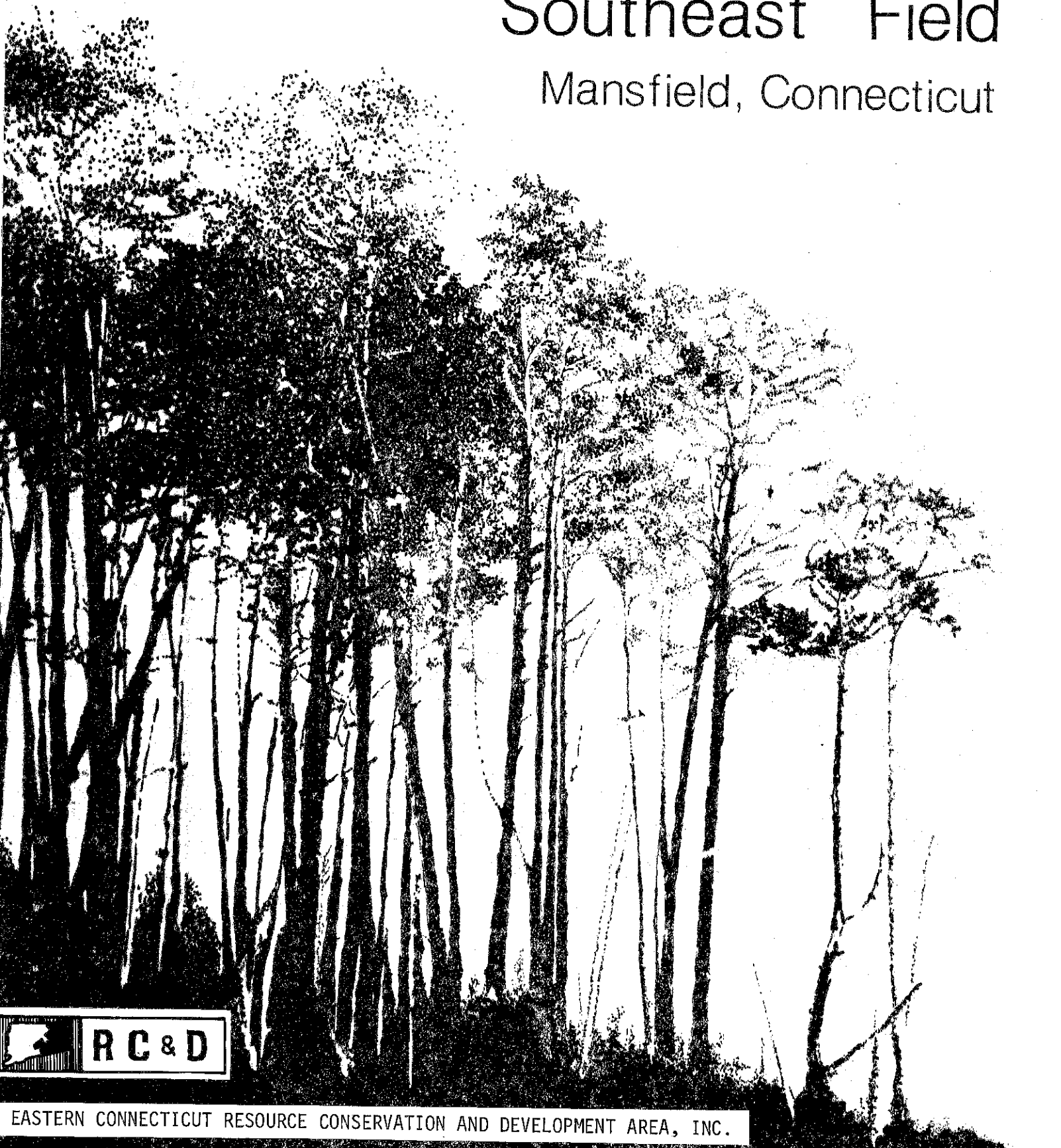


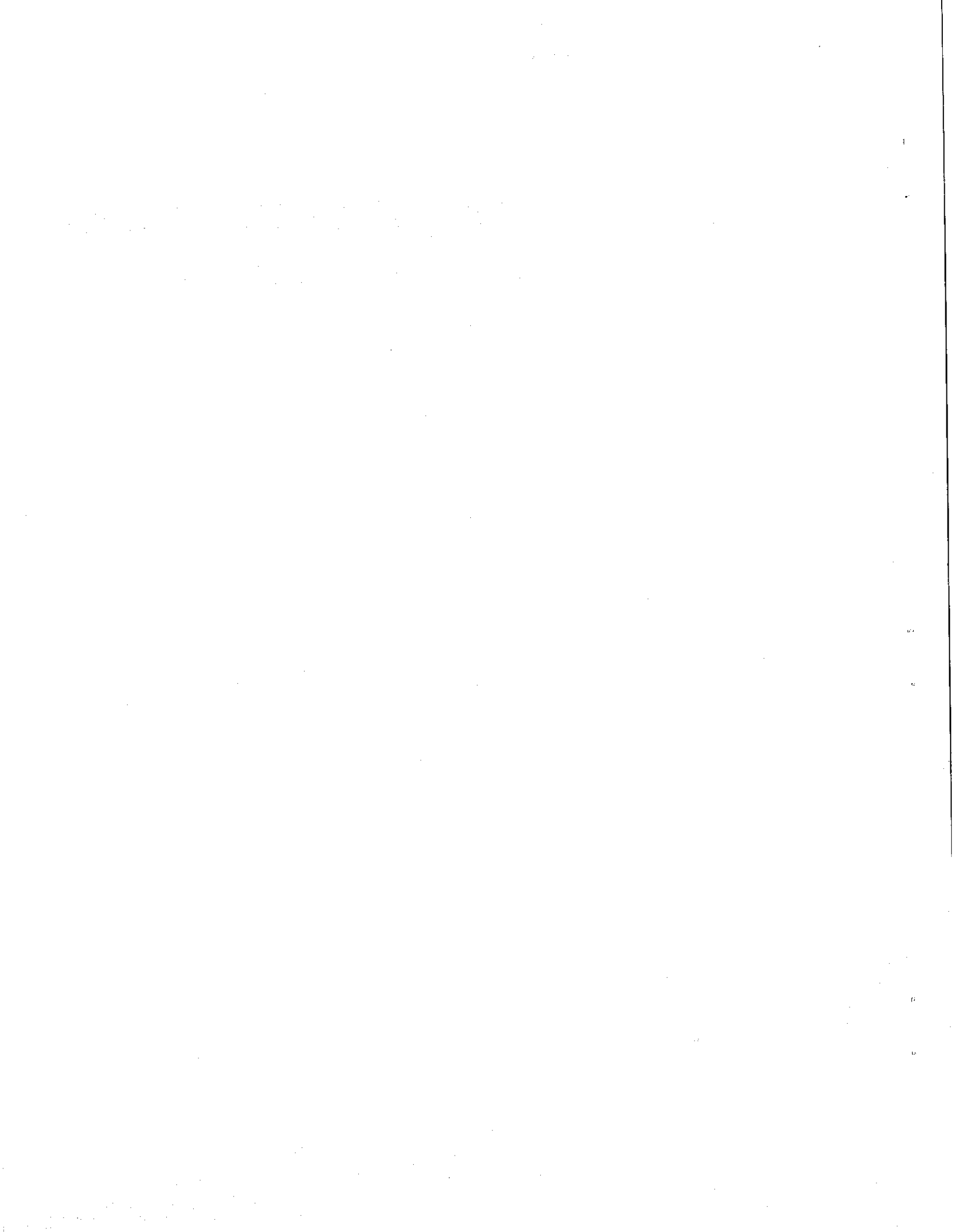
Environmental Review Team Report

Southeast Field

Mansfield, Connecticut



EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.



