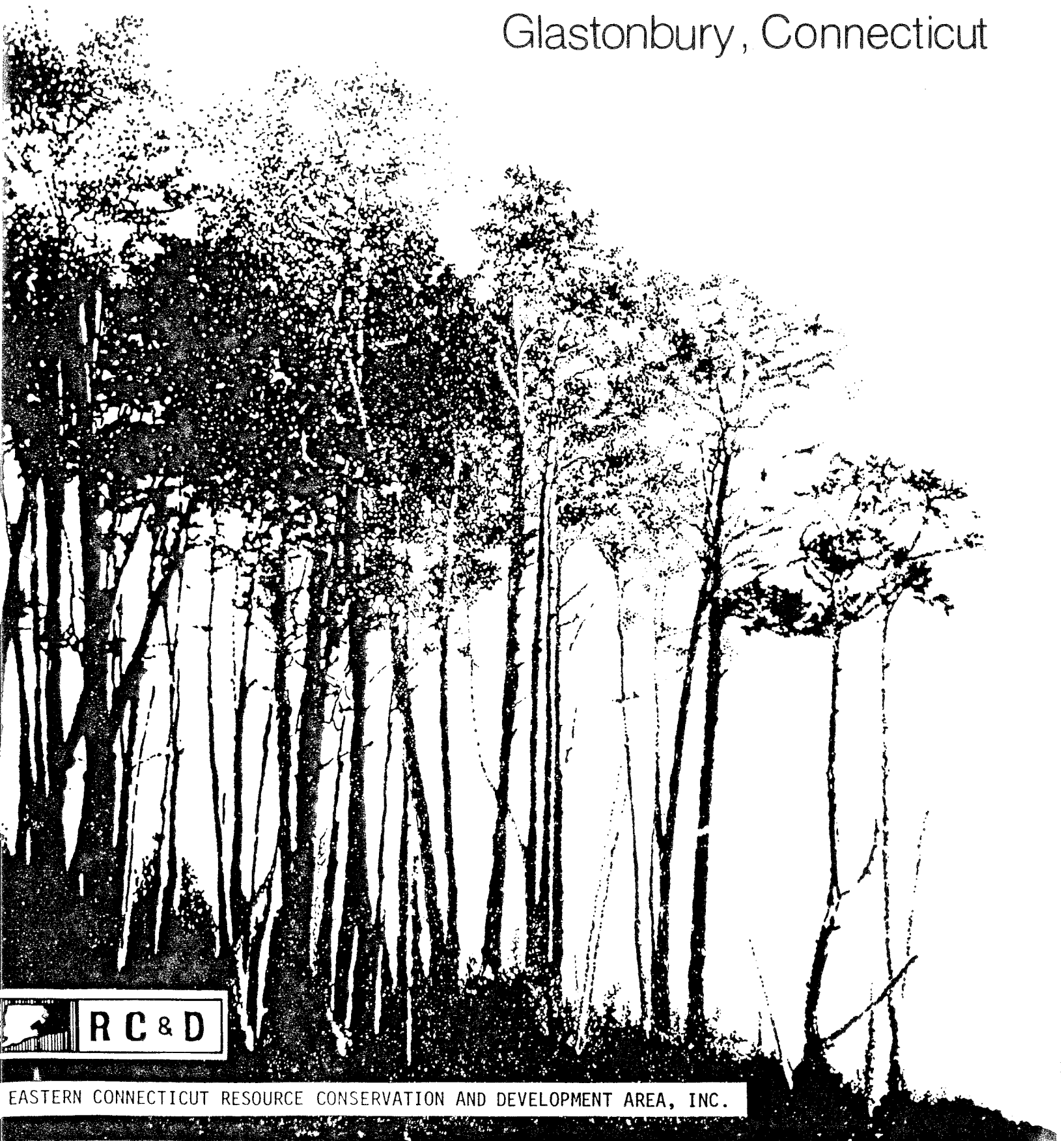


# Environmental Review Team Report

## Red Hill Glastonbury, Connecticut

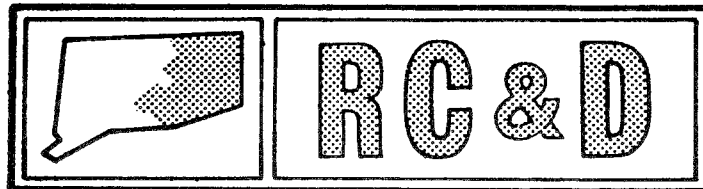


EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.

