

ENVIRONMENTAL REVIEW TEAM REPORT



SEYMOUR MEADOWS SUBDIVISION SEYMOUR, CONNECTICUT

Ⓢ KING'S MARK
RESOURCE CONSERVATION AND DEVELOPMENT AREA

KING'S MARK ENVIRONMENTAL REVIEW TEAM REPORT

On

SEYMOUR MEADOWS SUBDIVISION SEYMOUR, CONNECTICUT



MAY 1979

Kings Mark Resource Conservation & Development Area

Environmental Review Team

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

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U.S.D.A. SOIL CONSERVATION SERVICE

State Agencies

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DEPARTMENT OF HEALTH

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Local Groups and Agencies

LITCHFIELD COUNTY SOIL AND WATER CONSERVATION DISTRICT

NEW HAVEN COUNTY SOIL AND WATER CONSERVATION DISTRICT

HARTFORD COUNTY SOIL AND WATER CONSERVATION DISTRICT

FAIRFIELD COUNTY SOIL AND WATER CONSERVATION DISTRICT

NORTHWESTERN CONNECTICUT REGIONAL PLANNING AGENCY

VALLEY REGIONAL PLANNING AGENCY

LITCHFIELD HILLS REGIONAL PLANNING AGENCY

CENTRAL NAUGATUCK VALLEY REGIONAL PLANNING AGENCY

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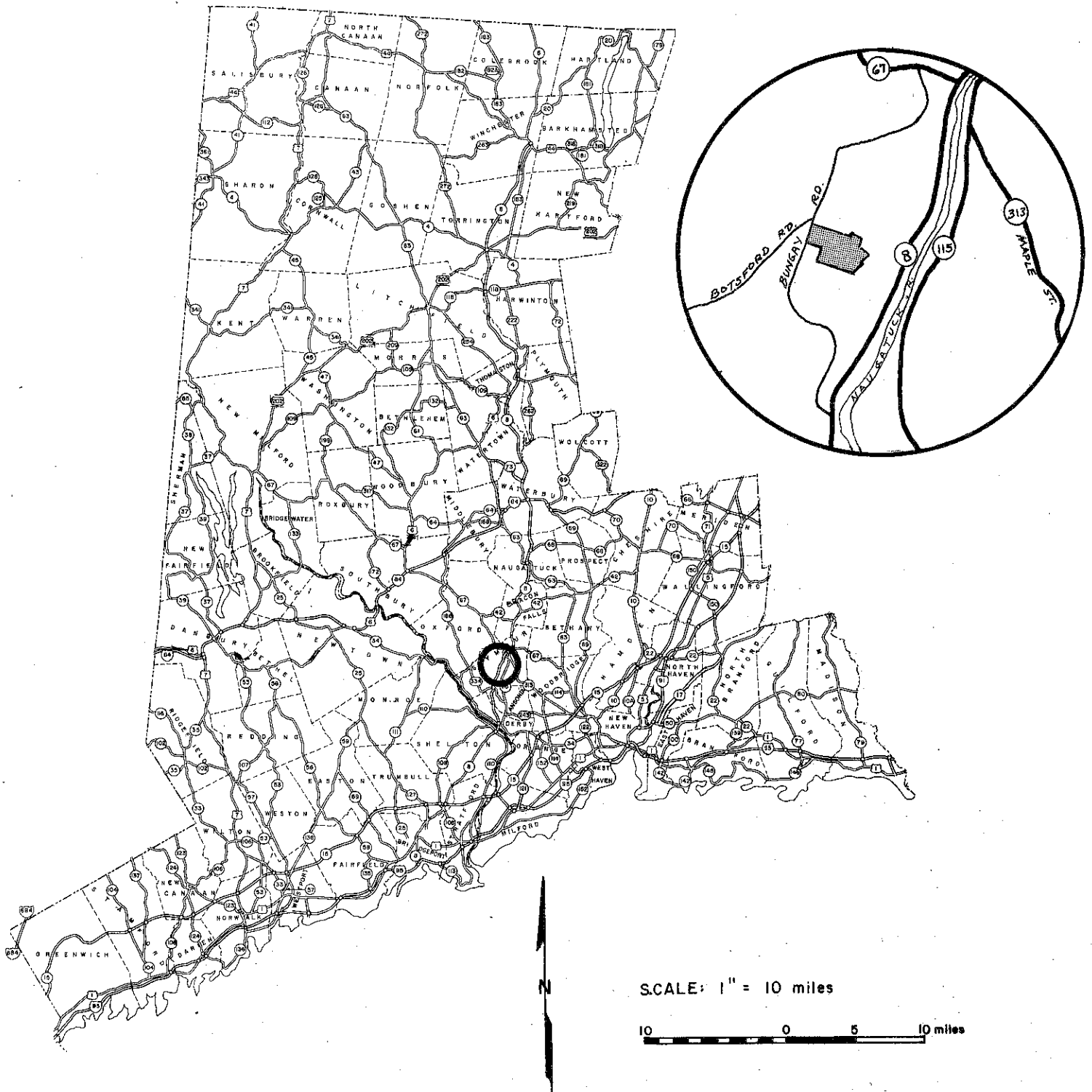
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LOCATION OF STUDY SITE

SEYMOUR MEADOWS SUBDIVISION SEYMOUR, CONNECTICUT



ENVIRONMENTAL REVIEW TEAM REPORT
ON
SEYMOUR MEADOWS SUBDIVISION
SEYMOUR, CONNECTICUT

I. INTRODUCTION

The Town of Seymour, Connecticut is presently reviewing an application for subdivision of + 80 acres of land. The subject site is located in the west central portion of town off Bungay Road and is known locally as the Mead Farm.

The subdivision plan calls for 66 lots and the construction of several interior roads (see Figure 1). Proposed lots are predominantly one acre in size and, at this writing, are to be served by on-site wells and septic systems. The developer of the project has indicated, however, an interest in extending public water supply to the site if suitable arrangements can be made.

