rapid permeability in the surface layer and subsoil, slow or very slow permeability in the substratum (fragipan), and a water table at or near the surface 9 to 10 months of the year. Major limitations are related to slow permeability, wetness and stoniness.

Soils

LAPPING PROPERTY
COLCHESTER, CONNECTICUT



This is an enlargement from the original 1,320'/inch scale to 660'/inch.

Information taken from: Interim Soil Survey Report, New London County, Connecticut, 1978; soil survey sheet no. 2652, prepared by United States Department of Agriculture, Soil Conservation Service. Advance copy, subject to change.

SOIL LEGEND

| Map Symbol | Soil Name |
|------------|---------------------------------------------------------------------|
| 11B | Canton and Charlton fine sandy loam, 3-8% slopes |
| 11XB | Canton and Charlton very stony fine sandy loam, 3-8% slopes |
| 11MD | Canton and Charlton extremely stony fine sandy loams, 15-35% slopes |
| 17LC | Charlton-Hollis fine sandy loams, 3-15% slopes |
| 17LD | Charlton-Hollis fine sandy loams, 15-35% slopes |
| 31A | Woodbridge fine sandy loam, 0-3% slopes |
| 41B | Sutton fine sandy loam, 3-8% slopes |
| 43M | Ridgebury, Leicester, and Whitman extremely stony sandy loams |
| 98 | Ridgebury fine sandy loam |
| ML2 | Udorthents, smoothed (made land) |

8) The Woodbridge series consists of nearly level, gently sloping and sloping, moderately well-drained soils on drumlins, and rounded or elongated hills of uplands. They formed in compact glacial till. Woodbridge soils have moderate permeability in the surface layer and subsoil, slow or very slow permeability in the substratum (fragipan), and a seasonal high water table at 18 to 24 inches. Major limitations are related to wetness, slow permeability and stoniness.

The soil survey map and the accompanying charts indicating soil limitations for certain land uses further distinguish the soil types and their potential for the listed land uses. As the detailed soils map provided here is an enlargement from the original 1,320'/inch to 660'/inch scale, the soil boundary lines shown, should not be viewed as absolute boundaries but rather as guidelines to the distribution of soil types on the property. The soils map along with "Interim Soil Survey Report: New London County, Connecticut" (USDA-SCS 1978), can serve as an educational tool regarding the identification and interpretation of soils.

Soils on the site range from the well-drained Hollis series to the poorly drained Ridgebury-Leicester-Whitman series, a regulated wetland soil under Public Act 155. Extensive filling and terracing will be required to construct the proposed football field. The resulting fill slope will be susceptible to erosion if not adequately protected and stabilized. Given the proximity of this area to the large wetland on the site, a comprehensive sediment-and-erosion-control plan should be prepared and implemented during construction of this facility. Technical expertise for developing such a plan is available from the New London County Soil Conservation Service field office.

