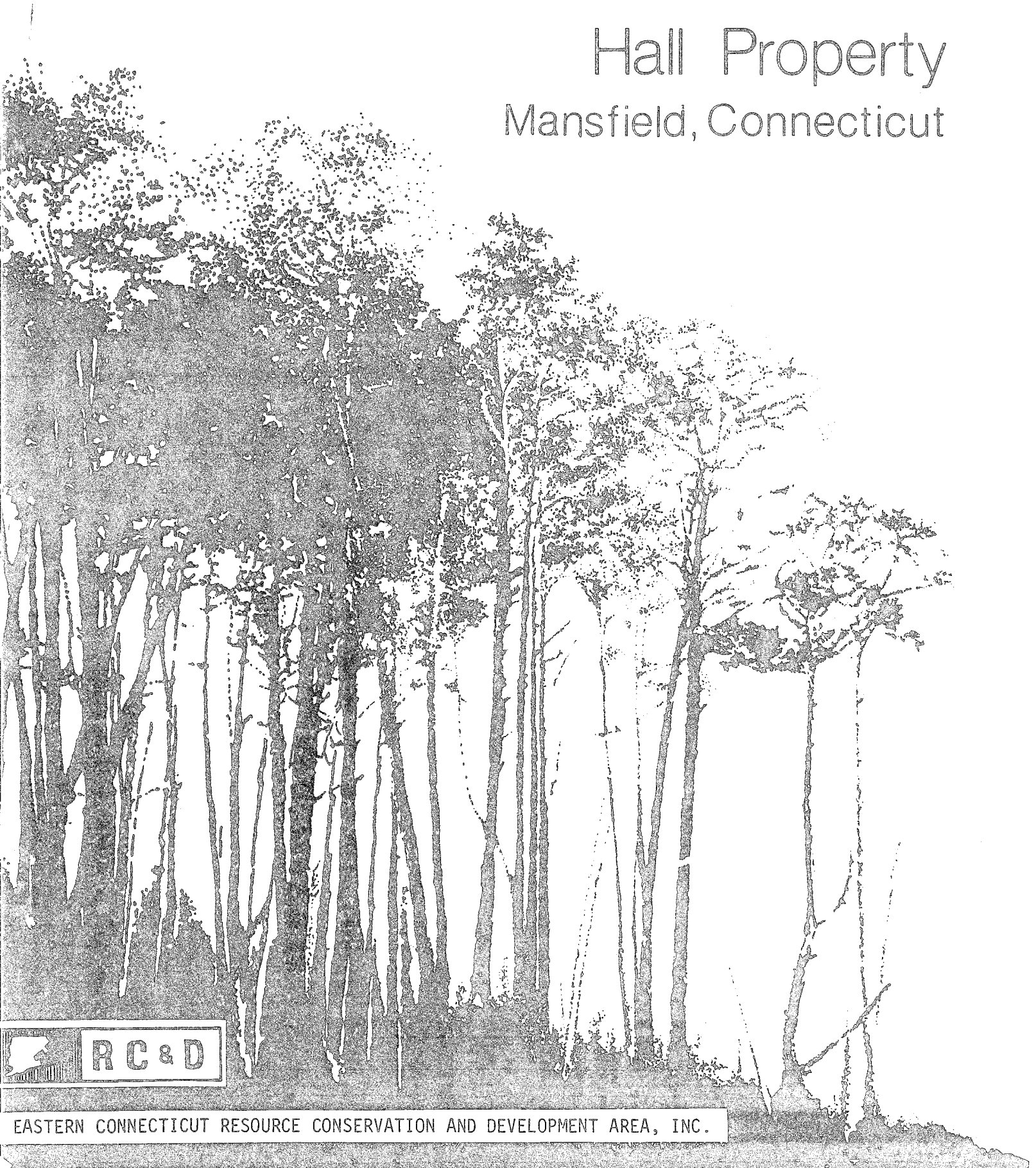


Environmental Review Team Report

Hall Property Mansfield, Connecticut



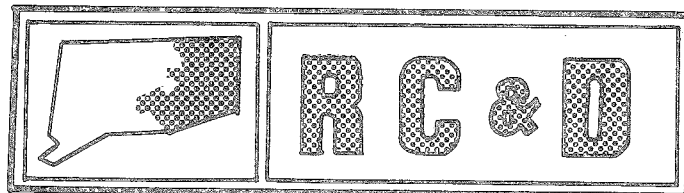
EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.