Environmental Review Team  
Report

Red Hill  
Glastonbury, Connecticut

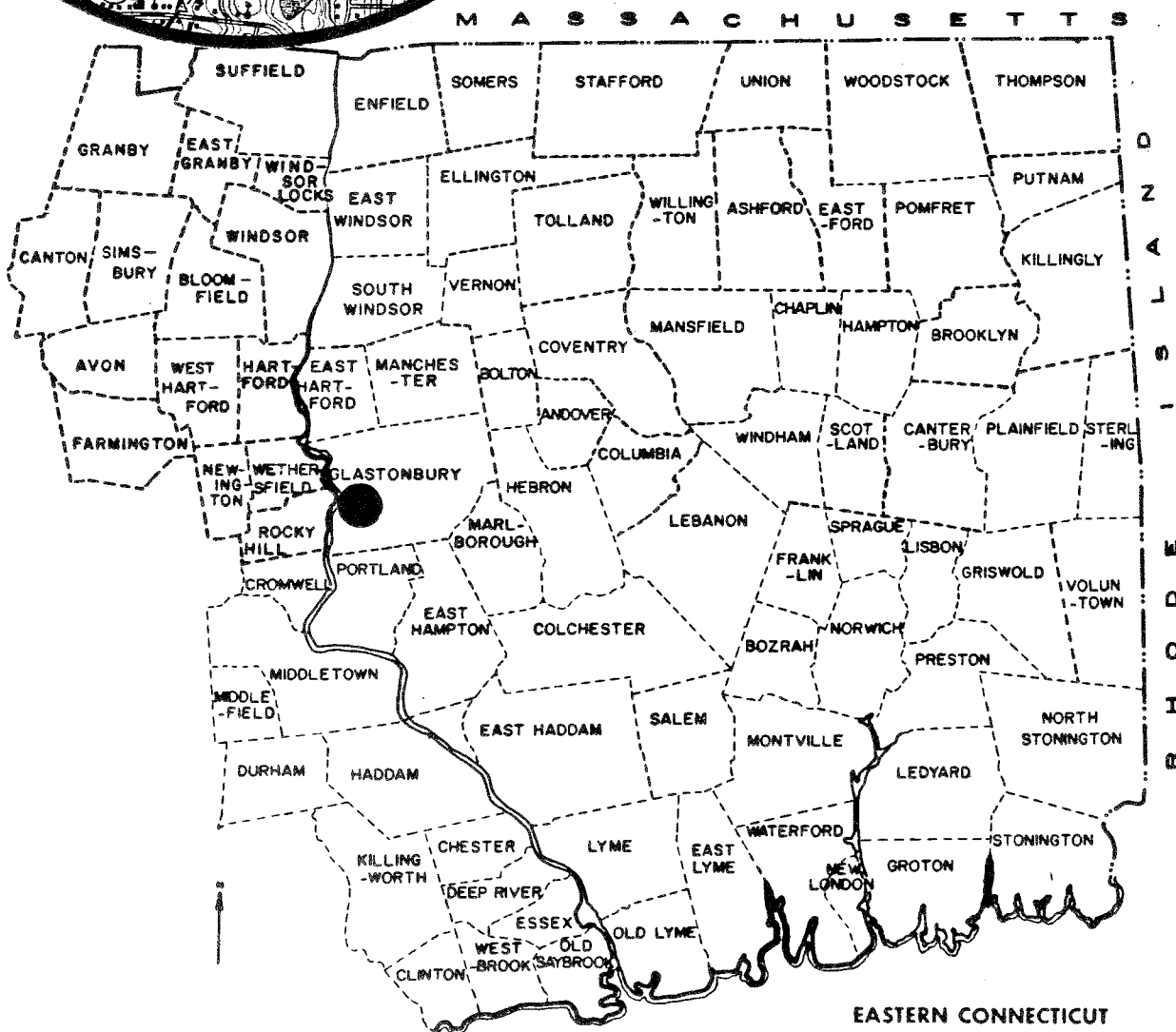
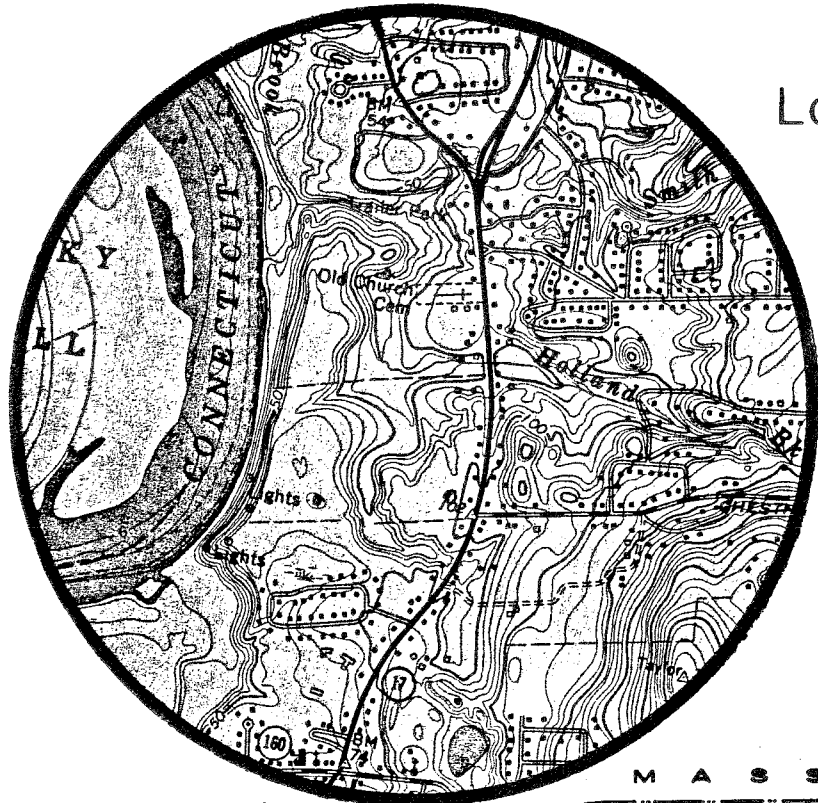
November, 1983



Eastern Connecticut Resource Conservation & Development Area  
Environmental Review Team  
PO Box 198  
Brooklyn, Connecticut 06234

# Location of Study Site

RED HILL  
GLASTONBURY, CONNECTICUT



EASTERN CONNECTICUT  
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

ENVIRONMENTAL REVIEW TEAM REPORT  
ON  
RED HILL DEVELOPMENT  
GLASTONBURY, CONNECTICUT

This report is an outgrowth of a request from the Glastonbury Planning and Zoning Commission, to the Hartford 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: Bill Warzecha, Geologist, State Department of Environmental Protection (DEP); Ken Metzler, Ecologist, (DEP); Vern Anderson, District Conservationist, (SCS); Wil Maxwell, Planner, Capital Region Council of Governments, John Rook, Wildlife Biologist, (DEP); David Poirier, Historical Commission; and Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Area.