Environmental Review Team
Report
on

Southeast Field
Mansfield, Connecticut

February 1978



eastern connecticut resource conservation & development area

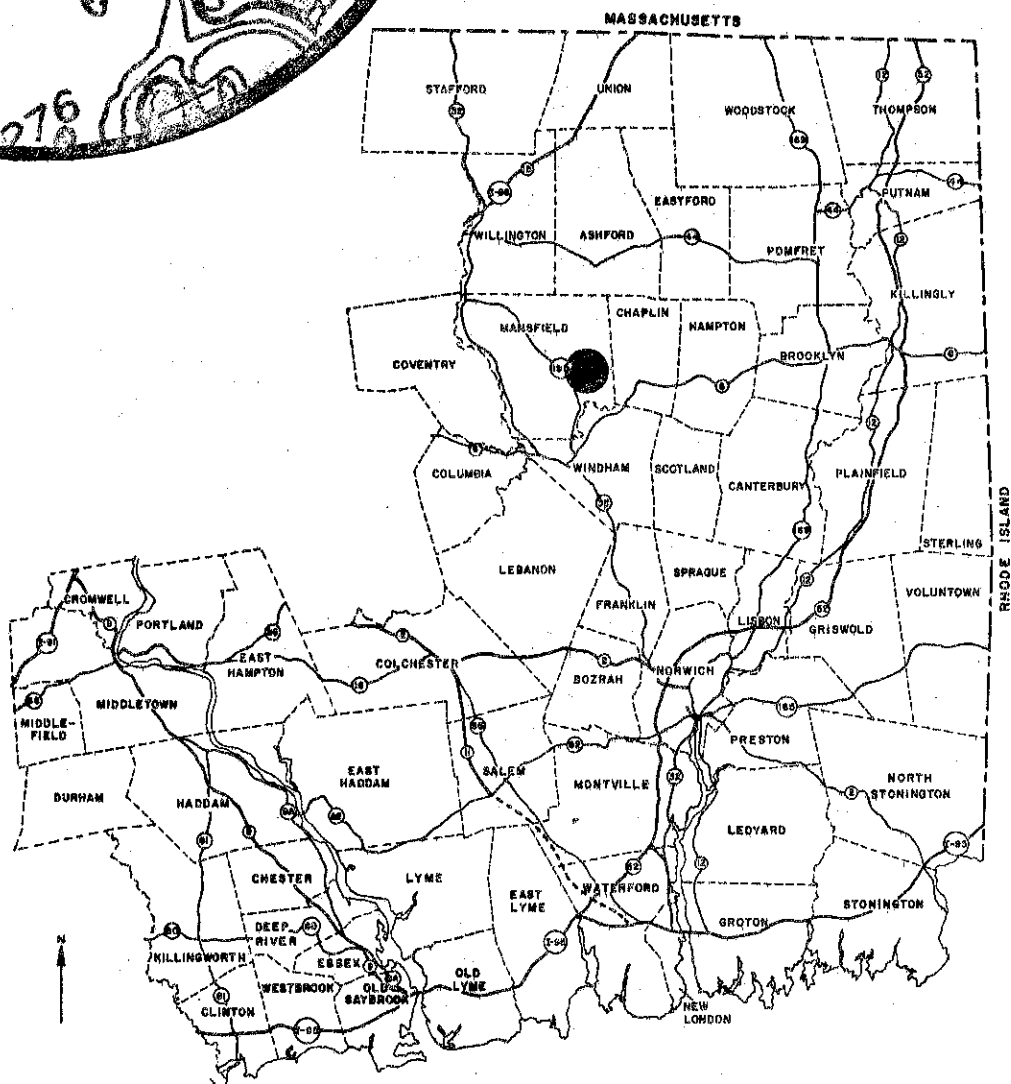
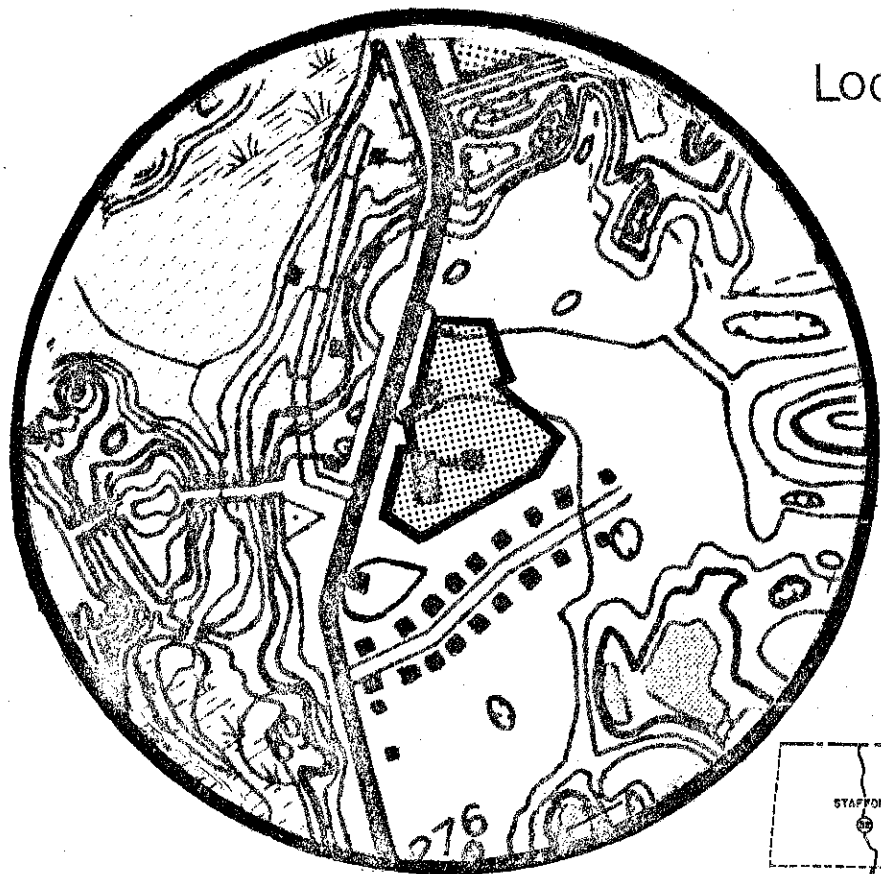
environmental review team

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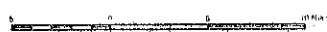
norwich, connecticut 06360

Location of Study Site

SOUTHEAST FIELD MANSFIELD, CONNECTICUT



EASTERN CONNECTICUT
RESOURCE CONSERVATION AND DEVELOPMENT PROJECT



ENVIRONMENTAL REVIEW TEAM REPORT
ON
SOUTHEAST FIELD
MANSFIELD, CONNECTICUT

This report is an outgrowth of a request from the Mansfield Conservation Commission, to the Tolland 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. This request was approved and the measure was reviewed by the Eastern Connecticut Environmental Review Team (ERT).

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

The ERT that field-checked the site consisted of the following personnel: Les Stillson, District Conservationist, Soil Conservation Service (SCS); Tim Dodge, Wildlife Biologist, SCS; Michael Zizka, Geologist, Connecticut Department of Environmental Protection (DEP); Donald Smith, Forester, DEP; David Miller, Climatologist, University of Connecticut Cooperative Extension Service; Les Barber, Regional Planner, Windham Regional Planning Agency (WRPA); Ernest Julian, Sanitarian, State Department of Health; Rudy Favretti, Landscape Architect, University of Connecticut; Tom Ladney, Soil Conservationist, SCS; and Jeanne Shelburn, ERT Coordinator, Eastern Connecticut RC&D Area.

The Team met and field-checked the site on Thursday, January 19, 1978. Reports from each contributing Team member were sent to the ERT Coordinator for review and summarization for the final report.

This report is not meant to compete with private consultants. As requested by the Town, this report, which identifies the existing resource base of the Southeast Field, shall constitute the environmental assessment portion of the Town's open space application for Federal Department of the Interior, Bureau of Outdoor Recreation (BOR) funds to assist in the development of Southeast Field.