The Planning and Zoning Commission from the Town of Seymour requested the assistance of the King's Mark Environmental Review Team (ERT) to help the town in analyzing the proposed development. Specifically, the ERT was asked to identify the natural resources of the site and to highlight opportunities and limitations for development of the land as proposed. Major concerns raised by the town in requesting this review included the impact of the project on soils, storm water runoff, wetlands and traffic.

The ERT met and field reviewed the site on April 18, 1979. Team members for this review consisted of the following:

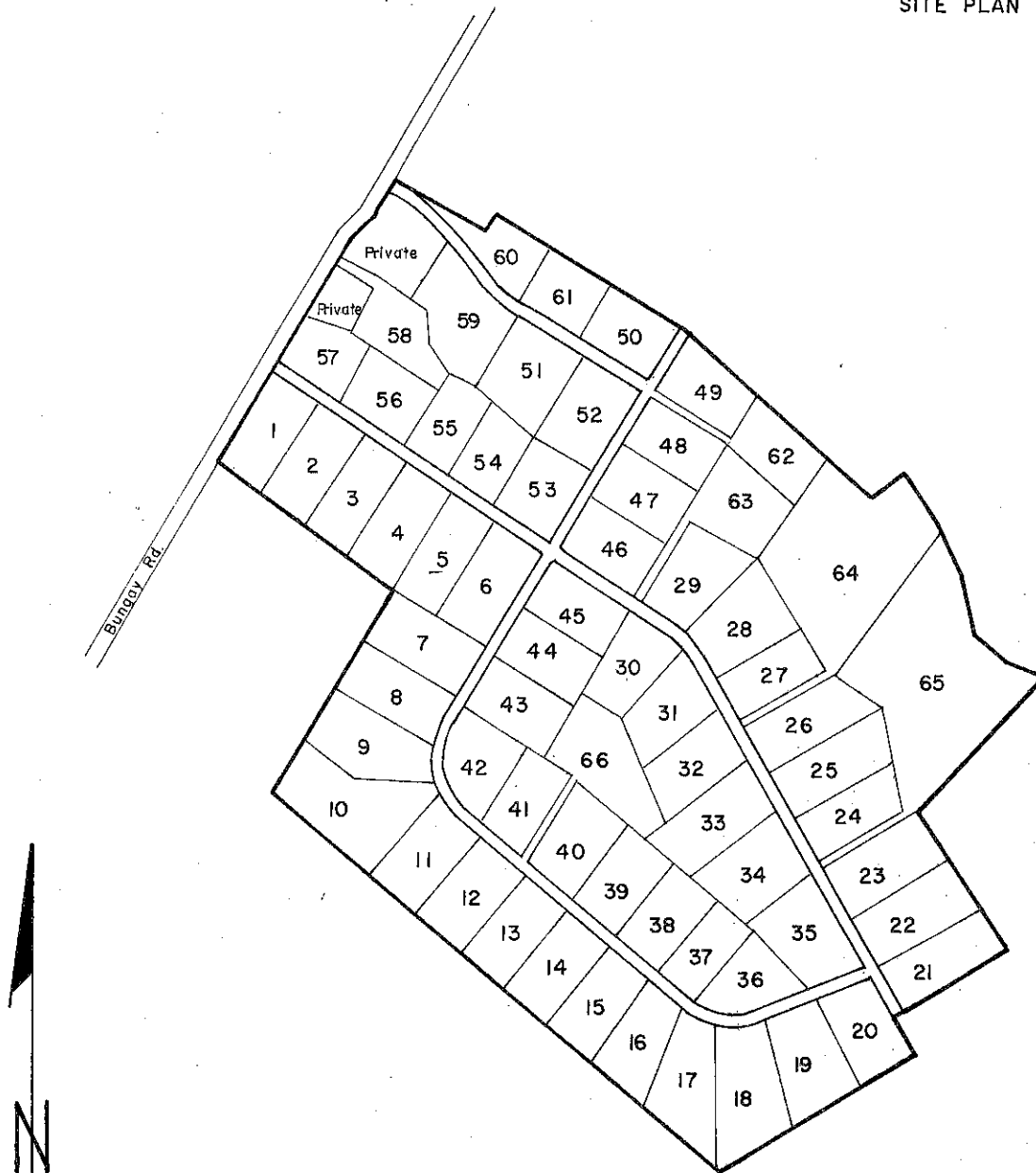
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Joe Devonshuk.....PlannerValley Regional Planning Agency

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

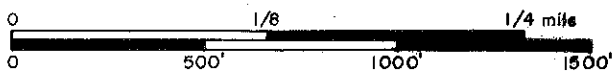
This report presents the team's findings and recommendations. It is important to understand that the ERT is not in competition with private consultants,

FIGURE I. SIMPLIFIED SITE PLAN

ADAPTED FROM DEVELOPER'S
SITE PLAN



SCALE: 1" = 500'



and hence does not perform design work or provide detailed solutions to development problems. Nor does the team recommend what ultimate action should be taken on a proposed project. The ERT concept provides for the presentation of natural resources information and preliminary development considerations--all conclusions and final decisions rest with the town and developer. It is hoped the information contained in this report will assist the Town of Seymour and the landowner/developer in making environmentally sound decisions.

If any additional information is required, please contact Richard Lynn, (868-7342), Environmental Review Team Coordinator, King's Mark RC&D Area, P. O. Box 30, Warren, Connecticut 06754.