WATER RESOURCES

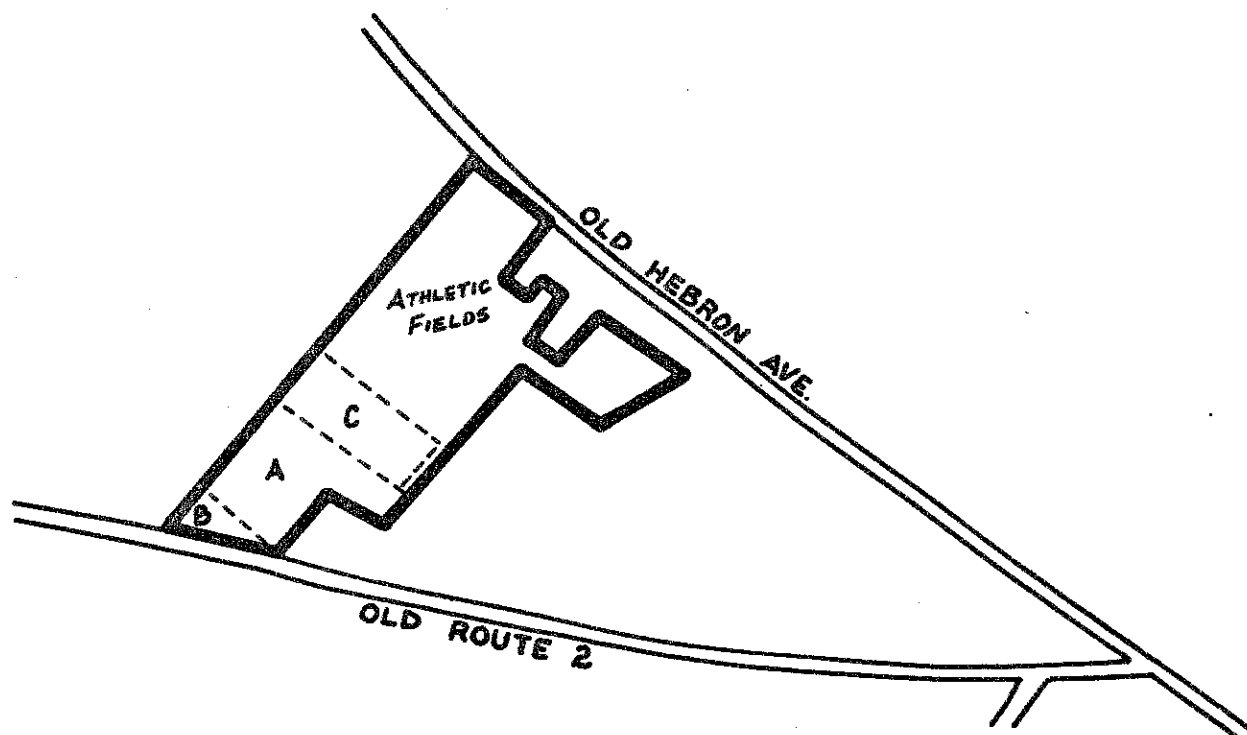
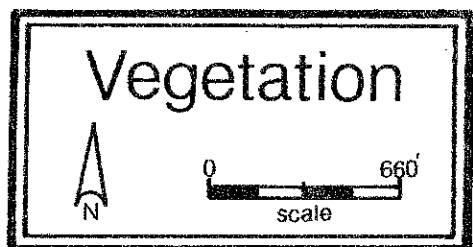
No high-yielding sand-and-gravel aquifers are believed to exist within the property. The schist bedrock, which would be the site's principal aquifer, is not a type that is often highly productive, and no exceptional yields would be anticipated from a well drilled on the site. Because of the mineralogy of the Brimfield Schist, water drawn from this unit commonly has high concentrations of iron and/or manganese. Water from many wells in the Colchester area requires filtration to alleviate this problem. Nevertheless, some wells drilled into the Brimfield Schist supply relatively pure water, probably as a result of tapping layers with few iron- and manganese-bearing minerals.

At the present time potable water to the sanitary service building is from the Colchester public water supply. Therefore, any expansion to the sanitary service building would not change the source of water supply. It is assumed the existing water line is of suitable size to provide sufficient water under adequate pressure for the intended purpose.




In terms of developing a possible picnic area at the lower portion of the site, consideration should also be given for bringing a water line to this area and provide a suitable tap for picnickers.

CLIMATE

The climate is typical of southern New England. Cool dry air from the sub-arctic regions of North America and moist warm air from the Gulf of Mexico have a major effect on day-to-day weather.



LEGEND

-  Road
-  Property Boundary
-  Vegetation Stand Boundary

LEGEND

- STAND A Hardwood-Swamp Sapling to Pole-size, Over-stocked
- STAND B Mixed Hardwoods Sapling to Pole-size, Fully-stocked
- STAND C Old Field-Red Cedar Sapling to Pole-size, Fully-stocked

* Sapling-size = Trees 1 to 5 inches in diameter at breast height.
 Pole-size = Trees 5 to 11 inches in diameter at breast height.

Average winter temperature is 29°F and average summer temperature is 69°F. The length of the growing season averages 200 days. Annual precipitation averages nearly 48". Seasonal snowfall averages 26".