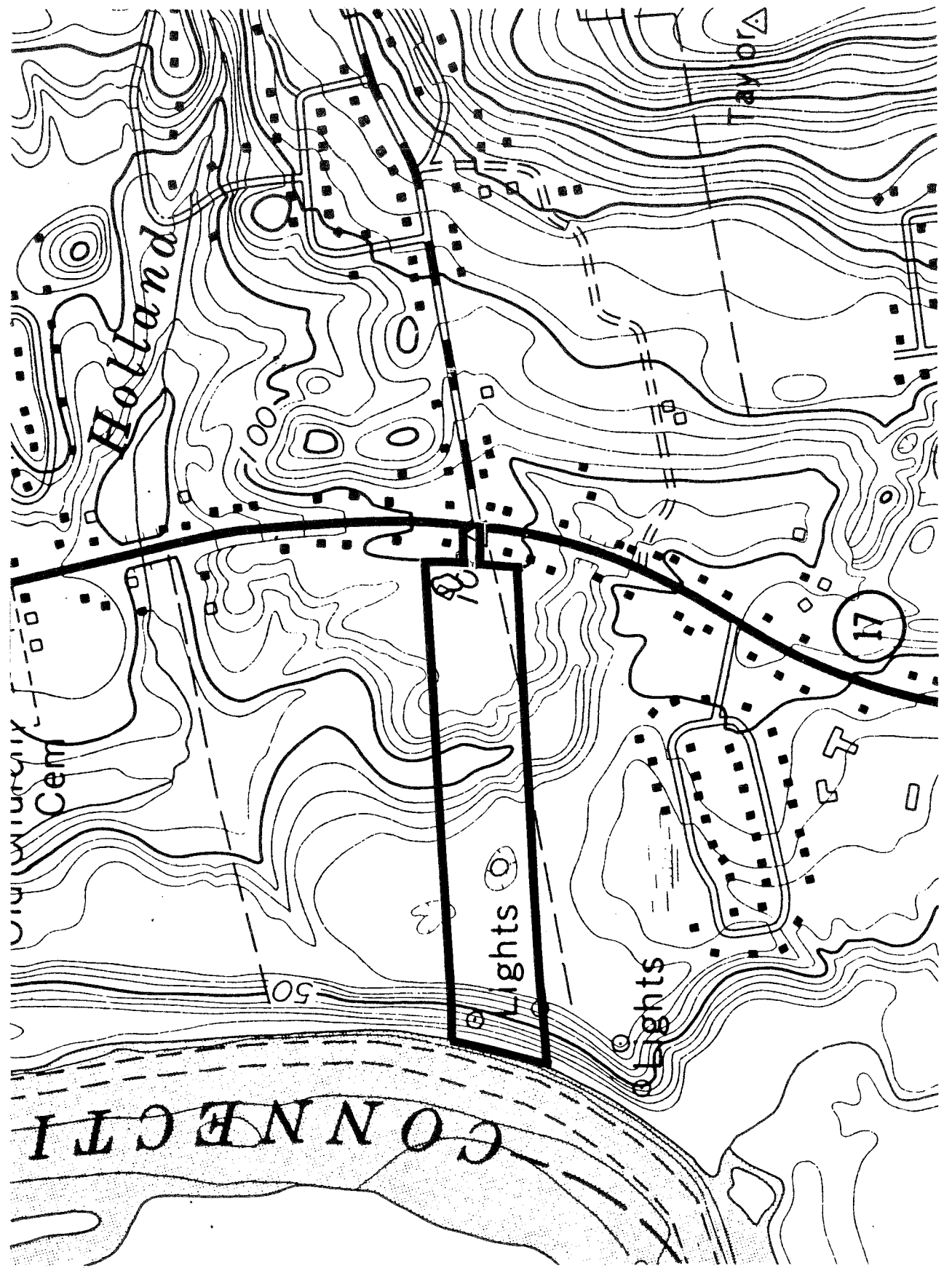
The Team met and field-checked the site on Thursday, August 11, 1983. Reports from each Team member were sent to the ERT Coordinator for review and summarization for the final report.

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 Glastonbury. 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, P.O. Box 198, Brooklyn, Connecticut 06234; 774-1253.

# Topography



## INTRODUCTION

The Eastern Connecticut Environmental Review Team was asked to prepare an environmental assessment for a proposed "Planned Area Development" in the town of Glastonbury. The site is approximately 20 acres in size and is presently owned by John Coccoma and Charles Pezzente. Preliminary plans for "Red Hill" have been prepared by Design Group One, a Hartford architectural firm.

The site is located on Main Street, at its intersection with Chestnut Hill Road. It is approximately 390 feet in width and its length extends from Main Street to the Connecticut River. Preliminary plans show 94 units (4.6 per acre) and 216 parking spaces. These units have been divided into four types: 24 flats, 52 town houses with garage, 8 town houses with attached garages and 10 single family homes. Public sewer and water service are available to the site. A single road will extend into the site from Main Street, crossing a small ravine, to provide access to the units.

Topography of the site is relatively flat except in the area of the ravine which bisects the property and the site's western boundary at the Connecticut River. These areas are very steep and are the only locations of forest vegetation on the site. The remainder of the property is being used for growing vegetable crops. A small wetland/pond exists west of the ravine.

The Team is concerned with the effect of this proposal on the natural resource base of the site. Although many severe limitations to development can be overcome with proper engineering techniques, these measures can become costly, making a project financially unfeasible for a developer.

Since the escarpments bordering the Connecticut River show active signs of slumping, all efforts should be concentrated on keeping any construction activities away from these fragile slopes. In addition, all storm sewer runoff should be directed elsewhere on the property, possibly into the small pond which could be utilized as a sedimentation basin.

Since the road across the ravine will be also crossing steep escarpments as well as an alluvial wetland, this area should also be treated as fragile with erosion of the escarpment very probable without proper engineering. In the wetland, stream flow should be also monitored to determine the proper culvert size to be placed under the constructed crossing. To maintain an acceptable grade across the ravine, it should be expected that much of the wetland will be filled prior to road construction. A sediment and erosion control plan should be developed and implemented prior to construction.