* * * * *

II. SUMMARY

- The majority of the soils on the property are favorable for the proposed development. Engineering modifications (e.g. curtain drains, footing drains) will be necessary in some soil areas to offset natural limitations. With implementation of the proposed project, it is recommended that an erosion and sediment control plan for the entire development process be prepared and followed.
- The proposed inland wetland road and driveway crossings, if properly designed and carefully constructed, should not have a significant adverse impact. The alternative "esplanade" interior road proposal, mentioned informally by the developer the day of the ERT field review, is considered preferable to the present Nickel Mine Drive proposal. The storm drainage system for the roads throughout the subdivision should consist of slotted pipes or have the joints cracked to prevent frost heaving.
- Approximately 18 acres of this + 80 acre tract are occupied by mixed hardwoods. Abandoned fields make up 15 acres and the remaining 47 acres are presently in agricultural use. Eight acres of the mixed hardwood stand are overcrowded and would benefit by removal of about one-third of the trees, leaving the healthiest, highest quality trees in the residual stand. Most of the soils on this property are favorable for the establishment of vegetation for landscaping, but efforts should nevertheless be made to preserve the healthy trees present on the tract.
- Runoff from the site would increase following development, but the changes would probably be very small. Hydraulic computations provided by the developer indicate that runoff would be artificially collected and outletted. Unless those outlets are to natural channels that are presently adjusted to the flows that would be discharged, measures should be used to slow down the flows at the outlet points to minimize the potential for increased erosion.
- Most lot owners should be able to obtain an adequate yield of water from wells drilled into the underlying bedrock. Individual wells should be placed as far as practical from septic system leaching fields, and should be placed uphill where possible. Judicious spacing is especially needed in the northwest section of the property, where hydrogeologic conditions are not well suited to sewage disposal.
- The ERT concurs with the local health district that most lots will require detailed engineered plans for on-site subsurface sewage disposal systems. The most critical area of concern is in the northwestern portion of the property where compact glacial till predominates. In this area, seasonally high groundwater levels could flood standard systems, causing backups, inadequate renovation or other problems. Careful engineering of systems or a reduction in the number of lots in the northwestern section of the site should be considered.
- The proposed subdivision plan appears to be consistent with local and regional plans but is apparently not consistent with the advisory state "Conservation and Development Policies Plan - 1979-1982".
- Estimated traffic generated by the proposed development (640 trips per day) will not overload the capacity of Bungay Road. Sight line distances at the proposed Meadowview Lane and Bungay Road intersections are adequate and the street grades acceptable.

. It is estimated that the proposed project when fully occupied would have a final population of about 174 persons. School age population generated should be approximately 59 students. It appears that the Seymour School System can accommodate this increased number of students.

* * * * *

III. SETTING, TOPOGRAPHY, LAND USE

The "Seymour Meadows" site is located about one mile southwest of the center of Town. The property is irregularly shaped and surrounded primarily by woodland or single family units situated on large lots. Nickel Mine Brook, an intermittent stream which discharges into the Naugatuck River, runs just north of the parcel.

The project site has a long history of agricultural use (dairy farming) and is characterized by a number of open fields and some patches of woodland. A small farm pond is located in the northwest corner of the site.

Topography of the site varies from gently rolling on the western two-thirds of the property to moderately-steeply sloping on the eastern third of the land (see Figure 2). The property slopes from west to east resulting in an aesthetic viewline to the east.

IV. GEOLOGY

The Seymour Meadows site consists of bedrock overlain by glacial till. Till is a nonsorted mixture of rock particles of various shapes and sizes. The particles were scraped, broken, or otherwise removed from preglacial soils or bedrock outcrops by a moving ice sheet. Because of differences in source areas for the particles and in modes of deposition, the texture of the till varies from sandy and relatively loose to silty and compact. In general, the compact variety is found at some depth below the looser variety. The Seymour Meadows site contains both types of till.

Bedrock appears to outcrop on the site only in the southeastern corner. The rock unit found on the site is Prospect Gneiss, a poorly foliated, medium to coarse-grained, dark gray gneiss consisting predominantly of the minerals plagioclase, quartz, and biotite, with minor hornblende, garnet and sphene.