Environmental Review Team
Report

on

Hall Property
Mansfield, Connecticut

February 1981

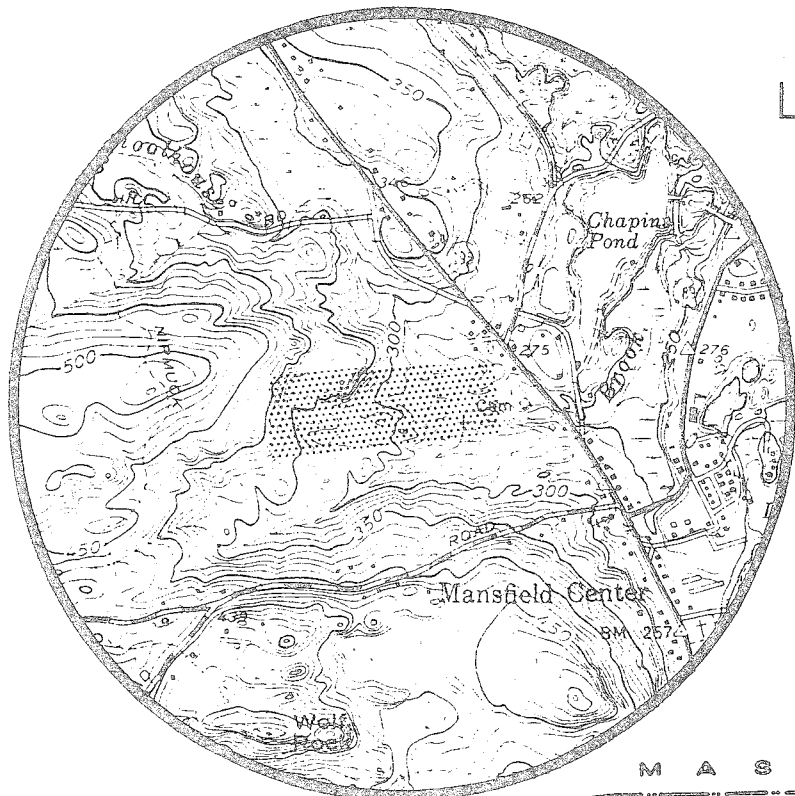


eastern connecticut resource conservation & development area

environmental review team
139 boswell avenue
norwich, connecticut 06360

Location of Study Site

HALL PROPERTY
MANSFIELD, CONNECTICUT



EASTERN CONNECTICUT
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

ENVIRONMENTAL REVIEW TEAM REPORT
ON
HALL PROPERTY
MANSFIELD, CONNECTICUT

This report is the outgrowth of a request from the Town of Mansfield to the Tolland County Soil and Water Conservation District (S&WCD). The Eastern Connecticut Resource Conservation and Development (RC&D) Project Executive Council also approved the request as a project measure which was subsequently reviewed by the 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 the property boundaries were forwarded to all members of the Team prior to their review of the site.

The Environmental Review Team that field-checked the property consisted of the following personnel: Joe Neafsey, District Conservationist, SCS; Mike Zizka, Geologist, Connecticut Department of Environmental Protection (DEP); Rob Rocks, Forester, DEP; Andy Petracco, Recreation Specialist, DEP; Les Barber, Planner, Windham Regional Planning Agency; and Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Project.

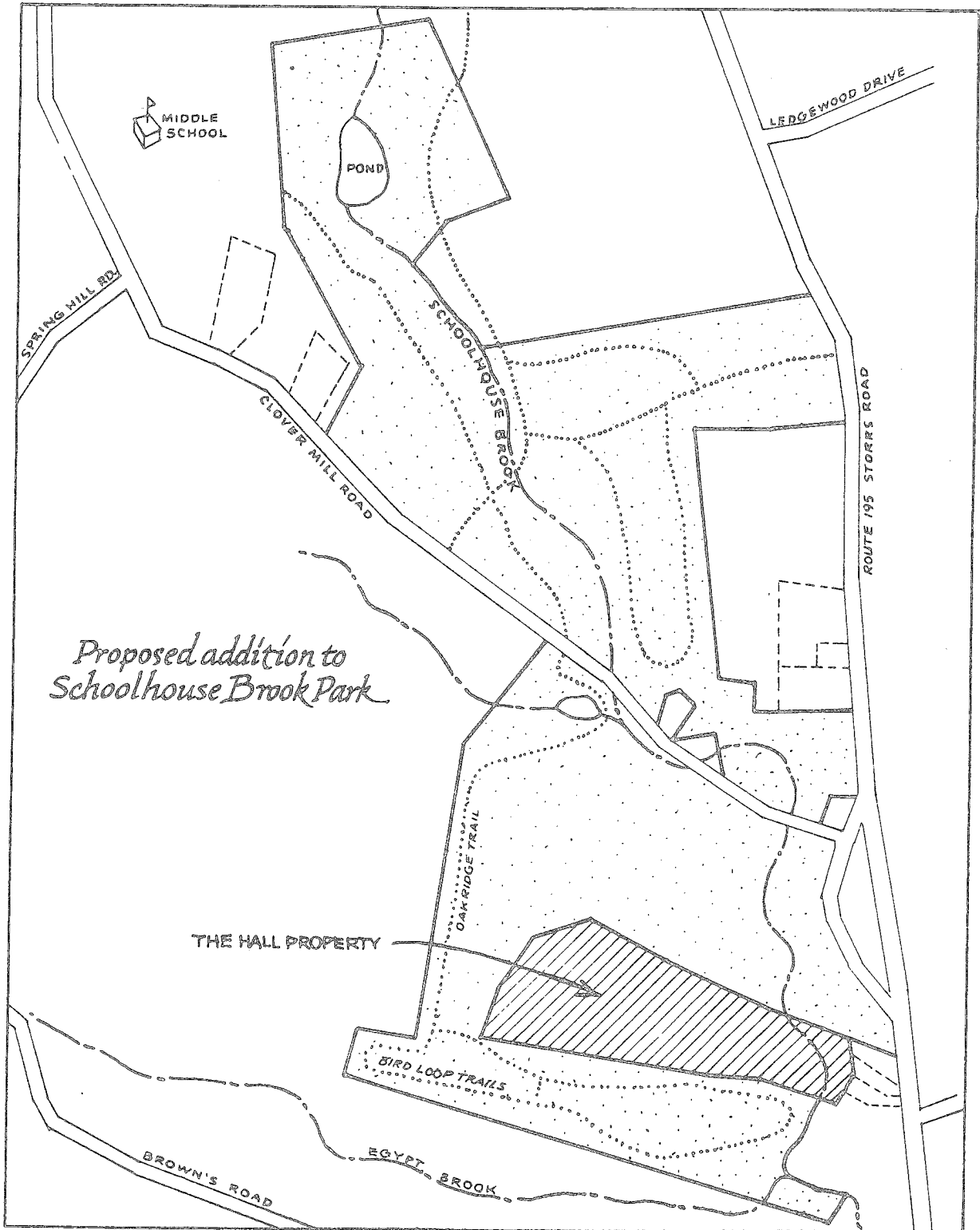
The Team met and reviewed the site on Thursday, November 13, 1980. Reports from each Team member were sent to the ERT Coordinator for review and summarization for this final report.

This report is not meant to compete with private consultants by supplying site designs or detailed solutions to development problems. As requested by the Town, this report, which identifies the existing resource base of the Hall Property, shall constitute the environmental assessment portion of the Town's open space application for federal Department of the Interior, Heritage Conservation and Recreation (HCRS) funds to assist in the acquisition of the Hall Property.

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 Project, 139 Boswell Avenue, Norwich, Connecticut 06360, 889-2324.