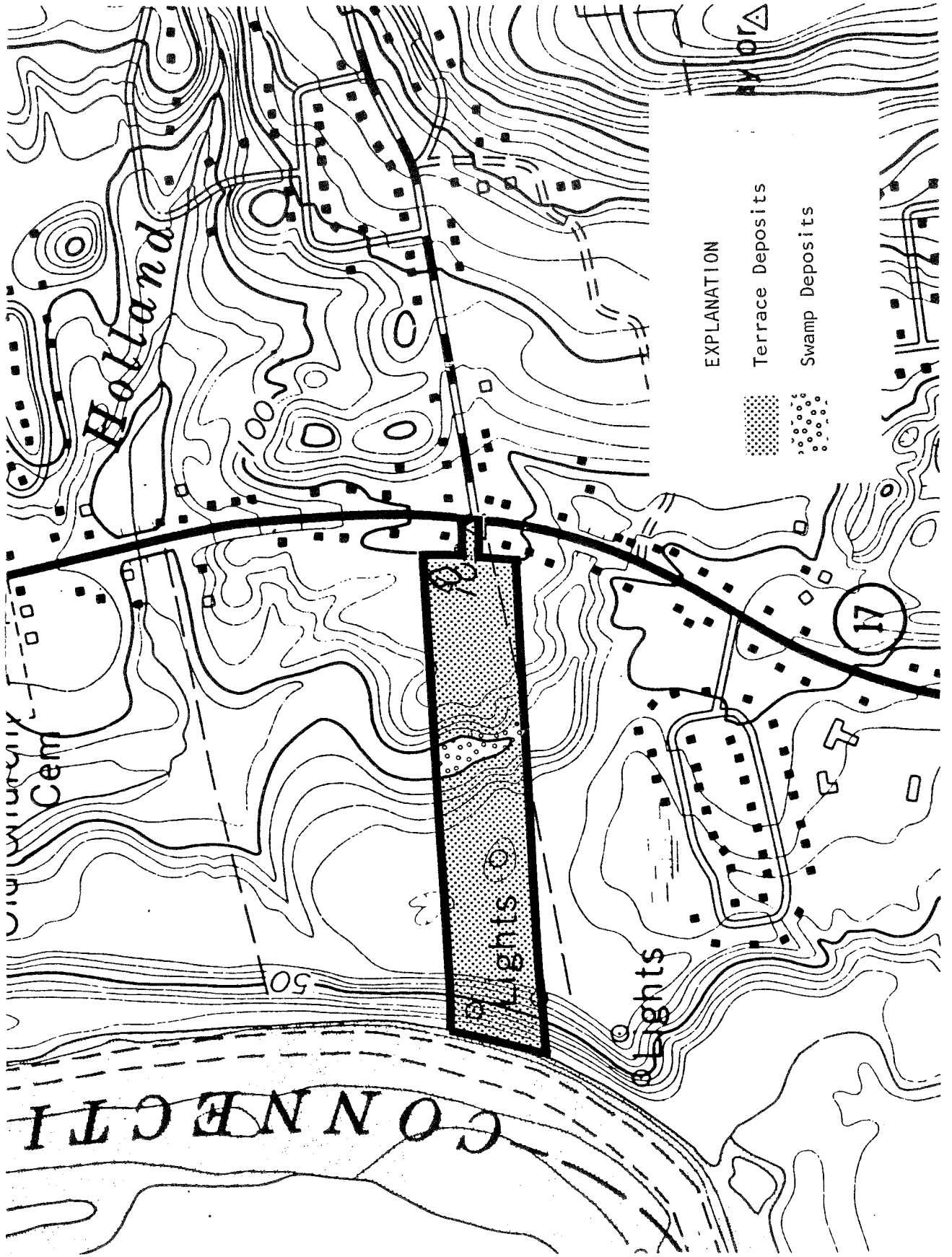
Since prime agricultural land is being lost at an alarming rate within Connecticut, this prime site should be considered for agricultural preservation.

More detailed discussion of these concerns can be found in the following sections of this report.

# Surficial Geology

0 660' scale

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## ENVIRONMENTAL ASSESSMENT

### TOPOGRAPHY

The ± 20 acre "Red Hill" site consists of a long and narrow, rectangular shaped parcel of land in South Glastonbury. It is bordered to the west by the Connecticut River and Main Street (Rte. 17) on the east. Access to the proposed planned area development will be off of Main Street (Rte. 17) in the eastern portion of the site. The topography of the site is characterized by a very steep escarpment which rises ± 90 feet above mean sea level from the floodplain of the Connecticut River (in the western section of the site) to a relatively, flat terrace. This flat terrace comprising most of the site, however, has been bisected in the central section by a relatively wide, moderately steep-sided ravine. The ravine is drained by a small, unnamed stream which is a tributary to Holland Brook, north of the site. A small man-made farm pond is located in the western half of the parcel. Although little water was observed in the pond at the time of the review, it holds more water during the wet times of the year.

### GEOLOGY

The "Red Hill" site is located in an area encompassed by the Glastonbury topographic quadrangle. A bedrock geologic map (QR-5) by Norman Herz and a surficial geologic map (G0-1359) by William H. Langer have been published by the U.S. Geological Survey. No bedrock outcrops were observed on the site. Nevertheless, bedrock underlying the site, as mapped from nearby outcrops has been identified as the Portland formation. This rock unit consists of a coarse arkosic sandstone which is commonly pink or reddish brown in color. The term "arkosic" refers to the sedimentary mineralogy of the rock which contains a high percentage of quartz and feldspar. These rocks were formed as a result of cementation of sand-sized grains and pebbles which were deposited in streams and lakes approximately 200 million years ago. Bedrock appears to be deeply buried (approximately 40 feet) by overburden and should pose no problems with the proposed development.

The surficial (overburden) deposits that overlie bedrock on the site are composed largely of light, reddish-brown, fine-grained sands in the top ± 10 feet. At a depth below 10 feet, the sediment becomes a very fine sand or silt and clay until it reaches the underlying bedrock. These surficial deposits were formed in a lake when pre-existing glacial streams emptied into it. This lake was formed at some point during the period of glacial retreat when ice blocks and sediment formed a temporary blockage or dam in the Connecticut Valley in the vicinity of Rocky Hill. As a result, the dam backed water up, creating a large lake which has been named by geologists as "Glacial Lake Hitchcock." Sudden changes in the velocity of meltwater streams into Glacial Lake Hitchcock caused the stream loads of suspended materials to be deposited on the lake bottom. Finer material of clay, silt and fine sands were deposited on the lake bottom. Once the ice dam broke, the lake drained and the prehistoric Connecticut River began cutting down through the thick lake bottom deposits, creating the terrace as we see it today.

The overburden on the site is overlain by a cap of eolian (windblown) deposits which consist of sand and silt mixed in the underlying glacial deposits.



During the review, town officials asked Team members to comment on a setback distance for proposed buildings from the top of the steep escarpment in the western section of the site. During a cursory inspection of the escarpment, signs of some active slumping as well as gulleying from natural drainage were observed. At the present time, there is not enough geological information available regarding the underlying material. Consideration should be given to conducting a thorough geologic and/or soils investigation in the area of the escarpments so that the stability of the underlying deposits can be properly addressed. A soils engineer or geologic engineer could be hired to conduct such a study. It should be noted that during the review, evidence of artificial fill consisting of combustible and non-combustible rubbish, which apparently was deposited during the past, was observed along the top and banks of the escarpment in the western portion of the site. Because heavy vegetation covers most of the material, the depth and extent of the dumpings is currently unknown. Nevertheless, any disruption of the land surface in this area could initiate erosion problems. Every effort should be made in keeping any construction activities, including storm water drainage away from the steep slopes which are more likely to erode or possibly slump (collapse) when disturbed.

