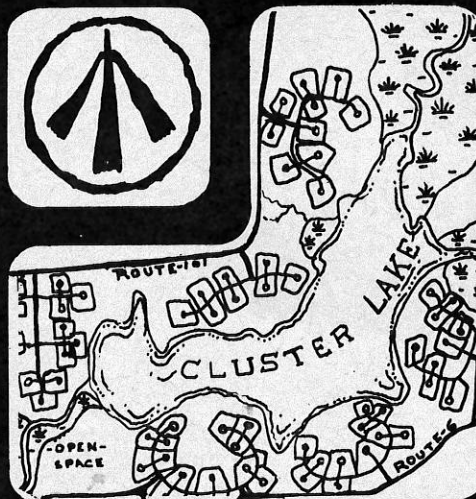
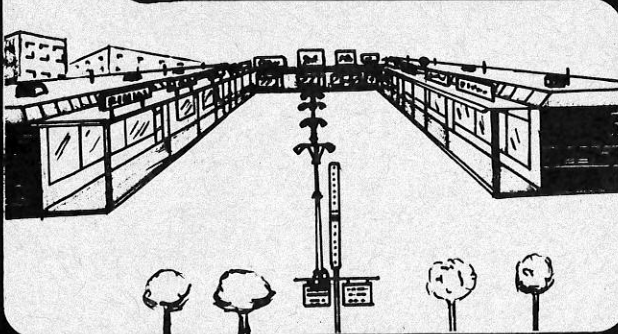
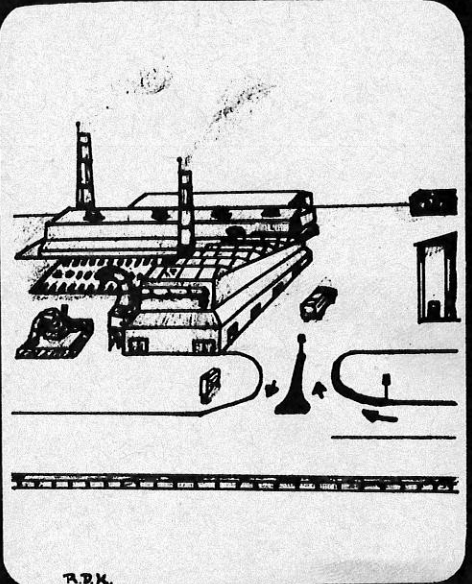


# ENVIRONMENTAL REVIEW TEAM REPORT



## JORDAN PROPERTY ACQUISITION BROOKFIELD, CONNECTICUT

Ⓚ KING'S MARK  
RESOURCE CONSERVATION AND DEVELOPMENT AREA

# KING'S MARK ENVIRONMENTAL REVIEW TEAM REPORT

On

JORDAN PROPERTY ACQUISITION  
BROOKFIELD, CONNECTICUT  
JUNE, 1978



King's Mark Resource Conservation & Development Area  
Environmental Review Team  
P.O. Box 30  
Warren, Connecticut 06754

## ACKNOWLEDGMENTS

The King's Mark Environmental Review Team operates through the cooperative effort of a number of agencies and organizations including:

### Federal Agencies

U.S.D.A. SOIL CONSERVATION SERVICE

### State Agencies

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEPARTMENT OF HEALTH

DEPARTMENT OF TRANSPORTATION

UNIVERSITY OF CONNECTICUT COOPERATIVE EXTENSION SERVICE

### Local Groups and Agencies

LITCHFIELD COUNTY SOIL AND WATER CONSERVATION DISTRICT

NEW HAVEN COUNTY SOIL AND WATER CONSERVATION DISTRICT

HARTFORD COUNTY SOIL AND WATER CONSERVATION DISTRICT

FAIRFIELD COUNTY SOIL AND WATER CONSERVATION DISTRICT

NORTHWESTERN CONNECTICUT REGIONAL PLANNING AGENCY

VALLEY REGIONAL PLANNING AGENCY

LITCHFIELD HILLS REGIONAL PLANNING AGENCY

CENTRAL NAUGATUCK VALLEY REGIONAL PLANNING AGENCY

HOUSATONIC VALLEY COUNCIL OF ELECTED OFFICIALS

AMERICAN INDIAN ARCHAEOLOGICAL INSTITUTE

x x x x x x

### Funding Provided By

CONNECTICUT STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Stanley J. Pac, Commissioner

