

**King's Mark
Environmental
Review
Team
Report**



**LITCHFIELD HILLS MALL
TORRINGTON,
CONNECTICUT**

LITCHFIELD HILLS MALL

TORRINGTON, CONNECTICUT

Environmental Review Team Report

Prepared by the King's Mark Environmental Review Team
of the King's Mark Resource Conservation
and Development Area, Inc.

Wallingford, Connecticut

for the

Torrington Inland Wetlands Commission

This report is not meant to compete with private consultants by supplying site designs or detailed solutions to development problems. This report identifies the existing resource base and evaluates its significance to the proposed development and also suggests considerations that should be of concern to the Inland Wetlands Commission and the City. The results of the Team action are oriented toward the development of a better environmental quality and long-term economics of the land use. The opinions contained herein are those of the individual Team members and do not necessarily represent the views of any regulatory agency with which they may be employed.

APRIL 1988

ACKNOWLEDGMENTS

The King's Mark Environmental Review Team Coordinator, Nancy Ferlow, would like to thank and gratefully acknowledge the following Team members whose professionalism and expertise were invaluable to the completion of this study:

- * William Warzecha, Hydrogeologist
Department of Environmental Protection - Natural Resource Center
- * Kathy Hanford, District Conservationist
USDA - Soil Conservation Service
- * Kip Kolesinskas, Soil Resource Specialist
USDA - Soil Conservation Service
- * Daniel Mayer, Inland Wetland Specialist
Department of Environmental Protection - Inland Wetlands Unit
- * Richard Lynn, Regional Planner
Litchfield Hills Council of Elected Officials

I would also like to thank Susan Anderson, Secretary of the King's Mark Environmental Review Team for assisting in the completion of this report.

Finally, special thanks to Edward Lukacovic of the Torrington Inland Wetlands Commission and John Larson, developer, John Upton, engineer for the developer, Peter Herbst, attorney for the developer, and David Darnell, environmental planner for the developer, for their cooperation and assistance during this environmental review.

EXECUTIVE SUMMARY

Introduction

The Torrington Inland Wetland Commission has requested that an environmental review be conducted on Litchfield Hills Mall, a site proposed for a commercial development. The site is located in the Torrington section of Torrington, at the corner of Routes 202 and 183. The 60.5 acre site is characterized by second growth, mixed hardwood forests, wetlands, residential and commercial development and agricultural lands. A drumlin occupies the central portion of the site. A tributary to the East Branch Leadmine Brook runs through the northeast corner of the site and the West Branch Leadmine Brook runs through the southwest corner. Currently, Leadmine Brook has flooding problems down stream of the site. Surrounding land use includes commercial and residential development.

The proposed development would encompass an approximately 300,000 square foot mall building and associated parking lots and entrance roads. A small restaurant is also planned. Approximately 16 acres of the eastern section of the site is being reserved for future residential development. The mall would be served by municipal sewer and water.

The City was primarily concerned with the potential impact that the proposed development would have on: (1) existing wetland corridors; (2) effects of erosion and sedimentation; (3) stormwater drainage; and (4) site design compatibility. Therefore the City asked the ERT to inventory on-site resources and determine their suitability for the proposed development.

The review process consisted of four phases: (1) inventory of the site's natural resources; (2) assessment of these resources; (3) identification of resource problem areas; (4) presentation of planning and land use guidelines. Based on the review process, specific resources, areas of concern and development limitations and opportunities were identified. The major findings of the ERT are presented below:

Setting, Topography and Geology

The site is located in the Torrington section of Torrington. The area has historically been used for residential and agricultural purposes, but there has been an increase in commercial development. The site is zoned C.I.R. (Commercial-Industrial Restricted).

The major topographic feature on the site is the centrally located drumlin. The hill slopes down to a tributary of the East Branch Leadmine Brook on the east and to the West Branch Leadmine Brook on the west. No bedrock outcrops were observed during the field review. Bedrock has been mapped as Hoosac Schist. Because of the depth to the surface, the bedrock should pose little or no problems to the development.

The surficial geologic materials are called till. The till has a shallow hardpan layer which can result in a seasonally high water table. A high water table can be a hindrance to development. Overlying the till parallel to the streamcourses are regulated inland wetland soils. These soils have seasonal

high water tables and are subject to frequent flooding. These wetlands appear to have good flood control and sediment retention attributes. Replacing the wetlands with parking lots, roads and buildings may diminish the retention functions of the wetlands and aggravate any downstream flooding unless preventive measures are taken. Any regulated activity that takes place in the wetlands will require a permit from the Inland Wetlands Commission and may require a permit from the U.S. Army Corps of Engineers.