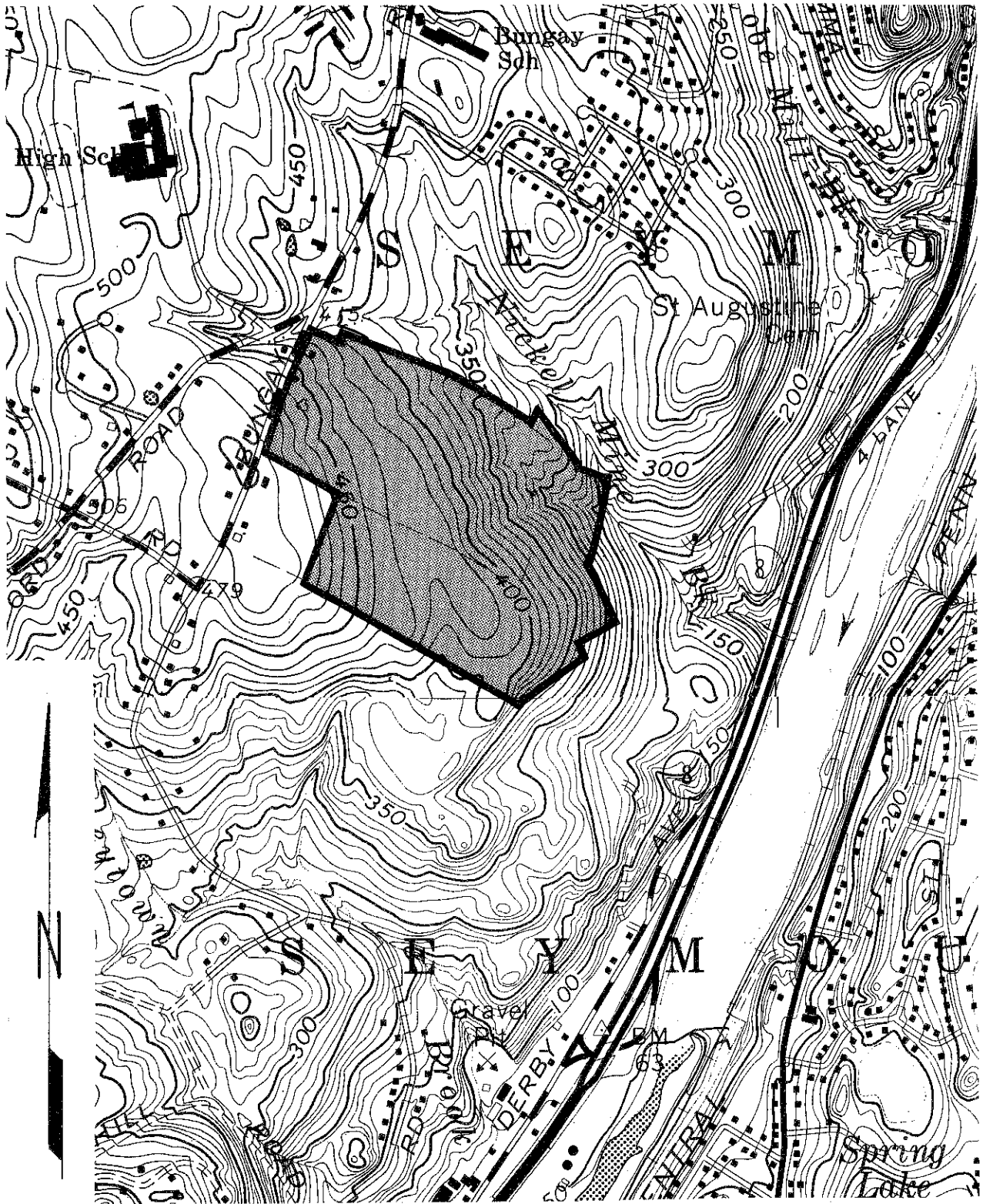
V. SOILS

Detailed soils mapping of the Seymour Meadows site has been performed by a soils scientist and submitted as part of the developer's application. A copy of this map is presented in the Appendix of this report together with a Soils Limitation Chart, which identifies limiting factors for various land uses on individual soil types.

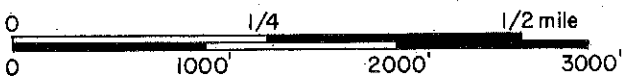
In general, the majority of the soils on the property are favorable for the proposed development. The Charlton soils (55% of site) are ideal for homesites and septic systems. The Paxton (18% of site) and Woodbridge (21% of site) soils pose moderate to severe limitations for residential development due to slope, seasonal wetness and slow percolation. These soils will require engineering modifications for the septic fields, including curtain drains. Footing drains should be installed around all basements in this area.

No home construction is shown within the wetland areas which is a positive attribute of the plan. The areas where roads and driveways cross inland wetlands (i.e. Nickel Mine Drive, lots 64 and 65) should have a permeable road base fill

FIGURE 2.
TOPOGRAPHIC MAP



SCALE: 1" = 1000'



material, plus erosion and sediment control measures implemented during construction. All culverts should, of course, be designed to prevent road flooding.

The proposed road and driveway crossings of inland wetlands, if properly designed and carefully constructed, should not have a significant adverse impact on the wetland areas. The alternative "esplanade" interior road proposal, mentioned informally by the developer at the ERT field review, is considered preferable to the present Nickel Mine Drive proposal as this would eliminate direct disturbance of the wetland area in the northwestern corner of the parcel.

The storm drainage system for the roads throughout the subdivision should consist of slotted pipe or have the joints cracked to pick up ground water. This practice will help to prevent the build up of hydrostatic pressure under the streets which can add to frost heaving.

Soil Descriptions (refer to Soils Map in Appendix)

Charlton Soils: (Map symbols: 32B, 32C, 32D) Soils of the Charlton series are well drained upland soils developed in very friable to firm glacial till. The surface and subsoil textures are friable or very friable fine sandy loam, to a depth of 24 to 30 inches. The underlying till is sandy loam, fine sandy loam or the gravelly counterparts of these. These soils are generally moderately permeable, but there may be a few thin, slowly permeable layers below 36 inches in some places. Except where stoniness and slope are problems, these soils are well suited for homesites, landscaping, septic fields and roads.

Paxton Soils: (Map symbols: 35B, 35C) The Paxton series consists of deep, well drained soils. These soils have a slowly to very slowly permeable fragipan at about 24 to 30 inches in depth. The surface and subsoil textures above the fragipan are very friable to friable, fine sandy loam. Most use limitations are associated with slow percolation rates, seasonal wetness, and large stones. Some engineering modifications may be needed for foundation placement, septic fields, and road construction.

Woodbridge Soils: (Map symbols: 31A, 31B) These soils are moderately well drained with a slowly to very slowly permeable hardpan at about 24 inches in depth. The limitations associated with these soils are similar to those listed above for the Paxton soils, but are further aggravated by the fact that a perched water table rises to within 15 to 20 inches of the soil surface and persists from late fall through late spring. Special consideration both in design and installation of subsurface sewage disposal systems are critical for these soils. The installation of curtain drains in combination with raised systems is the most common technique used to combat these soil limitations.

The seasonal water table of these soils also creates problems in the construction of homes with basements and measures such as footing drains are needed to protect seepage into basements. Special consideration must also be given to the hazard of frost heaving.

Sutton Soils: (Map symbol: 41MC) The Sutton series are moderately well drained upland soils developed on very friable to firm glacial till. More than three percent of the surface is covered with stones and boulders. Surface and subsoil textures are normally a very friable, fine sandy loam with varying amounts of small angular rock fragments. A fluctuating water table may be within 15 to 20 inches of the surface from January through March. Due to the seasonal wetness,

stoniness and slope, some engineering may be needed for foundation placement, septic fields and road construction in this area.

Madeland: (Map symbol: Ma) This small area is an old farm dump in which mostly rocks and boulders have been deposited.

Ridgebury, Whitman and Leicester, extremely stony soils: (Map symbol: 43M) This mapping unit includes poorly and very poorly drained soils. These soils are extremely stony on the surface and throughout the soil profile. More than three percent of the surface is covered with stones and boulders. These soils have a perched water table at, or near, the surface from fall to spring and after heavy rains during the summer.

The predominant soils in such mapping units are the Ridgebury and Whitman soils which are underlain by a fragipan at 20 to 25 inches. The topsoil and subsoil texture is a fine sandy loam. The fragipan is a very compact fine sandy loam. The soil above the fragipan has moderate permeability but the fragipan itself has slow to very slow permeability. The Ridgebury soil is poorly drained and the Whitman soil is very poorly drained. The Leicester soils are also a fine, sandy loam, but do not have a fragipan within 40 inches of the surface. All of these soils are considered inland wetland soils as defined by Public Law 155, as amended, and are unsuitable for homesite development.