### Policy Determined By

KING'S MARK RESOURCE CONSERVATION AND DEVELOPMENT AREA

Victor Allan, Chairman, Executive Committee

Stephen Driver, ERT Committee Chairman

George Sweeney, Coordinator

### Staff Administration Provided By

NORTHWESTERN CONNECTICUT REGIONAL PLANNING AGENCY

Warren C. Wilson, Chairman

Thomas A. J. McGowan, Director

Richard Lynn, ERT Coordinator

Robert D. Kaplan, ERT Draftsman

Irene Nadig, ERT Secretary

## TABLE OF CONTENTS

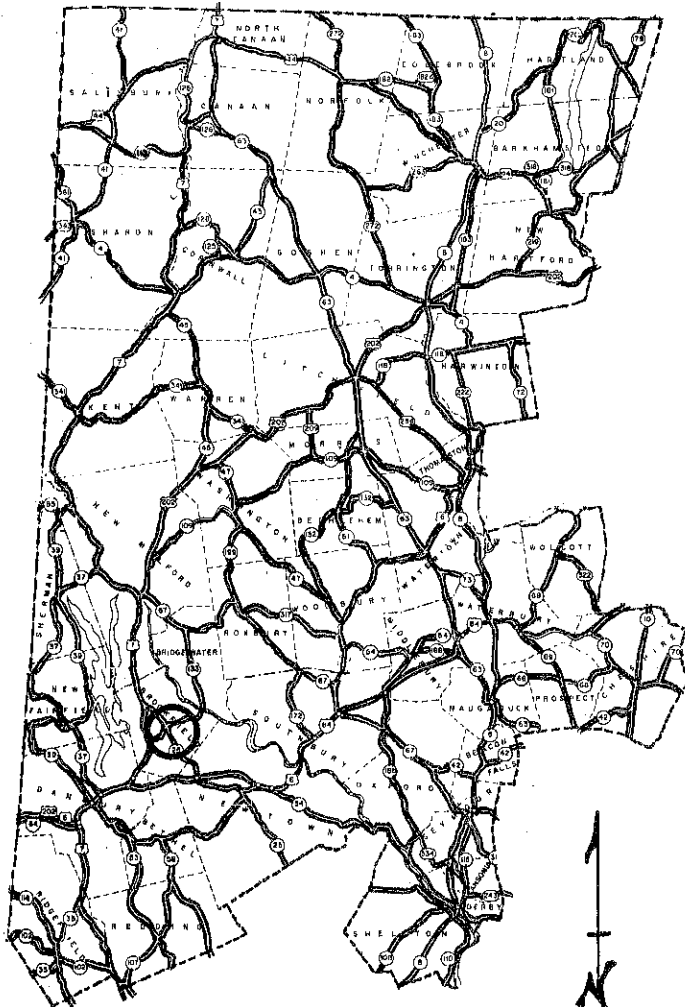
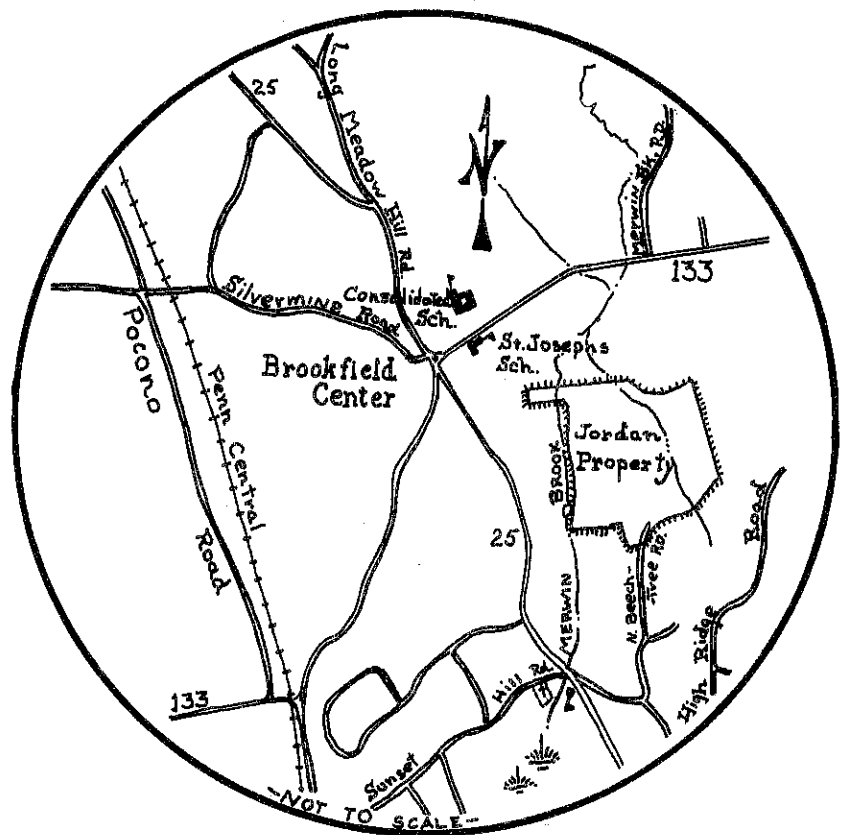
	<u>Page</u>
I. Introduction .....	1
II. Summary of Major Findings .....	2
III. Setting, Topography, Land Use .....	3
IV. Soils .....	5
V. Geology .....	5
VI. Hydrology .....	6
VII. Forestry .....	8
VIII. Wildlife .....	11
IX. Recreational Development Potential .....	12
X. Appendix .....	13
Soils Map	
Soils Limitation Chart	
Soil Descriptions	

## LIST OF FIGURES

1	Topographic Map .....	4
2	Watershed Map .....	7
3	Forest Vegetation Map .....	9

# LOCATION OF STUDY SITE

## JORDAN PROPERTY



0 5 10 miles  
0 26,400' 52,800'

# ENVIRONMENTAL REVIEW TEAM REPORT

## ON

### JORDAN PROPERTY ACQUISITION

### BROOKFIELD, CONNECTICUT

#### INTRODUCTION

The Town of Brookfield has an option to purchase a 52 acre parcel of land near Brookfield Center. The land, known locally as the Jordan Property, is currently wooded but has a history of agricultural use. The Town is considering the purchase of the property for open space and recreation purposes.

The First Selectman from the Town of Brookfield requested the assistance of the King's Mark Environmental Review Team (ERT) to aid the Town in analyzing the proposed acquisition. Specifically, the ERT was asked to identify the natural resources of the site and highlight opportunities and limitations for recreational development.

The ERT met and field reviewed the site on Wednesday, May 10, 1978. Team members for this review consisted of the following:

David Thompson.....District Conservationist.....Soil Conservation Service  
Mike Zizka.....Geohydrologist.....Dept. Environmental Protection  
Edward Rizotto.....Recreation Resource Specialist...Dept. Environmental Protection  
Jeff Schmaltz.....Wildlife Biologist.....Dept. Environmental Protection  
Don Smith.....Forester.....Dept. Environmental Protection  
Jim Williams.....Planner.....Housatonic Valley Council  
of Elected Officials

Prior to the review day, each team member was provided with a summary of the proposed project, a checklist of concerns to address, a soil survey map, a soils limitation chart, and a topographic map of the area. Following the field review, individual reports were prepared by each team member and forwarded to the ERT Coordinator for compilation and editing into this final report.

This report presents the ERT's findings and recommendations. It identifies the natural resource base of the site and discusses recreational development potential. It is hoped this information will assist the Town of Brookfield in making decisions regarding the future of the Jordan property.

If any additional information is required, please contact Richard Lynn (868-7342), Environmental Review Team Coordinator, King's Mark RC&D Area, P. O. Box 30, Warren, Connecticut.

\* \* \*

## SUMMARY OF MAJOR FINDINGS

1. The Jordan Property is an attractive piece of property from an open space, aesthetic, and passive recreational standpoint. The site is characterized by a rich diversity of vegetation and a varied and interesting landscape.
2. Opportunities for passive recreational development are good throughout the site. Probable uses include hiking, ski touring, nature study, picnicking, backpack camping, and possibly fishing if the property does in fact abut the small pond on Merwin Brook.
3. The value of the Jordan Property as regards forest vegetation is high. With careful management, this area can be productive in forest products while maintaining and enhancing educational, recreational, and wildlife values. Stand descriptions and recommendations for forest management are presented in the text.
4. The site contains three types of wildlife habitat: hardwood forest, old pasture and streambelt. Wildlife management practices such as brush cutting, mowing, and selective timbering could be implemented to increase the diversity and interspersion of habitat types. Such management would effectively improve the area for wildlife.
5. Opportunities for active recreational development (ballfields, tennis courts, playgrounds, etc.) of the property are limited. One area of + 6 acres at the southern end of the property off North Beech Tree Road is suitable for active recreational development. This same area could also accommodate structures and basic on-site facilities.
6. The Jordan Property is currently landlocked. Although the Town does own a right-of-way into the property on the eastern border of the site off Route 133, considerable costs would likely be incurred in developing this access point due to steep slopes and rock outcrops. A variety of access points are possible and would be satisfactory for passive recreational use and development of the property. Logistically, the western portion of the site has greater vehicular accessibility potential and such access would be essential for active recreational development of the property.
7. Town acquisition of additional open space is consistent with the "Brookfield Plan of Development, 1977".

## SETTING, TOPOGRAPHY, LAND USE

The Jordan property is located about one half mile southeast of Brookfield Center. Route 133 runs to the north of the property and Route 25 runs to the west. The tract is currently landlocked, but the town owns a small right-of-way into the property along the eastern border of the land off Route 133.