Proposed Aquisition



DESCRIPTION OF THE PROPOSAL

The Town of Mansfield seeks to purchase a 23.3 acre tract of land which is virtually surrounded by the town-owned Schoolhouse Brook Park. It lies west of Rte. 195 and south of Clover Mill Road. The property is presently owned by Mrs. Germaine Hall of Mansfield Center. The Hall property fronts on Rte. 195, directly opposite the intersection with Chaffeeville Road.

The property is primarily woodland with a brook flowing through the eastern portion. Part of the brook's course takes it through a small swamp on the property. The eastern portion of the tract may be characterized as predominantly flat with the brook cutting diagonally across it. While the western portion is hilly with some rock outcrops. The property was logged off recently with most of the higher quality trees removed. The timber harvest areas are rather unsightly with the high stumps and slash left behind. The appearance will improve somewhat after the slash has decomposed.

Mrs. Hall states that this land has an interesting history, having been in the Hall family for many generations. Three Hall brothers received a grant of land in the 17th century to an area beginning south of Chaffeeville Road and extending to the foot of Spring Hill, taking in land on both sides of the present Route 195. The parcel in question was probably part of this grant. More recently, Charles Hall and John Barrows worked in these woods together. One of their projects was the digging of a small well for drinking water, which still exists. It is said that a high ledge in this area once served as an Indian lookout and it is thought to have been the site of an important Indian campground. A number of Indian artifacts have been found on the property.

Acquisition of the Hall Tract would enhance usability and control on this portion of the town park by consolidating the pattern of ownership.

DESCRIPTION OF THE ENVIRONMENT

PRESENT/PAST LAND USES

The project site was formerly used as farmland, but has grown into a productive woodland. The property has recently been logged (within the past two to three years.) Slash is still evident on the site.

The present landowner has found evidence of Indian encampment on certain sections of the property.

SOCIO-ECONOMIC CONDITIONS

The Town of Mansfield has a total 1980 population of 20,747 according to the preliminary census count. That figure is a 3.8% increase over the 1970 population of 19,994. Half of the 1970 population, numbering 10,691 persons, was concentrated in the Storrs urban area which lies about three miles north of Schoolhouse Brook Park of which the proposed acquisition would be a part. Windham, the largest town in

the region and abutting Mansfield to the south, had a preliminary 1980 population of 21,068, a 7.3% increase over the 19,626 population of 1970.

The urban center of Windham (the City of Willimantic) lies about four miles south of Schoolhouse Brook Park. Its preliminary 1980 population of 14,636 is an increase of only 200 over the 1970 figure. While certainly in a different town, Schoolhouse Brook Park is the most convenient, accessible, and diversified large community park available to Willimantic residents and its swimming area is actively used by them.

Mansfield and, to a significant but lesser extent, Windham residents are the direct beneficiaries of the improvements at Schoolhouse Brook Park. As the following table indicates these two towns encompass the majority of the residents in the region.

TOTAL POPULATION

	<u>1970</u>	<u>% Regional Pop.</u>	<u>Preliminary 1980</u>	<u>% Regional Pop.</u>	<u>Projection 2000</u>	<u>% Regional Pop.</u>
Mansfield	19,994	31%	20,747	29%	22,000	27%
Windham	19,626	30%	21,068	30%	24,080	30%
Region	64,376		70,959		81,360	

The two urban areas of these towns house a significant concentration of the region's low and moderate income persons: the large student population, numbering 8000 dormitory students and many low income student households off campus in Mansfield and the large number of elderly, low and moderate income and minority households in Willimantic.

Minority population in the Windham region as a whole is quite small; less than 4% in the 1970 Census but Mansfield and Windham house a disproportionate and significant share of these residents. The following table illustrates the point.

	<u>Race</u>			<u>Spanish Indicators</u>		
	<u>Negro</u>	<u>Indian</u>	<u>Other</u>	<u>By Birth Or Origin</u>	<u>Puerto Rican</u>	<u>Spanish Language</u>
Mansfield	316	22	293	25	70	209
Windham	274	6	101	715	630	902
Subtotal	590	28	394	740	700	1,111
Regional Total	710	44	452	1,077	707	1,215
Mansfield/Windham as % of Region	83%	64%	87%	69%	99%	91%

The concentration of college age persons in these two towns is illustrated by the following table.

Population

	<u>Age 16-21</u>	<u>% of Total Population</u>	<u>Age 22-34</u>	<u>% of Total Population</u>
Mansfield	7,923	39%	3,949	20%
Windham	2,340	12%	3,523	18%
Remainder of the Region	2,318	9%	5,112	21%

Mansfield and Windham between them were the home to 62% of the elderly (60 and over) in the region in 1970. While the elderly are perhaps less mobile than other segments of the population, the Mansfield Conservation Commission has been exploring the options available to develop trails suitable for the use of the elderly; the park is likely to be more accessible to the elderly in the years ahead.

Mansfield, especially in combination with Windham which lies well within the service area of the park, provides a home to many of the population elements which receive the most benefit from a convenient, large, multifaceted recreational facility. The acquisition of the Hall property would, in particular, improve on that "wilderness" aspect of the park which cannot be duplicated in heavily developed urban parks in Willimantic.

The Windham Region as a whole and Mansfield in particular continues to show a decline in manufacturing employment which is considerably below the state average. In 1976 only 14.1% of total employment in the region was engaged in manufacturing compared to 32.1% in Connecticut.

The occupational distribution of Windham residents in 1970 is indicated below.

	<u>White Collar</u>	<u>Blue Collar</u>	<u>Service</u>	<u>Farm</u>
Mansfield	64.6%	14.3%	19.1%	1.9%
Windham	46.0%	38.8%	15.0%	.2%
Region	51.4%	32.4%	14.0%	2.3%

Income figures for Mansfield in 1970 indicate a very high rating for households and a very low rating for unrelated individuals as compared with national standards. The presence of many low income students accounts for this anomalous situation. Windham exhibits less extreme income spreads, although 9.7% of the Town's population was in poverty compared to 5.6% in Mansfield.

Commercial and Industrial activity is concentrated in lower Mansfield/Willimantic, 3 to 4 miles away, and to a lesser extent in Storrs about three miles away. A small commercial center exists in Mansfield Center one-half mile to a mile from the Hall property.