#### HYDROLOGY

The "Red Hill" site lies entirely within the watershed of Holland Brook. Most of the runoff from the site flows into the ravine which bisects the property. The ravine is drained by a small unnamed stream which flows into Holland Brook, north of the site. A small area, approximately  $\pm$  3.8 acres in size, which comprises the steep escarpment in the western portion of the site, flows west into the Connecticut River (See Watershed/Drainage Map). The drainage area of Holland Brook is approximately 1.33 square miles or 851 acres. The area proposed to be developed represents a little over one and a half percent of the total watershed. In view of this, it seems likely that the increases in runoff from the site itself would have a small impact upon peak flow into the stream on the site or Holland Brook. As a policy matter, however, runoff from the site should be controlled in some manner, i.e., detention ponds/retention ponds, since a series of developments in the watershed, each producing small peak flow increases, ultimately could result in a substantial change in the flow characteristics of the streams, potentially causing streambank erosion.

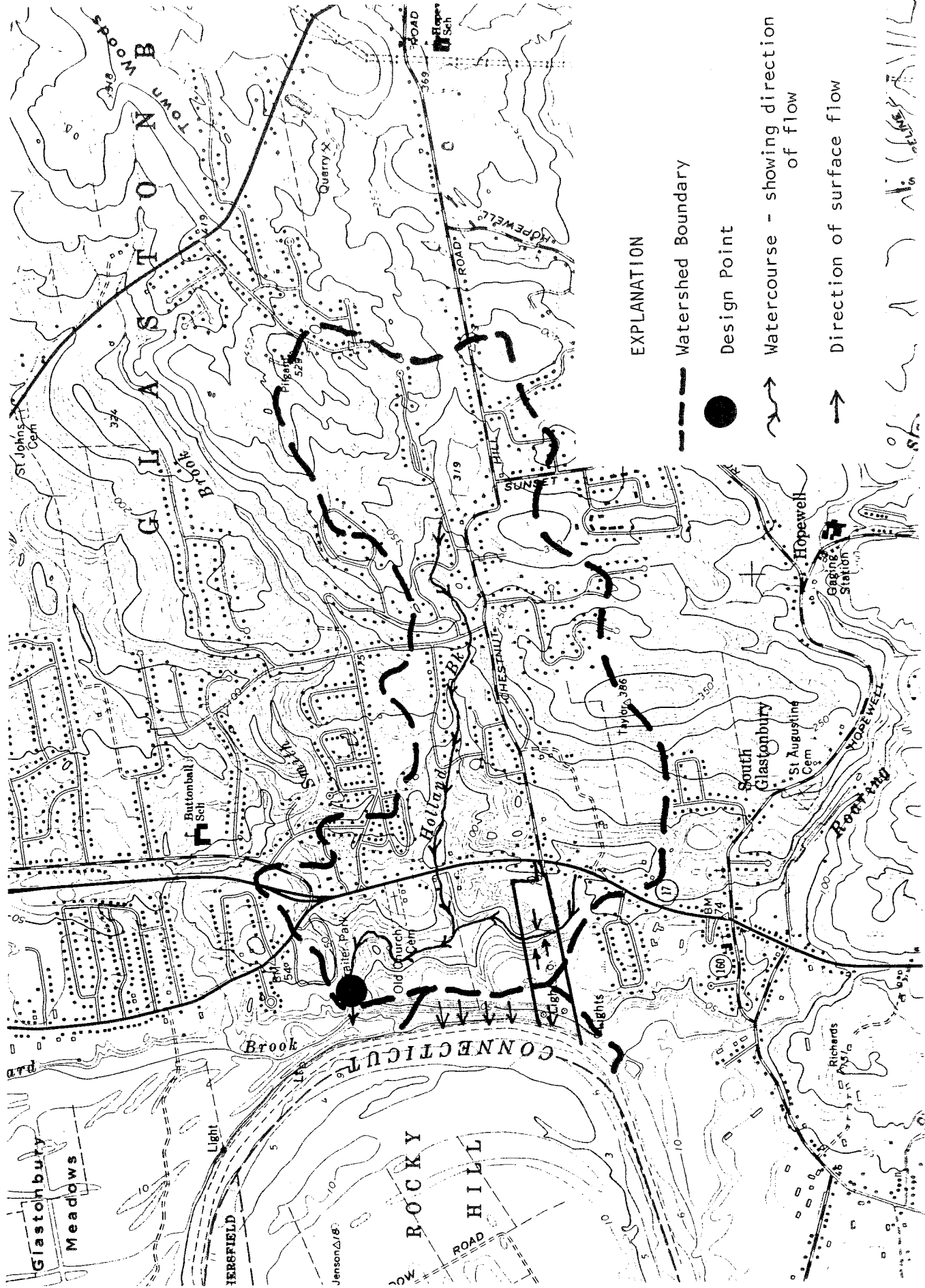
Development of the site as planned can be expected to increase the amount of runoff from the site for a given rainfall amount and to thereby increase peak flows into the stream as well as Holland Brook. These increases would be caused by removal of vegetation, compaction of soil during the construction phase, and creation of impervious surfaces such as rooftops, driveways and access roads.

An estimate may be made of the runoff change likely to occur from the proposed land use modification. Technical Release No. 55 of the Soil Conservation Service provides a technique which may be used in formulating the estimate. This method involves the determination of runoff curve numbers, which relate the amount of precipitation to amounts of runoff. It is estimated that development would increase the curve number of the property by 5 (from 62 to 67). Under these conditions, runoff depth for a 25 year storm event would increase from 1.95 inches to 2.39 inches; an increase of 22 percent. This increase is significant and underscores the importance of judicious stormwater management on the site. Therefore, prior to approval, it is recommended that the applicant(s) be required





# Drainage Areas



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## EXPLANATION

-  Watershed Boundary
-  Design Point
-  Watercourse - showing direction of flow
-  Direction of surface flow

to submit detailed hydrological information on pre- and post-development runoff volumes and peak flows from the property. Estimates should be provided for 10, 25, 50 and 100 year design storm. Detailed design specification for all stormwater control facilities (including retention/detention ponds, if considered) should also be submitted. Since the soils in the area of proposed development are prone to erosion, it is highly advisable to prepare and closely follow a conscientious erosion and sediment control plan. Also, all storm drain outlets should include a designed energy dissipator/splash pad to help protect areas below the outlet from gullyng. It is recommended that runoff in the western portion of the property be directed eastward away from the steep escarpment. Steep and fragile slopes, such as those found along the ravine and the western border, are more likely to erode or slump (collapse) when disturbed.