The property consists of a gently rolling hilltop and steeply sloping ( $\pm 15\%$ ) north slope of varied and interesting landscape (see Figure 1). The hillside rises between the narrow flood plains of Merwin Brook and the un-named brook transversing the property to the east. In the north-western part of the site, the slope is flatter but somewhat irregular. East of the un-named brook, the land surface is knobby because of the proximity of bedrock which crops out in many places. Elevations on the property range from a low of 420 feet at the northern tip of the parcel to a high of 590 feet on the southern border.

The entire tract is wooded, but was cleared and farmed years ago. Stone walls which once delineated crop fields stoically await the return of the plowman as the hardwood canopy heralds the return of primary species of trees and shrubs to the land. One small trail, a former farm road, cuts through the center of the property providing internal access. In addition, the property apparently abuts a small pond on Merwin Brook.

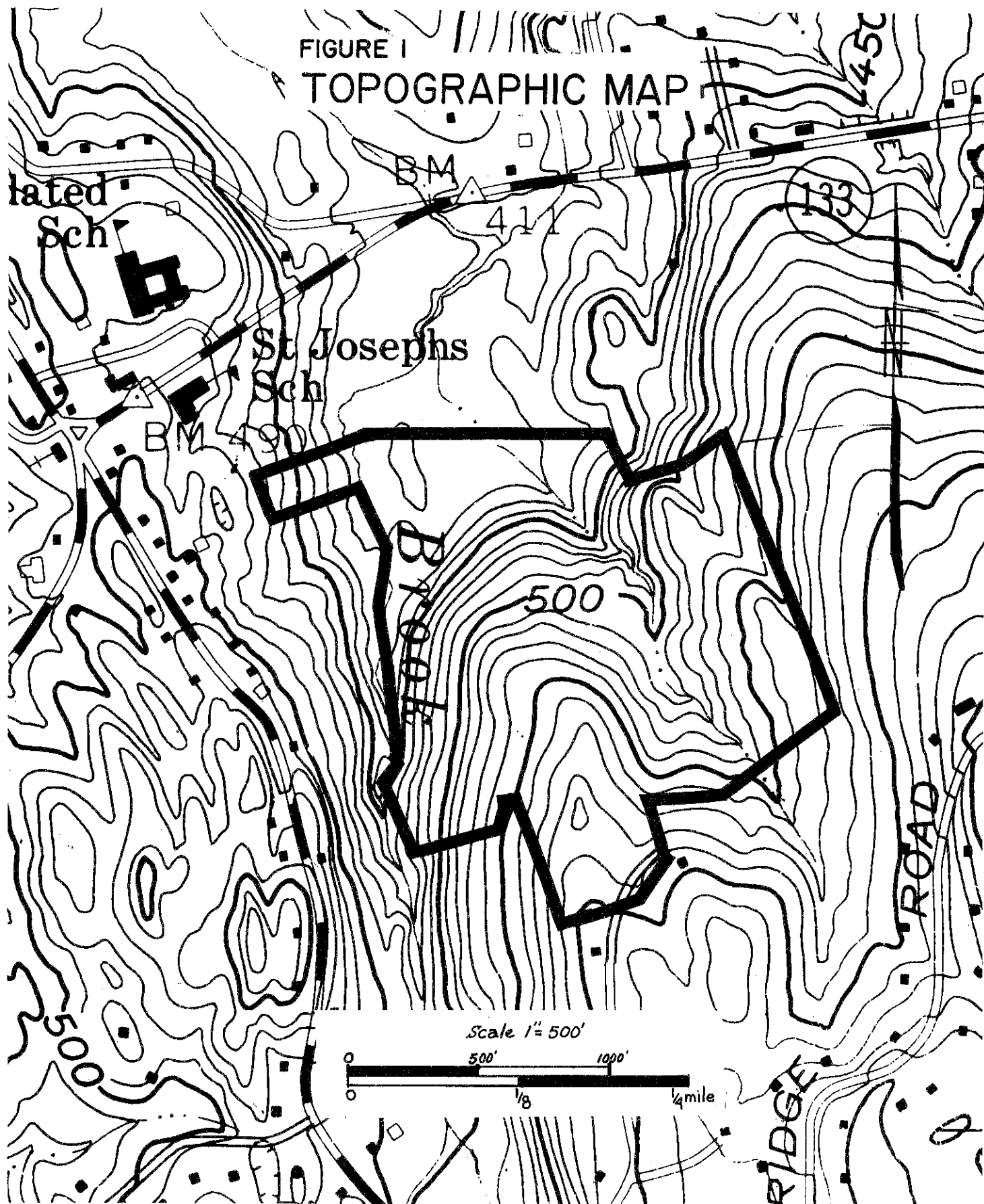
A review of aerial photographs from 1941 to 1976 reveals a drastic change in land use of the Jordan Property. By 1941 intensive agricultural use of the Jordan Property had been abandoned. It was the first property in the area to be abandoned. Approximately thirty centrally located acres remained partially open but the intrusion of brush and sapling trees was quite evident. The east ridge was wooded, but not densely at this time. By 1951 individual trees had invaded the brushy areas and the east ridge had become thickly wooded. Today, the entire tract is wooded.

Land adjacent to the site is predominantly low-density residential use with one institutionally used parcel just to the northwest of the site. There has been a notable shift in land use in the area surrounding the Jordan Property in the past 35 years. In 1941 the principal land use of the Jordan Property environs (north - south from Route 133 to Brookfield - Newtown town line and east - west between Route 25 and Tower Road) was agriculture. The only secondary roads serving the area were Tower Road, Birch Tree Road, and Camp Hill Road. There were a total of eight homes exclusive of those along Routes 133 and 25. By 1976, according to aerial photographs, the road count has increased to fourteen and the number of homes has skyrocketed to 285. In addition only two significant agricultural land units remain. Land not in farms or home-sites is in the advanced stages of reversion to woodland.



FIGURE 1

TOPOGRAPHIC MAP



## SOILS

A detailed soil survey map of the property is presented in the appendix of this report together with a description of all soils identified on the property.

The appendix also includes an interpretive soils limitation chart which identifies limiting factors for various land uses on individual soil types. These limiting factors have application only if development involving earth moving, structures or basic facilities are anticipated. None of the soils identified have limitations that would diminish the open space or passive recreational use of the property.

To accommodate formal team sport facilities, structures, or basic facilities, the most adaptable soil type is 32B. (See soils map in the appendix.) This soil can support a wide variety of uses with no significant site development problems. The 32XC area is limited only by slope. Although large scale regrading would be impractical on this soil, small facilities such as tennis courts could be terraced into the slope at several locations with little difficulty.

The remainder of the soils have limitations that would entail intensive construction procedures to convert to active recreational or structure sites.