VEGETATION

Three distinct vegetation types appear on this site. These types are located on the accompanying Vegetation Map and are described as follows:

Stand A. Hardwood-swamp. Poor-quality sapling to pole-size red maple are present in this 4-acre over-crowded stand. The understory contains highbush blueberry. Ferns, club mosses and marsh grasses provide ground cover on the drier parts of this site. The poorer quality trees and understory vegetation have been removed in the part of this stand which has been proposed for a picnic area. Many of the stumps which were left are sprouting heavily.

Stand B. Mixed Hardwoods. Sapling- to pole-size white oak, black oak, and hickory, with occasional red maple, aspen, gray birch, and red cedar, form the overstory in this fully-stocked 1-acre stand. Hardwood tree seedlings, high bush blueberry, and shadbush are present where the understory has not been removed. Parts of this stand have also been thinned in preparation for the picnic area.

Stand C. Old Field. Sapling- to pole-size red cedar occupy this fully-stocked 2.5 acre stand. Black oak, black cherry, and apple trees are also present but in low numbers. The understory species present are high bush blueberry and barberry. Grasses are the main component on this area's ground cover.

PROBABLE FUTURE ENVIRONMENT

Vegetation Area C would eventually produce quality cedar poles if the project were not initiated. The black oak present in this stand would in time overtop the cedar and slowly shade it out, eventually producing an oak or oak-hickory dominated forest in currently undeveloped areas.

ENVIRONMENTAL IMPACT

QUANTIFIABLE LAND USE CHANGES

The Lapping Property is well-located with respect to the area of greatest population concentration in the Town. It is located on the western edge of the Borough of Colchester, an area with significant growth potential. A public water supply presently serves the area of the site, and public sewers are scheduled for all of this area of the Town within the next few years. These factors, together with the Lapping Property recreation facilities, make this general area very desirable for residential development.

EFFECT ON WATER RESOURCES

The only potentially noticeable effects that the proposal might have on water resources would come from increased use of the site's septic system and/or from grading and filling operations. Assuming the adequacy of the septic system to handle increased usage, the effect on groundwater should be minor. Moreover, any change in groundwater quality would not influence the availability or quality of drinking water, since the site is served by public water-supply facilities. Grading and filling operations have a potential both for temporary changes in surface-water quality and for siltation of the wetland on the property. Disturbance of the natural soil or the addition of fill to a site commonly increases mineral concentrations in water flowing through and from the site. These concentrations decrease over time. It is unlikely that such temporary increases within the property would be deleterious. The siltation problem can be avoided by careful sediment-and-erosion controls.

EFFECT ON VEGETATION

Part of the proposed picnic area is located in or very close to the hardwood swamp (Stand A). As this area is developed, windthrow damage may become an increased hazard. Windthrow is a process by which shallow-rooted trees are blown down by moderate winds. Trees in this stand are crowded with many intertwining root systems. If large openings are made during development, wind may be able to travel through the stand and cause increased windthrow hazard.

Thinning this swamp area will allow the trees to become somewhat more stable over time. This may be accomplished during the winter when ice is present. No more than one third of the trees should be removed. Only those of damaged or poor quality should be removed, leaving the healthier trees to become more stable.

The vegetation making up Stand C will be completely removed to make room for the proposed athletic field expansion. A total of three to five cords per acre of red cedar posts and green fuelwood will be generated. This area will be filled, graded, and planted to sod.

The picnic area proposed in parts of Stand A and B will produce some impact on the surrounding vegetation.

Soil compaction accompanying the increased use of this area may eliminate ground cover vegetation and eventually cause the trees, for which soil conditions are more critical, to die.

If fireplaces are provided, understory vegetation in this and surrounding areas may be gathered, used as kindling, and eliminated.

SEWAGE DISPOSAL

The existing sanitary facilities building is being serviced by an on-site sub-surface sewage disposal system. The building and the sewage disposal system is to be expanded in order to accommodate increased usage. Although no specific information was given as to the existing sewage disposal system, it has apparently been functioning satisfactorily during the time it has been operational. Soil mapping

data indicates this area to generally have moderate to severe limitations for sewage disposal purposes. Visual observations revealed a generally flat area near the service building, particularly towards the front, with the grade rising towards the north-west side and falling off on the opposite side. However, there appears to be sufficient area capable of supporting a larger sewage disposal system for seasonal or intermittent use. Appropriate testing (observation pits and seepage tests) of the soil should be done in order to establish a basis for design of the proposed leaching system.