EXISTING TRANSPORTATION ROUTES

Route 195, the principal north/south route in the Windham Region connecting Storrs and Willimantic, serves as the principal access to the Hall property and Schoolhouse Brook Park via Clover Mill Road which leads off from Route 195. Access is convenient for those with automobiles. A regular transit district bus route now operates daily along Route 195 from Willimantic to Storrs. At the moment the nearest stop is in Mansfield Center, a mile south of the Hall property. As the service continues it might be possible to provide a more convenient stop near or at the park, particularly in the summer if demand can be demonstrated.

Dial-a-Ride service could provide free access to the park to any Windham Region elderly or handicapped resident or for a fee for any other, subject to more important priority trips.

The Hall acquisition will in no way contribute to any congestion on approach roads. Turns into and out of Clover Mill Road from Route 195 can be hazardous due to the volume and speed of traffic on that highway. However the additional activity stimulated by the Hall property will be negligible.

SURFACE AND SUBSURFACE GEOLOGIC CONDITIONS

The Hall property is located in an area encompassed by the Spring Hill topographic quadrangle. A surficial geologic map of the quadrangle has been prepared by P.H. Rahn and published by the Connecticut Geological and Natural History Survey (Quadrangle Report No. 26). Three major surficial geologic units are found on the site: till, stratified drift, and alluvium. The first two are glacial sediments. During the period when glacier ice flowed through Connecticut, it scraped, plucked at, and gouged preexisting bedrock surfaces and soils, accumulating and transporting the loose rock debris. Most of this material was redeposited on the hillsides directly from the ice without further reworking by water. Till is the name given to these direct ice deposits. They consist of rock particles ranging in size from clay to boulders. Till textures vary from sandy and loose (Generally in the upper few feet) to silty and tightly compact. Till thicknesses on the site appear to be generally less than 10 feet.

Stratified drift consists of rock debris that was washed out of melting glacier ice during a period of glacial retreat. The deposit is generally well-sorted (i.e. particles of different sizes are separated) and distinctly layered. In most places, sand and gravel are the predominant grain sizes, but occasional layers of silt or clay may be interspersed. The thickness of the stratified drift is not known, but it probably varies from zero at the western contact with till to about 40 feet at the eastern boundary of the property.

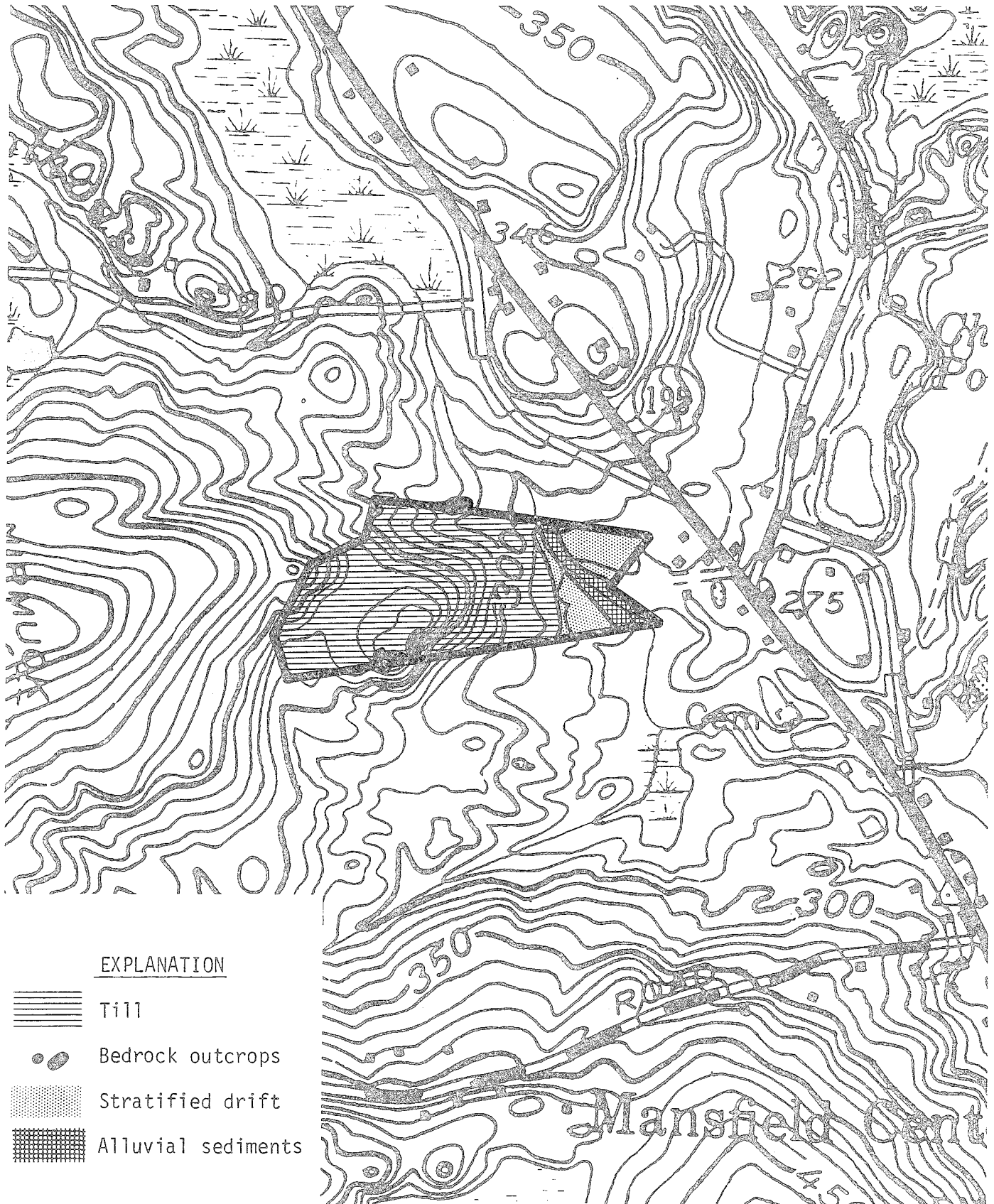
Alluvium is a term applied to sediments deposited by modern streams in channels and on floodplains. It consists largely of retransported till or stratified drift particles but includes eroded rock debris as well. The alluvium is very thin in this area; it is generally less than 5 feet thick.