## GEOLOGY

The bedrock underlying and cropping out on the Jordan Property is mapped and described in Quadrangle Report No. 7 of the Connecticut Geological and Natural History Survey; the report is entitled The Bedrock Geology of the Danbury Quadrangle, by James W. Clarke (1958). Only one rock unit, the Hartland Formation, is mapped for the property. The unit consists of garnet-sillimanite-biotite schist and biotite quartzite. Other principal minerals in the schist are quartz, andesine, tourmaline, and muscovite, while accessory minerals include kyanite, microcline, apatite, and zircon. No mining of these minerals is known to have occurred in the area, nor are economic concentrations of the minerals suspected. Mining of marble for lime has been active in Brookfield's history, but no marble is believed to underlie the property. Most local marble is found within the valley of the Still River, west of the proposed acquisition.

Surficial geologic materials, those deposits which overlie solid bedrock, have been mapped for the Danbury Quadrangle by Woodrow Thompson; his map is on open-file with the Natural Resources Center of the Department of Environmental Protection in Hartford. According to this map, a glacial deposit known as till is the principal surficial material on the Jordan property. Till contains an assortment of particles removed from bedrock exposures and preexisting overburden by flowing ice. An indiscriminate mover, the ice carried grains ranging in size from clay to boulders and in shapes from round to angular to flat. As a consequence, till varies in texture from sandy and loose to hard, clayey, and compact. Where meltwater flowed within the ice, pockets of relatively well-sorted

sand and gravel were left within the till. Usually, these pockets are only a few feet in any dimension. No large sand-and-gravel deposits are thought to exist on the property.

The thickness of the surficial deposits on the property is not known. Numerous bedrock outcrops in the eastern part of the site suggest that the till generally is less than 10 feet thick in that area. Although no outcrops actually were observed on the western part of the property during the field review, the steepness of the slope adjoining Merwin Brook suggests that the till here is also thin, possibly blanketing a structural ridge developed in the Hartland Formation. Nevertheless, the property is situated within a line of streamlined hills that are thought to be composed of till more than 40 feet thick. These hills, known as drumlins are glacial features whose shape and linear orientation reflect both the passage and the flow direction of moving ice. It is therefore possible that the northern part of the major hillside on the property is a thick accumulation of till that was plastered behind a bedrock ridge.

## HYDROLOGY

Runoff from the Jordan Property flows either into Merwin Brook or an un-named brook to the east. The two brooks merge north of the property; Merwin Brook continues flowing north for about 1.7 miles and enters a cove of Lake Lillinonah (Housatonic River). The drainage area that supplies the two brooks up to the points at which they leave the property is shown in Figure 2; approximately 505 acres is contained. The additional drainage area, approximately 145 acres, that supplies Merwin Brook as far as Route 133 also is shown on that figure.

Residential development in the southern part of the watershed has been heavy. It is likely that the development has increased significantly the peak flows in the two brooks for given amounts of rainfall. As a result, the flood plain area adjacent to the brooks probably is more frequently inundated than before the watershed was developed.

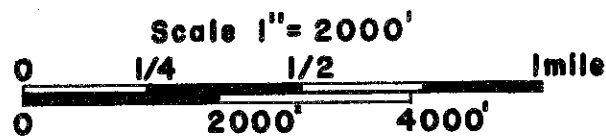
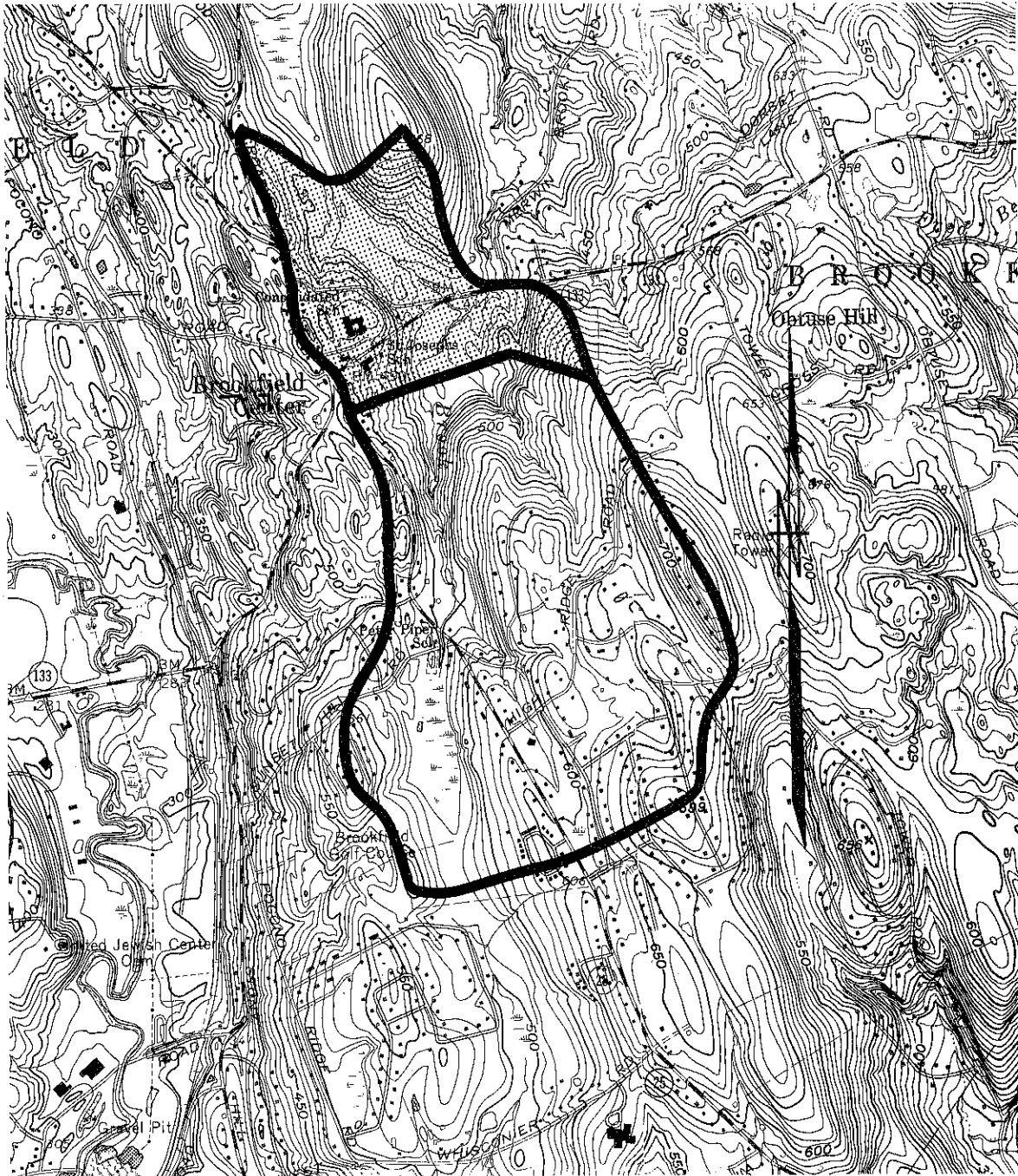
## Water Supply

No high-potential sand-and-gravel aquifer is believed to exist on the property. Water for any purposes probably would have to be drawn from wells tapping the underlying bedrock. Yields from bedrock commonly are small: Connecticut Water Resource Bulletin No. 21 reports that, while 80% of surveyed wells tapping schist bedrock in the upper Housatonic River basin supplied 2 gallons per minute (gpm) or more, only 10% supplied 20 gpm or more. However, for the proposed recreational purposes, such limited yields should be adequate.