## SOILS

A detailed soils map of this site is 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 of 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 Soil Survey: Hartford County, Connecticut, 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 soils designated EsA and EsB are Enfield silt loams. It is a well-drained soil that is underlain by stratified sand and gravel at a depth from 10 to 30 inches. This soil has a high moisture holding capacity. It is easy to till and responds well to management for agricultural crops. The EsA is on a 0 to 3 percent slope and the EsB is on a slope of 3 to 8 percent. The EsB slope can erode rather easily when unvegetated.

Soils shown as Tg (Terrace Escarpment) consists of sands and gravels on slopes of more than 15 percent. This land type is best suited to forest because of steep slope and droughtiness.

Saco sandy loam (SaA) consists of frequently flooded, very poorly drained soils on flood plains. Water stands on the surface for long periods in winter and spring. Saco soils have developed from a wide variety of sediment. At a 2 to 4 foot depth the soil consists of mottled silt loam or very fine sandy loam.

### Agricultural Soils

Enfield silt loam (EsA) is a prime agricultural soil. This soil type comprises 65 percent of the parcel. Most of the prime agriculture soil is located on the western side of the gully area where the proposed road crossing is planned.

The soils are presently used for growing vegetable crops. An apple orchard is on the property to the south with vegetables grown on the property to the north.

A subdivision located on this narrow parcel will definitely have an impact on the croplands to the north and the south. The total cropland acreage would be in jeopardy. A decision will be needed on the preservation of the agricultural land versus development of this area. The total area of cropland in question on the west side of the ravine is about 40 acres.

#### Erosion and Sediment Control

If development occurs in this area, it will be most desirable to keep all buildings off of the Terrace Escarpment soils. This would include all of the natural bank along the Connecticut River. It would also be wise to exclude buildings on the area immediately beyond the top of the bank so as to keep weight off the bank and also not to disturb vegetation on the bank area.

Fill material has been deposited on the Terrace Escarpment soil over the years. The amount deposited is not known. Further field checking should be done to ascertain the amount of fill material added so that the stability of the bank can be determined.

All storm drain and surface runoff waters should be kept off the Terrace Escarpment of the Connecticut River. If there are any increased water flows, the following alternatives can be considered:

- piping storm water to the bottom of the Terrace Escarpment through a properly designed tile
- constructing a diversion at the top of the slope to keep surface storm flows off the slope. The diversion will need a properly designed outlet.

The existing pond located in the western portion of the property is not a feasible fish pond site. The seasonal water table of the pond area varies greatly from spring to summer. An alternative is to fill this pond area or to develop it as a possible waterfowl pond. Another alternative is to use the pond area as a detention-sediment basin if the area is developed as proposed.

A detailed erosion and sediment control plan showing structural and vegetative measures to be used will be necessary prior to any development of the area.

#### Road Crossing

During the review, town officials asked Team members to comment on the proposed road location, and wetland/ravine crossing. It should be noted that no road profile and/or typical cross-section showing finished grades, elevations at slope changes, side slopes and road drainage systems was made available to the Team geologist. About 600 feet of the proposed interior road will cross the ravine. Assuming a road 26 feet wide traverses the ravine straight across with 2 to 1 side slopes, approximately 67,500 cubic yards of earth fill would be required to construct this portion of the road.

Wetland road crossings are feasible provided they are properly engineered. Proper provisions should be made for removing unstable material, if necessary,

beneath the roadbed, backfilling with a permeable road base fill material and installing culverts as necessary. Road construction through wetlands should preferably be done during the dry time of year and should include provision for effective erosion and sediment controls. Special attention should be directed at stabilizing the side slopes with permanent grass, jute and excelsior matting, etc., as expeditiously as possible. Also, a detailed road profile showing finish grade, elevation at slope changes, sideslopes, depth of fill, etc., should be submitted for town review.

## VEGETATION

The area of proposed development can be best characterized as a high level terrace (approximately 90 feet MSL) bordered on the west by a steep escarpment and the Connecticut River and bisected by a ravine drained by a small brook to the north. Most of the site and surrounding area has been cleared for agriculture with orchards and vegetables the major crops. Forest vegetation is confined to the steep escarpments and the banks of the Connecticut River, and on the level bottom of the ravine is a dense shrub thicket interspersed with scattered trees and vines. On the terrace occurs a small wet depression that holds standing water for much of the year. Inland wetlands on this property include the wet depression, the level shrub thicket within the ravine, and the narrow fringing floodplain of the Connecticut River.

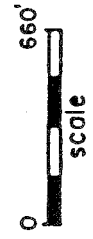
The major regional vegetation is Central Hardwoods-Hemlock-White Pine. Characteristic tree dominants include Red, Black, and White Oaks (Quercus rubra, Q. velutina, and Q. alba), and Shagbark, Pignut, and Bitternut Hickories (Carya ovata, C. glabra, and C. cordiformis) on well-drained sites Chestnut (Castanea dentata) was dominant until almost exterminated in the early 1920s by the Chestnut Blight and only sprouts remain today. Hemlock (Tsuga canadensis) and White Pine (Pinus strobus) are frequent and locally abundant or dominant. Abandoned fields are dominated in the early phases by White Pine, Red Cedar (Juniperus virginiana), and/or Gray Birch (Betula populifolia). White Pine is at its southern limit of its occurrence on old fields in this region.

The present forest vegetation can be summarized as follows:

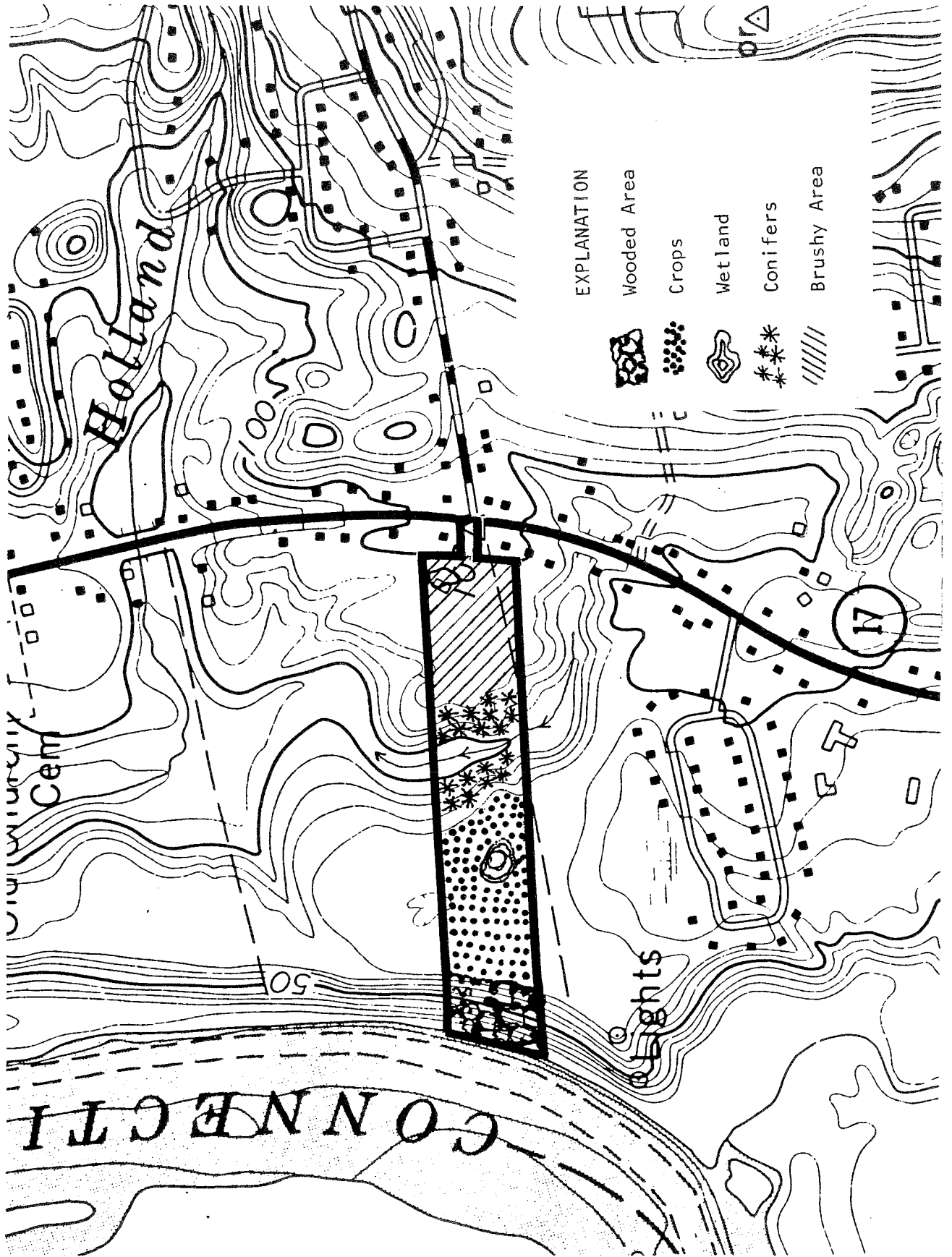
Along the Connecticut River is a small linear fringe of floodplain forest. Major tree species include Silver Maple (Acer saccharinum) and Cottonwood (Populus deltoides) with a sparse herbaceous cover of Poison Ivy (Toxicodendron radicans) and Cut-Grass (Leersia virginica). This area is actively flooded with much debris accumulating as the waters recede.

On the adjoining escarpment is a forest vegetation composed of a mixture of White Ash (Fraxinus americana), American Elm (Ulmus americana) and Black Birch (Betula lenta) with Red Oak and Black Locust (Robinia pseudo-acacia) more common towards the top. Much of this escarpment shows signs of disturbance with abundant trash dumps and soil slumps apparently common. Sumac (Rhus typhina, R. glabra) is a common shrub and Poison Ivy and Blackberry (Rubus sp.) form dense thickets throughout. The herbaceous vegetation is variable but species such as Enchanter's Nightshade (Circaea quadrisulcata), White Avens (Gevin canadense), White Baneberry (Actaea pachypoda), Jewelweed (Impatiens capensis), and Jack-in-the-Pulpit (Arisaema atrorubens) attest to the rich, moist nature of the slope.

# Vegetation



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On the terrace is a small semi-permanent pond dominated by a herbaceous growth of Bur-reed (Sparganium chlorocarpum) and Water Parsnip (Sium suave). Ringing the pond is a narrow shrub thicket of Buttonbush (Cephalanthus occidentalis) with a tangle of Blackberries and Fox-Grape (Vitis labrusca) on the depression slopes.

On the slopes of the ravine is another forested area with Red Oak the predominant tree. On the eastern slope a plantation of White Pine and Spruce (Picea sp.) covers a large portion of the area. For the most part, the slopes have a sporadic herbaceous cover with scattered shrubs throughout.

On the base of the ravine is a fairly level area dominated by a tangle of shrubs. Dominant shrubs include Arrowwoods (Viburnum spp.), Silky Dogwood (Cornus amomum) and scattered Red Maple (Acer rubrum) and Green Ash (Fraxinus pennsylvanica) saplings. The dense tangle of shrubs, vines (Vitis labrusca, V. riparia, Sicyos angulatus), and Blackberries make foot travel through this area difficult at best.

#### WILDLIFE

Woodland area at river's edge. The area's composition is made up of hardwoods, such as oak and maple, has a thick understory (including many vines), and also includes some softwoods. It is valuable to many forms of wildlife as it is a source of food and cover. It also serves as a buffer zone between the river and the cropland. Development should not take place in this steep area. Natural erosion exists, therefore any disturbance would only accentuate the problem. It is also a necessary buffer zone between the river and prospective residents.

Wetland area. Thick vegetation (mainly staghorn sumac) surrounds a small seasonal pond. This area is valuable to a large variety of birds, mammals, reptiles, and amphibians as a source of food, water, and cover. The pond could be developed, deepened, widened, to make it permanent. Some of the surrounding vegetation could be thinned, giving the residents a scenic view of the area.

Coniferous stand. Mature pine and hemlock make up this stand. It is on a fairly steep slope. It is bordered to the north by hardwoods and to the east by open area. The developer is proposing to create a road that will go through a portion of this stand and the surrounding hardwoods. In order to do this, the woodland area would be significantly reduced. An alternative is to develop the existing dirt road as access to the area.

Open, brushy area. A large variety of shrubs and grasses make up this area. Along its western edge runs a small stream. This area is beneficial to wildlife as it provides both food and cover. Although this area provides wildlife food and cover, most of it will be commercially developed if the proposal is approved. Leaving a strip along the forest edge and creating hedgerows could be done. This would be valuable to wildlife and be aesthetically pleasing.