Small outcrops of bedrock were observed in the western half of the property. A larger, cliff-like exposure is located at the southern boundary. The rock types are primarily schists and gneisses. Schists are rocks in which the constituent minerals have largely been arranged into thin parallel layers, giving the rock a slabby

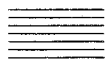
Surficial Geology

(adapted from Conn. Geol. &
Nat. Hist. Surv. Quad.
Rpt. No. 26)

0 660
scale



EXPLANATION



Till



Bedrock outcrops



Stratified drift



Alluvial sediments

appearance. Gneisses are rocks in which thin bands of parallel elongate minerals alternate with bands or layers of more granular minerals. Both types of rock were formed by deformation of preexisting rocks. The predominant components of the bedrock are quartz, feldspar, biotite, hornblende, and garnet, but muscovite, sillimanite, and other minerals are present in smaller amounts. Occasionally interspersed among the schists and gneisses are layers and lenses of pegmatite, a coarse-grained rock with a granitic composition.

SOILS

Soil series typical of the Hall property include the Hollis series, the Jaffery series, the Leicester, Ridgebury, Whitman complex, the Scarborough series, the Sudbury series and the Sutton series. Leicester, Ridgebury Whitman complex and the Scarborough series are regulated wetland soils under Public Act 155.

The Hollis series consists of shallow, well drained to excessively drained soils formed in acid glacial till derived mainly from schist and gneiss. They are nearly level to steep soils on bedrock controlled land forms. Depth to bedrock ranges from 10 to 20 inches.

Limitations for paths and trails associated with recreational development:

<u>Slope range</u>	<u>Limitations</u>
0-15 %	Slight
15-25%	Moderate-slope
25+%	Severe-slope

Potential as habitat for wetland and upland wildlife is poor.

Suitability for woodland production is fair (slight to moderate limitations) except for seedling mortality.

The Jaffrey (Hinckley) series consists of deep, excessively drained soils formed in water sorted material. Typically they have very friable gravelly loamy sand in A and B₂ horizons. These soils are found on terraces, outwash plains, deltas, kames and eskers.

Limitations for paths and trails associated with recreational development:

<u>Slope range</u>	<u>Limitations</u>
0-15%	Slight
15-25%	Moderate-slope
25+%	Severe-slope

Potential as habitat for upland and wetland wildlife is poor.

Suitability for woodland production is fair (slight to moderate limitations) except for seedling mortality.

The Leicester, Ridgebury, Whitman Complex consists of deep poorly drained soils formed in glacial till. Typically they are level to gently sloping soils found in low-lying wet areas, along drainageways on uplands or in depressions.

Limitations for paths and trails associated with recreational development is moderate to severe because of ponding, wetness and large stones.

Potential as habitat for upland wildlife is fair; good for wetland wildlife.

Suitability for woodland production is severe due to wetness, windthrow hazard, seedling mortality and equipment limitations.

The Scarboro series consist of deep, very poorly drained soils on outwash plains, deltas and terraces. They are formed in thick sand deposits.

Limitations for paths and trails associated with recreational development are severe due to ponding and wetness.

Potential as habitat for upland wildlife is poor and good for wetland wildlife habitat.

Suitability for woodland production is poor (severe limitations).

The Sutton series consists of deep, moderately well drained soils formed in glacial till. They are level to moderately steep soils on glacial till covered uplands usually on lower slopes or depressions.

Limitations for paths and trails associated with recreational development are slight.

Potential as habitat for upland wildlife is good and poor for wetland wildlife.

Suitability for woodland production is good.

WATER RESOURCES

Schoolhouse Brook flows south through the Hall property, entering near the center of the northern boundary and exiting near the southeastern corner of the site. The brook splits into two channels about 375 feet north of the property and reconverges about 50 feet below the northern boundary. A tributary from the west enters the brook approximately 50 feet south of the reconvergence point. Schoolhouse Brook commands a drainage area of about 990 acres at the point where it exits the site. Included in this area are several swamps and marshes, as well as Schoolhouse Brook Pond. Although the watershed's surficial geologic base is almost entirely till, which is a meager source of surface-water recharge during dry periods, Schoolhouse Brook maintains a significant flow during most dry seasons. This fact is reflected by the fish population which is sustained in the reach of the brook within the boundaries of Schoolhouse Brook Park. It is likely that the wetlands along the brook's channel are important sources of stream recharge in dry periods.

Schoolhouse Brook passes into an area covered by sandy and gravelly stratified drift near the northern boundary of the Hall parcel. This material is at the western fringe of a massive sequence of stratified drift deposits in the Fenton River-Mount Hope River-Natchaug River valley. The stratified drift on the Hall site itself may be suitable for wells yielding groundwater at low to moderate rates. East of the site, the deposits may be capable of yielding more than 100 gallons per minute at selected well locations. Since wells placed in coarse-grained deposits near streams may withdraw part of their water yield from the streams by induced infiltration, particularly when pumping rates are high, it is important to protect the quality of the surface waters. At present, the quality of both surface water and groundwater in the vicinity of the Hall property appear to be good.

VEGETATION

The 23[±]acre property proposed for acquisition may be divided into three vegetation types. These include Pine, 8[±]acres; Old field, 3[±]acres; and four mixed hardwood areas, totaling 12[±]acres. (See Vegetation Type Map). No rare or endangered plant species were observed during the November 13th field investigation.