Geologic Development Concerns

The Mall is to be served by municipal water and sewer facilities. Therefore, the major hydrogeologic impacts associated with development of on site facilities would not be expected.

Deep cuts in hardpan soils are difficult to stabilize and a good vegetative cover is practically impossible. In order to control the hazards, a detailed soil erosion and sediment control plan will be needed. Because of the hardpan, an artificial drainage system will need to be carefully planned. Of special concern are areas where hardpan cuts and fills are made. If the buildings have basement facilities, footing drains will be needed to keep the basements dry.

The erosion and sediment control plan will need to be enforced by the City. Because of the high water tables and silty soils, the chance for environmental damage to neighboring properties and downstream watercourses and wetlands would be expected to be high unless erosion and sediment control measures are properly installed. It is suggested that temporary sediment pools be constructed prior to land disturbance and any construction be done in the dry time of the year (May to November).

A letter from the applicant's geotechnical engineer recommends that considerable care be taken if the on-site materials are used for fill. It is suggested that the geotechnical engineer oversee the work to insure that no problems arise.

Hydrology

Drainage from the eastern section of the site drains into an unnamed tributary of East Branch Leadmine Brook. Drainage from the western section drains to West Branch Leadmine Brook. The drumlin forms the drainage boundary. The proposed development will change the hydrology of the headwaters of both brooks. According to the DEP, the water in both Brooks is classified as AA - existing or proposed public drinking water supply impoundments and tributary surface waters. The Bristol Water Company will be diverting water from the East Branch Leadmine Brook for a small impoundment in Harwinton. The water quality of both Brooks may be lowered by the project. It is very important that a soil erosion and sediment control plan be prepared and enforced. Parking lot debris including sand and salt used in winter, spilled hydrocarbons and other automobile-related residues will be carried to the two proposed detention ponds. Most of the sand and litter should be trapped in the basins, but the suspended solids and dissolved materials may be transmitted to the Brooks. Detention basins will need a regular maintenance program to remove silt and litter. It is recommended that the applicant contact the DEP Water Compliance Unit to determine if a permit will be needed for discharge of stormwater to the watercourses. In addition, it is suggested that the Bristol

Water Department and the State Department of Health Services, Public Water Supply Section be contacted regarding the proposed development.

The development will significantly increase the amount of runoff shed from the site. Two detention basins, created by earthen dams in the wetlands, are proposed to handle post-development runoff increases. The DEP Dam Safety Unit should be contacted to see if a permit is needed. Careful examination of the final stormwater management plan, drainage calculations and detention basin design will be needed before the final approval.

Soil Resources

The soils on the site are formed from glacial till materials, with a hardpan at an approximately two foot depth. Soils on the drumlin are well drained to moderately well drained, and soils in the lower areas to the east and west are poorly drained to very poorly drained. Areas which include large cuts and fills will be very difficult to stabilize. The "clearing limits of disturbance" shown coincide with the wetland limits at the base of the slope. Because of the large amount of earth to be moved and the limitations of the area, work will extend into the wetland area. To minimize the impacts on the wetlands, alternatives could include staying off the slopes and rearranging the parking and building, terracing the parking areas or using the areas "reserved for future development".

Erosion and Sediment Control Plan

Comments on the erosion and sediment control plan include suggestions for further details and better protection of the property. The existing problem from topsoil removal on the drumlin could be seeded to prevent further erosion. Extensive filling of wetlands is proposed for the construction of parking areas, roads and storm water detention basins. Alternative layouts which reduce the amount of impact could be investigated.

Salt tolerant grasses may be needed along the parking lot edges. Buffers along the edges will provide a visual and noise barrier and will trap trash. Fencing can provide a better barrier and could be extended along the east and west edges.

Wetland Considerations

The wetlands on the site are divided into three main systems. The western portion of the site contains an intermittent stream which flows toward a large wooded shrubbed swamp. The eastern section of the site contains a large wetland which flows into a tributary of the East Branch Leadmine Brook and a smaller wetland which runs south off of the property. The wetlands are in good condition with the exception of a portion of East Branch Leadmine Brook which has been disturbed.

The wetlands act as intermittent streams for surface runoff and groundwater seepage. Other functions include wildlife habitat, water purification, sediment filtration, flood water storage, nutrient recycling and visual and aesthetic diversity. The habitat value of the wetlands ranges from fair to good and the several different types of communities on the site provide the diversity needed by animals and birds.