Soil Loss and Sedimentation

With implementation of the proposed project, it is recommended that an erosion and sediment control plan for the entire development process be prepared and followed. Erosion and sediment control practices are described in the "Erosion and Sediment Control Handbook--Connecticut" (U.S.D.A. Soil Conservation Service, 1976). Additional assistance in the preparation and review of erosion and sediment control plans is available from the New Haven County Conservation District.

The following practices should be implemented as part of the sediment and erosion control plan:

1. All disturbed areas, including areas around homes, roadcuts, and fills, and stockpiled topsoil, should be vegetated as follows:
 - a. Permanent vegetation where final grading is completed on time for seeding dates, April 1st - June 15th and August 15th - September 30th. Also where areas will be exposed for twelve months or more.
 - b. Temporary vegetation where final grading is not completed in time for permanent seeding. Seeding dates are August - October 15th.
2. Road and driveways should be constructed as close to the land contour as possible.
3. Road cuts and fills should be finished on 2:1 side slopes (3:1 for sandy or gravelly soils).

4. Hay bale erosion checks around all catch basins are suggested, especially before paving roads.
5. Topsoil should be stockpiled and spread over areas that would be difficult to establish in vegetation because of adverse soil conditions.

VI. VEGETATION

Approximately 18 acres of this + 80 acre tract are occupied by mixed hardwoods. Abandoned fields dominated by pioneer plant species make up 15 acres and the remaining 47 acres are presently in agricultural use (see vegetation type map).

Vegetation Type Descriptions

STAND A. Agricultural Land. Approximately 47 acres of this property have been used in the recent past, or are now being used as pasture. Grasses are the primary form of vegetation with multiflora rose, barberry, raspberry, black cherry, black birch, sugar maple, red maple and white ash present along the numerous stone walls which separate these pastures from one another. Stand A' which makes up 7 of the above 47 acres is designated as an inland wetland. Sedges and skunk cabbage are dominant, with many of the species mentioned in stand A present along the edges.

STAND B. Old Field. Scattered apple trees, red cedar, gray birch, hawthorn, barberry, multiflora rose, raspberry, greenbrier, sweet fern, goldenrod, steplebush, dewberry and dense grasses make up the vegetative cover on the old field portions of this tract which together total 12 acres.

STAND C. Mixed Hardwoods. This 10 acre over-stocked stand is made up of sapling to pole size red maple, white ash, black birch and black cherry. Many of these trees are of poor quality due to excessive crowding. Red cedar, gray birch and apple trees are present in the understory. These species are being shaded out by the dense overstory. Ferns are the principal form of ground cover in this area.

STAND D. Mixed Hardwoods. Pole size black oak, white oak, American beech, hickory and black birch are present in this uncrowded, fully stocked 8 acre stand. Gray birch and red cedar are losing dominance in the understory to hardwood tree seedlings, shadbush and white pine. Patches of green brier, low bush blueberry, huckleberry, grasses and club mosses form a continuous ground cover in this area.

STAND E. Old Field. Seedling to sapling-size gray birch are the dominant species in this 3 acre fully-stocked stand. Sapling size black birch, several poor quality white oak and scattered apple trees are also present. Stag-horn sumac and Autumn olive are abundant along the edges of this stand where they receive full sunlight. The ground cover in this stand is dominated by grasses, low bush blueberry, swamp laurel and club mosses. Sedges are present in the wettest parts of this stand.

FIGURE 3. VEGETATION TYPE MAP



VEGETATION STAND DESCRIPTIONS*

- STAND A,A' Agricultural Land 49 Acres
- STAND B Old Field, Brush Species 12 Acres
- STAND C Mixed Hardwoods, Over-Stocked
Sapling to Pole-size, 10 Acres
- STAND D Mixed Hardwoods, Fully-Stocked
Pole-size, 8 Acres
- STAND E Old Field, Fully-Stocked
Seedling to Sapling-size, 3 Acres

LEGEND

- Road
- Property Boundary
- Vegetation Type Boundary
- Stream
- Pond
- Buildings

*SEEDLING SIZE = Less than 1 inch diameter at breast height (d.b.h.)
 SAPLING SIZE = 1 to 5 inches in d.b.h.
 POLE SIZE = 5 to 11 inches in d.b.h.

Aesthetics and Preservation

Efforts should be made to preserve, to the maximum extent possible, the healthy trees in the forested parts of this tract. These trees are valuable for aesthetics, shade and wildlife habitat. In addition, research has shown that trees can enhance the value of a house lot by as much as twenty percent.

It should be recognized, with the development of this property, that trees are sensitive to mechanical injury and also to changes in soil aeration, moisture level, and physical composition within the entire area under their crowns. Such disturbances may cause trees to decline in health and even die within three to five years. Care should be taken during construction to minimize mechanical injury to trees and soil disturbances near trees. Where possible, trees should be saved in small groups or "islands". Individual and groups of trees that are to be saved could be temporarily marked to ensure their protection during project construction.

Suggested Management Techniques

As shown in the Soils Limitation Chart of this report (see Appendix), most of the soils on this site are favorable for the establishment of vegetation for landscaping.

The trees in stand C (mixed hardwoods) are declining in health and vigor due to over-crowding. In this condition, trees are very sensitive to environmental stresses, including the changes occurring with development. A thinning in this stand removing approximately one-third of the stems will reduce competition between trees for space, sunlight, nutrients and water. In time, a healthier, more stable stand will result that will be better able to survive the stresses brought about by development. This thinning, if implemented, should focus on removing unhealthy poor quality trees, undesirable species such as red maple, and those trees which are directly competing with healthy, high quality trees. The cost of marking the trees to be removed would be covered by the fuelwood generated.

The apple trees present in stand C and also the old fields (stand B and E) should respond favorably to releasing and pruning. The additional sunlight reaching these trees should stimulate increased flowering and in turn improve fruit production.