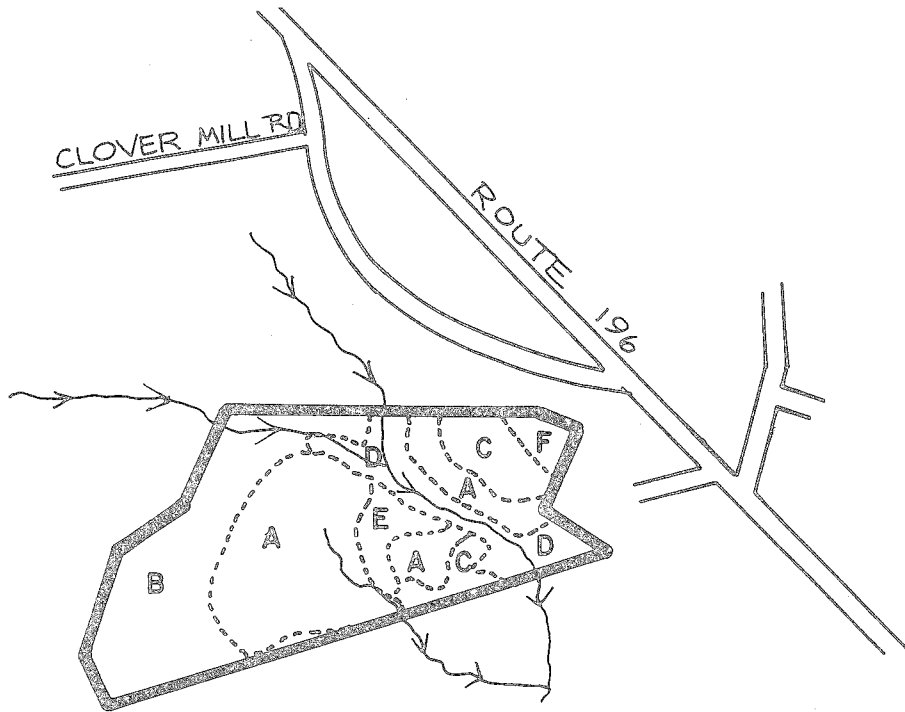
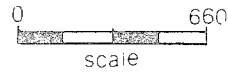
This entire tract has recently received a harvest of its sawtimber-size trees, including both hardwoods and softwoods. Many culls (trees that will never produce sawlog material) and damaged trees were left behind, uncut. Extremely steep areas and some of the wetter stream-belt sections were excluded from this harvest. A description of the vegetation types within this tract follows:

Type A (Pine). This 8[±]acre stand is made up of pole and small sawtimber-size eastern white pine with red pine intermixed. Scattered hardwood species including white oak, black oak, red oak, shagbark hickory, pignut hickory, yellow birch, black birch and sugar maple are also present along with occasional eastern hemlock. Stocking levels are quite variable. The steeply sloped sections of this stand are fully-stocked while areas which have recently been harvested are either under-stocked or at the low end of fully-stocked. The understory in this stand is dominated by hardwood tree seedlings, white pine seedlings, and maple-leaf viburnum. Ground cover consists of huckleberry, barberry, Christmas fern, club moss and Canada mayflower.





Type B (Mixed Hardwoods). Sapling to pole-size black oak, white oak, shagbark hickory, pignut hickory, black birch, and scattered eastern white pine, eastern hemlock, red maple and American beech are present in this 7[±]acre fully-stocked stand. Hardwood tree seedlings, white pine seedlings, hemlock seedlings, flowering dogwood, hop hornbeam, and maple-leaf viburnum form the understory in this stand. Ground cover is made up of barberry, grasses, huckleberry, Christmas fern, bracken fern, aster, partridge berry, striped pipsisewa, rattlesnake-plantain and club moss.

Type C (Old Field). Approximately 3 acres of this site is vegetated by old field species. These include grasses, goldenrod, dewberry, japanese barberry, bayberry, sheep laurel, poison ivy, raspberry and multi-flora rose. Several tree species have also become established, included are red oak, eastern red cedar and eastern white pine. Sapling-size white spruce have been planted along the western boundary of the northern field.

Vegetation



LEGEND

	Roads
	Property Boundary
	Vegetation Type Boundary
	Streams

VEGETATION TYPE DESCRIPTIONS*

TYPE A.	Pine, 8 [±] acres, variable stocking, pole to small sawtimber-size.
TYPE B.	Mixed hardwoods, 7 [±] acres, fully-stocked, sapling to pole-size.
TYPE C.	Old field, 3 [±] acres, under-stocked with tree species.
TYPE D.	Mixed hardwoods/stream belt, 3 [±] acres, over-stocked, sapling to pole-size.
TYPE E.	Mixed hardwoods, 1 [±] acre, fully-stocked, seedling-size.
TYPE F.	Mixed hardwoods, 1 [±] acre, over-stocked, sapling to pole-size.

- * Seedling-size = Trees less than 1 inch in diameter at 4 1/2 feet above the ground (d.b.h.)
 Sapling-size = Trees 1 to 5 inches in d.b.h.
 Pole-size = Trees 5 to 11 inches in d.b.h.
 Sawtimber-size = Trees 11 inches and greater in d.b.h.

Type D. (Mixed Hardwood/Stream Belt). This 3±acre over-stocked stand is made up of poor to medium quality sapling to pole-size red maple, yellow birch and white ash. Occasional eastern white pine are also intermixed. The understory is dominated by spicebush and witchhazel with white pine seedlings becoming established. Christmas fern, cinnamon fern, hayscented fern, sensitive fern, grasses, barberry, poison ivy and club moss form the ground cover in this stand.

Type E. (Mixed Hardwoods). A dense growth of sugar maple seedlings, red oak seedlings, black birch seedlings and white pine seedlings have become established on this one acre clear cut area. Ground-cover vegetation in this area consists of grasses, barberry and hayscented fern.

Type F. (Mixed Hardwoods). This one acre over-stocked stand is made up of poor quality sapling to pole-size red maple. Spicebush is present in the understory with scattered patches of highbush blueberry. Barberry, cinnamon fern and sensitive fern form the ground cover in this area.

WILDLIFE

The Hall property has a variety of areas with different potentials as habitat for wildlife ranging from fair to good.

The logging operation that was performed in 1975 reduced and canopy cover over much of the eastern portion of the property and the regrowth of shrubs and sprouts has benefits to wildlife, especially the deer population. Evidence of browsing was observed, as well as droppings. Ruffed grouse was also observed.

A lack of underplanting and fruiting shrubs limit use of the area by birds, but the tops and brush piles left from the logging operation probably provide some food and cover for indigenous bird species.

