

Environmental Review Team Report

Killingly Recreation Areas

Killingly, Connecticut

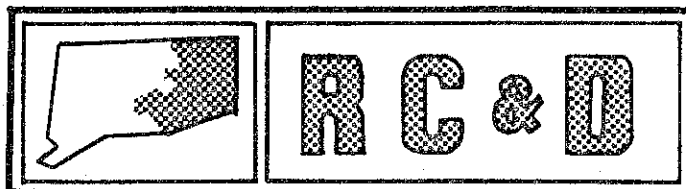


RC&D

EASTERN CONNECTICUT RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.

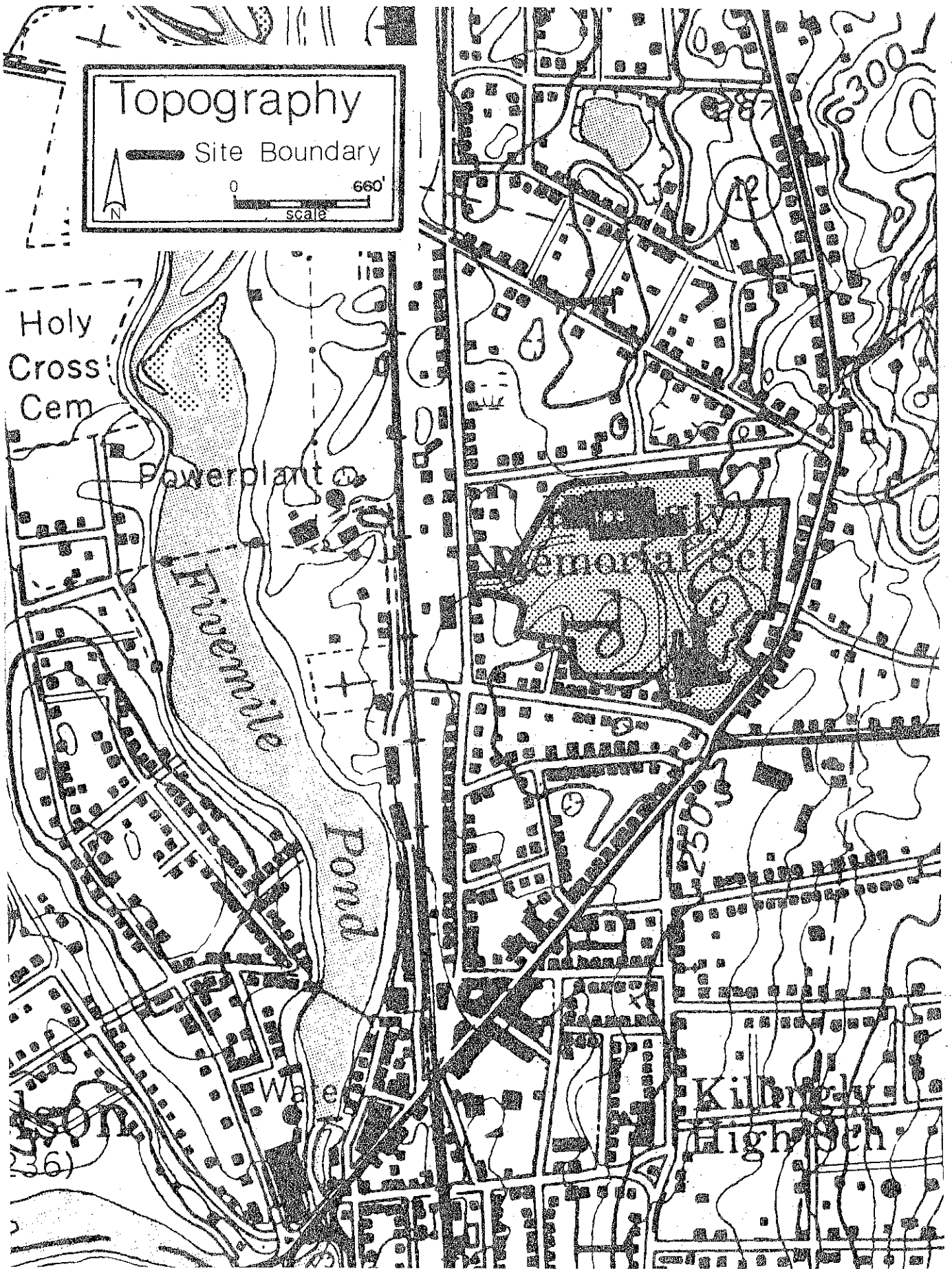
Environmental Review Team
Report
on
Killingly Recreation Areas
Killingly, Connecticut

March 1980



eastern connecticut resource conservation & development area

environmental review team
139 boswell avenue
norwich, connecticut 06360



DESCRIPTION OF THE ENVIRONMENT

PAST/PRESENT LAND USES

The present land use of this site consists of recreation fields for a grade/high school complex, as follows: 1 football field, 1 soccer field, 1 field hockey field, 2 basketball courts, 2 softball fields, 2 tennis courts, 1 track practice area, and 1 playground. The past land use was a landfill/dump. The surrounding area is high density residential.

EXISTING SOCIO-ECONOMIC CONDITIONS

Killingly is expected to show one of the highest increases in population in the next 20 years of the entire ten-town region. The current population is 15,700 and is expected to be 22,000 by the year 2000. The increased population reflects a 29% additional need for school and recreation facilities.

Parcel 1 borders the central business district of the Borough of Danielson and consequently presents a large amount of economic activity (retail sales).

Sources: State DOH 1979 population projections, U.S. Census 1970, Killingly Plan of Development.

EXISTING TRANSPORTATION ROUTES

The site is located on Route 12, one of the main north-south corridors in Northeastern Connecticut. The site is also easily accessible from other parts of Killingly and the surrounding area via Route 52 and Borough of Danielson roads. As the site is adjacent to high density development, there are greater numbers of children in close proximity to the site.

SURFACE AND SUBSURFACE GEOLOGIC CONDITIONS

This site was formerly occupied by a landfill. The discarded solid wastes have been buried and the site graded. Continued compaction of the sandy and gravelly fill and cover materials has resulted in the occasional appearance of buried rubbish at the surface.

SOILS

Original soils on this site had been disturbed for establishment of a town landfill. Precise contents of this soil unit mapped CF can only be determined by on site investigation. If buildings are planned on a portion of this area it will be wise to determine foundation support ability of the ground by digging test holes. If revegetation of the area is planned, the Soil Conservation Service (SCS) can advise on grading (i.e. sloping at 1 percent, etc., to direct surface runoff), seedbed preparation, and seeding. The seasonal aspect of seeding and intensity of school use would be important considerations. Possible varying of terrace levels or sectional seeding should be considered. Hedgerow division

barriers could be planted. The slope to the east could be planted with appropriate plant species and/or mulched. Again SCS would provide guidance if requested. It does appear this large field could at least be improved with more dense sod cover.

WATER RESOURCES

Little potential is seen for groundwater underlying this parcel, situated as it is on a former landfill. However, no real need exists for this groundwater since this parcel lies within an area served by public water supply mains.

VEGETATION

Grasses are the predominant vegetation type on this site.

WILDLIFE

This site is no doubt frequented by urban wildlife types such as cats, dogs, skunks, raccoons, squirrels and seasonal songbirds.

PROBABLE FUTURE ENVIRONMENT

Whether the parcel is further developed or not, the site would remain in recreational use. The concentration of recreational development would be less. Intensive maintenance of the site would not be needed if an alternate site is chosen.

ENVIRONMENTAL IMPACT

QUANTIFIABLE LAND USE CHANGES

The changes that could be made at this site are somewhat limited and land use patterns in the area would remain relatively unchanged.

SOCIO-ECONOMIC CHANGES

The local tax structure could be increased due to local contributions necessary to fund the project. Additional recreational staff and field maintenance staff would be required. Area residents would benefit from the additional recreation facilities acquired. The surrounding area could be affected by higher noise levels from the additional recreation facilities. Additional recreational facilities could provide additional opportunities for recreation for children of lower income families.

TRANSPORTATION ROUTES

It is anticipated that any increase in traffic can easily be handled by existing roads. No additional safety hazards would be incurred.

ENERGY CONSUMPTION

Rehabilitating this site would not create any additional energy consumption.

EFFECT ON WATER RESOURCES

Water resources would not be affected by rehabilitating athletic facilities on this site.

EFFECT ON VEGETATION

Rehabilitation of these fields will not cause any adverse effect on the existing vegetation.

EFFECT ON WILDLIFE

Planned activities will not cause any change in current wildlife which frequent the site.

WATER SUPPLY

Water is supplied to the site from a public water supply which also provides water to both schools on the site.

WASTE DISPOSAL

Waste disposal will be supplied by the public sewer system which already services this site.

ADVERSE ENVIRONMENTAL EFFECTS

This proposal will generate no adverse environmental effects.

IRREVERSIBLE COMMITMENTS OF RESOURCES

Rehabilitation of these fields will cause no irreversible commitments of resources.

RECREATION POTENTIAL

Parcel #1 has the least development potential because it is already rather intensively developed. The site is an open playing field situated behind both the Killingly Elementary and High Schools with the facilities shared by both. There is also a tennis court and children's play area here.

Expansion and improvement of facilities is considered to meet the recreational needs of Killingly residents. Development timing will be contingent upon available funding. The site is readily accessible from Route 12 and is located within Danielson city limits. Since the proposal for parcel #1 does not alter the current type of use there should be no major disruption to use patterns, the local community, or the site itself.

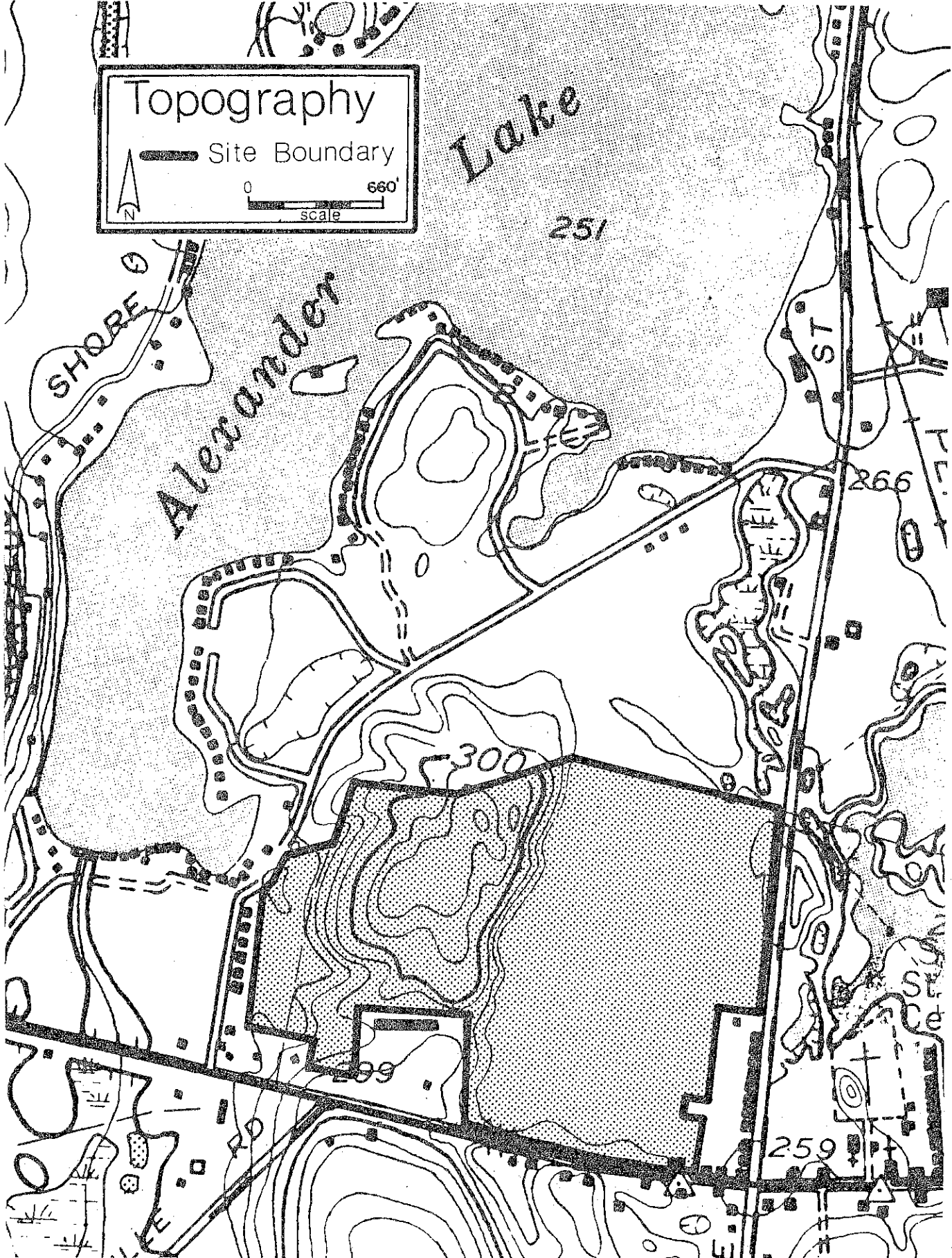
This site has, as indicated, been developed to nearly maximum use levels. Rearrangement of the layout might enable more facilities to be placed on the site but the net gain anticipated is marginal. Substituting one activity for another might be considered in an attempt to meet priority needs.