A state employed Service Forester or consultant forester could be contacted to mark the trees which should be removed for the thinning in stand C.

VII. HYDROLOGY

The compact nature of much of the till overburden and the moderate to steep slopes on the site have led to an intricate surface drainage network. Seepage areas on the property have produced intermittent drainage channels, which are mostly very small. One moderately sized channel, with several smaller tributaries, crosses proposed lots 62, 64 and 65. This channel joins Nickel Mine Brook just east of the boundary of the site. On the day of the ERT field review, the channel contained a stream that formed a series of scenic cascades.

Runoff from the site would increase following development, but the change would probably be very small, particularly if efforts are made to preserve existing trees where possible and to establish new trees or shrubs on the lots. Technical Release No. 55 of the Soil Conservation Service contains a list of runoff curve numbers for certain soil types and land uses. These numbers relate the amount of precipitation that falls on a given area to the amount of surface runoff that is produced. A higher curve number indicates that a greater volume of runoff would occur following a given amount of rainfall. For Charlton soils (which underlie half of the site), the curve number for cultivated land with conservation treatment is 71, while the curve number for one-acre residential lots is 68. For Paxton and Woodbridge soils, which together comprise approximately half of the site, the curve numbers are 78 for cultivated land and 79 for one acre residential lots. These figures indicate that the difference between pre-development runoff and runoff from one acre residential lots on the site would be very small indeed. The major runoff increase would be expected to come from the new roads: the curve number for pavement is 98 on all soil types.

Hydraulic computations provided by the developer indicate that runoff would be artificially collected and outletted. Unless those outlets are to natural channels that are presently adjusted to the flows that would be discharged, measures should be used to slow down the flows at the outlet points to minimize the potential for increased erosion.

VIII. WATER SUPPLY

Lots in the proposed subdivision would be served by on-site, individual wells drilled into bedrock. It is difficult to predict the potential yields of such wells, since the yields depend upon such geologic factors as the number, size, and distribution of fractures in the bedrock. Nevertheless, it is possible to estimate the probability that any given well could supply 3 gallons per minute (an amount considered adequate to meet most household needs) based on a survey of wells in the lower Housatonic River basin (Source: Connecticut Water Resources Bulletin No. 19). This study indicates that of 294 bedrock wells examined, approximately 78 percent yielded 3 gpm or more; approximately 85 percent yielded 2 gpm or more; and approximately 95 percent yielded at least 1 gpm.

Most lot owners should be able to obtain yields of 3 gpm or more in wells drilled no deeper than 200 feet into the bedrock. Below that depth, less chance exists for obtaining substantial additional groundwater. If yields of less than 1 gpm are achieved after drilling 200 feet into the rock, a new well site may be desired rather than deeper drilling in the original hole.

Individual wells should be placed as far as is practical from septic system leaching fields, and should be placed uphill where possible. Considering the natural slope of the site, it will be impossible to keep all the wells uphill of leaching fields on the same or neighboring lots. Judicious spacing is especially needed in the northwest section of the property, where hydrogeologic conditions are not well suited to sewage disposal.

It would be advisable to prepare a master plan of the proposed subdivision which illustrates the locations of all the wells in relation to the locations of all the septic systems. This plan could be reviewed by the local department of health and would help to ensure the proper location of all wells relative to septic system leaching fields.

In the event that public water supply is available to service the site (mentioned as a possibility by the developer the day of the ERT field review), the hazard of septic system contamination of wells would of course be eliminated. This alternative would also provide additional space for the placement of septic systems. In light of these benefits, the ERT considers the public water supply alternative preferable to the present on-site well alternative.

IX. SEPTIC SYSTEMS

The Lower Naugatuck Valley Health District has submitted an evaluation report on Seymour Meadows, dated March 12, 1979, to the Seymour Planning Commission. The ERT sanitarian concurs with the evaluation of the local health district that most lots will require detailed engineered plans for on-site subsurface sewage disposal systems before permits could be issued. The ERT sanitarian also concurs with the soil investigation report submitted by Henry T. Moeller, soil scientist. This report clearly outlines soil limitations and special concerns for the installation of septic systems.

With respect to on-site subsurface sewage disposal, the area of greatest concern is the northwestern section of the property where compact glacial till predominates. In this area, seasonally high groundwater levels could flood standard systems, causing backups, inadequate renovation, or other problems. The numerous seepage areas on the site indicate potential for surfacing of effluent during wet periods. The latter problem would not only be an aesthetic and health nuisance, but could contaminate local streams. Careful engineering of systems or a reduction in the number of lots in the northwestern section of the site should be considered.

X. PLANNING CONSIDERATIONS

State Considerations

The State of Connecticut has a plan which was prepared by the staff of the Comprehensive Planning Division of the Office of Policy and Management with the guidance and cooperation of the Continuing Committee on State Planning and Development. This committee is a legislative review body made up of four senators and four representatives. This "Conservation and Development Policies Plan 1979-1982" enunciates broad and meaningful goals and strategies for those policy and investment decisions of the State government which concern the future growth and development of the State and the conservation of its natural and man-made resources.

The "Locational Guide Map" which accompanies this plan labels the Seymour Meadows site as a "Conservation" area.

"Conservation" is a designation with a "definition criteria" which includes public water supply quality protection, wild and scenic streambelts, natural areas of local significance, inland wetlands, scenic areas associated with the protection and enhancement of existing major investments in public open space and recreation and agricultural lands. The existence of the Mead Farm is probably why this area was labeled "Conservation".

The "State Action Strategy" for this designation is to "plan and manage for the long term public benefit the lands contributing to the State's need for food, fiber, water and other resources, open space, recreation and environmental quality, and insure that changes in use are compatible with the identified conservation values".

The Seymour Meadows subdivision appears to be inconsistent with this advisory Conservation and Development Policies Plan. If this property was part of a state program called the Acquisition of Development Rights on Farmland, it would be exempt from subdivision development. The owner, however, must apply for this program and the past owner of the Mead Farm did not.