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

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

DESCRIPTION OF THE PROPOSAL

The Town of Mansfield wishes to expand development of a portion of Town-owned recreation land known as Southeast Field. Of the total 11-acre parcel, seven acres will be used for immediate active recreational development and the remaining four acres will be retained in open space for future development. The proposed expansion will include a redesign of existing facilities as well as an additional soccer field. This development will provide for the growing number of enthusiasts who are participating in the Town's soccer program, which was devised by Joe Morrone, soccer coach for the University of Connecticut.

Southeast Field is located directly adjacent to Southeast school on Route 89, approximately three-quarters of a mile from the junction with Route 195. The site is surrounded by the Mansfield Hollow Flood Control Project, a forested tract of federally-owned land.

It is hoped that with recreational development funding available, the project will reach completion within a one-year time span.

The current proposal is to complete and expand specialized recreation facilities, ball fields and soccer field to serve an on-going recreation program which is town-wide in character. It complements the development program on-going at the Central Schoolhouse Brook Park where swimming facilities and more resource oriented low-density recreational facilities are being developed.

With the proximity of the Mansfield Hollow Reservation and the holdings of the Joshua's Tract Conservation and Historic Trust, the ball field development also complements the low density, natural experience plans for these adjacent facilities.

The Windham Regional Planning Agency has recommended the development of a balanced recreational system in all towns of the region including a reasonable geographic distribution of parks serving neighborhoods in each town.

In addition the regional plan recommends full utilization of opportunities adjacent to schools. The Southeast Field proposal, while not specifically mentioned in the Regional Open Space Plan, fulfills all these regional objectives.

DESCRIPTION OF THE ENVIRONMENT

PRESENT/PAST LAND USES

The specific site under review is currently in recreational use and has been in such use for some time. On the north and east, the site is bordered by the Mansfield Flood Control Reservation, which is used for extensive hiking, nature observation, boating, recreation. Immediately to the west is the Southeast Middle School. Residential homes on scattered lots and subdivisions lie along Route 89 farther to the west. The site lies just on the edge of the moderately dense residential neighborhood in Mansfield Center. The whole area is zoned residential on acre lots.

EXISTING SOCIO-ECONOMIC CONDITIONS

The 1970 population of the Town of Mansfield was 19,994. Of that total 7,354 were University students quartered at the UConn Storrs campus, and 1,600 were residents at the Mansfield Training School. Total Town population is anticipated to grow to 21,700 by 1980 and 26,300 by the year 2000 (WRPA figures.). During that period household population is expected to grow from 11,040 in 1970 to 15,100 by the year 2000.

The Southeast site serves a large area of southeastern and eastern Mansfield which is an area principally of single family homes. As many of the subdivisions in Mansfield Center developed early, a large proportion of the Town's smaller-than-one acre residential lots are located in close proximity to the site under review. The northeastern portion of the Town has been developing rapidly in recent years and can be expected to continue that process in the future. The pattern here is typically large-lot subdivisions of lots of one or two acres or more.

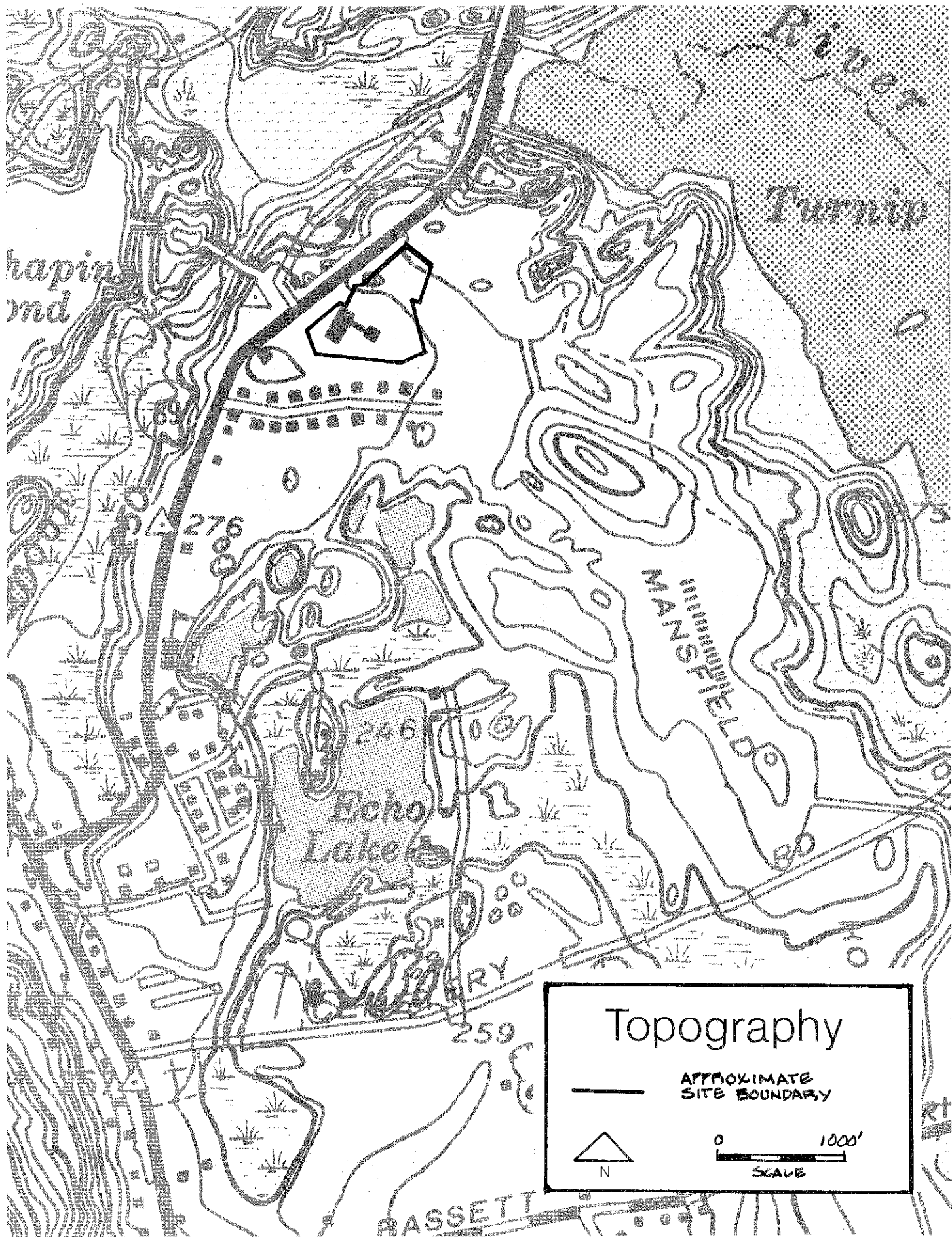
Route 195, the Town's principal north-south artery, lies about a mile south and west of the site in Mansfield Center. A modest amount of commercial activity has developed at that location serving the transient population using the highway. Approximately four miles to the south on the Willimantic city line, a major regional retail shopping district has developed at the intersection of I-84. With the exception of the supporting commercial activities which have developed in the Storrs area and the regional retail area at Routes 195 and I-84, Mansfield is substantially residential with the principal industry being the two State institutions--the University of Connecticut and the Mansfield Training School.

EXISTING TRANSPORTATION ROUTES

The site abuts Route 89 which is an arterial road serving the north and east portions of the Town of Mansfield as well as serving as an important regional highway link connecting the center of the region with the towns of Ashford and Union and with I-86 to the north. The road's current daily capacity is 12,000 vehicles and with a current daily volume of 2,200 vehicles Route 89 is certainly capable of handling the traffic likely to be generated by the proposed facilities. The proposed provision of a 48-car parking lot should permit use of the facilities without interference with the functioning of Route 89.