The problem of over use was cited as destroying the lawn areas. A program of intensive lawn care and maintenance whereby fertilization, aeration, and watering is done, to promote optimal growth and increase resistance to site wear would be desirable. If over use is still a problem, alternating patterns of use or curtailing the use of fields may have to be considered in attempting to reduce site degradation. Any development program on this site should probably be directed toward dilution of the over use problem and resultant damage. If no further action is taken and use patterns retain similar levels of activity, the lawn damage problem will persist, thereby limiting future utility.

The town should set priorities for the greatest facility need at this site and then an attempt should be made to accommodate that need. The least used component of the facility could then be converted to a higher priority use. Since the site is fairly level and developed for ballgames, facility conversion should be a fairly uncomplicated task. Specific recommendations on facility conversion are not offered, since this decision can more appropriately be made by the town.

If elementary and high school use of play areas are incompatible, then an attempt to segregate areas of use may have to be considered. Rearrangement of facilities may be deemed necessary because of this factor alone.

Parcel 2



DESCRIPTION OF THE ENVIRONMENT

PAST/PRESENT LAND USES

The site is presently being used for agricultural crops and educational agricultural activities. A facilities building exists on the site. The surrounding land is low density residential and open space.

SOCIO-ECONOMIC CONDITIONS

Killingly is expected to exhibit one of the highest increases in population growth in the ten-town region. Increased population projections (15,700 present; 22,000 by year 2000) reflect a net increase of 29%. This increase will result in necessary additional school facilities, requiring additional recreation facilities.

Sources: State DOH 1979 population projections, U.S. Census 1970, Killingly Plan of Development.

TRANSPORTATION ROUTES

The site is located on Connecticut Route 101 and upper Maple Street. Route 101 forms one of the major east-west corridors in Killingly. The parcel is also accessible from Route 52. These routes also serve as access to the town's industrial park.

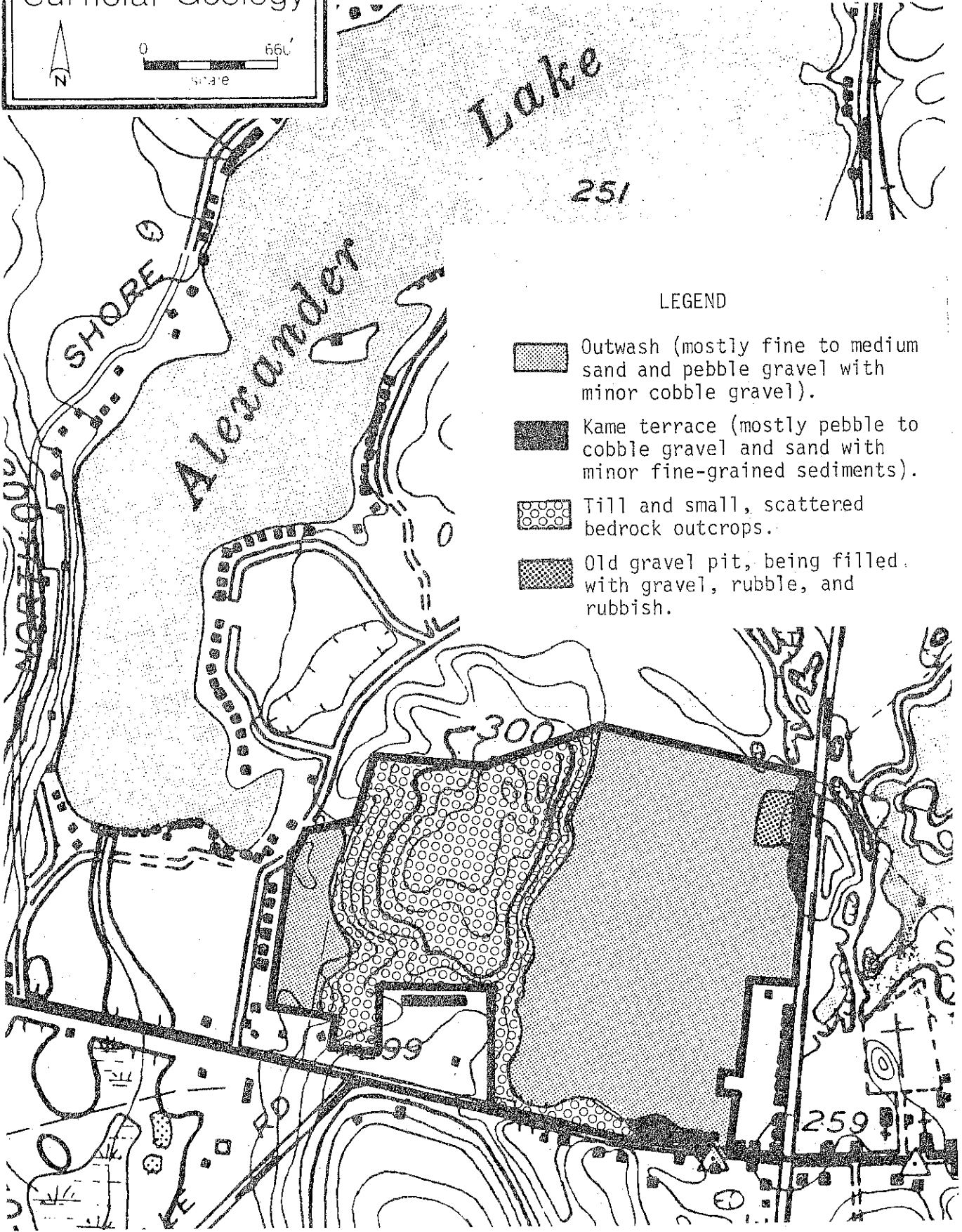
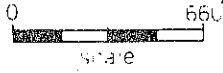
TOPOGRAPHIC CONDITIONS

This parcel can be divided into three zones. The first zone occupies the eastern half of the site and consists of a fairly flat glacial outwash deposit. The flat surface is broken only by a gravel pit, approximately one acre in size, at the northeastern corner. The second zone, occupying most of the western half of the site, consists of a bedrock-controlled hill that rises a maximum of about 70 feet above the flat area to the east. The third zone, a strip approximately 200 feet wide at the western boundary of the site, consists of another relatively flat series of outwash deposits.

SURFACE AND SUBSURFACE GEOLOGIC CONDITIONS

The first and third zones of this parcel, as described in the Topography section of this report, are composed of glacial outwash deposits. The gravel pit at the northeastern corner of the site indicates that most of these deposits consist of sand and pebble gravel, to a depth of at least 15 feet. Approximately 6 feet of cobble gravel overlies the sandy material at the eastern boundary of the pit. Logs of wells in the vicinity of this site indicate that the overall depth of outwash on the parcel may be at least 50 feet and possibly as much as 90 feet. The second zone of the Topography section consists of a bedrock knob thinly veneered with till. Till is a nonsorted accumulation of rock particles and fragments of widely assorted sizes and shapes. These materials were incorporated into an ice sheet as it moved slowly southward through Connecticut, and were redeposited on bedrock surfaces directly from the ice.

Surficial Geology







Lake

251

Alexander

LEGEND

-  Outwash (mostly fine to medium sand and pebble gravel with minor cobble gravel).
-  Kame terrace (mostly pebble to cobble gravel and sand with minor fine-grained sediments).
-  Till and small, scattered bedrock outcrops.
-  Old gravel pit, being filled with gravel, rubble, and rubbish.

The bedrock on or underlying the site is part of the Quinebaug Formation, a described in the "Bedrock Geologic Map of the Danielson Quadrangle, Windham County, Connecticut," by H.R. Dixon, U.S. Geological Survey Map GQ-696 (1968). The Black Hill Member of the Quinebaug Formation forms the knob itself. This member is described as a non-resistant, light to dark gray, fine-grained, well-layered schist composed of the minerals biotite, quartz, oligoclase, and occasionally, calcite and hornblende. Schist is a term for crystalline rocks in which platy or flaky minerals have aligned to form thin layers or slabs in the rocks. Accessory minerals in the schist include epidote, opaque minerals, sphene, and apatite. Minor muscovite quartzite layers are interspersed within the schist. No economic value is likely to be attributed to these rocks.

SOILS

Soils typical of this site include:

17LC Charlton-Hollis fine sandy loams, very rocky, 3 to 15 percent slopes. This gently sloping to sloping unit consists of two soils, Charlton and Hollis, which occur in patterns too intricate to separate in mapping. About 50 percent of the unit is similar to the soil described for the Charlton series. Charlton are well drained soils developed in upland till normally deeper than 5 feet. These soils are moderately permeable in the subsoil but slowly to very slowly permeable layers may be present below 60 inches. The water table normally is below 60 inches most of the year. The Charlton soils are naturally stony and contain few to many stones throughout the soil. Most use problems are related to slopes and stoniness. Hollis soils make up about 30 percent of this mapping unit and occurs when bedrock is a few to 20 inches deep. This mapping unit has rock outcrop covering 1 to 8 percent of the surface and few to many stones on the surface.

60A Hinckley gravelly sandy loam, 0 to 3 percent slopes. Hinckley are excessively drained soils developed in stratified sandy, gravelly and cobbly water deposits. These deposits, normally deeper than 10 feet, are located on undulating to rolling terrace topography above the present overflow of large streams. They have rapid to very rapid permeability in the subsoil. The water table is below 60 inches during most of the year. Most use problems are related to texture, droughtiness and rapid to very rapid permeability. This soil is nearly level.

60C Hinckley gravelly sandy loam, 3 to 15 percent slopes. This soil is gently sloping and sloping. Areas occur in patterns too intricate to separate in mapping, and the surface layers are not as thick.

70A Merrimac sandy loam, 0 to 3 percent slopes. Merrimac are excessively drained soils developed in sandy water deposits, from 18 to 24 inches deep, over coarse textured stratified sands and gravels. These deposits, normally deeper than 10 feet, are located on terraces above the present overflow of large streams. These soils have moderate to rapid permeability in the subsoil. The water table normally is below 60 inches during most of the year. Most use problems are related to the moderate to rapid permeability and droughtiness. This soil is nearly level.

70B Merrimac sandy loam, 3 to 8 percent slopes. This soil is gently sloping.

455A Sudbury sandy loam. Sudbury are moderately well drained soils developed in sandy water deposits, from 18 to 24 inches deep, over coarse-textured stratified sands and gravels. These soils, normally deeper than 10 feet, are located on terraces above the present overflow of large streams. They have moderate permeability in the subsoil. The water table normally rises to within 20 to 30 inches of the surface during the winter and spring months. Most use problems are related to the seasonal high water table. This soil is nearly level.