Regional Considerations

The Valley Regional Planning Agency (VRPA) has prepared a plan for the Region's development. "The Valley Tomorrow, A Plan for the Future of Our Valley Community" projects Seymour's role in the Valley as one of providing families with a place to live and providing the Region with recreational facilities and open space. Based on the "Plan of Land Use" map, which accompanies this document, low density residential (1-3 units per acre) is planned for the "Seymour Meadows" area.

As it stands now, this subdivision does not seem to be inconsistent with the Regional Plan; however, careful consideration of the open space and recreational criteria as described in the Plan is essential.

Local Considerations

There are no specific references in two of the latest completed Seymour plans (1965, 1971) which directly relate to this site. The projected proposed land use for the general area including this site is low density residential. The VRPA in conjunction with Seymour's Planning and Zoning Commission are presently working on a comprehensive plan.

The subdivision seems to be consistent with presently accepted local plans for this area of Seymour. Housing of the proposed subdivision type is now in the area plus a mixture of high density housing and public facilities (two schools, Bungay and High School).

Traffic Impact

The access to this subdivision will be via Bungay Road which borders the property on the northwest. Bungay Road is a local street which runs from Derby Avenue on the south to its intersection with West Church Street on the north. Traffic volumes calculated by counter are presently not available, however, estimates are possible. According to the Connecticut Department of Transportation 10 and 7 are the average weighted 24 hour totals of all vehicle trips counted to and from single family detached houses and 1 to 2 bedroom apartment units respectively. Using these figures, it is estimated that the peak hour traffic count for Bungay Road is 1,500 cars. The estimated additional vehicle trips generated by the proposed subdivision is 640 per day. Determining the peak hour figure for 640 average daily trips (10% of the ADT), the new total estimated peak hour traffic count is 1,564 cars. The design capacity for a fully improved Bungay Road is 2,000 vehicles per hour in both directions.

While the proposed subdivision does not bring Bungay Road over capacity, future development in the area may merit some upgrading of intersections and signalization.

Internal Access Roads

The primary proposed subdivision road, Meadowview Lane, intersects with Bungay Road, a local road, approximately 800 feet south of Botsford Road. The sight line distances appear to be adequate at this intersection, and the street grades acceptable. Because the Seymour subdivision regulations state that "subdivisions containing fifty lots or more shall have at least two connections with existing streets" (Article III, Section II), a second access from Bungay Road, Nickel Mine Drive, has been proposed. This road intersects with Bungay Road approximately 500 feet north of Meadowview Lane, near the northerly property line. The primary objection to Nickel Mine Drive is that approximately 300 feet of this road passes through designated wetlands. As an alternative, the applicant has informally proposed eliminating Nickel Mine Drive and widening Meadowview Lane into an esplanade - a boulevard with plantings down the center. If this constitutes "two connections", and is acceptable to the Planning and Zoning Commission, then this plan is a more desirable option.

Community Facilities Impact

In 1978, based on VRPA figures, Seymour's total population was 13,900 while the total school age population (5-19) was 3,966. Given the total number of occupied housing units at 4,288 (based on 1970 Census), the total population/housing unit was 3.24 while the school age population/housing unit was .92. If the same proportion as existing here remains during the construction life of the project, the total population from the 64 units will be approximately 207 persons with the school age population approximately 59 students. Given the fact that Seymour's three elementary schools are now operating at approximately 77% of their 1,421 students capacity (325 openings), looking at this site independently of any other growth in the town, it appears that the elementary schools could well accommodate the additional students. The Junior High (or Middle School) should also be able to absorb the extra students. It is now operating at 90% of its 650 capacity which leave 65 student openings. The capacity of the High School is 1,529 students; this school is currently operating at 66% of its capacity (513 student openings). Given the proposed subdivision, again, independent of any other growth which may occur in the district, it appears that the High School can accommodate the increased number of students.

Additional growth in other areas of Seymour can have a significant impact on the capability of the school systems as well as other community facilities accommodating a subdivision. A keen eye should be kept on all and any further residential developments and their effects on community facilities.

Cluster Development as an Alternative to the Proposed Project

Although not proposed, Seymour Meadows would be ideally suited to cluster development. At present, however, Seymour's zoning regulations limit such development to land served by both public water and sewers. It is recommended that the commission seriously consider modifying the ordinance so that cluster development could be considered on property which is served by public water and septic systems which meet the approval of the Health Department.