TOPOGRAPHIC FEATURES

The site is located on a fairly flat kame terrace surface. The terrace was formed during the retreat of glacial ice from the region. Meltwater carried sand and gravel away from the wasting ice, depositing the material in streams or in temporary glacial lakes or ponds fed by such streams. Blocks and tongues of stagnating ice were partly or wholly buried by sediment. As the ice melted and diminished in size, the deposits collapsed, forming scarps along the valleys, as well as many closed depressions known as kettles. These ice-contact features are prominent near the north and east borders of Southeast Field.



Topography

— APPROXIMATE SITE BOUNDARY



SURFACE AND SUBSURFACE GEOLOGIC CHARACTERISTICS

The only geologic materials that are likely to have a bearing on the proposed project are surficial deposits. Connecticut Water Resources Bulletin No. 12 contains logs of test holes that were drilled in the vicinity of the site. These records indicate that about 100 feet of unconsolidated sediments overlie bedrock on the site. Nearly all of this overburden consists of stratified drift, material that was deposited by glacial meltwater as previously described. Sand comprises most of the stratified drift, but a gravelly layer about ten feet thick tops this deposit in the flatter areas. Much of the material may be useful as fill for construction purposes or as concrete aggregate. Mineral concentrations of economic value are unlikely.

SOILS

The two soil types found on the tract are terrace soils situated over water deposited beds of sand and gravel. The soils, Jaffery gravelly sandy loam (JaC) and Merrimac fine sandy loam (MrA), have slopes ranging from 0 to 15 percent, have moderate to rapid permeability and are droughty.

The 2.75 acres of Merrimac soil is covered by school buildings, lawns and parking space. This soil is recognized as prime farmland suitable for the production of all agricultural crops adapted to the area. Approximately one acre of this soil will be affected by the proposal.

The remaining 8.25 acres is comprised of Jaffery gravelly sandy loam underlain by stratified sand and gravel at a depth of 6 to 18 inches in which there are some cobbles and stones. The shallowness to sand and gravel, slope, low natural fertility, rapid permeability and droughtiness are major factors severely limiting the use of this soil for intensive athletic fields.

The development of the new soccer field involves a major soil disturbance with up to 8 foot cuts. Earth moving is readily done, but stabilizing and vegetating cut slopes is difficult. Irrigation with intensive fertilization is essential to establish a vigorous stand of vegetation. Turf, trees and shrubs are difficult to establish and maintain because of low moisture-holding capacity and low natural fertility. Sloping areas are susceptible to erosion necessitating a plan to control surface runoff, erosion and sedimentation.

The soil survey map and the accompanying charts indicating soil limitations for certain land uses further distinguish the soil types and their potential for the listed land uses. As the detailed soils map provided here is an enlargement from the original 1,320'/inch to 330'/inch scale, the soil boundary lines shown should not be viewed as absolute boundaries but rather as guidelines to the distribution of soil types on the property. The soils map along with the "Soils Survey - Tolland County" (USDA-SCS 1966), can serve as an educational tool regarding the identification and interpretation of soils.

CLIMATE

The following table gives monthly averages of climatic data pertinent to the type of recreational activity planned.

CLIMATIC DATA*

<u>Month</u>	<u>Average Precipitation (inches/ month)</u>	<u>Average Solar Radiation (cal/cm²/ month)</u>	<u>Average Air Temp. (° F.)</u>	<u>Average Soil Temp. 4" below sod (° F.)</u>	<u>Average growing degree days/month</u>	<u>Prevailing wind direction</u>
Jan.	3.61	4960	15	30	0	N
Feb.	2.85	6600	18	28	0	N
Mar.	4.20	8680	21	34	0	N
Apr.	3.89	11100	28	45	300	NW
May	3.85	12090	46	54	620	S
June	3.48	12600	63	68	810	S
July	3.91	13330	68	73	899	S
Aug.	4.94	13020	66	73	837	SE
Sept.	4.09	9900	58	65	570	N
Oct.	3.48	8060	40	56	310	N
Nov.	4.26	5400	29	44	60	N
Dec.	3.66	4650	18	34	0	N

*This data was taken from: "The University of Connecticut Agricultural Climate Station at Coventry" by D.R. Miller and B.F. Janes. Storrs Agr. Experiment Station Bulletin: (in preparation)

The planned ballfield activities require long growing seasons for turf grass. The precipitation, growing degree day, and soil temperature data indicate conditions should be ideal for growing cool season grasses throughout the entire season from April through October.

The planned recreation area should not significantly effect the meso-climate or micro-climate in the area. The locations of the playing fields are exposed to prevailing fall and spring winds which will cause a significantly uncomfortable wind chill during these seasons, especially for spectators.

WATER RESOURCES

The site is adjacent to an area designated as favorable for development of large water supplies (Connecticut Water Resources Bulletin, No. 11, Plate B). The saturated thickness of stratified drift at the site is about 30 to 40 feet, indicating a depth to water table of about 60 to 70 feet. This saturated part is thought to be composed mostly of fine sand, which may hamper the development of screened wells and which may also limit the potential water yield.

Water quality is likely to be good from either stratified drift or bedrock. Only a very slight chance of excessive concentrations of dissolved solids, particularly iron and manganese, exists.