Ground water in the Brookfield area commonly is moderately hard to hard (61 to 180 milligrams of  $\text{CaCO}_3$  per liter or equivalent), and occasionally contains high concentrations of manganese (greater than 0.05 ml/l Mn.) Hence, water from a well or wells on the property may require filtration.

## FIGURE 2 WATERSHED MAP

Drainage area of the two brooks that flow through the Jordan Property. Non-shaded section shows drainage area to the points of exit of the two brooks from the property. Shaded section shows additional runoff supply area that contributes to Merwin Brook as far as Route 133.



## FORESTRY

The value of the Jordan Property as regards forest vegetation is high. The area contains a variety of species and several stages of forest succession are evident. With careful management this area can be of great educational and recreational value as well as productive in forest products.

The property consists of approximately 26.6 acres of old field growth, 7.5 acres of wetland, and 17.9 acres of mixed hardwood. The location of these vegetative areas is presented in Figure 3.

Stand descriptions and recommendations for forest management are presented below (refer to Figure 3).

STAND 1. 14.5 acres - Old field. Medium site with herbaceous material, red cedar, juniper, and sapling size (3 to 10 feet high) gray birch, oak, cherry and aspen in central portion. Composition grades from central portion to perimeter where perimeter has dense stocking of sapling to pole size (4 to 12 inches in diameter at breast height) grey and black birch, red and white oak, red maple, and occasional hickory.

Recommendations - Area's diversity of size and species has value for wildlife. Limited cordwood harvest (+2 cords per acre) is possible around perimeter of area. Perhaps in return for cordwood, operators could release cedars, more valuable hickory and oak and generally maintain opening in present state. This would tend to retain pioneer species such as low shrubs and birches and maintain wildlife habitat.

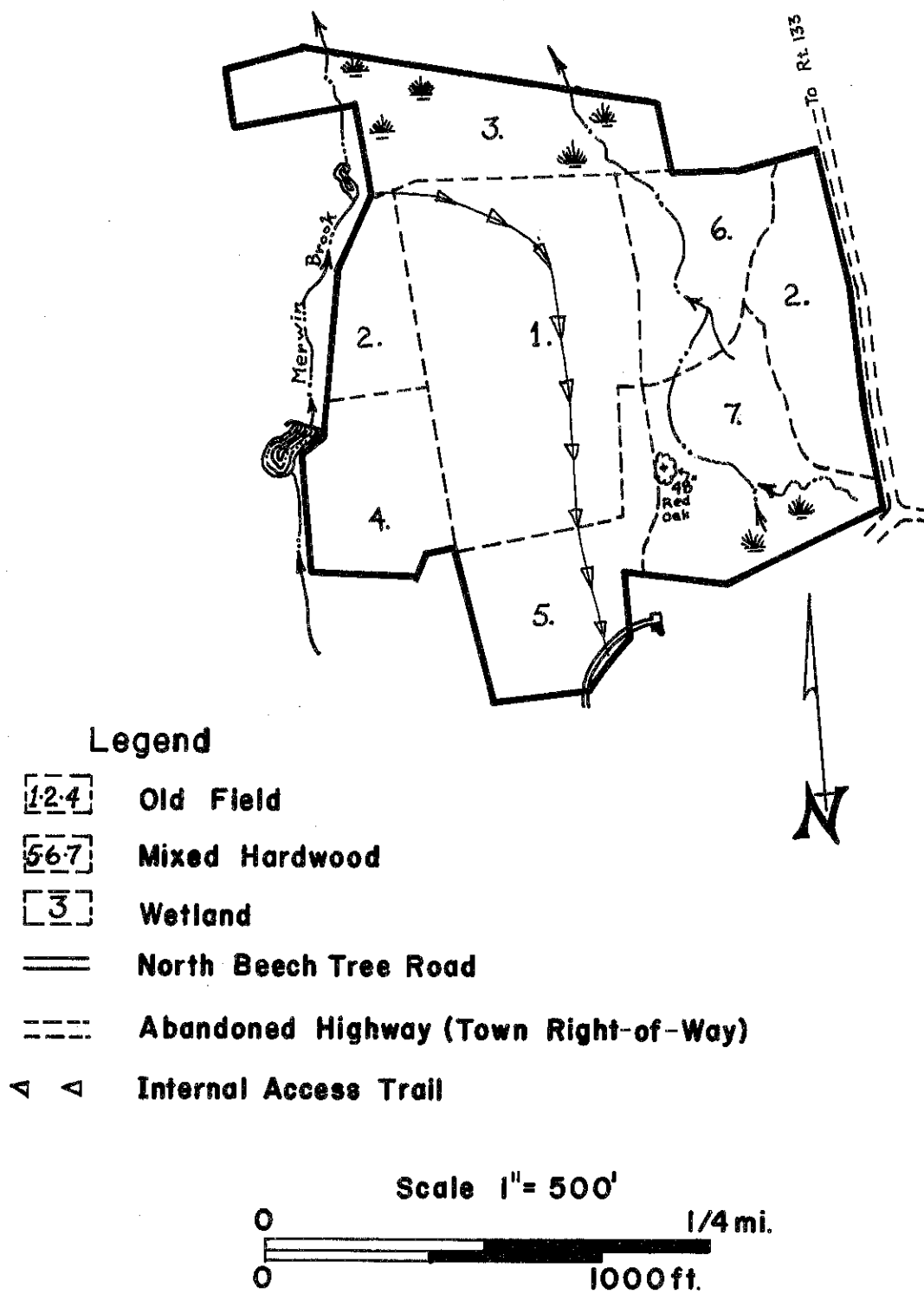
STAND 2. 7.5 acres - Old field. Medium site fully stocked with pole to sawlog size material (12 to 24 inches diameter at breast height). Dominant species is red oak. Also represented are white oak, hickory, black birch, red maple with occasional sugar maple, yellow birch, and red cedar. Understory is generally open, with some witchhazel. Reproduction is limited to black birch and some sugar maple.

Recommendations - A limited cordwood harvest is recommended to remove material of poor form or diseased. Harvest should be aimed at releasing sugar maple but restricting growth of red maple. Probable yield is  $\pm$  3 cords per acre.

STAND 3. 7.5 acres - Wetland. Poor site (due to excessive soil moisture) fully occupied by red maple (pole size) with occasional ash on drier sites. About one acre surrounding the brook is open and occupied by herbaceous material and wetland shrubs.