GP Gravel Pits. This map unit consists of excavated pits in sandy to very gravelly outwash soils. Some areas are in sandy glacial till soils. Areas of this unit are irregular in shape, depending upon the nature of the deposits and ownership boundaries. Mapped areas range from 5 to 60 acres.

Gravel or sandy soil material was removed from these areas for construction purposes and other uses. The pits range from 5 to 50 feet in depth. The sides are commonly steep and the floor is commonly level but may be gently sloping. They lack vegetation except for a few drought tolerant varieties of plants.

Included with this unit in mapping are small pools of water. A few included areas have smoothed or uneven accumulations of waste and general refuse that without major land reclamation is incapable of supporting plants. The surrounding soils are commonly excessively drained Hinckley, and Windsor soils, somewhat excessively drained Gloucester, and Merrimac soils, well drained Agawam soils, and moderately well drained Ninigret and Sudbury soils. Many of these soils were included in the areas excavated. The total inclusions are from 10 to 25 percent.

Approximately one half of this tract is fairly level. The Vo-Ag department of the Killingly school system is using a portion for growing crops, orchard plantings, etc. The soil use Limitation Chart in the Appendix to this report indicates which soils are prime farming types. It also shows there are very few limitations for any use on these soils except for septic tank absorption/leach fields. The underlying gravelly composition of these soils may contribute to pollution of ground water because of poor filtering ability. A map on "Ground-Water Availability in Connecticut" published by the State DEP in 1978 shows the underlying ground water as an aquifer capable of yielding 50-2000 gallons of water per minute to wells. Preservation of clean ground water is important. Since a sewer trunk line runs out Upper Maple Street it is likely any sanitary facilities installed would be connected to the trunk line and eliminate any potential problems.

Planning for construction of any buildings and athletic fields should involve the Vo-Ag department and their future needs. It would seem logical to locate recreation facilities nearest to Route 101 and Maple Street. Consideration should be given for the wetter Sudbury soil. Appropriate drainage should be planned - storm water culverts from a parking lot for example - tying into existing storm sewers, etc.

The upper wooded portion of this total tract is apparently being managed by Vo-Ag classes for forest products. More integration of forestry management with recreation trails, outdoor classroom areas, a cross country trail, etc., would be possible. On the extreme western edge of the property where the pond (w) shows, wetland wildlife habitat could be emphasized. SCS could provide specific aid in developing the area for wildlife management. The majority of the soil in this wooded upland area does have moderate to severe limitations for any large buildings

due to slope and rockiness. The wooded area can be a source of cordwood and/or timber now and in the future years.

WATER RESOURCES

This parcel lies within a zone described as "favorable for development of small to moderately large groundwater supplies from stratified drift (the glacial outwash deposits). These areas will yield more than 100 gallons per minute to individual wells at many places but low permeability or small saturated thickness will limit yields at many places within these areas." (Source: Connecticut Resources Bulletin No. 8, Plate D.) The bedrock underlying these parcels may also be the source of small yields (generally less than 10 gallons per minute).

Iron and manganese concentrations have caused problems with groundwater supplies in the Dayville area. Most of these problems involve wells tapping the lower 20 feet or so of the stratified drift or the upper 10-20 feet of bedrock. Wells tapping only the upper portion of the stratified drift or penetrating deep into the bedrock, with casing extending down through the upper 10-20 feet, are much more likely to supply good-quality water.

VEGETATION

See "Vegetation Type Chart" for dominant species found on this parcel. (Appendix A).

WILDLIFE

Wildlife typical of this area include urban species such as dogs, cats, skunks, raccoons, mice, seasonal songbirds; as well as species more typical of forest and edge habitats such as rabbits, white-tail deer, opossum and woodchucks.

PROBABLE FUTURE ENVIRONMENT

If this site is not chosen, it will probably remain in agriculture and forestland.

ENVIRONMENTAL IMPACT

QUANTIFIABLE LAND USE CHANGES

If this site were developed, most of the land now in agriculture would be lost. The surrounding municipal forestland could incur additional impact from people using it as both nature and exercise trails. Land uses in the general vicinity would remain relatively unchanged.

SOCIO-ECONOMIC CHANGES

The local tax structure could be increased due to local contributions neces-

sary to fund the project. Additional recreational staff and field maintenance staff would be required. Area residents would benefit from the additional recreation facilities acquired. The surrounding area could be affected by higher noise levels from the additional recreation facilities. Additional recreation facilities could provide additional opportunities for recreation for children of lower income families.

TRANSPORTATION ROUTES

The traffic associated with developing this site can easily be handled by existing routes except for short periods of congestion which may be generated if a large stadium were constructed.

ENERGY CONSUMPTION

Energy consumption is directly related to the distance the bulk of the population must travel to get to the area serving them. This parcel, though located four to five miles from the city of Danielson (Killingly's population center) is on a major traffic artery thereby offering convenient routing from Route 52 which Route 101 intersects. Daily use of ballfields on this site by Killingly High School students for team training does appear impractical, however.

EFFECT ON VEGETATION

The proposed development of an athletic field complex on a portion of the agricultural land (Area A) will preclude agricultural use of that land. Such a development should have little impact on surrounding vegetation.

The development of the proposed hiking trails, nature study trails and picnic sites within the forested portion of this parcel (Stands Band C) will have minimal negative impact on vegetation.

Development of trails and picnic sites will cause some loss of vegetation through soil compaction, mechanical root injury, direct trampling and vandalism. These disturbances may reduce or eliminate ground cover vegetation and accelerate mortality of low vigor, unhealthy trees along trails and within picnic areas.

The loss of ground cover vegetation in these areas will reduce the aesthetic quality of the area and also potentially cause accelerated erosion.

Dead and dying trees along trails and in picnic areas will be hazardous to people using the area.

EFFECT ON WILDLIFE

Development of this parcel will have minor impact on most wildlife currently using this parcel. Several food sources presently used by birds and mice may be removed when the land is taken out of agricultural use. Deer may also find the area undesirable with more intensive use of the forest land.

EFFECT ON WATER RESOURCES

The most significant potential source of contamination of groundwater supplies from the proposed recreational development would be absorption into the ground of runoff from paved areas, such as parking lots. Nevertheless, this source would be unlikely to lead to any severe groundwater deterioration except in an unusual event, such as spillage of gasoline. Moreover, this risk would be present under any type of development and probably would be greater under most other types. A minimal overall impact on groundwater from the proposed recreational facilities is foreseen.

WATER SUPPLY

Water for proposed activities would be provided by on-site wells.

WASTE DISPOSAL

If the proposed developments are carried out, this site will see a large increase in amount and type of usage. The amount of refuse generated at the site will also increase dramatically. Refuse containers in sufficient numbers should be located at the fields, bleachers, parking lots and wherever else usage indicates. If food vendors or concession stands are present at any of the athletic events, they should have covered refuse containers to decrease fly traffic. The refuse should be removed to the landfill shortly after athletic events to prevent insects and rodents from being attracted to it.

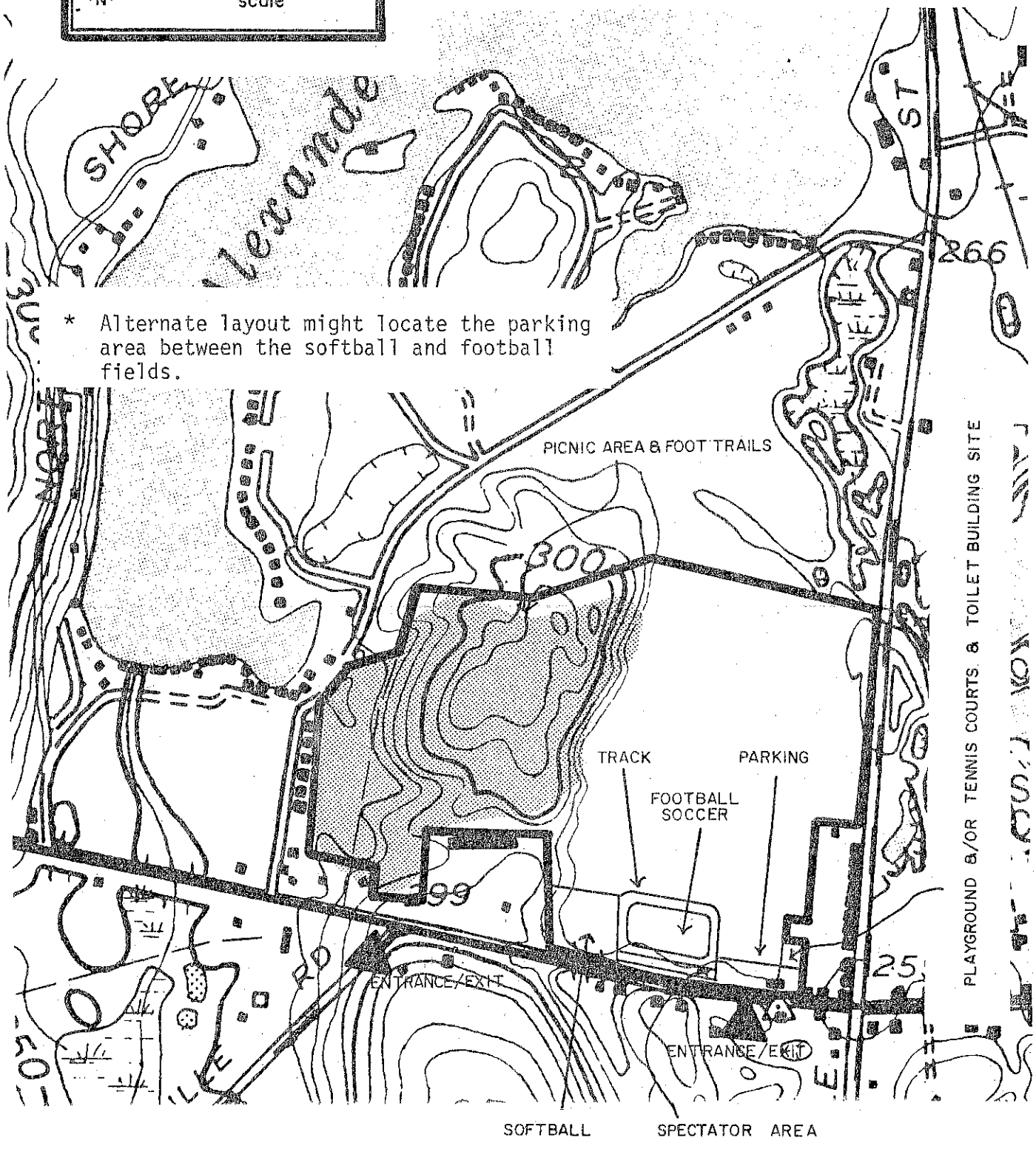
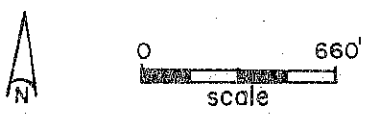
A public sewer line extends along upper Maple Street and could serve a locker-shower building. Restrooms, available to the public during games, should be provided in this building.

If the northwest section of the parcel is developed for recreational use, refuse disposal containers and sanitary facilities should be provided in sufficient numbers along trails and at picnic areas. Chemical toilets should be used to prevent contamination of the groundwater. The refuse containers should be emptied on a regular schedule.

RECREATION POTENTIAL

This parcel consists of 86 acres of woodland and tilled field. The tract is currently used by eleven towns for a vocational-agricultural training area. Forty acres comprise the tilled field, which is fairly level. The remaining land on the westerly portion is hilly and wooded. It is being logged under the vo-ag program for a timber stand improvement. This area would lend itself to low density use such as scattered picnic sites and trails, with comparatively little site work. An access road to a picnic area on and near the hilltop would have to be provided. There is a fifty foot corridor to Route 101 which could provide the access point to an existing dirt road on the property which winds up through the wooded section. Upgrading the existing interior road would provide access to individual picnic sites and could provide for parking along the road in linear fashion or spur parking at individual picnic sites. Picnic site locations can be determined partly by the tree thinning operation.

Recreation Potential



* Alternate layout might locate the parking area between the softball and football fields.