It is also noted the town of Colchester is in the process of installing public sewers. While the availability of a sewer line on Old Hebron Road is still a matter of several years, it would be recommended that provisions be made at this time for the building's future sanitary sewer connection.

SOLID WASTES

An increase of refuse would be expected from the recreational area, particularly if there is a picnicking site and/or a snack bar operation in conjunction with league play or other spectator sports. An adequate number of conveniently located containers for the storage of refuse should be provided. Refuse should be collected on a regular basis for final disposal off-site at the town refuse disposal area.

MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

Soil compaction on the drier parts of the picnic area (Stand B) may be reduced by spreading a layer of wood chips around picnic tables where use will be the heaviest. On the wetter parts of the picnic area (Stand A) spreading wood chips will have little or no value unless a porous gravel fill is spread first.

Loss of some trees caused by soil compaction, even with the addition of wood chips, is unavoidable. As these trees die they should be removed to prevent possible hazard. Replacement of lost trees should be made to assure future shade trees. In the lower, wetter areas, trees which are tolerant of high moisture levels, such as white ash, elm, silver maple, willows or sycamore, should be planted. On the drier parts of this area most tree species will survive if they are planted properly.

Providing an alternative fuel source for cooking fires, supplying "charcoal-only" metal fireplaces on posts, or completely banning open fires in the picnic area will reduce loss of surrounding vegetation and wood chips to fire.

IRREVERSIBLE COMMITMENT OF RESOURCES

The loss of vegetation resulting from the development of Stand C into the proposed athletic fields is not irreversible. Reforestation may occur naturally or be helped along by man through planting if the athletic fields are abandoned at some time in the future.

RECREATION POTENTIAL

This site is composed of approximately 25 acres on which there are presently three ballfields, a tennis court complex, a basketball court, and a toilet building. The lower or westernmost ballfield is to be expanded by the addition of fill material on its western and southern sides. This lower field is the longest of the three and is intended for use in football and soccer games after expansion. Bank stabilization to reduce erosion would be desirable as would a silt barrier along the embankment's base.

The map supplied has been used to illustrate the proposed layout. Six parking areas are indicated with an aggregate of approximately 100 parking spaces. Supplemental parking could be offered by using the easternmost (Little League) ballfield during large ball games when ground conditions permit. There is currently no established parking area near the basketball and tennis courts. A linear (one-row) parking lot could be put in with some minor grading, along the chainlink fence to the north. This would accommodate approximately 30 cars.

A small parking lot with an access road could be established by adding fill at the lower end of the red cedar area (on the hillside) to provide parking for picnic sites interspersed along the access road. The picnic sites would probably be located between this access road and the ballfield to the east and above. The terrain is steep, but by careful site selection and some selective tree cutting, it should be possible to locate 6-8 picnic tables in the cedar grove. This parking lot could be the terminus to a sled and toboggan run starting from the flagpole located at the highest point of the site. The route is indicated on the accompanying map. It would be desirable not to clear cut the cedar-studded hillside until a decision is made on its use.