Clearings and brush, as well as regrowth in the stream corridor, provides good habitat for certain small mammals, birds, reptiles and amphibian species.

FISH

Schoolhouse Brook is the property's most attractive feature. The brook is perennial and carried a substantial flow at the time of assessment when it would have been expected to be very low. This stream would be expected to support those varieties of fish most commonly found in the small stream environment; i.e. brook trout, dace, shiners, and redbfish pickere1. Other species such as sunfish, fall-fish and darters may also be present.

The brook ranges from a broad flowage over and around boulders to a narrower band of water over smaller sized (rubble) substrate. As a result of this variety in appearance, the stream could serve as an interesting study area in the fields of stream hydrology and fish habitat.

Purchase of this property will assist the town of Mansfield in protecting Schoolhouse Brook as an important town resource. The Hall property presently represents an interior piece within the existing Schoolhouse Brook town park. With this property incorporated into the park, the town will have a solid, well-defined block of open space for the enjoyment of its residents.

PROBABLE FUTURE ENVIRONMENT

The Hall property would be suitable for some residential or commercial development. If the town is unable to purchase the property for integration into Schoolhouse Brook Park, such development is likely to occur. This could result in deterioration of local ground water quality and of the quality of Schoolhouse Brook. Although a "no-action" alternative would have the same environmental effect (i.e. negligible) as acquisition, it is probable that the parcel would not remain untouched for long.

ENVIRONMENTAL IMPACT

NATIONAL REGISTER

The proposed acquisition is just north of the Mansfield Center Historic District, both a national register district and a local historic district. It would secure more fully the natural qualities of the approaches to the District from the north and will in every way contribute to the protection of the environment.

Indian artifacts have been found on the site but no archeological investigation has taken place to verify the existence of Indian encampment.

EFFECT ON LAND USE

Acquisition of the Hall property will have little effect on present land use. The project site is surrounded by Town owned open space and its acquisition will enhance and supplement this adjoining use.

EFFECT ON SOCIO-ECONOMIC CONDITIONS

Purchase of this parcel should have no appreciable effect on socio-economic conditions within the town.

EFFECT ON TRANSPORTATION ROUTES

Acquisition of this property should not cause increased use of roads in the vicinity of the site. Adjacent property is currently being used for recreation purposes and additional open space property would not be expected to increase this use to any great extent.

EFFECT ON WATER RESOURCES

The acquisition of the Hall property should have no impact on ground or surface waters.

EFFECT ON VEGETATION

The proposed purchase and utilization of this property for passive recreation such as hiking, nature study, picnicing and low density youth group camping will have little negative impact on the vegetation which is present.

Removal of some vegetation to open up the picnic and camp areas to increase sunlight and air flow will be necessary. Clearing operations should remove only the lowest quality trees and those which are a direct hazard to area users. Any healthy, large, high vigor trees should be retained for their shade and aesthetic value.

Few further losses of vegetation, due to soil compaction or root injury are expected because the trails through this property have been in existence for many years. Vandalism and direct trampling of vegetation outside the trail areas may be expected.

EFFECT ON WILDLIFE

Purchase of this site should have little adverse effect on wildlife in the area. Intrusions by humans may restrict wildlife movement somewhat, but committing this area to long range open space use in conjunction with adjacent property should enhance wildlife habitat values in the general area.

MITIGATING MEASURES

Careful planning and wise layout of any new trails, picnic sites and camping areas are essential to minimize potential problems. New trails should be developed following natural land contours. They should also avoid wet areas and very steeply sloped areas. Picnic and campsites should be located on well drained soils, with adequate drainage.

The trails, picnic areas, and camp sites should all be well defined and clearly marked. This should help to limit extensive soil compaction, root injury and trampling of herbaceous vegetation outside these areas. Root injury and soil compaction may be reduced by spreading wood chips several inches deep along heavily used trails, and in picnic and camping areas.

It is extremely important that provisions for trail, picnic and camping area maintenance be established prior to development. If provisions for future maintenance are not made, these areas will rapidly decline in quality.

RECREATION POTENTIAL

Recreational potential for the property is good. Its location and topography unquestionably make it a desirable addition to the town park. Extensive recreational use is envisioned by the town, with some youth group camping also provided. The network of cart paths are usable for trail related activities such as hiking, jogging,

birdwatching, cross-country skiing, showshoing, nature study, etc. If the camping use envisioned is of the backpack variety, no vehicular access need be provided. Although the tract also lends itself to picnic use, with its attractive hill top areas, this would necessitate construction of a road for vehicle access. The need for picnic sites is currently being provided by the picnic area located near the swimming area along Clover Mill Road.

The varied terrain would provide opportunities for outdoor classroom study. Access to the property would have to be via the existing foot trail system (Oak Ridge and Bird Loop trails) since the present access from Route 195 is excluded from the sale and will remain in private ownership. Vehicle parking is currently provided at the town swimming and picnic area on Clover Mill Road.

Lying just to the west of the Hall tract and town property is the Nipmuck trail which is one of the hiking trails in the Connecticut Blue Trail system. The Nipmuck trail runs from the town of Mansfield to the town of Union. If permission could be secured to use the intervening private land to connect the Nipmuck trail to the town park, town land could be used as a takeoff or terminal point for a hike on the Nipmuck. By this, existing or yet to be established foot trails could thereby be linked to the main Nipmuck trail, providing access to and a diversion from the main Nipmuck trail. There may be another possibility of cross-linking the west branch with the east branch of the Nipmuck trail. The southern terminus of the Nipmuck is forked with its east branch routed through Mansfield Hollow State Park. Connection of these branches would thereby form a closed loop. A designated backpack camping area on the Hall tract or adjacent town property could be used by individuals or scout and church type groups in conjunction with a hike on the Nipmuck. The major drawback of a trail leg connecting with the east branch (Mansfield Hollow) of the Nipmuck is the necessity of crossing the heavily travelled Route 195.

The Hall property is claimed to have been used extensively by the Indians. If evidence of this use can be found, the historical significance of the area can possibly be incorporated in an interpretive program with educational potential signs or numbered stations cross-keyed to a descriptive map and text at the parking area could be used to this end.