There are currently no recreational facilities on this site. The town needs additional playing fields; consequently, the tract is being considered for recreational development. With the proper layout of recreational facilities targeted for the open field area, loss of arable land could be minimized. If ballfields are laid out close to Route 101 with the associated parking area directly off the road, the most effective use of the field appears possible (i.e., minimal corn-field loss).

Development of this parcel would be tied into the upgrading and expanded development of existing recreation lands owned by the town.

It is anticipated that any ballfields established could receive heavy use on a seasonal basis. Local children would undoubtedly make use of the fields for pickup ball games, kite flying, etc.

Refuse pickup would probably need to be frequent because of the exposed location along a state highway and resultant use by travellers for lunch and rest stops. Night time activity could pose a problem unless proper security measures are taken along with periodic police patrol.

Recreational development of the tract will bring along the need for supportive sanitary facilities. Flush toilets would be preferred in a heavy use facility. Any structure brings with it the potential for damage by vandalism so that a structure design chosen should be as vandal resistant as possible. Potential locations of a toilet building should be determined before finalizing a development plan. Rental or portable toilets may suffice if recreational use is light to moderate.

Vegetation losses are anticipated to be low. Some eventual loss of deciduous trees can be expected in a picnic area because of the damaging effect of foot traffic. Wood chips, possibly derived from any tree thinning operations, could be used to advantage in trying to reduce this impact. Grass fields established where there are now tilled fields should be fairly easy to install and maintain on the site because of the current agricultural use. Discontinuance of grass ballfields and reversion to a tilled and farmed plot can be effected without any undue hardship should this eventually be decided. To emphasize again, however, an attempt should be made to minimize the loss of arable land to non-farm use.

Some slight increase in traffic can be anticipated during ball games and other scheduled events. No untoward traffic problems are anticipated, but if they do materialize, they may be remedied by using a blinker traffic light.

Ballfields (one softball and one football) could be established with relatively little loss of arable land. An unplowed portion of the southwest corner of the open field under cultivation could be converted to a softball field through some cutting and filling. Immediately east of this area and just north of the line of conifers along Route 101 is an area that would lend itself to the establishment of a football field surrounded by a track. Cut and fill would also be required to level this area. Any cutting and filling should be preceded by the stripping and stockpiling of topsoil for eventual use.

Cut and fill of the area near Route 101 should provide excess fill the needs of this locale (mostly cutting). If suitable quality gravel can be obtained from any excavation being done to provide level ballfield sites, the gravel could be

used to build up the subgrades of the access roads (as the one proposed into the wooded tract) or for the building up of a parking area. A further possibility would include the stockpiling of this material near the present dump site and former gravel bank on the northeast corner of the tilled field. When this dump site becomes full enough to warrant closure, the stockpiled gravel could be used as overburden and serve as subgrade to a final layer of topsoil. This would enable restoration of this dump site to its use as productive farm land since the materials being dumped here now seem relatively innocuous.

Establishing parking and toilet facilities in the southeast portion of the tract may reduce the amount of cut and fill necessary, although the ideal would be to locate each ballfield on either side of a centrally located parking area with nearby toilet facilities. An arrangement such as this, would dictate excavation of the southeast corner to eliminate the foundations located there. This would also necessitate a reroute of the existing access road off Route 101 and crossing the east edge of the plowed field.

It may be possible as previously mentioned, to install a track around a football field's perimeter. If cutting and filling is done, a spectator area may be located on the sloped area which would result from that cut and fill. A proposed spectator area is in the shade of the line of conifers located along Route 101.

Squaring off irregular configurations and using those irregularities to maximum advantage will make for greater operability of the remaining farm land. Location of a playground area and a toilet building may be possible in one of these small areas behind the residences on Upper Maple Street. This area is bounded on three sides by private land. Neighborhood sentiment may be against installing a toilet building in sight of the adjacent backyards, however.

Any landscaping or tree planting done along Route 101 should be done with an eye toward retaining visibility and sight lines available to drivers entering and exiting the tract.

The recreation options proposed for this parcel, assuming retention of the farming operation, are therefore:

- Picnic area.
- Hiking/nature/bird watcher trail.
- Softball field.
- Football/soccer field.
- Track (around football field).
- Playground.
- Snowmobiling on fields and roads.
- Tennis court (space permitting).

MITIGATING MEASURES

The rocky nature of the forested area necessitates careful planning and wise layout of the proposed trails and picnic sites. Trails established in this area should generally follow contours, avoid steep slopes and wet areas. Steps and short boardwalks may be utilized where steeply sloped areas and wet areas cannot be avoided. Picnic sites should be relatively flat, yet still afford good drainage.

The trails and picnic sites should be well defined and clearly marked. This should limit extensive soil compaction, root injury and trampling of herbaceous vegetation outside the trail system and picnic areas.

Soil compaction may be reduced by spreading woodchips several inches deep along trails and picnic sites. As woodchips rot they lose their effectiveness and should be replaced. Woodchips are also used as kindling for campfires at picnic sites. Crushed stone or cinders also reduce soil compaction and are more permanent than woodchips, however, they are usually more costly.

Eventual loss of some trees caused by soil compaction, even with the addition of woodchips, crushed stone or cinders is unavoidable. As these trees die they should be removed to prevent a possible hazard. Trees along the trails and picnic areas which are already dead, also present a possible hazard and should be removed.

Management of Parcel #2 Vegetation Type B

The trees in Stand B are becoming overcrowded and beginning to decline in health and vigor. A thinning in this stand will improve this condition by reducing competition between residual trees for space, sunlight, water and nutrients. This fuelwood thinning should follow the "crop tree selection method." For the purpose of this thinning 100 of the highest quality trees on each acre should be identified (trees spaced about 20'x20' will equal 100 trees per acre), and one, two, or three trees that are in direct competition with each of those identified should be removed. The 100 trees per acre that are selected as crop trees should be healthy, large crowned and show little or no signs of damage. Trees which are not competing with the 100 selected trees should not be removed, unless they are severely damaged, or dead. This thinning, if implemented, will provide approximately 5 cords per acre.

Aside from improving the health of the trees and producing fuelwood, this thinning could provide excellent woodlot management training for the Vocational-Agriculture students. This area could also become a woodlot management demonstration area for town residents, promoting proper woodlot management practices.

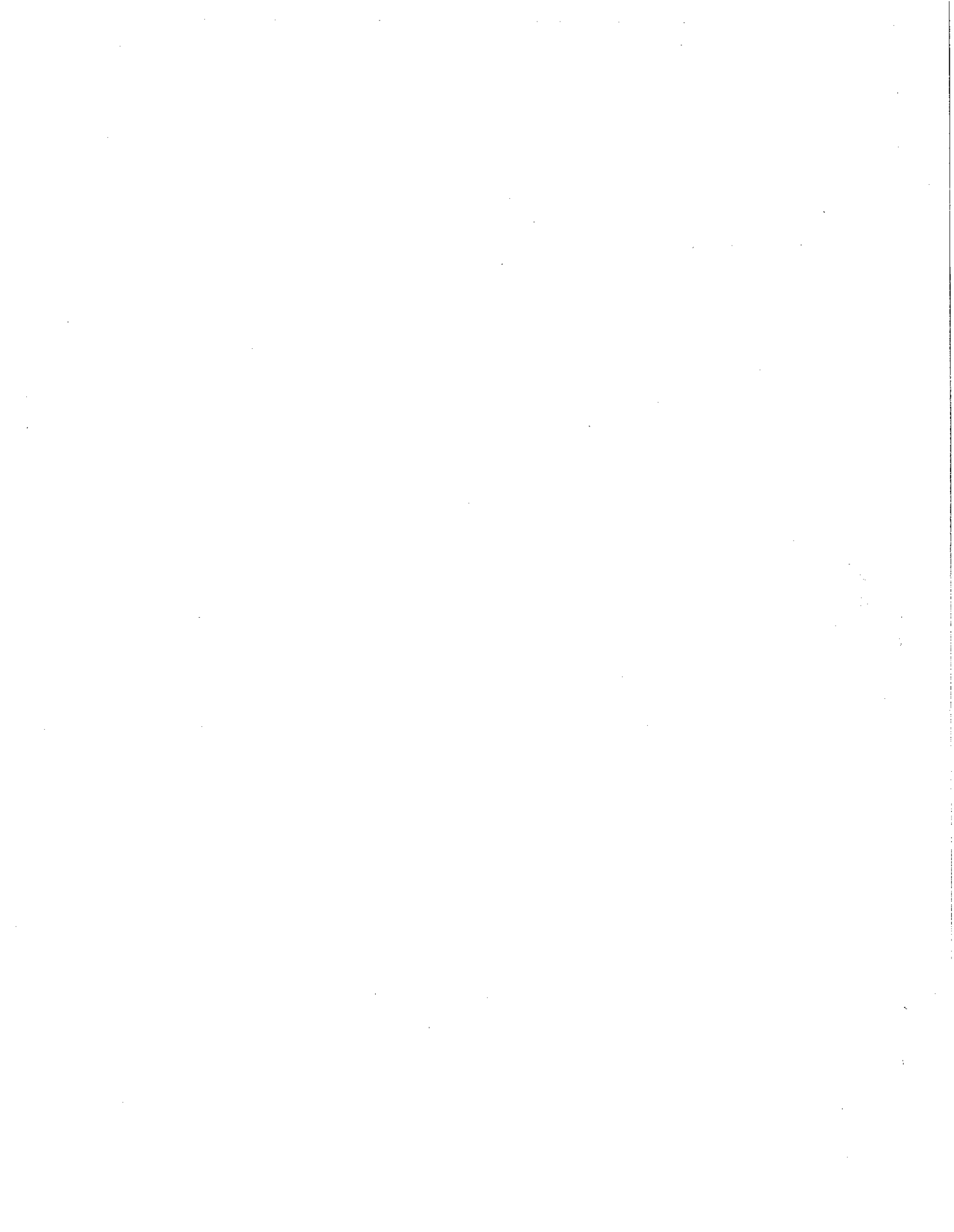
Revenues made by the sale of fuelwood from this area could be used to develop and maintain the trail system and picnic areas.