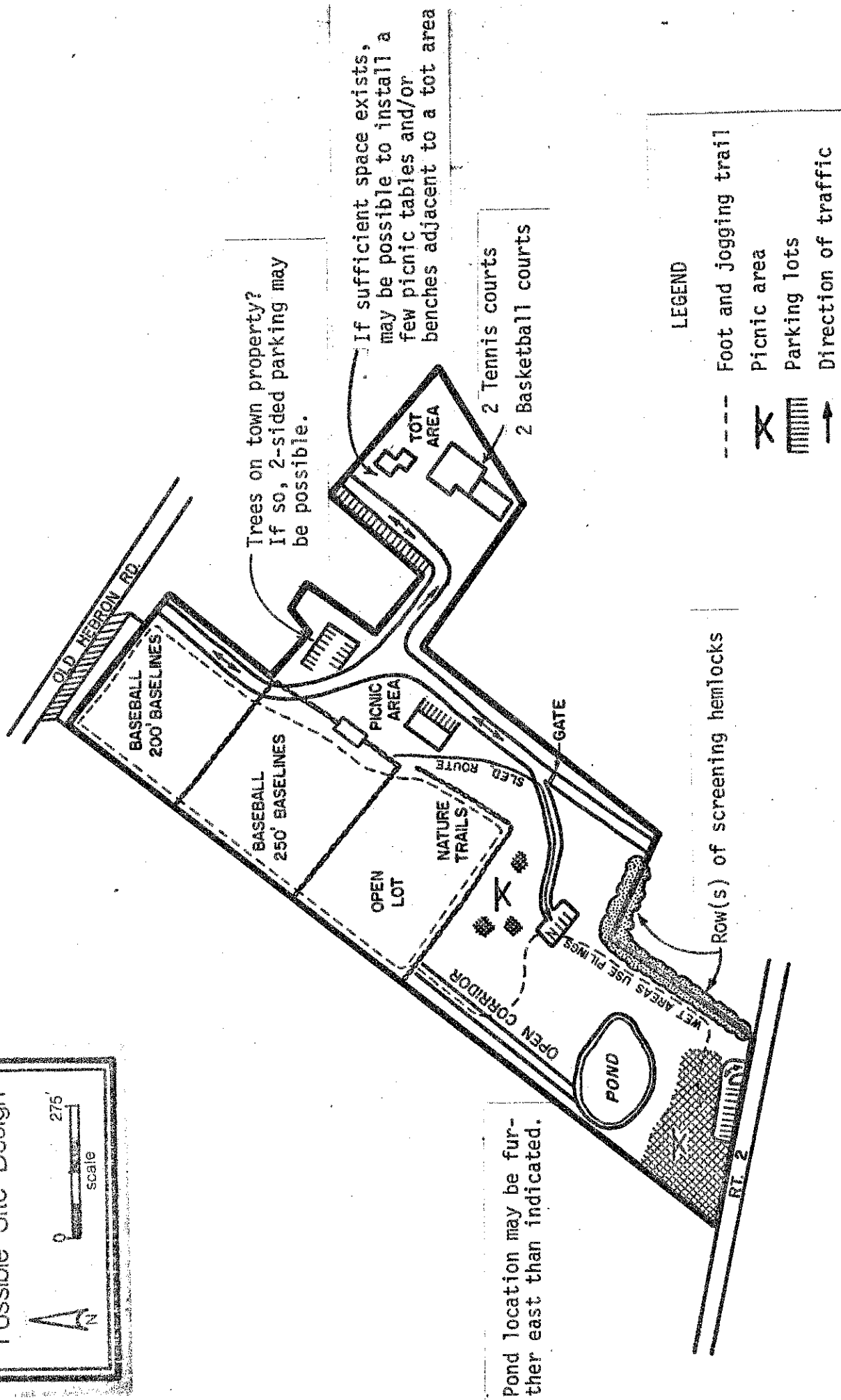
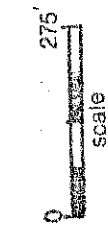
An east to west corridor could be cut out of the wooded hillside on the north end of the property. This would provide another area for sledding, ski practice, etc., down the hillside from the football field to the skating pond. This corridor could also comprise the uphill portion of the foot-trail linking the picnic area at the westernmost end of the tract to the picnic area at the easternmost end. The foot and jogging trail could be readily adapted to a small fitness parcourse. For information on establishing a fitness parcourse and the exercise stations, a how-to-booklet can be obtained by sending .50¢ to:

Environmental Health Services Division, State Department of Health, 79 Elm St., Hartford, Connecticut 06115. Ask for the "Fitness Parcourse Handbook". Reference to the map will show that the jogging trail has been routed around the aggregate perimeter of the ballfields.

The small picnic area proposed near the toilet building should be planted with some shade trees since it is on a southern slope and could become quite warm in the summer. Additionally, the planting of a single or double line of hemlocks or other dense foliage barrier on the northern side of this picnic area would minimize the chance of a baseball or softball hitting someone at a picnic table. The intervening hill precludes a picnicker from seeing a ball's direction of travel.