## PLANNING CONCERNS

Although not shown on the preliminary plan, there should be a substantial open space area between the escarpment along the Connecticut River and any proposed multi-family residential structures. This particular area along the River is excessively steep, has severe limitations for development and may be subject to a high incidence of erosion.

An open space reservation would tend to improve the visual impact and preserve this natural and scenic area overlooking the River. Very importantly, it would also promote the Town's Plan of Development which proposes a linear open space plan along the River with a connector to Earle Park, a town facility north of this site.

If feasible, efforts should be made to preserve and prevent violation of the environmentally sensitive area (ravine) located about mid-project; about 800' west of Main Street. Structures should not impinge upon the area and efforts should be made to prevent bisecting it by a street, bridge and other appurtenances, as the impact of construction could have serious consequences. The plan of circulation for the proposed development should consider the possibility of skirting this area by placing the street along the southern property line or even south of the property line and may require the acquisition of additional land. In any event, additional design alternatives should be proposed in an effort to preserve and maintain this valuable parcel. As an example, this might include the acquisition of land south of this tract for a street which would provide access to the rear portion of the property where multi-family units are proposed.

On the matter of streets, there should be additional street stubs or reservations planned so that access will be possible to other development which may occur on the abutting properties. The principal street cul de sac as proposed appears longer than allowed by Glastonbury's subdivision regulations which provide for a maximum length of 1000' with a 60' turnaround radius.

The density of the rear portion of the proposed layout appears rather crowded. The multi-family units appear very close together and cram the property lines. This problem could be alleviated by reducing the density and thus would provide for a more fluid flow of open areas, off-street parking, recreational facilities, etc.

Since the subdivision abuts the Connecticut River, reference should be made to the criteria and standards proposed for the conservation zone along the River by the Connecticut River Assembly. Glastonbury is a member of this organization which has reached several major conclusions regarding the value of the river and actions which should be taken to protect such a natural resource. The proposed conservation zone and the minimum standards are included in a final report made to the Connecticut General Assembly in December 1981. The local Planning and Zoning Commission should have a copy of this material.

### Historic Resources

The State Historic Preservation Office has reviewed the information provided by the Environmental Review Team with respect to this project. This office notes that 1155 Main Street is listed on the State Register of Historic Places. Further, most of Main Street in Glastonbury would appear to be eligible as a



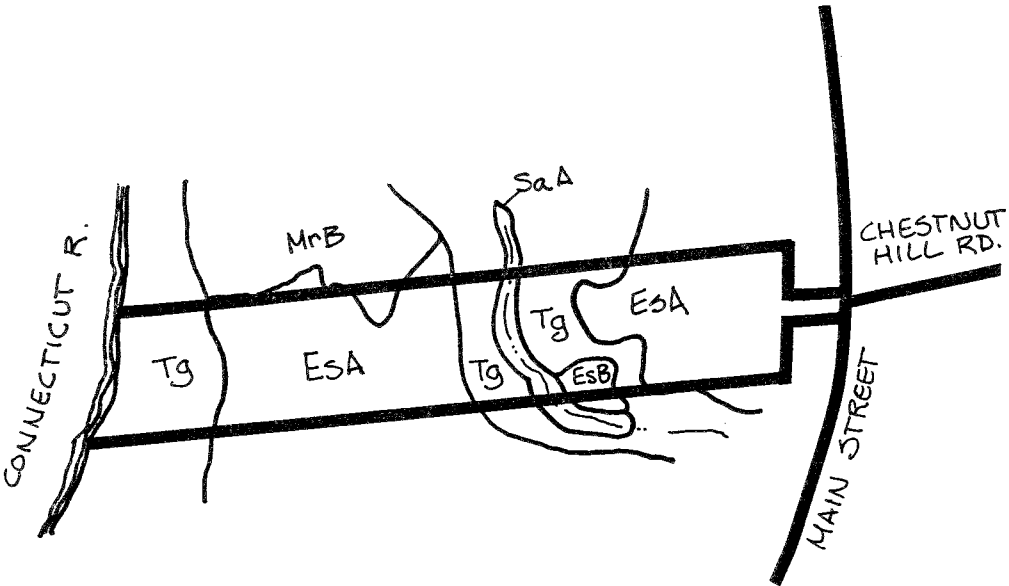
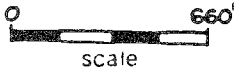
historic district for the National Register of Historic Places. As part of our survey efforts, this office employed a historical architect to identify clusters of two or more architecturally significant properties. In this regard, any proposed new access drive or roadway improvement should be designed at a suitable scale and with appropriate landscaping in order to visually harmonize with the historical and architectural ambience of Main Street.

This office notes that numerous prehistoric archaeological sites are known within the Connecticut River floodplain in the Town of Glastonbury. In particular, the Public Archaeology Survey Team, Inc. has identified prehistoric archaeological sites located both north and south of the proposed development area.

Based upon the extensive distribution of prehistoric archaeological sites within the Connecticut River floodplain, we believe that a professional archaeological reconnaissance survey should be undertaken to identify and evaluate the archaeological potential of the development area. If significant archaeological resources are discovered within the project area, we further recommend that the developer and the Town of Glastonbury should consult with the State Historic Preservation Office concerning the development of a professional archaeological management plan for such resources. Where feasible, this office advocates the in situ preservation of archaeological resources rather than the initiation of archaeological data recovery efforts.

# Appendix

# Soils



S O I L S   L I M I T A T I O N   C H A R T

GLASTONBURY ERT "RED HILL"

<u>SOIL SYMBOL</u>	<u>SOIL NAME</u>	<u>DWELLINGS W/BASEMENTS</u>	<u>ROADS &amp; DRIVEWAYS</u>	<u>LAWNS/LANDSCAPING</u>
EsA	Enfield silt loam 0 - 3% slopes prime farmland highly productive	slight	moderate frost action	slight
EsB	Enfield silt loam 3 - 8% slopes farmland of statewide importance highly productive	moderate slope	moderate slope frost action	moderate slope
Tg	Terrace Escarpments sand & gravel slopes > 15%	severe slope	severe slope	severe small stones droughty, slope
SaA	Saco sandy loam 0-3% slope	severe floods wetness	severe floods wetness	severe floods wetness

## 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 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 (774-1253), Environmental Review Team Coordinator, Eastern Connecticut RC&D Area, P.O. Box 198, Brooklyn, Connecticut 06234.