ADVERSE ENVIRONMENTAL EFFECTS

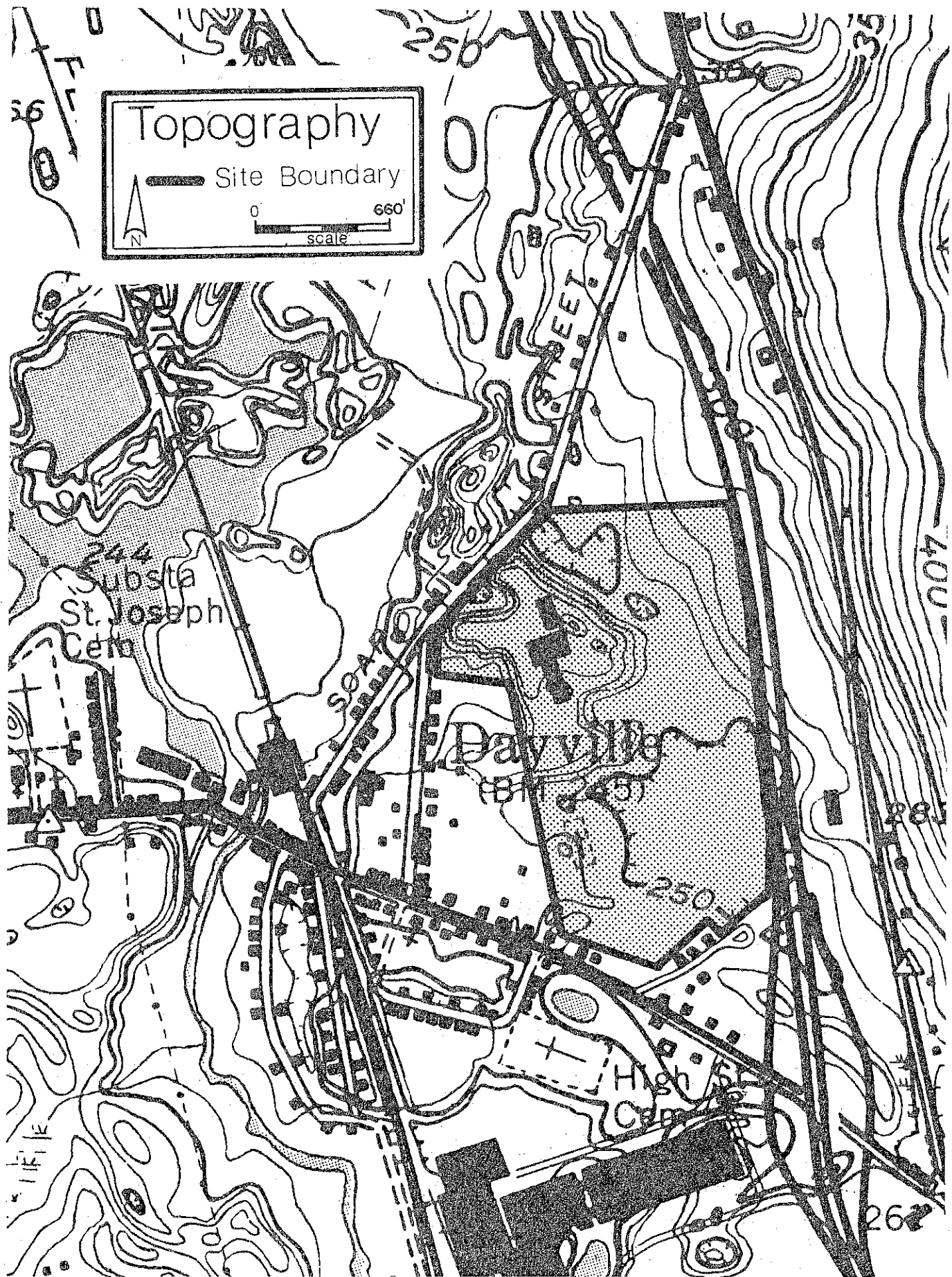
Development of this parcel for recreation facilities would produce few adverse environmental effects. Use by wildlife may be restricted, a large percentage of the land would be lost for agricultural use and a minor potential for groundwater contamination from parking lot runoff and salts would exist under proposed development plans.

IRREVERSIBLE COMMITMENTS OF RESOURCES

Developing this site as planned would put an end to most agricultural activity on the site. The major portion of the open land on this parcel consists of prime agricultural soils. Should the open land use used for recreation instead of cropland, this agricultural resource will be lost.



Parcel 3



DESCRIPTION OF THE ENVIRONMENT

PAST/PRESENT LAND USE

The site is presently being used as a recreation facility containing: 1 softball field, 2 baseball fields, 2 tennis courts, 1 basketball court, 1 soccer field and a playground area. The parcel is adjacent to the Killingly Central Elementary School. The surrounding land is low density residential. The past land use was municipally owned open space.

SOCIO-ECONOMIC CONDITIONS

Killingly is expected to exhibit one of the highest increases in population growth in the ten-town region. Increased population projections (15,700 present; 22,000 by year 2000) reflect a net increase of 29%. This increase will result in necessary additional school facilities, requiring additional recreation facilities.

TRANSPORTATION ROUTES

The site borders Route 101, which is a major east-west corridor. It is adjacent to Route 52 and is in close proximity to Route 12, both major north-south corridors.

TOPOGRAPHIC CONDITIONS

This site consists of a flat area in the southern portion (the location of a former gravel pit), a moderately sloping hillside at the northeastern boundary, and a section of a glacial terrace in the northwestern portion, which rises about 40 feet above the elevation of the southern section. The terrace area, now occupied by a school, is not being considered in the recreation plans.

SURFACE AND SUBSURFACE GEOLOGIC CONDITIONS

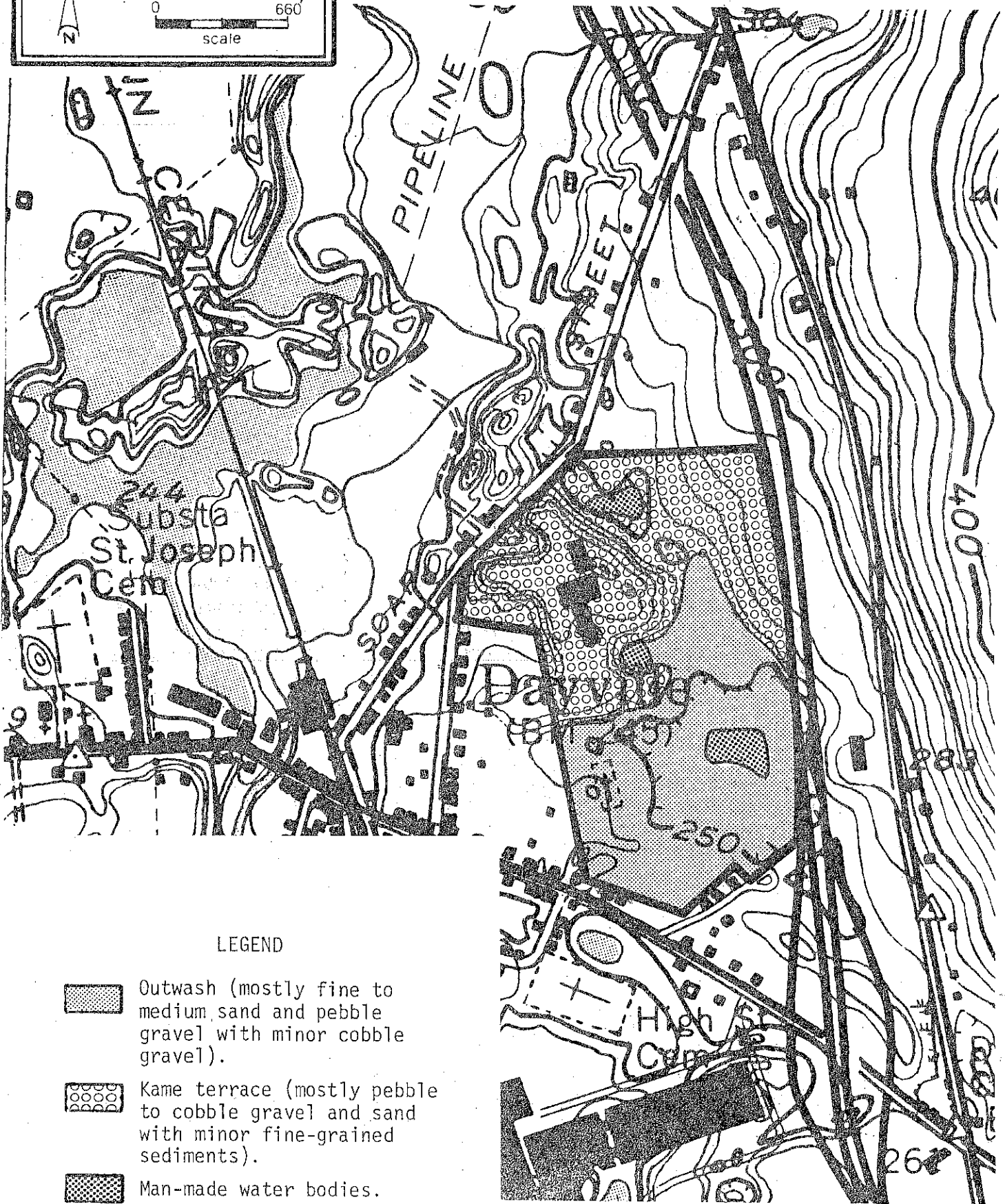
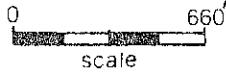
The area under consideration for recreational development consists of glacial outwash or kame terrace deposits. The different terms refer to the specifics of the modes of formation of the deposits, but both terms indicate origination in meltwater flowing from a wasting mass of glacier ice. A small excavation in the former gravel pit area showed 6 feet of sand and pebble- to cobble-gravel. The depth of this material is not known, but records of local wells indicate that 50 feet or more may be present.

SOILS




Soils typical of this site include:

Ninigret fine sandy loam. Ninigret are moderately well drained soils developed in silty water deposits, about 24 inches deep, over coarse-textured, stratified sands and gravels. These soils, normally deeper than 10 feet, are located on

Surficial Geology



LEGEND

- 
 Outwash (mostly fine to medium sand and pebble gravel with minor cobble gravel).
- 
 Kame terrace (mostly pebble to cobble gravel and sand with minor fine-grained sediments).
- 
 Man-made water bodies.

terraces above the present overflow of large streams. They are moderately permeable above the sands and gravel substratum, which are rapidly permeable. The water table normally rises to within 20 inches of the surface during the winter and spring months. Most use problems are related to the seasonal high water table. This soil is nearly level.

60A Hinckley gravelly sandy loam, 0 to 3 percent slopes. Hinckley are excessively drained soils developed in stratified sandy, gravelly and cobbly water deposits. These deposits, normally deeper than 10 feet, are located on undulating to rolling terrace topography above the present overflow of large streams. They have rapid to very rapid permeability in the subsoil. The water table is below 60 inches during most of the year. Most use problems are related to texture, droughtiness and rapid to very rapid permeability. This soil is nearly level.

60C Hinckley gravelly sandy loam, 3 to 15 percent slopes. This soil is gently sloping and sloping. Areas occur in patterns too intricate to separate in mapping, and the surface layers are not as thick.

60D Hinckley gravelly sandy loam, 15 to 40 percent slopes. On this soil a higher percent of boulders occur.

65B Agawam fine sandy loam, 3 to 8 percent slopes. Agawam are well to somewhat excessively drained soils developed in water deposits of sand. These deposits, normally deeper than 10 feet, are located on terraces above the present overflow of large streams. These soils have moderate to rapid permeability in the subsoil. The water table normally is below 40 inches during most of the year. Most use problems are related to the variability of the underlying substrata. This soil is gently sloping.

70A Merrimac sandy loam, 0 to 3 percent slopes. Merrimac are excessively drained soils developed in sandy water deposits, from 18 to 24 inches deep, over coarse textured stratified sands and gravels. These deposits, normally deeper than 10 feet, are located on terraces above the present overflow of large streams. These soils have moderate to rapid permeability in the subsoil. The water table normally is below 60 inches during most of the year. Most use problems are related to the moderate to rapid permeability and droughtiness. This soil is nearly level.

213C Hinckley gravelly sandy loam, 3 to 15 percent slopes. Hinckley are excessively drained soils developed in stratified sandy, gravelly and cobbly water deposits. These deposits, normally deeper than 10 feet, are located on undulating to rolling terrace topography above the present overflow of large streams. They have rapid to very rapid permeability in the subsoil. The water table is below 60 inches during most of the year. Most use problems are related to texture, droughtiness and rapid to very rapid permeability. This soil is gently sloping and sloping. Areas occur in patterns too intricate to separate in mapping, and the surface layers are not as thick.

455A Sudbury sandy loam. Sudbury are moderately well drained soils developed in sandy water deposits, from 18 to 24 inches deep, over coarse-textured stratified sands and gravels. These soils, normally deeper than 10 feet, are located on terraces above the present overflow of large streams. They have moderate permeability in the subsoil. The water table normally rises to within 20 to 30 inches of the

surface during the winter and spring months. Most use problems are related to the seasonal high water table. This soil is nearly level.

695A Agawam fine sandy loam, 0 to 3 percent slopes. Agawam are well to somewhat excessively drained soils developed in water deposits of sand. These deposits, normally deeper than 10 feet, are located on terraces above the present overflow of large streams. These soils have moderate to rapid permeability in the subsoil. The water table normally is below 40 inches during most of the year. Most use problems are related to the variability of the underlying substrata. This soil is nearly level.

*466 Walpole sandy loam. Walpole are somewhat poorly to poorly drained soils developed in sandy water deposits, from 18 to 24 inches deep, over coarse textured stratified sands and gravels. These deposits, normally deeper than 10 feet, occupy low lying terraces above the present overflow of large streams. These soils are moderately permeable in the subsoil. The water table normally is near the surface from late fall through early spring. Most use problems are related to the long seasonal high water table.