Recommendations - Soil conditions restrict use of area by heavy harvesting equipment to mid-winters when ground is frozen. Cordwood thinning of poorest quality 1/3 of volume would be desirable here but may not be practicable due to soil conditions. If cordwood operation is feasible probable yield would be 5 - 6 cords per acre, otherwise cordwood yield from accessible areas will be minimal.

FIGURE 3  
FOREST VEGETATION MAP



STAND 4. 4.6 acres - Old field. Medium site well stocked with pole to sawlog size ash, red and sugar maple, hickory and occasional oaks. Southern 2/3 of stand has heavy white pine regeneration. The understory is fairly open. Reproduction other than white pine is minimal.

Recommendations - Encouragement of softwoods here is feasible to provide diversity. Steepness of terrain may restrict harvests in portions of area. Cordwood harvest of poorest quality 1/3 of volume would be desirable in accessible areas in order to release white pine reproduction. Probable yield here will average 2.5 cords per acre.

STAND 5. 5.6 acres - Mixed hardwood. Medium site fully stocked with two age classes. Large (+20" diameter breast height) beech are dominant with occasional sawlog size red and white oaks. Black birch is present under this and is generally of pole size. Reproduction is black birch and some oak over a large portion of the area but beech reproduction is heavy within 30 feet of parent trees.

Recommendations - Encouragement of development to beech ridge would enhance aesthetic value. Limited sawlog harvest in conjunction with stands 6 and 7 may be feasible during winter months. In this stand, harvesting poorest 2/5 of volume would encourage beech and oak reproduction. Harvest should then be followed with cordwood salvage of material remaining in tree-tops of felled trees and also those residual trees which have been damaged. Probable sawlog yield should be approximately 2,000 board feet per acre. Probable cordwood yield is 4 cords per acre.

STAND 6. 4.7 acres - Mixed hardwood. Good site fully stocked with sawlog size yellow poplar, ash, sugar maple, yellow and black birch, with occasional red oak. Understory is of similar composition with fewer yellow poplar. Wetter areas have heavy underbrush, such as spicebush and witchhazel, which restrict reproduction. Reproduction on most of the area is good, consisting of yellow and black birch, sugar maple, and occasional ash.

Recommendations - Area has potential for development of northern hardwood type. Limited sawlog harvest would be desirable to remove poorest quality 1/4 of volume to encourage more tolerant species. This harvest should then be followed with cordwood salvage operation to remove top material. Probable yield in sawlog material  $\pm$  2,000 board feet per acre. Cordwood yield  $\pm$  3 cords per acre.

STAND 7. 7.6 acres - Mixed hardwood. Medium site (fertile but high moisture content) fully occupied by sawlog size black birch, red and sugar maple, with some red and white oaks present. Understory is generally composed of similar species but also has dense underbrush in wet places. Reproduction is minimal in these areas but more open areas have black birch and some sugar maple reproduction.

Recommendations - Sawlog harvest to stimulate reproduction should be considered in conjunction with harvests in stands 5 and 6. Removal of poorest 1/4 volume would be desirable with followup cordwood salvage. Probable sawlog yield  $\pm$  2,000 board feet per acre. Probable cordwood yield is 3 cords per acre.

NOTE: There is a large (48" diameter breast height) red oak tree of old field origin which has high aesthetic value. An attempt should be made to remove dead and dying limbs from this tree and competing trees should be removed.

#### General Statement

Town ownership of this property will likely produce heavy pressure on town officials to allow cordwood harvests by towns people. Caution should be used in approaching a decision on this matter. To avoid damage to the forest, it is suggested that a state or private forester assist in marking those trees to be removed and that harvesting be restricted to one or two wholesale cordwood operators. These wholesalers can be held to a contract and town management of these sales will be much simpler. No cordwood harvesting should occur while a sawlog harvest is in process for safety reasons. Prior to any cordwood or sawlog sales, the town should seek counsel as to liability in the case of personal injury or trespass.

#### WILDLIFE

The Jordan property contains three types of wildlife habitat: hardwood forest, old pasture, and streambelt. The location of these types can be determined from Figure 3 with the streambelt area consisting of  $\pm$  100 feet on either side of that portion of Merwin Brook which cuts through the property.

Much of the property is hardwood forest. Tree species present in this habitat type include oaks, maples, beech, tulip, and ash. White-tailed deer, grey squirrel, chipmunks, ruffed grouse, scarlet tanager, black and white warbler, and box turtle are examples of wildlife species which utilize this habitat type.

The center of the property was once a pasture but has now grown up into cedars, cherries and aspen. In between the trees lush areas of grasses, sedges, and herbs still flourish. Wildlife species found here include cottontail rabbit, yellowthroat, meadow vole, and garter snake.

Vegetation of the streambelt habitat includes red maple, skunk cabbage, false hellebore, and numerous sedges. Although this habitat type is small in size on the property it is significant in its importance to wildlife. Some wildlife species use the streambelt as a travelling corridor; examples are raccoon, muskrat, and mink. Also, many different frogs, toads, and salamanders come to the stream in the spring to breed.



Any planned development in this corner of the property should take into consideration the effects the development will have on the wildlife values of this habitat type.

Any area of land needs to have a variety of habitat types if it is to support a diversity of wildlife species. In addition, this variety of habitat types should consist of small acreages with each patch of one type bordering several other types. The Jordan property now has only two major habitat types and the old pasture will gradually become hardwood forest if left alone to nature's devices. If a greater diversity of wildlife species is desired, management practices could be used to increase the variety of habitat types. Brushcutting and mowing in areas of the old pasture will maintain that habitat type on the property. Openings can be made in the hardwood forest by the use of cordwood cutters and/or timber sales. These openings can be allowed to grow back naturally into young saplings while other openings are created in later years on other parts of the property. Such management will effectively improve the area for wildlife by increasing the diversity and interspersion of habitat types.

#### RECREATIONAL DEVELOPMENT POTENTIAL

The Jordan Property is an attractive piece of property from an open space, aesthetic, and passive recreational standpoint. The site is characterized by a rich diversity of vegetation and a varied and interesting landscape. The proximity of the parcel to the town center, schools and housing not only adds value to those areas, but also increases potential for public enjoyment of the site.

Opportunities for passive recreational development are good throughout the site. Probable uses include hiking, ski touring, nature study, picnicking, backpack camping, and possibly fishing if the property does in fact abut the small pond on Merwin Brook. Little or no potential exists for "satisfactory" snowmobiling or trail bike use due to the limited size of the site.

As discussed above, the only area generally well suited for active recreational development is that area delineated on the soils map as 32B (see soils map). This area of + 6 acres could support one or more of a variety of uses including playgrounds, ballfields, tennis courts, large group picnic areas, and parking lots. The area could also support structures and basic on-site facilities such as drinking fountains and toilets. The 32XC soil type area is limited by slope but a few small facilities, such as tennis courts, could be accommodated by the area in select places.