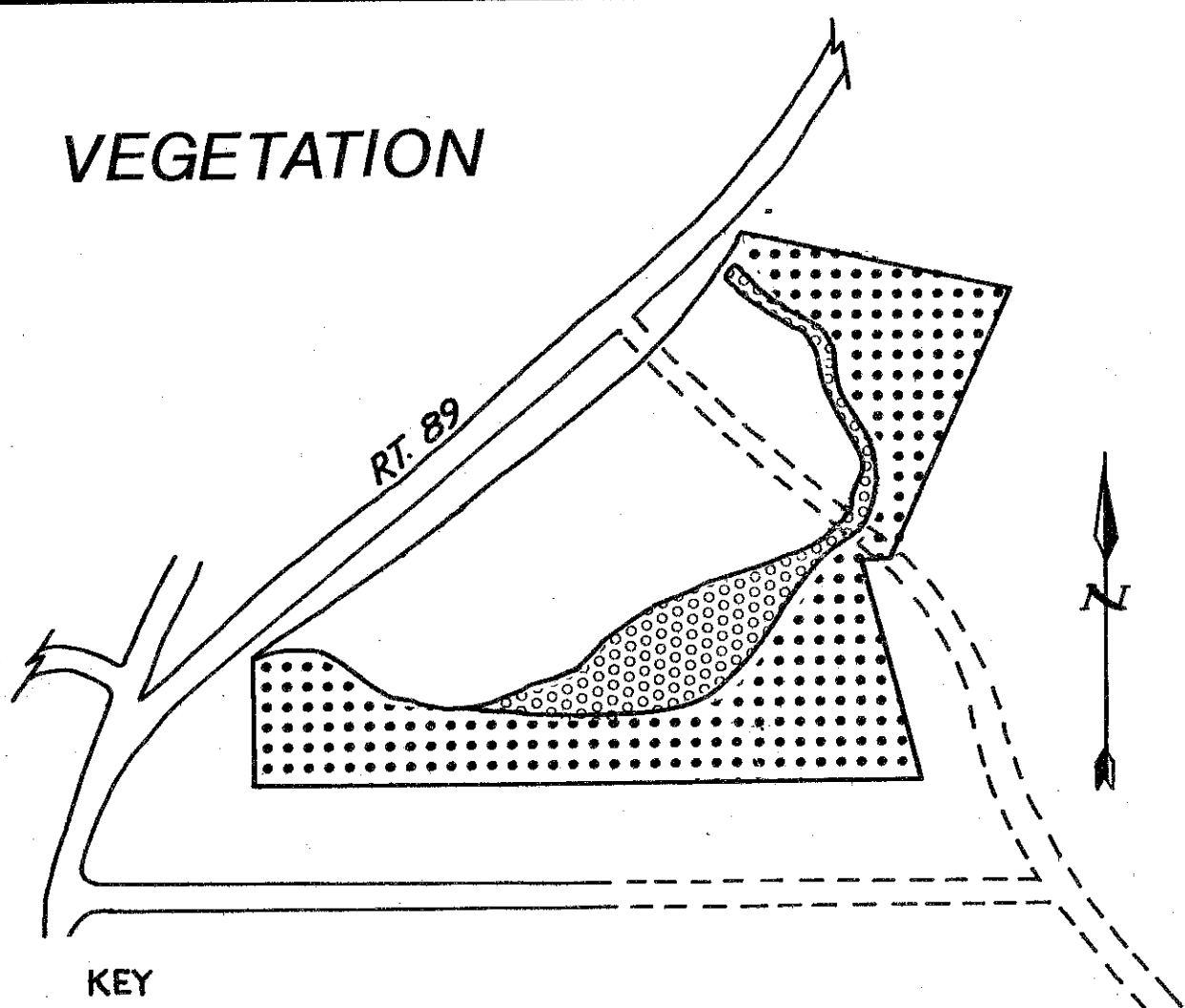
VEGETATION

Approximately two and one-half acres of the 11 acre site are devoted to school buildings and lawns. Four acres are wooded, consisting of a mix of white pine and hardwood trees which include quaking aspen, American elm, black oak, white oak, grey birch and blue beech. In addition to white pine, pitch pine is common and abundant. Collectively, the conifers dominate the woodland vegetation. Shrubby understory vegetation is also present and includes grey stem and silky dogwood. The dominant vegetative cover on the remaining 5.5 acres of open land is grass, including little blue stem and weedy growth including sweet fern.

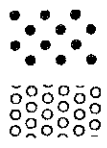
The woodland is in a single block and abuts woodland owned by the federal government as part of the Mansfield Hollow Dam flood control project. The white pine present is generally mature, exceeding 12 inches DBH (trunk diameter at breast height). Individual quality of trees is fair to good, however, clearing operations may not involve enough trees to make a commercial harvest feasible. Trees with sawlog values should be salvaged wherever possible. Generally, vegetative reproduction in the area is sparse, due to droughty soil conditions and limited light penetration to the forest floor. Consequently, there are limited amounts of food and cover for wildlife. The sparse population of mature oaks does little to benefit wildlife food sources since acorn production is cyclic with heavy production occurring every four to five years.

A nature trail has been developed in the wooded area as an educational tool. A number of the trees along the trail have identification tags attached to them.

VEGETATION



KEY



EXISTING WOODLAND BOUNDARY

PROPOSED WOODLAND BOUNDARY



WILDLIFE

Animal resources dependent entirely on the 11 acre area are minimal. Most animals range between woodland and openland with concentrations in the border areas. Common species within the area include seasonal songbirds, cottontail rabbit, red and grey squirrels, skunk and raccoon. Most species are common and abundant. Food sources and habitat quality generally are good, given the droughty nature of the soils and their effect on vegetative production. No rare or endangered species or habitat for the same was identified during the investigation.

PROBABLE FUTURE ENVIRONMENT

The site is currently used recreationally although it is inadequate to serve that role effectively. If the proposed upgrading is not carried out, it can be assumed that the existing recreational use will continue. If additional facilities were to become available elsewhere, at least a portion of the site might be used in conjunction with the adjacent school facility for more intensive purposes including expansion of the school's physical plant.

The existing nature trail would continue in use and not require relocation. An attractive wooded site, the location of a portion of the trail, would not be destroyed and would continue as natural habitat associated with the school's outdoor education program.

ENVIRONMENTAL IMPACT

QUANTIFIABLE LAND USE CHANGES

The proposed development will not introduce any new activities into the area. It will, however, increase the frequency of use of the site which is generally limited to evening and weekend activity. The activities or the intensity of activities are not likely to have any impact on adjacent land use. The site is buffered on all sides by park or institutional uses so that noise resulting from anticipated activities on the site should be of only nominal nuisance value. Use would not conflict with educational activities next door because of the differing time frame of each activity.

SOCIO-ECONOMIC CHANGES

The immediate environs of the site are permanently committed as public open space or institutional use. The expanded use of the site in question will not in any way affect settlement patterns in the area. As the proposed development will occur totally within existing public property, no persons will be displaced and no new opportunities for residential or other intensive land use will be foregone. It is unlikely that any new tax generating activities will be stimulated and such activity would only be permitted in the nearest commercial zone on Route 195 more than a mile away. Aside from the expenditure of money for the town's share of the project, no effect on the tax structure would be expected.

With increased recreational use of the site the environmental quality of homes in the vicinity fronting on Route 89 may be diminished somewhat due to additional traffic, a potential increase in litter, particularly if refreshments are sold at the site, and a general increase in noise level. These increased annoyances would not be completely compensated for by increased use of improved recreational facilities because the fields proposed are essentially townwide in use and appeal rather than as specifically a neighborhood oriented facility.

TRANSPORTATION ROUTES

As indicated earlier the site fronts on a major arterial road of good quality, in the vicinity of the site. The capacity of the road is certainly capable of handling the traffic generated by the increased use of this site, particularly since the facility will be used principally in off-peak traffic hours.

With appropriate management of landscaping, sight lines should be sufficiently clear to permit entrance and exit to the site safely.

Relative proximity to the town's sanitary landfill does increase truck traffic on this portion of Route 89 which may be a potential hazard for users of the recreation facilities. Again, however, the use of the recreational site will be principally in the off hours when the landfill is not in operation.

AIR QUALITY AND AMBIENT NOISE LEVEL

The recreation area will have no effect on air quality as long as the fields are maintained in grass. If bare soil surfaces are allowed, dust will become a problem due to the wind exposure of the site.

The ambient noise level will be increased due to the intensive type of recreation planned. The type of noise generated will consist of human voice sounds, industrial and vehicular sounds, in frequencies which are least harmful and bothersome to humans. With the extensive buffering of public open space and institutional land separating the site from nearby residential uses it should not be a major problem however.

SOLID WASTES

While it would be expected that a limited quantity of solid wastes would be generated, it should remain a relatively minor problem. This should be particularly true if no future snack bar is planned to operate in conjunction with the spectator sports located on the site. Adequate and convenient storage containers need to be provided until refuse is collected. The material can then be disposed of off-site at the town refuse disposal area.

SANITARY FACILITIES

Although no specific reference was made for the inclusion of public comfort facilities, recreational areas should address this subject. Many types of recreational facilities do require that certain types of sanitary fixtures be provided.

The availability of such facilities also prevents the indiscriminate use of wooded or other secluded areas for restroom purposes.

Facilities should be designed to withstand hard use, possible vandalism and to minimize the long term maintenance and operational costs. There should be at least one privy, chemical toilet or flush toilet facility for each sex, and they should be conveniently located.

EFFECT ON WATER RESOURCES

The Mansfield town landfill lies directly north of the property; effluent from this source may presently be discharging into Fenton River and entering Mansfield Hollow Lake. A high demand from a well in stratified drift on Southeast Field may produce a cone of depression in the water table during dry periods that is sufficient to induce infiltration from the Fenton River. Although this would introduce potentially contaminated water into the well, the likelihood that large amounts of water would be required for the proposed project in a capacity other than maintaining the turf grass on the playing fields is negligible. Hence, water quality seems to pose no problem to development.

EFFECT ON VEGETATION

Approximately one acre of woodland will be cleared for playing fields. Open land presently in grass cover will be regraded for playing fields. This will result in temporary loss of vegetation. Following playing field development, grass will be reestablished over the area including acreage where trees have been removed.