*754 Scarboro fine sandy loam. Scarboro are very poorly drained soils developed in sandy water deposits. These deposits, normally deeper than 10 feet, occupy low lying terraces. Stratified sands and gravels may occur below 5 feet. They have moderate permeability in the subsoil. The water table normally rises to the surface during most of the year. Most use problems are related to the high water table.

CF - Cut and Fill. Cut and fill consists of sandy and gravelly soils that have been altered by cutting, filling, grading and paving in some areas. The soils are level to sloping and are well drained to excessively drained. Precise contents of this soil unit can only be determined by on-site investigation. These soils are commonly similar to the soils mapped adjacent to them.

GP - Gravel Pits. This map unit consists of excavated pits in sandy to very gravelly outwash soils. Some areas are in sandy glacial till soils. Areas of this unit are irregular in shape, depending upon the nature of the deposits and ownership boundaries. Mapped areas range from 5 to 60 acres, in size.

Gravel or sandy soil material was removed from these areas for construction purposes and other uses. The pits range from 5 to 50 feet in depth. The sides are commonly steep and the floor is commonly level but may be gently sloping. They lack vegetation except for a few drought tolerant varieties of plants.

Included with this unit in mapping are small pools of water. A few included areas have smoothed or uneven accumulations of waste and general refuse that without major land reclamation is incapable of supporting plants. The surrounding soils are commonly excessively drained Hinckley, and Windsor soils, somewhat excessively drained Gloucester, and Merrimac soils, well drained Agawam soils, and moderately well drained Ninigret and Sudbury soils. Many of these soils were included in the areas excavated. The total inclusions are from 10 to 25 percent.

In past years planning and design assistance on portions of Owen Bell Park has been provided by SCS through the Eastern Connecticut RC&D program. Designs

* Designated wetland soil by P.A. 155.

on file show grading cuts and fills, drainage, etc. for playing fields north of the existing Owen Bell ball fields. SCS assistance is available for technical modification of existing designs.

The undeveloped northern portion offers a variety of use alternatives. As with some of Parcel 2 the area lies above a major ground water aquifer. It is probable that only dense intensive development would pose a threat to ground water if septic leach fields were installed. Surface water pollution is not likely unless large disturbed (base soil) ground areas allow soil sheet erosion into swampy wetlands and/or open water areas. Use alternatives include one or two substantial play fields properly terraced with runoff controlled by surface diversions, wildlife habitat enhancement both for wetland and upland wildlife, cross country trails, outdoor education opportunities - for the adjacent school, etc. The area provides a fine opportunity to integrate athletic recreation and conservation education. An outdoor education plan could easily be developed if desired by the school. Although the Ninigret (45A), Hinckley (213C), and Agawam (65B) soils are prime farmland soils their location and topography do not favor agricultural use except possibly for community garden plots. However students might be guided to use areas to plant wildlife attraction plants, Christmas trees, etc. The existing swampy pond area could be developed to better attract ducks and other wetland species. SCS will give further conservation planning assistance if requested.

WATER RESOURCES

This parcel lies within a zone described as "favorable for development of small to moderately large groundwater supplies from stratified drift (the glacial outwash deposits). These areas will yield more than 100 gallons per minute to individual wells at many places within these areas." (Source: Connecticut Resources Bulletin No. 8, Plate D.) The bedrock underlying these parcels may also be the source of small yields (generally less than 10 gallons per minute).

Iron and manganese concentrations have caused problems with groundwater supplies in the Dayville area. Most of these problems involve wells tapping the lower 20 feet or so of the stratified drift or the upper 10-20 feet of bedrock. Wells tapping only the upper portion of the stratified drift or penetrating deep into the bedrock, with casing extending down through the upper 10-20 feet, are much more likely to supply good-quality water.

VEGETATION

See "Vegetation Type Chart" for species typically found on this parcel. (Appendix A).

WILDLIFE

Wildlife currently using the area include urban species such as cats, dogs, skunks, raccoons and seasonal songbirds. The undeveloped portion of the parcel provides excellent cover and food sources for numerous "old field" species.

PROBABLE FUTURE ENVIRONMENT

If the project proposal is not initiated, the project area would probably continue to receive informal use primarily by local children. With the homes and elementary school nearby, the site is a sort of backyard play area. Development providing a more formalized recreation area may not radically alter this pattern of use.

ENVIRONMENTAL IMPACT

QUANTIFIABLE LAND USE CHANGES

Development of recreation facilities would promote residential development in the surrounding areas.

SOCIO-ECONOMIC CHANGES

The local tax structure could be increased due to local contributions necessary to fund the project. Additional recreational staff and field maintenance staff would be required. Area residents would benefit from the additional recreation facilities acquired. The surrounding area could be affected by higher noise levels from the additional recreation facilities. Additional recreation facilities could provide additional opportunities for recreation for children of lower income families.

TRANSPORTATION ROUTES

The traffic associated with developing this site can easily be handled by existing routes except for short periods of congestion which may be generated if a large stadium were constructed.

ENERGY CONSUMPTION

Rates of energy consumption would not be altered to any measurable degree unless a lighted stadium facility were constructed or a facilities building were constructed.

EFFECT ON VEGETATION

Development of this parcel into the proposed athletic field complex will necessitate removal of some of the old field and meadow vegetation. Most important will be the destruction of excellent wildlife habitat, which provides food and cover for many species of birds and small mammals.

If development of this area is implemented it would be desirable to plant a buffer strip between the athletic complex and Route 52. Several staggered rows

of a mixture of eastern white pine and hemlock planted approximately eight feet apart would eventually produce both visual and sound barriers. The additional planting of fruiting shrubs, such as silky dogwood, crab apple and autumn olive on each side of the evergreen planting, will provide aesthetic variety and additional food and cover for birds. This buffer strip should be approximately 50 feet wide and run the entire length of the property.

EFFECT ON WILDLIFE

Most transient urban wildlife species will not be effected by this proposal, however, those animals and birds who rely on food and cover provided by the undeveloped portion of this site, will be displaced.

EFFECT ON WATER RESOURCES

The most significant potential source of contamination of groundwater supplies from the proposed recreational development would be absorption into the ground of runoff from paved areas, such as parking lots. Nevertheless, this source would be unlikely to lead to any severe groundwater deterioration except in an unusual event, such as spillage of gasoline. Moreover, this risk would be present under any type of development and probably would be greater under most other types. A minimal overall impact on groundwater from the proposed recreational facilities is foreseen.

WATER SUPPLY

Water will be provided by on-site wells, already established in the developed section of the park.

WASTE DISPOSAL

If the athletic facilities are developed at Owen Bell Park, the types of usage will be similar to what the park has previously experienced, but there will be a larger amount. Sufficient refuse disposal containers and sanitary facilities will have to be provided.

Refuse containers should be provided at all the playing fields, spectator areas, parking lots, locker rooms, and wherever else usage indicates. The containers should be emptied on a regular schedule to prevent insects and rodents from becoming a problem. The refuse should also be removed after an athletic event.

If a locker building is built for the playing fields, public restrooms should be provided. If not, chemical toilets must be provided in sufficient numbers. Chemical toilets should also be provided in the more remote areas of the park along trails and at picnic areas.

If the locker room building is served by an on-site septic system, the poorly drained soils surrounding the pond should be avoided. Drainage off Route 52 may

have to be further controlled to prevent it from interfering with the operation of the septic system. The septic system should be sized so that it can handle the water flow during peak usage, rather than just the average daily flow.

IRREVERSIBLE COMMITMENTS OF RESOURCES

Development planned for this parcel will produce no irreversible commitments of resources.

RECREATION POTENTIAL

The Town of Killingly is proposing partial development of the undeveloped (northerly) portion of its Owen Bell Park. A ballfield is being proposed for the southwest part of this site, as are picnic facilities for the use of Killingly residents. The town has indicated that they have an insufficient number of ballfields to meet demand and, as a consequence, are having trouble suitably maintaining existing fields due to overuse.

Recreational expansion would apparently be undertaken as funding becomes available.

Having multiple parks within a given town offers definite advantages to users if minimized travel distance accrues to the maximum number of people, thereby, effecting a savings in travel, time and fuel. It does place an extra burden on town maintenance crews and budgets, however, when multiple facilities dictate more road and travel time between them.

The site is variously bounded by an interstate highway to the east, a low density residential area to the north, an elementary school to the west, and developed town park to the south. It is located near a modest sized commercial/industrial area. It is of irregular contour with the low points seasonally wet or at least damp. The ballfield being proposed would be situated, in part, in one of these damp areas. There is a low volume surface drainage off a sloped area on the other side of the highway lying east of the tract.

The site's high ground may be characterized as reverting fields and revegetating cut and fill areas which are being overtaken by juniper shrubs and occasional white pine. Annual mowing of these fields subsequent to removal of some or all of the juniper would enhance site usability by not permitting these fields to revert to brushy growth. A tree planting program, using species such as white pine, could provide attractive picnic groves through the planting of tree clusters.

Access to the site is via town road through a small residential area immediately off of Route 101. An interchange for Routes 52 and 101 is located less than 1/4 mile east of the access road so that good transportation routes are provided to the site.

The parcel is well located (juncture of two major routes) to provide easy access to the bulk of the town's residents which should impact favorably on fuel consumption considerations.

Establishment of an additional ballfield and possible picnic facilities should bring with it additional traffic to and from the site. Any increased traffic flow would primarily impact on the small group of houses through which the access road is routed. Noise levels, air quality and traffic hazards posed are impact considerations. Along with increased use would come an increased need for sanitary facilities. A toilet building providing flush toilets would be a logical progression from site development and expanded use. It should be located near the area of heaviest use, soil conditions permitting. Drinking fountains could be located at or near the toilet building.

Increased use of hillside areas brings with it the increased possibility of erosion. Facility layout on sloped areas should be with an eye toward minimizing erodibility and when possible avoiding use of steep slopes for anything but activities such as sledding, tobogganing, etc. There is a direct relationship between more foot and vehicle traffic, vegetation loss and erosion potential. An ongoing maintenance program of seeding bared areas, use of wood chips in picnic areas or similar areas subjected to heavy compaction by foot traffic and the keeping up with gravel road and parking lot maintenance (runoffs, drains, and water diversions) will help ensure minimal site degradation.

Modest increases in patronage of the local restaurants and stores may result from expanded development and attendance at Owen Bell Park.

Conifer screen plantings can be advantageously employed in reducing negative sight and sound impact on abutting landowners. Such a planting on the easterly bound would help screen off Route 52, improving the aesthetics and privacy of the site.

Extensive site alteration to accommodate specific activities tends to narrow the range of options for accommodating any future needs in an economical manner. Careful forethought to facility layout should therefore be a primary consideration keeping in mind the lands available to the town, the present recreational needs, and potential (future) needs.

A road to any picnic areas installed would provide access for service vehicles and those of the using public. Provision for user parking at picnic sites or a central parking area instead are possible options. In any event, provision must be made for people to drive to picnic areas to drop off their picnic gear if the parking area is not nearby. Provision for parking at the picnic area(s) minimizes potential conflicts, however. Unwanted nighttime activity may necessitate closure of such an access road by gate in the evening.

Establishment of a ballfield is proposed for the southwest portion of the parcel. Careful site selection and layout can help minimize cut and fill requirements since there are wet spots to contend with here.

In the northwest corner of the parcel is a mixed stand of trees containing some sizable white pine. With selective thinning and pruning, this area would make an attractive picnic grove. Picnic site and parking area locations should be situated on comparatively level portions of the tract.

Expansion of the existing parking lot in the developed portion of Owen Bell Park (outside of the project study area) is anticipated and would be necessary

to meet anticipated use, particularly in light of the additional ballfield installation.

A small nature study trail is one option which, if installed, could benefit the adjacent school and others in the town system. A par-course, with exercise stations is another possibility and such a trail could conceivably share the same route as a nature study trail.

Development of this parcel for low density use along with a program to landscape and/or manage the flora could make this area an attractive adjunct to the current and extensively developed south end of Owen Bell Park.