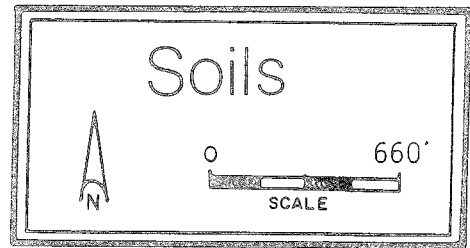
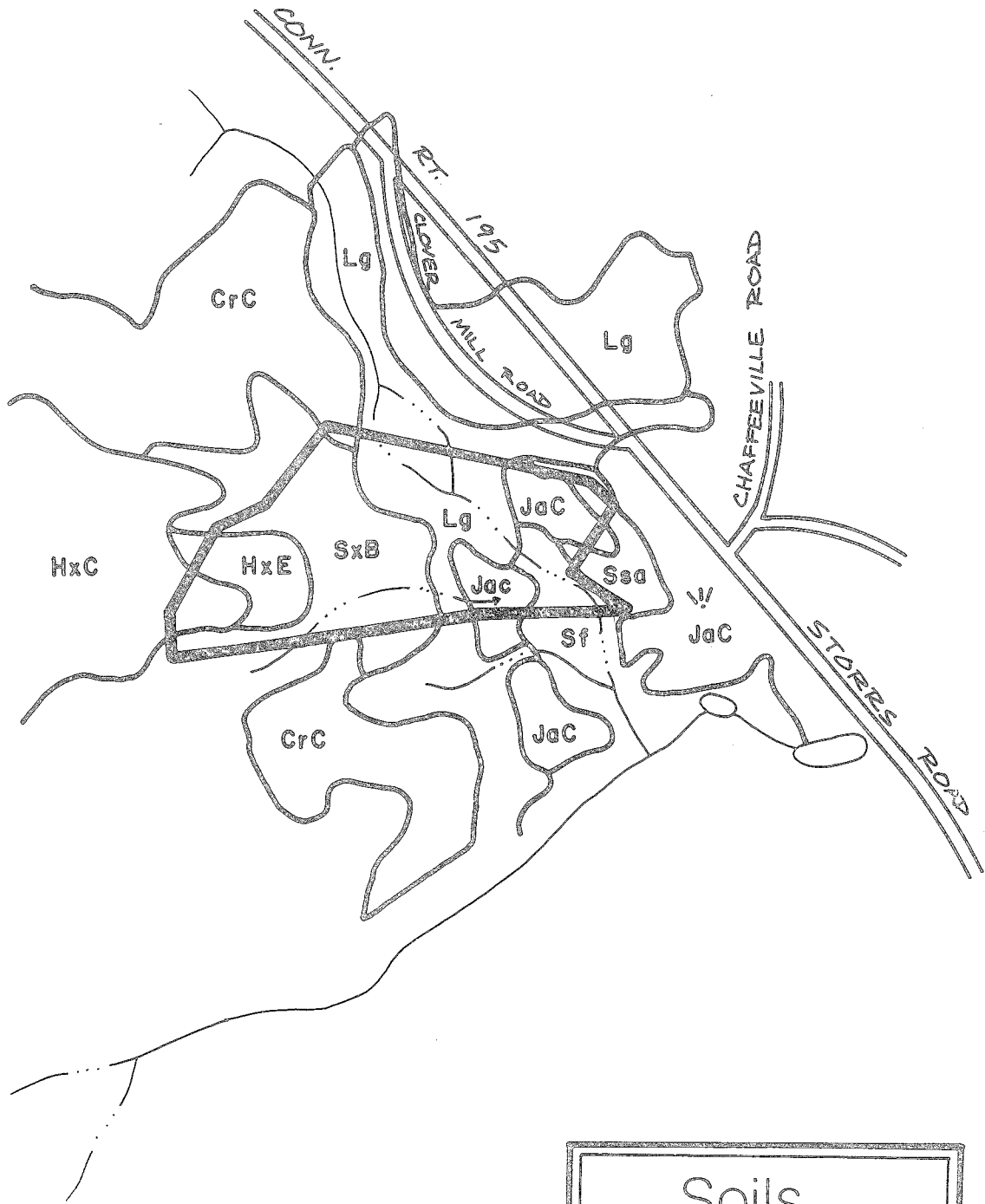
Increases in use levels by town ownership should be marginal with the passive recreational uses planned, so that the anticipated impacts on transportation routes, noise levels, air quality, etc. would be negligible. If timber resource management is to be carried out on the block of town land into which the Hall tract would be absorbed, vehicular access would have to be provided for extraction of the timber.

A more pronounced impact would result if more formalized facilities such as picnic and drive-to camping areas were installed. The erosion potential created in use of steeper sloped for trails or roads should be minimized by methods prescribed by the Soil Conservation Service. More frequent maintenance and cleanup and the setting out of refuse containers would be necessary if such formalized facilities were installed.

If purchased, the property could be immediately used for passive recreational pursuits while providing good opportunities for future development in an expanded recreational program. A no action alternative to purchase would therefore be undesirable from the standpoint of the possible benefits which could otherwise accrue to the town and its residents (to include the nearby University of Connecticut). If the town's share of funding were to be rejected thereby precluding purchase, a lease and option

to buy may be a consideration. Though outright purchase is definitely preferred, if not possible, a leasing agreement may be the best alternative action for the Town.

Appendix



HALL PROPERTY
MANSFIELD, 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
Hollis	HxC	2	7	Depth to rock, large stones	3	3	3	3
Hollis	HxE	3	11	Depth to rock, large stones	3	3	3	3
Jaffrey	JaC	3	11	Slope	2	2	2	2
**Leicester, Ridgebury Whitman	Lg	7	26	Wetness, seepage	3	3	3	3
**Scarboro	Sf	2	7	Wetness	3	3	3	3
Sudbury	SsA	1	4	Wetness, frost action	3	3	2	1
Sutton	SxB	9	34	Wetness, frost action, large stones	3	3	2	2
		<u>27</u>	<u>100</u>					

* Limitations: 1 = slight, 2 = moderate, 3 = severe.

** Regulated wetland soil under Public Act 155.

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.