#### Access

As mentioned above, the Jordan Property is currently landlocked. Although the Town does own a right-of-way into the property on the eastern border of the site off Route 133, considerable costs would likely be incurred in developing this access point due to steep slopes and rock outcrops.

Logistically, the western portion of the site has greater vehicular accessibility potential. The reasons for this are threefold: 1. the existing trail through the center of the property (see Figure 3) occupies the most favorable route for an interior maintenance or access route; 2. wetlands, ledge, slope, and the intermittent stream preclude vehicular access through the eastern section and 3. areas suitable for active recreational development, including parking lots, are located on the southwestern portion of the property off North Beech Tree Road.

Although North Beech Tree Road does abut the property to the south, the Team has been informed by the Town that this is a private road. As a result, this road is not useable for public access to the property at this time. It should be noted however that North Beech Tree Road does provide an ideal access point to the property as 1. the road system is intact 2. the road fronts on the only area suitable for active recreational development, and 3. the internal access trail terminates at this point.

A variety of alternative access points are possible and would be satisfactory for passive recreational use and development of the property. The Town is currently exploring such alternative including possible easements from adjacent landowners.

The volume/capacity ratios for town roads proximate to the site area (i.e. Route 25 and Route 133) are well within "acceptable" performance standards and any additional trips generated by developing the parcel into public open space would not significantly impact the operation of these roads.

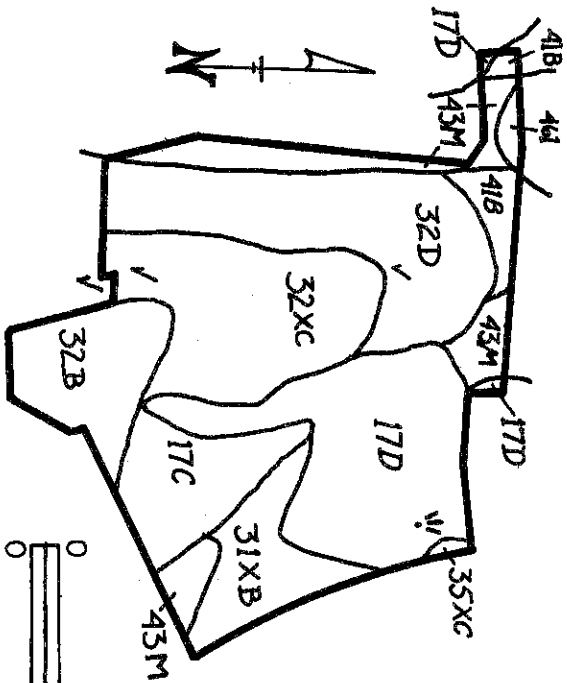
#### Recreation Need

High quality open space/recreation land is a valuable community asset. It benefits community health and morale, improves aesthetics, increases the value of surrounding realty, and protects the natural resource base.

According to the most recent Housatonic Council Land Use Survey (1976) the Town of Brookfield has the least amount (570 acres or 4.4% of total town acreage) of net recreation/open space land dedicated to that use in the ten-town region. And only one town, New Milford, has a lower percentage of land in the recreation/open spaces category. Town acquisition of additional open space/recreation land is also consistent with the "Brookfield Plan of Development, 1977" which states: "It is recommended that Brookfield adopt a standard of 10 percent of the total Town acreage as open space".

As was previously discussed, principal land use in Brookfield has shifted from agriculture to residential home sites in recent years. In general, as residential development increases, the demand for recreational land and facilities also increases while open space land diminishes. This trend has progressed to the point in Brookfield where very few open space parcels remain in the southeastern portion of town. If town owned open space is considered essential in the general area of the Jordan Property, only three options remain--the Jordan Property or the remaining two agricultural farms in the area.

# SOILS MAP



Prepared by USDA-SCS  
1978  
Advance copy  
Subject to change.

SCALE 1" = 660'



Soils Limitations Chart  
JORDAN PROPERTY ACQUISITION  
BROOKFIELD, CONNECTICUT

Limitations and Principal Limiting Factors For: \*

Map Symbol	Soil Name	Camp Areas for Inten- sive Use	Bldgs. in Rec. Area	Picnic Areas	Intensive Play Area	Paths & Trails	Reason for Limitation
461	Raypol silt loam	3	3	3	3	3	Poorly and very poorly drained
43M	Ridgebury, Leicester & Whitman, extremely stony soils	3	3	3	3	3	Poorly and very poorly drained
41B	Sutton fine sandy loam, 3-8% slopes	2	2	1	2	1	Seasonally wet
32D	Charlton fine sandy loam, 15-25% slopes	3	3	3	3	2	Slope
32XC	Charlton very stony fine sandy loam, 8-15% slopes	1	1	1	2	1	Slope
32B	Charlton fine sandy loam, 3-8% slopes	1	1	1	2	1	Slope
17D	Hollis-Charlton rocky complex, 15-35% slopes	3	3	3	3	3	Ledge, Slope
17C	Hollis-Charlton rocky complex, 3-15% slopes	2	3	1	3	3	Ledge, Slope
31XB	Woodbridge very stony fine sandy loam, 3-8% slopes	2	2	1	2	1	Seasonally wet
35XC	Paxton very stony fine sandy loam, 8-15% slope	2	2	2	3	1	Slope

1. SLIGHT LIMITATION: indicates that any property of the soil affecting use of the soil is relatively unimportant and can be overcome at little expense.
2. MODERATE LIMITATION: indicates that any property of the soil affecting use can be overcome at a somewhat higher expense.
3. SEVERE LIMITATION: indicates that the use of the soil is seriously limited by hazards or restrictions that require extensive and costly measures to overcome.

\*EXPLANATION OF  
RATING SYSTEM

## SOIL DESCRIPTIONS

### JORDAN PROPERTY

#### BROOKFIELD, CT.

17C Hollis-Charlton rocky complex, 3 to 15 percent slopes. This mapping unit is composed of gently sloping and sloping soils. It consists of about 30 percent Hollis fine sandy loam, 30 percent of an unnamed soil that is 20 to 40 inches deep over bedrock and about 20 percent of Charlton fine sandy loam. The remainder of this unit consists of inclusions of Paxton, Sutton, and other soils. The soils in this unit occur in such an intricate and complex pattern that it is not practical to separate them on the scale of map used. In many places there are narrow drainageways with poorly drained soils that are too narrow to separate on the map. Bedrock outcrops are few to numerous and stoniness ranges from almost none to extremely stony.

The Hollis soil is somewhat excessively drained and consists of friable to very friable fine sandy loam less than 20 inches deep to bedrock. The well drained unnamed soil is also a fine sandy loam. The well drained Charlton soil developed in glacial till. Surface soil and subsoils textures to a depth of 20 to 30 inches is fine sandy loam with numerous rock fragments. All of these soils are moderately permeable but drainage is restricted by the underlying bedrock.