EFFECT ON WILDLIFE

Due to the relatively small size of the area, wildlife will not be significantly affected. Disturbance by humans is presently high and will continue following development. Wildlife mobility will not be restricted by the proposed project. There will be a loss of one acre of woody cover due to clearing. This should not significantly lower the quality of wildlife habitat. Food chains should remain stable following development.

MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

The existing nature trail and the natural woodland through which it passes will be disturbed under the current development program. The trail will be relocated and continue to function in the remaining wooded portion of the site. The woodland (about a half acre) will be permanently lost. The surrounding Mansfield Hollow Reservation is a principally wooded preserve easily accessible from the Southeast Elementary School. It could be available for the natural environmental education purposes to which the lost half acre of woodland is currently put. Loss of woodland habitat values can be offset by planting fruiting shrubs and conifers as part of a landscaping theme to benefit wildlife and enhance aesthetics. Grasses planted following playing field construction should be of better vigor and species composition than presently exists.

It is recommended that the area be permanently maintained in grass to avoid any dust problems. Given the droughty soil conditions and the projected heavy use which these fields will have, some type of irrigation system to maintain turf on the fields may be necessary.

Refuse disposal and sanitary facilities had not been previously considered. With the heavy use intended, these items should be considered a necessity.

SHORT TERM VS. LONG TERM PRODUCTIVITY

The Town of Mansfield, as the opportunity arises, has been developing a comprehensive recreational facilities inventory throughout the town. This current proposal would provide developed game fields for the whole town. If not provided at this site they would have to be developed elsewhere to achieve the balanced recreational system desired by the Town. A central community park has been developed and is periodically expanded in the center of town principally to low intensity, individualized activities such as hiking, nature interpretation and camping, etc., which are suitable for the natural qualities that dominate that site. The Southeast Field proposal under consideration here complements the developments occurring at Schoolhouse Brook Park.

Without the project at least a portion of the site might be more easily available for other municipal use (expansion for instance of the Elementary School). In addition the neighborhood would not be subject to the increase, however modest, of noise and traffic as the use of the facilities increases with the expansion of the town's population and with an increase in the popularity of the game of soccer. In any event the site will continue to be used as a recreational resource albeit at a less intensive level. The difference in impact on the neighborhood and the site would appear to be marginal at worst.

IRREVERSIBLE COMMITMENTS OF RESOURCES

No major irreversible commitments of resources are expected. The loss of one acre of mature trees will represent a commitment of a renewable resource. Tree planting could replace this resource with time. All other actions could be reversed.

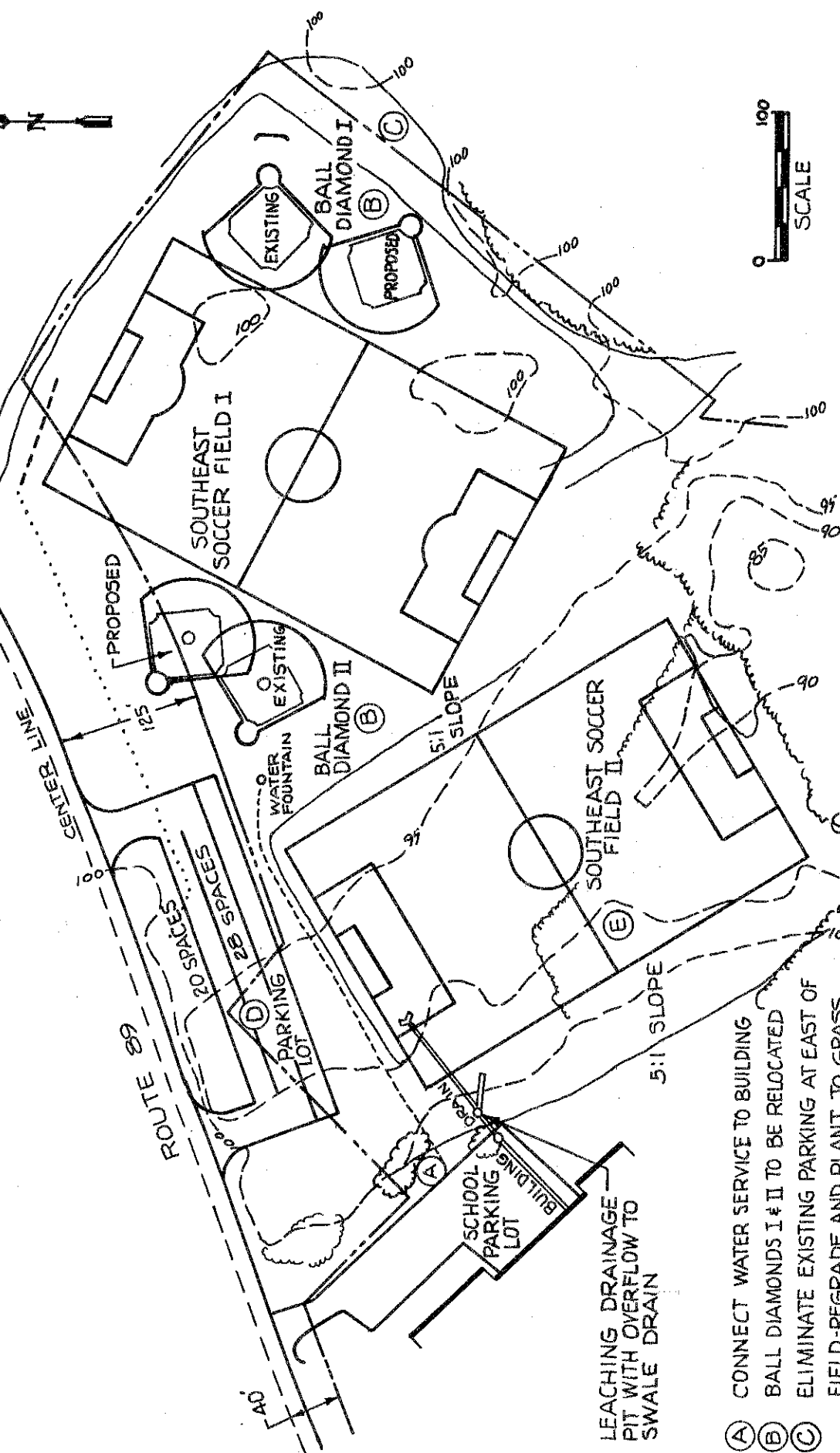
Approximately 100 feet of an existing nature trail will be lost during woodland clearing. Development of wildlife habitat along the woodland edge and in drainage and small areas would create greater opportunity for wildlife and outdoor education than presently exists. This would more than compensate for loss of the trail.