The expansion of the toilet building and the location and adequacy of the septic field may have some bearing on exact placement of the nearby picnic area.

Possible Site Design



A ten-table picnic area with parking for about twelve cars is located on the westernmost end of the tract (along Old Route 2). Parking is proposed inside and against the stone wall paralleling Old Route 2. Minimal tree cutting would be necessary to establish this parking lot. As much as possible, tree-shaded parking should be retained.

On the easternmost end of the tract, near the Little League ballfield, a 6-8 table picnic area would be ideally located in the vegetated area lying between the stonewall and the parking area adjacent to Old Hebron Road. Tables should be anchored to prevent theft in an area like this, where vehicles could not be gated out at night. The parking area here (along Old Hebron Road) should accommodate 20-25 cars parked diagonally.

The parking lots at the east and west ends of the tract could be used as starting points by joggers.

Most of the road system has 2-way travel. If road width is critical, the easternmost loop can be routed one-way.

A pond has been indicated on the map in the area of the present swamp. The pond is intended for ice skating and possible warm water fishing, if dug sufficiently deep. A permit would have to be secured for any work in this inland wetland. The swamp is wooded; it would be necessary to clear cut the trees and dig out the stumps and swamp bottom to install a pond. A shallow pond would provide relatively safe ice skating. A deeper pond would enhance the possibility for fishing but would probably never enable swimming because of lack of sufficient water movement and poor water quality. Clearcutting of trees and digging out the organic swamp bottom would probably reduce the water storage capacity of the swamp, resulting in more flash runoff. It would be desirable to keep a pond to the minimal size necessary, approximately 125' x 200'. Complete removal of the swamp as it is, would eliminate habitat for some wildlife types. Birdwatching is engaged in by numerous passive recreationists who may be using the foot path routed through the swamp. The swampland portion of the foot path would have to be built up on pilings.

A screening border of hemlock could also be planted along the stonewall near the town garage which would help beautify and delineate the boundary between park and town garage land.

Appendix

LAPPING PROPERTY
COLCHESTER, CONNECTICUT

PROPORTIONAL EXTENT OF SOILS AND THEIR LIMITATIONS FOR CERTAIN LAND USES

| Soil Series | Soil Symbol | Approx. Acres | Percent of Acres | Principal Limiting Factor | Urban Use Limitations* | | | |
|-------------------------------|-------------|---------------|------------------|-------------------------------------|--------------------------------|--------------------------|-------------------|--------------|
| | | | | | On-Site Sewage | Buildings with Basements | Streets & Parking | Land-Scaping |
| Charlton-Hollis Complex | 17LC | 2 | 8 | Slope, Large stones | 2 | 2 | 2 | 2 |
| Charlton Part | | | | | | | | |
| Hollis Part | | | | | 3 | 3 | 3 | 3 |
| Charlton-Hollis | 17LD | 1 | 4 | Slope | 3 | 3 | 3 | 3 |
| Canton-Charlton | 11B | 1 | 4 | | 1 | 1 | 1 | 1 |
| Canton-Charlton | 11XB | 1 | 4 | Large stones | 2 | 2 | 2 | 2 |
| Canton-Charlton | 11MD | 4 | 16 | Slope, Large stones | 3 | 3 | 3 | 3 |
| Woodbridge | 31A | 3 | 12 | Percs slowly, Wetness | 3 | 3 | 3 | 1 |
| Sutton | 41B | 4 | 16 | Wetness | 3 | 3 | 2 | 1 |
| Ridgebury, Leicester, Whitman | 43M | 2 | 8 | Large stones, Wetness, Percs slowly | 3 | 3 | 3 | 3 |
| Ridgebury | 98 | 1 | 4 | Percs slowly, Wetness | 3 | 3 | 3 | 3 |
| Udorthents | ML2 | 6 | 24 | | | | | |
| | | | | | LIMITATIONS DETERMINED ON SITE | | | |

URBAN USE LIMITATIONS: 1 = slight; 2 = moderate; 3 = severe.

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.