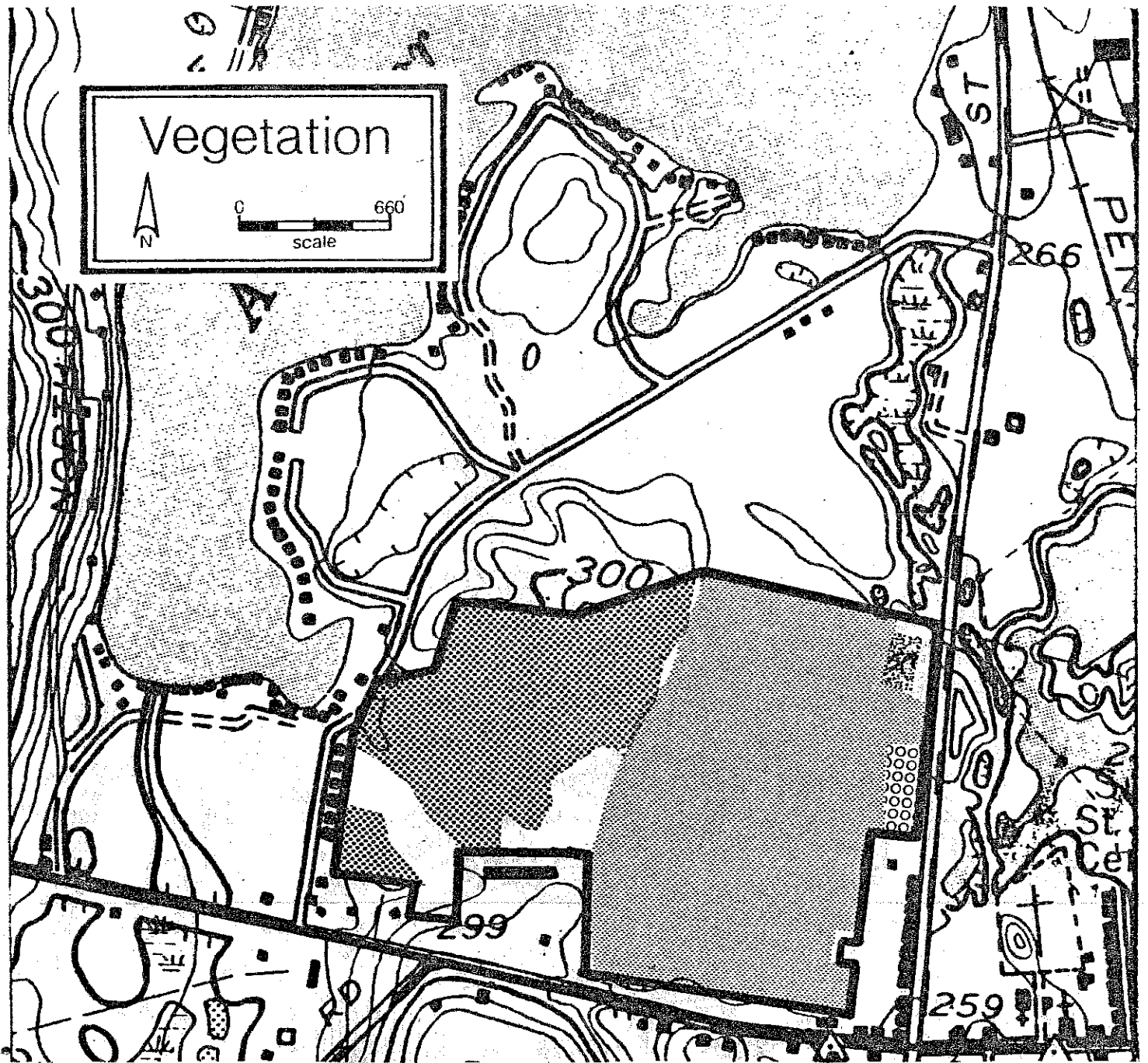
Appendix

VEGETATION TYPE DESCRIPTIONS






<u>Stand Type</u>	<u>Acres</u>	<u>*Main Stand Size Class</u>	<u>Stocking Level</u>	<u>Main Stand Quality</u>	<u>Major Components Of: Overstory</u>	<u>Understory</u>	<u>Ground Cover</u>
A. Agricultural Land	45						
B. Mixed Hardwoods	21	Pole	Upper end of fully-stocked	Medium trees are declining in health and vigor due to crowding and lack of adequate moisture and shallow to bedrock soils.	Black oak, white oak, with occasional black birch and red maple.	Eastern white pine seedlings and hardwood tree seedlings with scattered patches of mountain laurel.	Grasses, club-moss, Canada mayflower, huckleberry and lowbush blueberry.
C. Softwoods	8	Sawtimber	Fully stocked	Medium to poor. Many of the pines have multiple tops and poor form as a result of past weeding.	Eastern white pine.	Black oak, white oak, red maple, cherry seedlings and mapleleaf viburnum.	Hay scented fern, Canada mayflower.
D. Christmas Tree Plantation	1	Seedling					
E. Gravel Pit	1						
F. Old Field	17	Sapling	Under-stocked		Eastern red cedar, red maple, shade bush and quaking aspen.	Highbush blueberry, silky willow, choke cherry, arrow-wood, old field juniper, smooth sumac, wild raspberry, and bayberry.	Grasses, golden-rod, sheep laurel, steep-leaved holly, sensitive fern, hairy cap moss.
G. Open Swamp	1						
Swamp/Meadow							

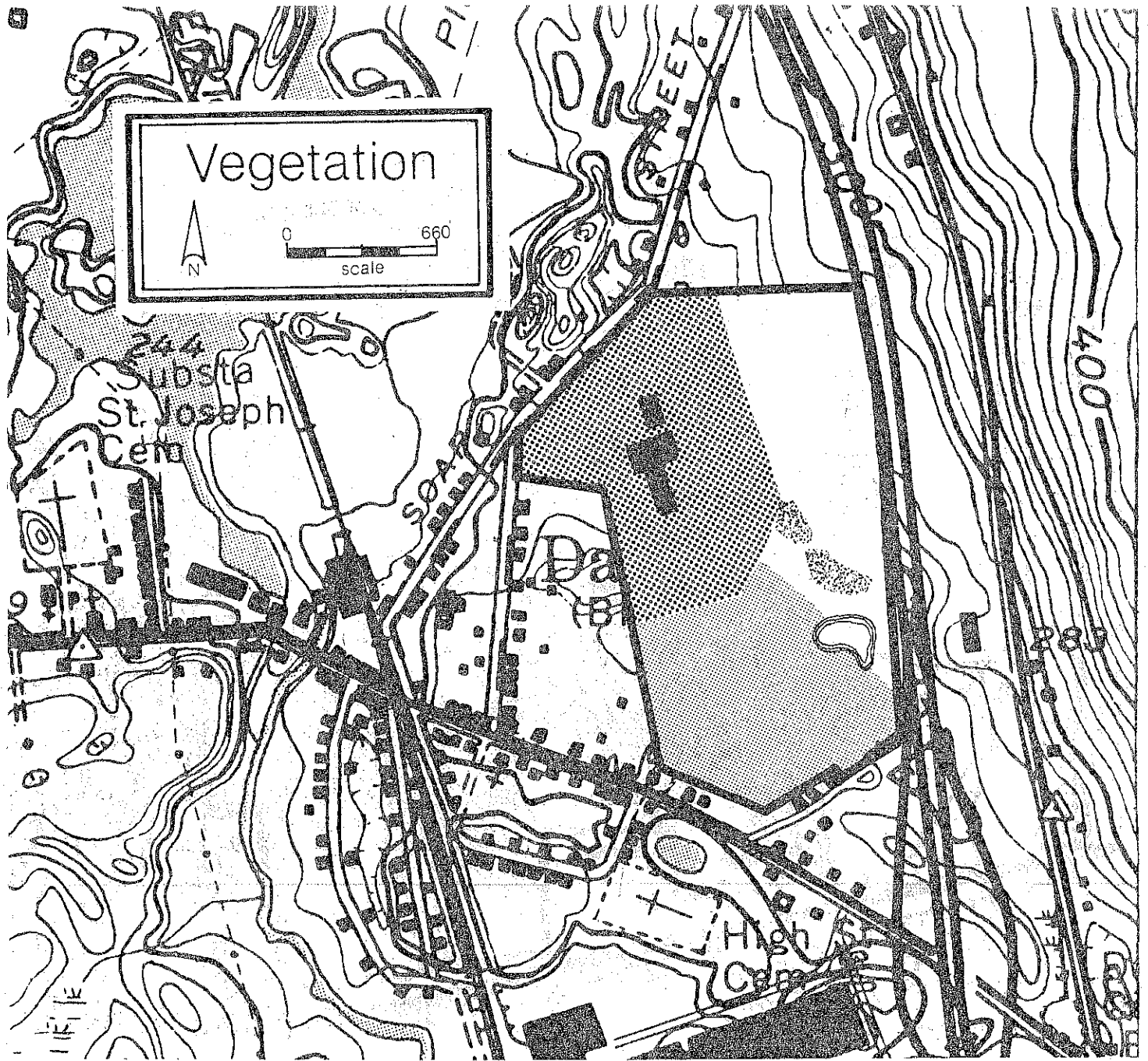
* Seedling size - Trees less than 1 inch in diameter at 4 1/2 feet above the ground (dbh).
 Sapling size - Trees 1 to 5 inches in dbh.
 Pole size - Trees 5 to 11 inches in dbh.

Silky willow, Sedges, sensitive fern, skunk cabbage.








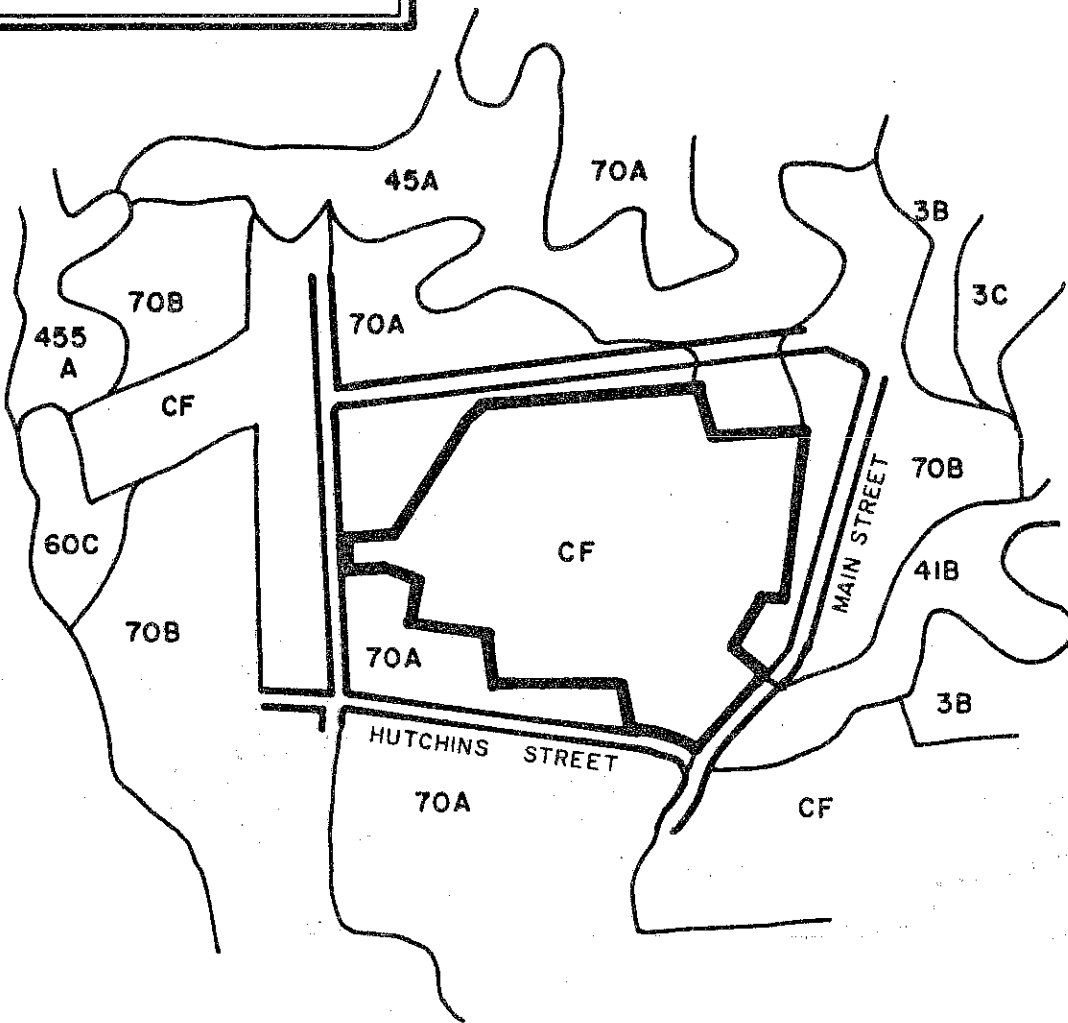
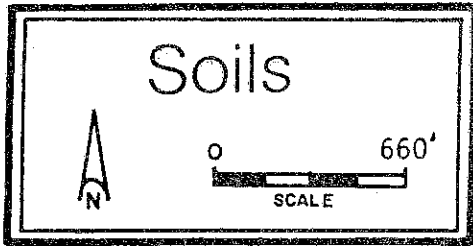
LEGEND