ALTERNATIVES TO THE PROPOSED ACTION

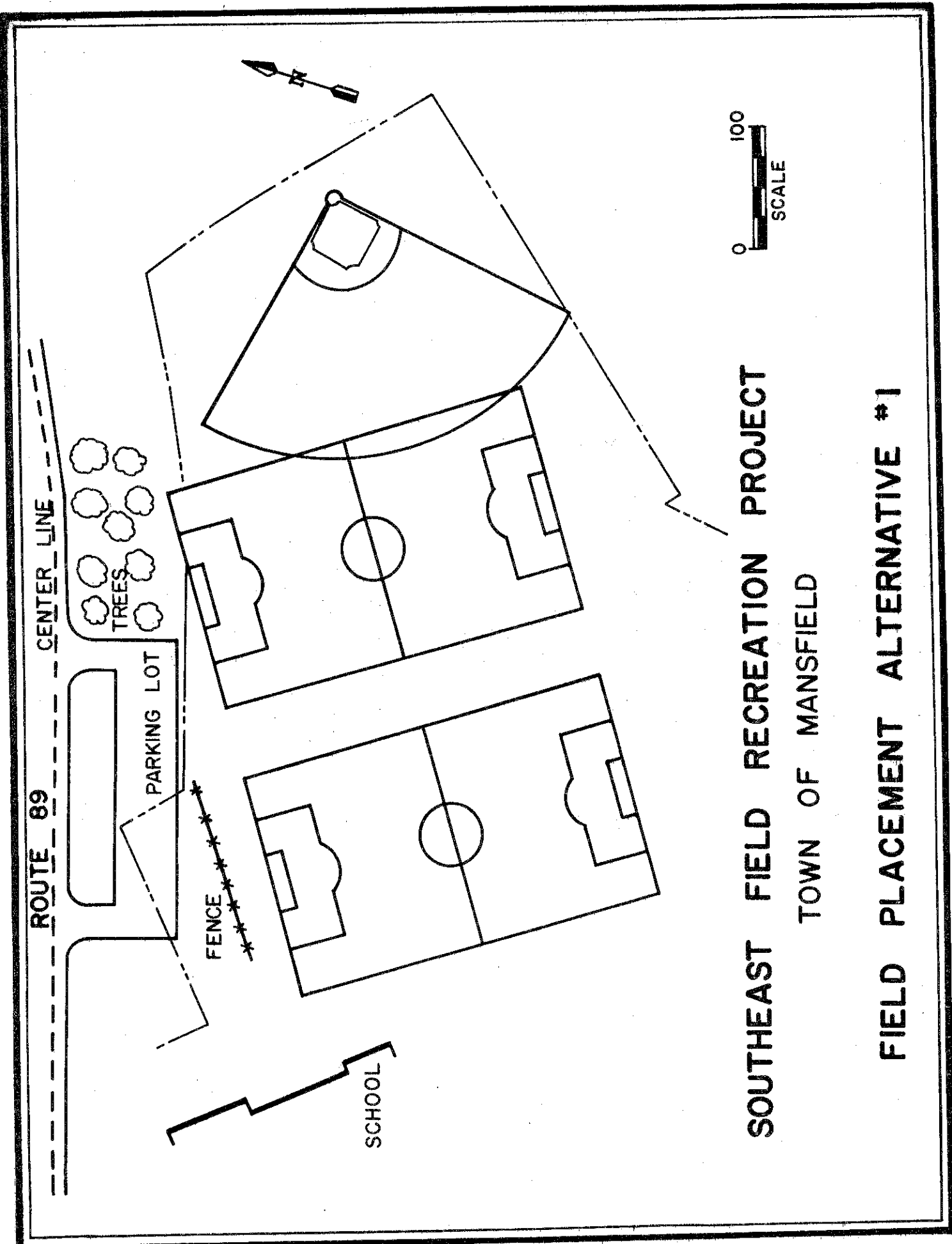
No action on the proposal would not fulfill the town's objective of obtaining an additional soccer field. The need for additional soccer facilities does exist



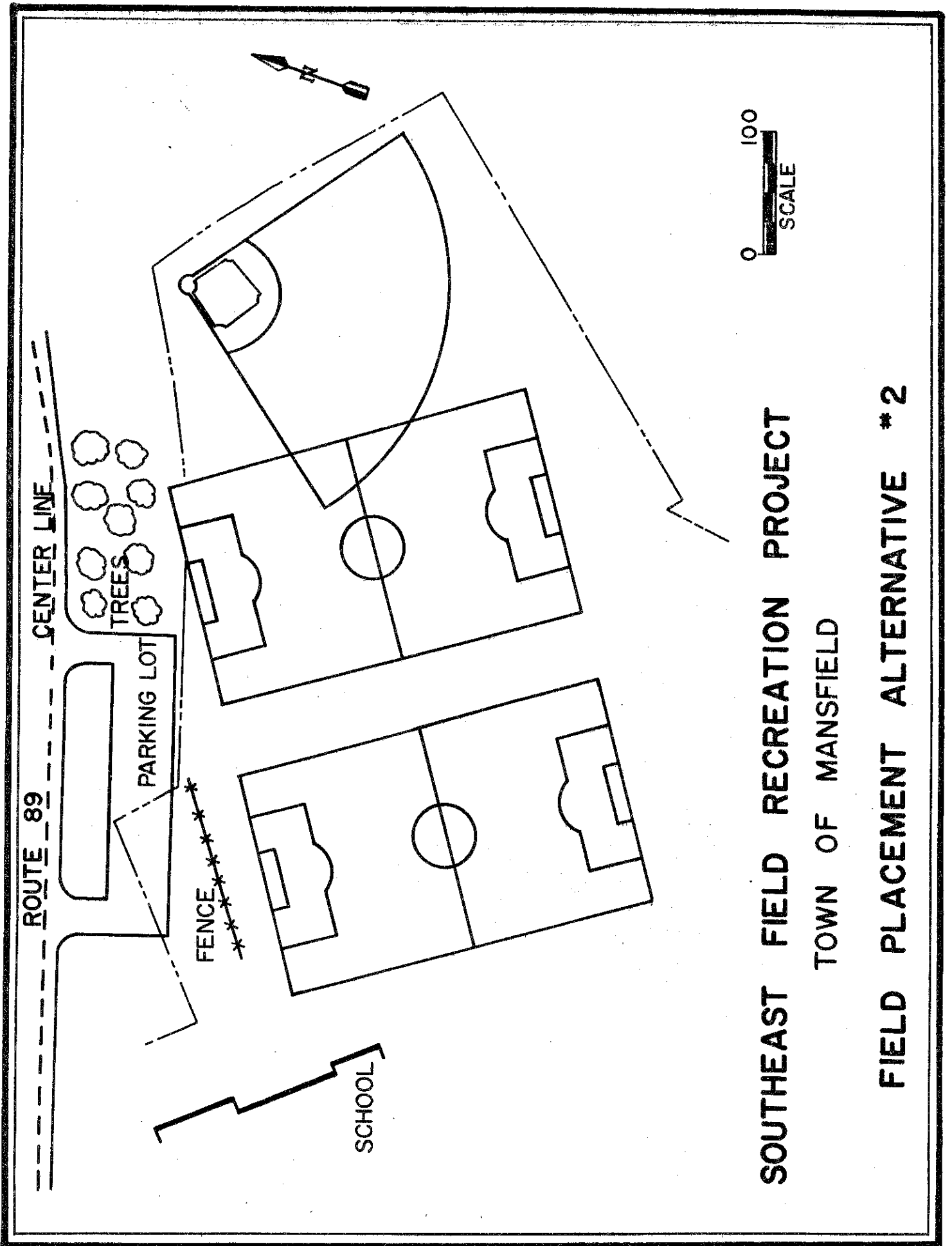
SOUTHEAST FIELD RECREATION PROJECT TOWN OF MANSFIELD



- (A) LEACHING DRAINAGE PIT WITH OVERFLOW TO SWALE DRAIN
- (B) CONNECT WATER SERVICE TO BUILDING
- (C) BALL DIAMONDS I & II TO BE RELOCATED
- (D) ELIMINATE EXISTING PARKING AT EAST OF FIELD-REGRADE AND PLANT TO GRASS
- (E) PROPOSED PARKING LOT TO BE OILED GRAVEL SURFACE
- (E) NATURE TRAIL TO BE RELOCATED AS DISPLACED BY SOCCER FIELD



SOUTHEAST FIELD RECREATION PROJECT
TOWN OF MANSFIELD
FIELD PLACEMENT ALTERNATIVE #1



SOUTHEAST FIELD RECREATION PROJECT

TOWN OF MANSFIELD

FIELD PLACEMENT ALTERNATIVE # 2

as shown in the Mansfield soccer program which was developed by Joe Morrone, the soccer coach at the University of Connecticut.

Leaving the playing fields as currently developed would preserve the nature trail and the section of forest which would otherwise be removed. A conflict would continue as groups compete for use of fields. As currently developed, using the soccer field excludes the use of the baseball fields concurrently or vice versa.

The proposed design fails to utilize the land in an efficient manner. All activity is restricted to one corner where the soils lack in the physical capabilities to handle such a load. Serious overlapping and crowding of fields exists.