17D Hollis-Charlton rocky complex, 15 to 35 percent slopes. This mapping unit is composed of moderately steep and steep soils. It consists of about 35 percent Hollis fine sandy loam, 30 percent of an unnamed soil that is 20 to 40 inches deep over bedrock and about 15 percent of Charlton fine sandy loam. The remainder of this mapping unit consists of inclusions of Paxton and other soils. The soils in this unit occur in such an intricate and complex pattern that it is not practical to separate them on the scale of map used. In some places there are narrow drainageways with poorly drained soils. Bedrock outcrops are few to numerous and stoniness ranges from few stones to extremely stony.

The Hollis soil is somewhat excessively drained, friable to very friable fine sandy loam less than 20 inches deep to bedrock. The well drained, unnamed soil is fine sandy loam. The well drained Charlton soil developed in glacial till. Surface soil and subsoil texture to a depth of 20 to 30 inches is fine sandy loam. The underlying material is sandy loam or fine sandy loam with numerous rock fragments. All of these soils are moderately permeable, but drainage is restricted by the underlying bedrock.

31XB Woodbridge stony fine sandy loam, 3 to 8 percent slopes. This is a moderately well drained soil with a slowly or very slowly permeable fragipan at about 24 inches in depth. It has 0.1 to 3 percent of the surface covered with stones or boulders. Surface soil and subsoil texture above the fragipan is friable or very friable fine sandy loam. The lower part of the subsoil is mottled indicating a waterlogged condition from late fall until spring and after heavy rains in summer. This soil is moderately permeable above the compact and very firm fragipan which restricts internal drainage. Water may move downslope

over the fragipan in wet seasons and cause seeps on lower slopes. This soil is a member of the drainage sequence that includes the well drained Paxton, the poorly drained Ridgebury, and the very poorly drained Whitman soils.

32B Charlton fine sandy loam, 3 to 8 percent slopes. This gently sloping, well drained, upland soil developed in very friable to firm glacial till. Surface soil and subsoil texture to a depth of 20 to 30 inches is fine sandy loam with some small, angular rock fragments. The underlying material is sandy loam or fine sandy loam with many stones and gravel size rock fragments in places. This soil is moderately permeable throughout, but slowly permeable layers may be present below 36 inches. Charlton soils are members of a drainage sequence that includes the moderately well drained Sutton and the poorly drained Leicester soils. The surface stones have been removed from this soil.

32D Charlton fine sandy loam, 15 to 25 percent slopes. This well drained, moderately steep to steep upland soil developed in very friable to firm glacial till. Surface soil and subsoil texture to a depth of 20 to 30 inches is fine sandy loam with some small, angular rock fragments. The underlying material is sandy loam or fine sandy loam with many stones and gravel size rock fragments in places. This soil is moderately permeable, but slowly permeable layers may be present below 36 inches. Charlton soils are members of a drainage sequence that includes the moderately well drained Sutton and the poorly drained Leicester soils. The surface stones have been removed from this soil.

32XC Charlton stony fine sandy loam, 8 to 15 percent slopes. This sloping, well drained, upland soil developed in very friable to firm glacial till. It has 0.1 to 3 percent of the surface covered with stones or boulders. Surface soil and subsoil texture to a depth of 20 to 30 inches is fine sandy loam with some small, angular rock fragments. The underlying material is sandy loam or fine sandy loam with many gravel size rock fragments and stones in places. These soils are moderately permeable, but slowly permeable layers may be present below 36 inches. Charlton soils are members of a drainage sequence that includes the moderately well drained Sutton and the poorly drained Leicester soils.

35XC Paxton stony fine sandy loam, 8 to 15 percent slopes. This sloping, well drained, upland soil has a slowly to very slowly permeable fragipan at about 24 to 30 inches in depth. It has 0.1 to 3 percent of the surface covered with stones and boulders. The surface soil and subsoil texture above the fragipan is very friable to friable fine sandy loam. The compact fragipan restricts internal drainage. In places, a perched water table may occur above the fragipan in wet seasons and after heavy rains. The water often moves downslope over the fragipan in wet seasons and after heavy rains. Paxton soils are a member of the drainage sequence that includes the moderately well drained Woodbridge, poorly drained Ridgebury, and very poorly drained Whitman soils.

41B Sutton fine sandy loam, 3 to 8 percent slopes. This is a moderately well drained upland soil developed in very friable to firm glacial till. Surface soil and subsoil texture to a depth of 20 to 30 inches is fine

sandy loam with some small, angular rock fragments. The underlying material is sandy loam or fine sandy loam with many stones and gravel size rock fragments in places. The lower subsoil is mottled indicating waterlogging. A fluctuating water table is sometimes within 15 to 20 inches of the surface during winter and early spring. This soil is moderately permeable throughout, but slowly permeable layers may be present below 36 inches in places. Stones and boulders have been removed from the surface of this soil. Sutton soils are members of the drainage sequence that includes the well drained Charlton and poorly drained Leicester soils.

43M Leicester, Ridgebury and Whitman very stony fine sandy loams. This very stony mapping unit includes poorly and very poorly drained soils. These soils occur in such an intricate and complex pattern that the separation of each individual soil was not possible on the scale of map that was used. These soils have a water table at or near the surface from fall to spring and after heavy rains during the summer.

461 Raypol silt loam, sandy subsoil variant. This nearly level, somewhat poorly to poorly drained soil developed in 20 to 40 inches of silts and very fine sands underlaid by stratified sands and gravel. It has a dark-colored surface soil over a mottled subsoil. The water table is near the surface from late fall to early spring, but may drop to 6 to 8 feet during summer and early fall. This friable soil has moderate to moderately slow permeability. Raypol occupies low-lying nearly level areas of terraces and broad drainageways. The soil surface is typically free of stones, but in some areas, surface stones may be present in small quantities.



# ABOUT THE TEAM

The King's Mark Environmental Review Team (ERT) is a group of environmental professionals drawn together from a variety of federal, state, and regional agencies. Specialists on the team include geologists, biologists, foresters, climatologists, soil scientists, landscape architects, recreation specialists, engineers, and planners. The ERT operates with state funding under the aegis of the King's Mark Resource Conservation and Development (RC&D) Area - a 47 town area in western Connecticut.

As a public service activity, the team is available to serve towns and developers within the King's Mark Area --- free of charge.

## 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 the review of a wide range of significant activities including subdivisions, sanitary landfills, commercial and industrial developments, and recreation/open space projects.

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 official of a municipality or the chairman of an administration agency such as planning and zoning, conservation, or inland wetlands. Requests for reviews should be directed to the Chairman of your local Soil and Water Conservation District. This request letter must include a summary of the proposed project, a location map of the project site, written permission from the landowner/developer 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 King's Mark RC&D Executive Committee, the team will undertake the review. At present, the ERT can undertake two reviews per month.

For additional information regarding the Environmental Review Team, please contact your local Soil Conservation District Office or Richard Lynn (868-7342), Environmental Review Team Coordinator, King's Mark RC&D Area, P.O. Box 30, Warren, Connecticut 06754.