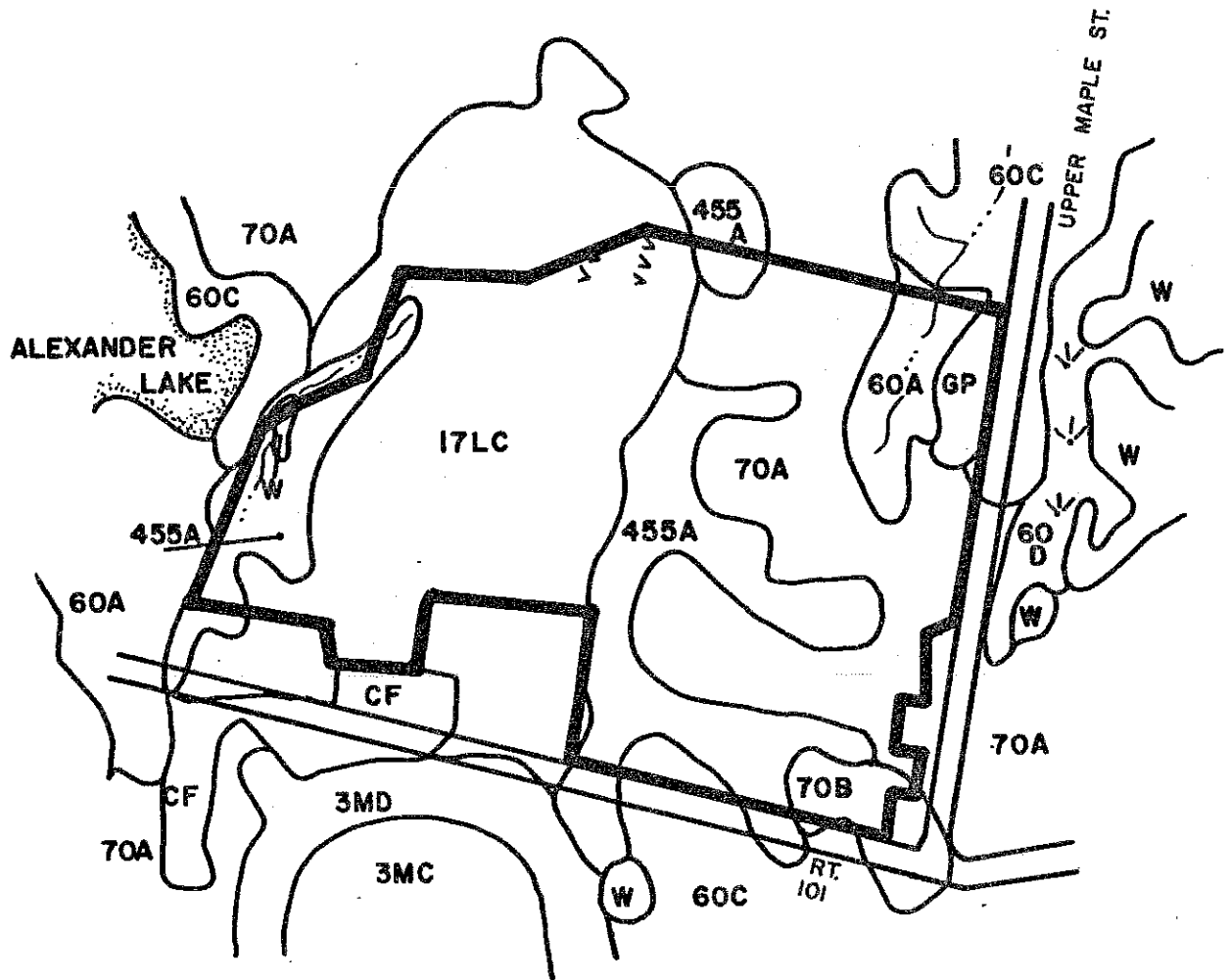
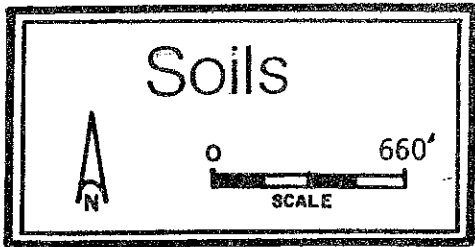
-  Type A
-  Type B
-  Type C
-  Type D
-  Type E

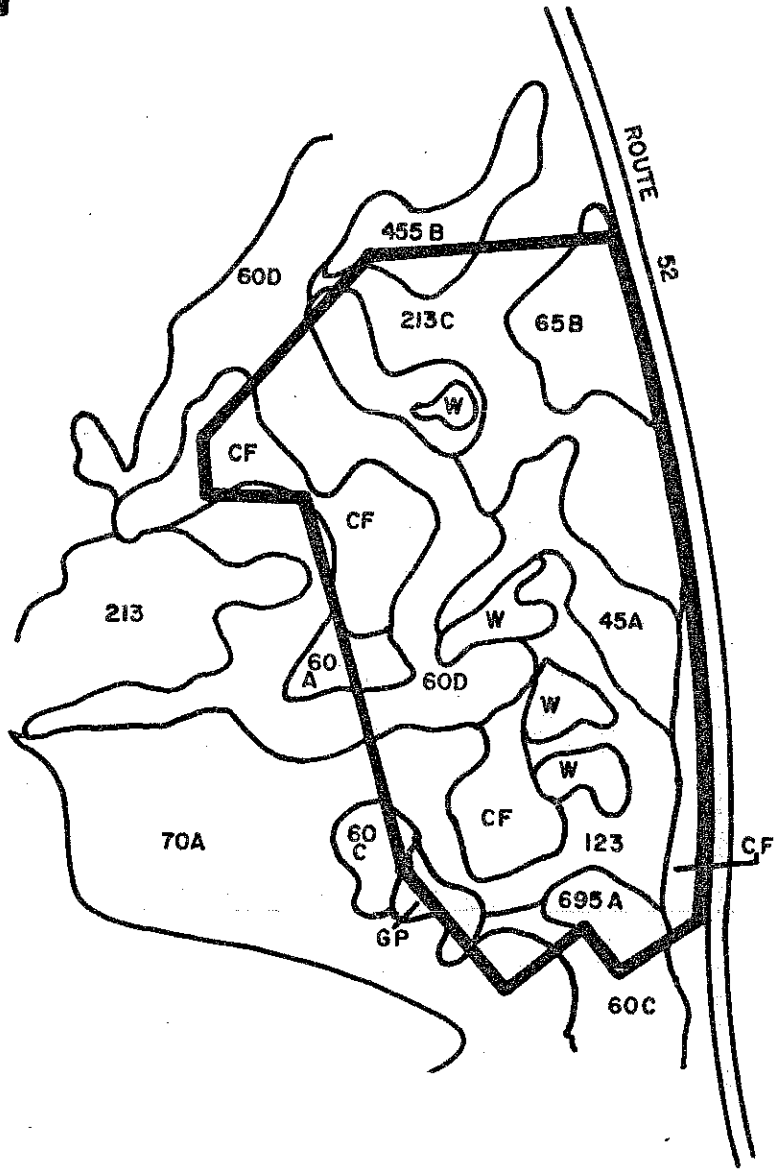
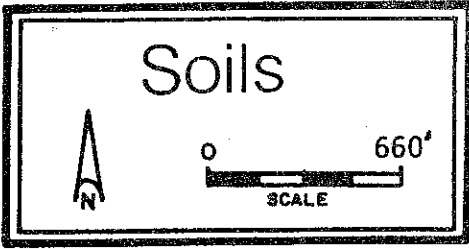


LEGEND

-  Type F
-  Type G
-  School area,
21 acres
-  Athletic Fields,
18 acres
-  Ponds







Recreational Facilities Sites (Parcels 1,2,3,)

Killingly

PRINCIPLE LIMITATIONS AND RATINGS OF SOILS FOR RECREATIONAL USE

Soil Symbol and Series	Playgrounds	Lawns and Land scaping	Paths and Trails	Small Commercial Buildings	Septic Tank Absorption Fields	Drainage
17LC Charlton & Hollis	Severe, slope, large stones	Moderate, slope, large stones	Slight	Severe, slope	Moderate, slope	Deep to water
#45A Ninigret	Moderate, wetness	Moderate, wetness	Moderate, wetness	Moderate, wetness	Severe, wetness, poor filter	Cutbanks cave
#60A Hinckley	Moderate, small stones	Moderate, small stones, droughty	Slight	Moderate, large stones	Severe, poor filter	Deep to water
#60C Hinckley	Severe, slope	Moderate, small stones, droughty, slope	Slight	Severe, slope	Severe, poor filter	Deep to water
213C Hinckley	Severe, slope	Moderate, small stones, droughty, slope	Slight	Severe, slope	Severe, poor filter	Deep to water
60D Hinckley	Severe, slope	Severe, slope	Moderate, slope	Severe, slope	Severe, slope, poor filter	Deep to water
#70A Merrimac	Moderate, small stones	Slight	Slight	Slight	Severe, poor filter	Deep to water
#70B Merrimac	Moderate, slope, small stones	Slight	Slight	Moderate, slope	Severe, poor filter	Deep to water

Prime farmland soil

Recreational Facilities Sites (Parcels 1,2,3,)

Killingly

PRINCIPLE LIMITATIONS AND RATINGS OF SOILS FOR RECREATIONAL USE

<u>Soil Symbol and Series</u>	<u>Playgrounds</u>	<u>Lawns and land scaping</u>	<u>Paths and Trails</u>	<u>Small Commercial Buildings</u>	<u>Septic Tank Absorption Fields</u>	<u>Drainage</u>
#455A Sudbury	Moderate, wetness, small stones	Slight	Slight	Moderate, wetness	Severe, wetness, poor filter	Cutbanks cave
455B Sudbury	Moderate, wetness, small stones	Slight	Slight	Moderate, wetness	Severe, wetness, poor filter	Cutbanks cave
#695A Agawam	Slight	Slight	Slight	Slight	Severe, poor filter	Deep to water
65B Agawam	Moderate, slope	Slight	Slight	Moderate, slope	Severe, poor filter	Deep to water
# Prime farmland soil						
<u>WETLAND SOIL</u>						
*466 Walpole #	Severe, wetness	Severe, wetness	Severe, wetness	Severe, wetness	Severe, wetness, poor filter	Frost action Cutbanks cave
*754 Scarboro	Severe, ponding	Severe, ponding, excess humus	Severe, ponding	Severe, ponding	Severe, ponding, poor filter	Cutbanks cave frost action

*Designated wetland soil by P.A. 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.