The proposed plan is the most expensive alternative with the least relative return. The crowding and conflict would continue among the playing fields. When one baseball diamond is being used, only the other field and one soccer field is useable. The same result will be achieved with less cost and overlap if a second alternative is implemented. The most intensive use will be on the area of the two ballfields where the soil is more susceptible to erosion from heavy use.

The worst orientations for baseball fields are north and west facing diamonds. The sun must be a factor to consider when designing athletic fields and the proposed plan shows one field oriented to the west, which presents problems to batters in late afternoon games. The sun is less of a problem to soccer players.

The overlap of fields shown in the proposed plan, presents a problem in itself. An outfielder could injure himself or herself by collisions with fielders on the other baseball diamond or with the soccer goal posts.

The redeeming feature of the proposed plan lies in the fact that it does accommodate all four playing fields, however, the crowded field layout offsets this advantage.

A redesign of the existing proposal would serve to make more efficient use of the area. This alternative would alleviate overlapping of facilities, but an additional soccer field would not be available for play. Here the new soccer field would be constructed as proposed, the existing field would be eliminated and the baseball fields would be reoriented to face each other on more of a north-south axis. The northernmost field should be moved into the northeast corner as much as possible to alleviate most of the field overlap.

The advantages to this approach are the virtual elimination of field overlap, the lessening of some construction costs as only one soccer field would be constructed, all fields can be used simultaneously, and the heavy use would be spread out with the soccer field located on more stable soils. The disadvantages are the elimination of the nature trail and part of the forested area and the lack of additional soccer facilities.

Another alternative includes the elimination of one baseball field to construct both soccer fields. The new soccer field would be built as proposed and the existing field would be rotated so that it is parallel to the new fields with a twenty foot margin between them. The baseball field is oriented with the backstop on the northeast or northwest boundaries with the field facing south. Placing the backstop in the northwest corner would provide access for the two soccer fields and baseball

field from Route 89. This will eliminate one of the proposed ball fields, but overlapping will be greatly reduced. Space for bleachers, a small parking lot, trees and shrubs would also be available with this plan. Landscaping can then be designed in areas along Route 89 to minimize the sun's evening rays.

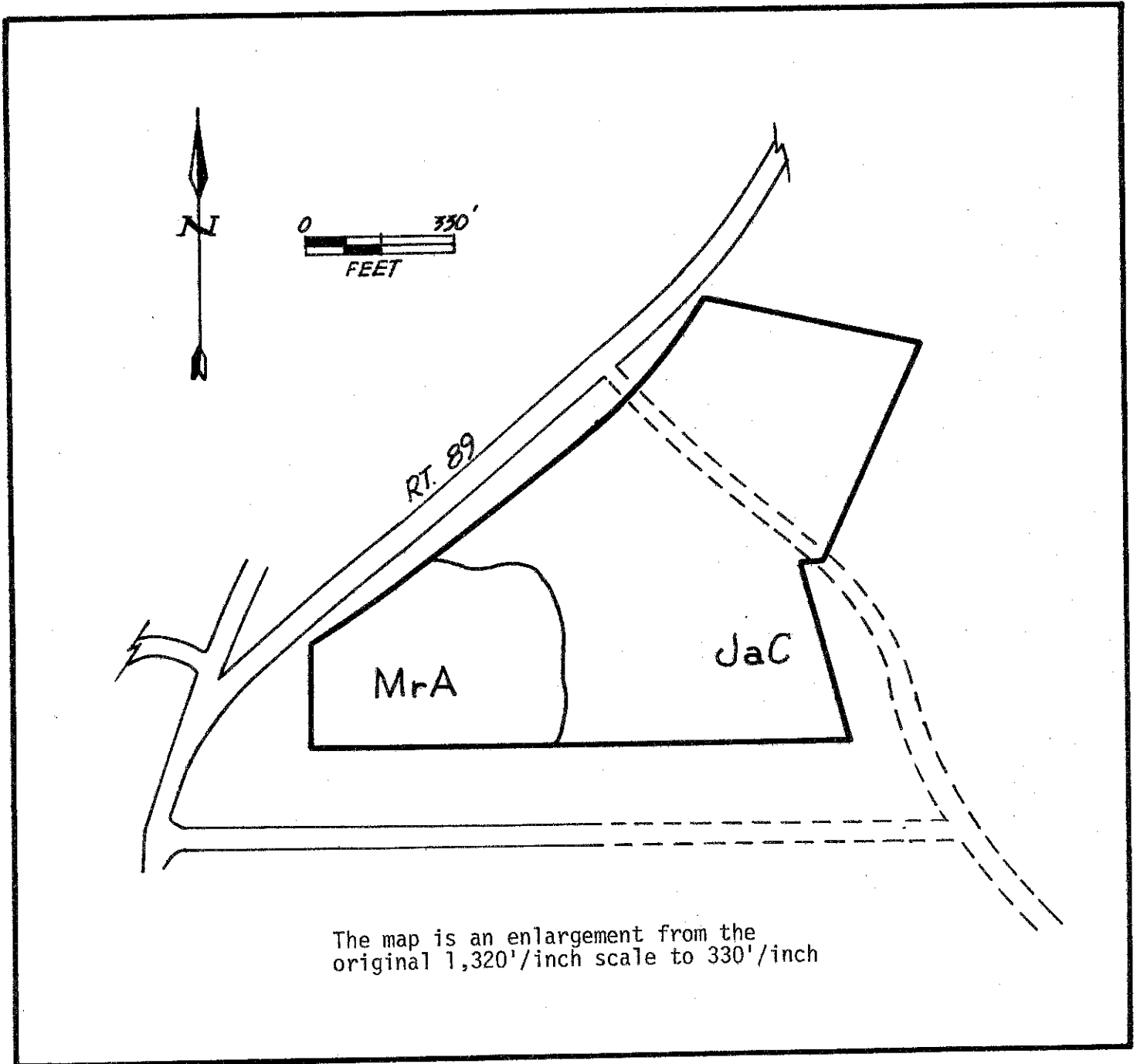
The Team suggests that the existing proposal be expanded to include development of the natural resources in this area as well as the playing fields. Educational benefit can be derived from student involvement in the development of this area. Students could become involved in creating a woodland edge and wildlife habitat with native plants available from the State Forest. It may also be beneficial for the students to become involved with a demonstration of forestry management techniques and cordwood harvesting during woodland clearing for the development.

Redevelopment of the nature trail should also be considered as a part of this proposal. The trail can be redesigned to link with trails in the Federal property trail system. It's educational value can also be improved by using standard identification tags which state the plant's common name, identifying characteristics, native habitat and cultural uses. The trail could include exhibits such as a pit showing the soil profile for the area and labelled sections of a large hardwood showing the morphology and pointing out products made from specific parts of the tree. This could be a useful addition to the natural science courses at Southeast School. Technical assistance for this type of program can be obtained from an Agricultural Extension Forester at the University of Connecticut or from the State Forest Service.

Appendix

SOILS

SOUTHEAST FIELD RECREATION PROJECT MANSFIELD, CONNECTICUT



Prepared by: United States Department of Agriculture, Soil Conservation Service
Advance copy, subject to change.

SOUTHEAST RECREATION FIELD

MANSFIELD, CONNECTICUT

PROPORTIONAL EXTENT OF SOILS AND THEIR LIMITATIONS FOR CERTAIN LAND USES

Soil Series	Natural Soil Group	Soil Symbol	Approx. Acres	Percent of Acres	Principal Limiting Factor	Limitations*			
						Athletic Fields	Landscaping	Streets and Parking	Cut Slopes
Jaffrey	A-1a	JaC	8.25	75	Slope Small stones droughtiness	3	3	2	Unstable slopes difficult to vege- tate
**Merrimac	A-1d	MrA	2.75	25	-	1	1	1	"

*Limitations: 1 = slight; 2 = moderate; 3 = severe

** Prime Farmland

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.