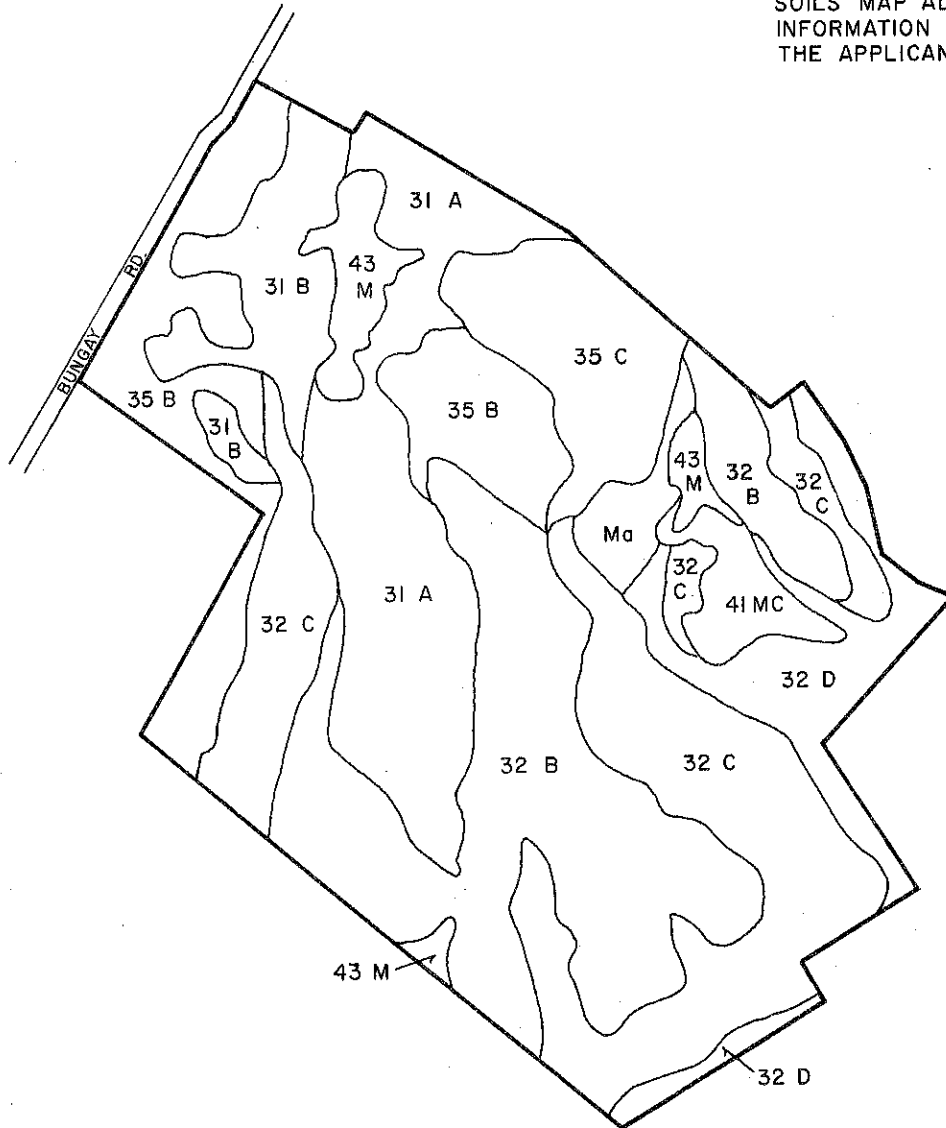
A major advantage of cluster development is that it provides for more efficient use of the land. Building can be concentrated on the most favorable soils and important natural features of the land (water, wetlands, steep slopes, open space, large trees) can be preserved. The present proposal includes building lots on steep slopes, thereby increasing the possibility of erosion during construction, and building lots with designated wetlands or water courses passing through them. Preservation of unsubdivided open space would enhance the appearance, character, and natural beauty of the area and provide additional land for common use.

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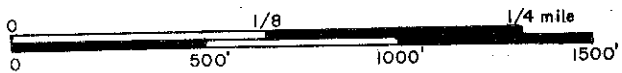
APPENDIX

SOILS MAP

SOILS MAP ADAPTED FROM
INFORMATION SUPPLIED BY
THE APPLICANT.



SCALE: 1" = 500'



SOILS LIMITATION CHART
SEYMOUR MEADOWS, SEYMOUR, CT.

| MAP SYMBOL | SOIL NAME | SEPTIC ABSORPTION FIELDS | | | BUILDINGS W/ BASEMENTS | | | ROADS OR DRIVEWAYS | | | LANDSCAPING | | |
|------------|---|--------------------------|--------------|----------|------------------------|----------|--------------|--------------------|--------------|----------|-------------|----------|---------------------|
| | | RATING | REASON | RATING | REASON | RATING | REASON | RATING | REASON | RATING | REASON | RATING | REASON |
| 31A | Woodbridge fine sandy loam, 0 - 3% slopes | Severe | Percs slowly | Severe | Wetness | Severe | Frost action | Severe | Frost action | Slight | | Slight | -- |
| 31B | Woodbridge fine sandy loam, 3 - 8% slopes | Severe | Percs slowly | Severe | Wetness | Severe | Frost action | Severe | Frost action | Slight | | Slight | -- |
| 32B | Charlton fine sandy loam, 3 - 8% slopes | Slight | -- | Slight | -- | Slight | -- | Slight | -- | Slight | | Slight | -- |
| 32C | Charlton fine sandy loam 8 - 15% slopes | Moderate | Slope | Slight | -- | Slight | -- | Slight | -- | Slight | | Slight | -- |
| 32D | Charlton fine sandy loam 15 - 25% slopes | Severe | Slope | Slight | -- | Slight | -- | Slight | -- | Slight | | Slight | -- |
| 35B | Paxton fine sandy loam, 3 - 8% slopes | Severe | Percs slowly | Moderate | Wetness | Moderate | Frost action | Moderate | Frost action | Moderate | | Moderate | Small stones |
| 35C | Paxton fine sandy loam 8 - 15% slopes | Severe | Slope | Moderate | Wetness | Moderate | Frost action | Moderate | Frost action | Moderate | | Moderate | Small stones |
| 41MC | Sutton very stony fine sandy loam, 3 - 15% slopes | Severe | Wetness | Severe | Wetness | Severe | Frost action | Moderate | Frost action | Moderate | | Moderate | Slope, Frost action |
| 43M | Leicester, fine sandy loam | Severe | Wetness | Severe | Wetness | Severe | Frost action | Severe | Frost action | Severe | | Severe | Wetness |
| Ma | Madeland | | | | | | | | | | | | |

- Limitations Variable -

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

EXPLANATION OF RATING SYSTEM:

ABOUT THE TEAM

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

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

PURPOSE OF THE TEAM

The Environmental Review Team is available to help towns and developers in the review of sites proposed for major land use activities. To date, the ERT has been involved in the review of a wide range of significant activities including subdivisions, sanitary landfills, commercial and industrial developments, and recreation/open space projects.

Reviews are conducted in the interest of providing information and analysis that will assist towns and developers in environmentally sound decision-making. This is done through identifying the natural resource base of the project site and highlighting opportunities and limitations for the proposed land use.

REQUESTING A REVIEW

Environmental Reviews may be requested by the chief elected official of a municipality or the chairman of an administration agency such as planning and zoning, conservation, or inland wetlands. Requests for reviews should be directed to the Chairman of your local Soil and Water Conservation District. This request letter must include a summary of the proposed project, a location map of the project site, written permission from the landowner/developer allowing the team to enter the property for purposes of review, and a statement identifying the specific areas of concern the team should address. When this request is approved by the local Soil and Water Conservation District and the King's Mark RC&D Executive Committee, the team will undertake the review. At present, the ERT can undertake two reviews per month.

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