The project will fill approximately 5.9 acres of wetland and impact the remaining. This loss will severely affect the habitat value of the wetlands through increased sedimentation and pollution. The diversity of the site will be lost as a result of the development. Flood storage in the wetlands will be reduced but the detention basins should be adequate to control the site runoff.

Detention berms will be constructed in the wetlands to control runoff. This may change the character and function of the wetlands. Consideration might be given to moving the detention basins out of the wetlands. The developer should submit an application to the DEP Dam Safety Unit due to the size of the structure and the amount of water which will be detained.

A steep drop is proposed for the southwest corner of the parking lot. The toe of the embankment borders the wetlands. Severe erosion and sedimentation could occur during the first few months, resulting in high amounts of sediment in the wetlands. An embankment with a lesser slope might be an option. Erosion and sediment control is crucial for the mitigation of impacts on the wetlands.

Due to the extent of the development and the reservation of the remaining land for future development, no opportunity exists for creation of new wetlands on the site. The creation of new wetlands is feasible and might be considered.

Threatened and Endangered Plant and Animal Species

According to the DEP - Natural Diversity Database there are no Federally listed Endangered Species or Connecticut "Species of Special Concern" that occur within the study area.

Planning Considerations

Surrounding land uses include residential and commercial development and undeveloped woodland. Landscaping and buffer strips will minimize the visual impacts on the adjacent areas. The most significant visual intrusion will be to those residents on Louis Circle. A vegetative buffer and opaque fence are proposed to mitigate the impacts.

Compatibility of the proposed plan with City zoning regulations is difficult because the zoning is currently under litigation. Arrangements have been made with the City and the Torrington Water Company to provide water and sewer facilities.

The State Policies Plan for the Conservation and Development of Connecticut, 1987-1992 identifies the area as a "Conservation Area" because it is located within a potential public water supply watershed. The Bristol Water Department has plans for a future water supply diversion downstream of the site. To the extent that the project poses a threat to water quality in the area, it is incompatible with the State Plan. It is suggested that the City, the applicant, the Bristol Water Company, the Department of Health Services and the DEP meet and identify appropriate mitigation measures for the project. The City might also wish to request an assessment of the impact of the proposed project on the businesses in downtown Torrington.

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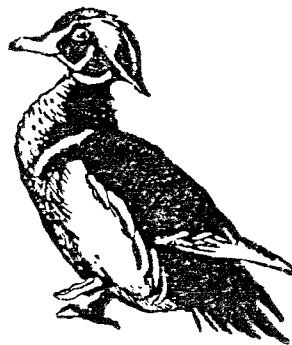
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INTRODUCTION



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The proposed development would encompass an approximately 300,000 square foot mall building and associated parking lots and entrance roads. A small restaurant is also planned. Approximately 16 acres of the eastern section of the site is being reserved for future residential development. The mall would be served by municipal sewer and water.

THE ERT PROCESS

Through the efforts of the Torrington Inland Wetlands Commission, the developer's representative and the King's Mark ERT, this environmental review and report was prepared for the City. This report primarily provides a description of on-site natural resources, and presents planning and land use guidelines.

The review process consisted of four phases:

- (1) Inventory of the site's natural resources (collection of data).
- (2) Assessment of these resources (analysis of data).
- (3) Identification of resource problem areas.
- (4) Presentation of planning and land use guidelines.

The data collection phase involved both literature and field research. The ERT field review took place on March 16, 1988. Field review and inspection of the proposed development site proved to be a most valuable component of this phase. The emphasis of the field review was on the exchange of ideas, concerns or alternatives. Mapped data or technical reports were also perused and specific information concerning the site was collected. Being on site also allowed Team members to check and confirm mapped information and identify other resources.

Once the Team members had assimilated an adequate data base, it was then necessary to analyze and interpret their findings. The results of this analyses enabled the Team members to arrive at an informed assessment of the site's natural resource development opportunities and limitations. Individual Team members then prepared and submitted their reports to the ERT Coordinator for compilation into the final ERT report.

The primary goal of this ERT is to inventory and assess existing natural resources occurring on the site as well as providing planning and land use information. Specific objectives include:

- (1) assessment of the the hydrological and geological characteristics of the site, including geological development limitations and opportunities, natural drainage patterns, postdevelopment stormwater runoff potential, and flooding;
- (2) determination of the suitability of existing soils to support the proposed development;

Figure 1

LOCATION OF STUDY SITE

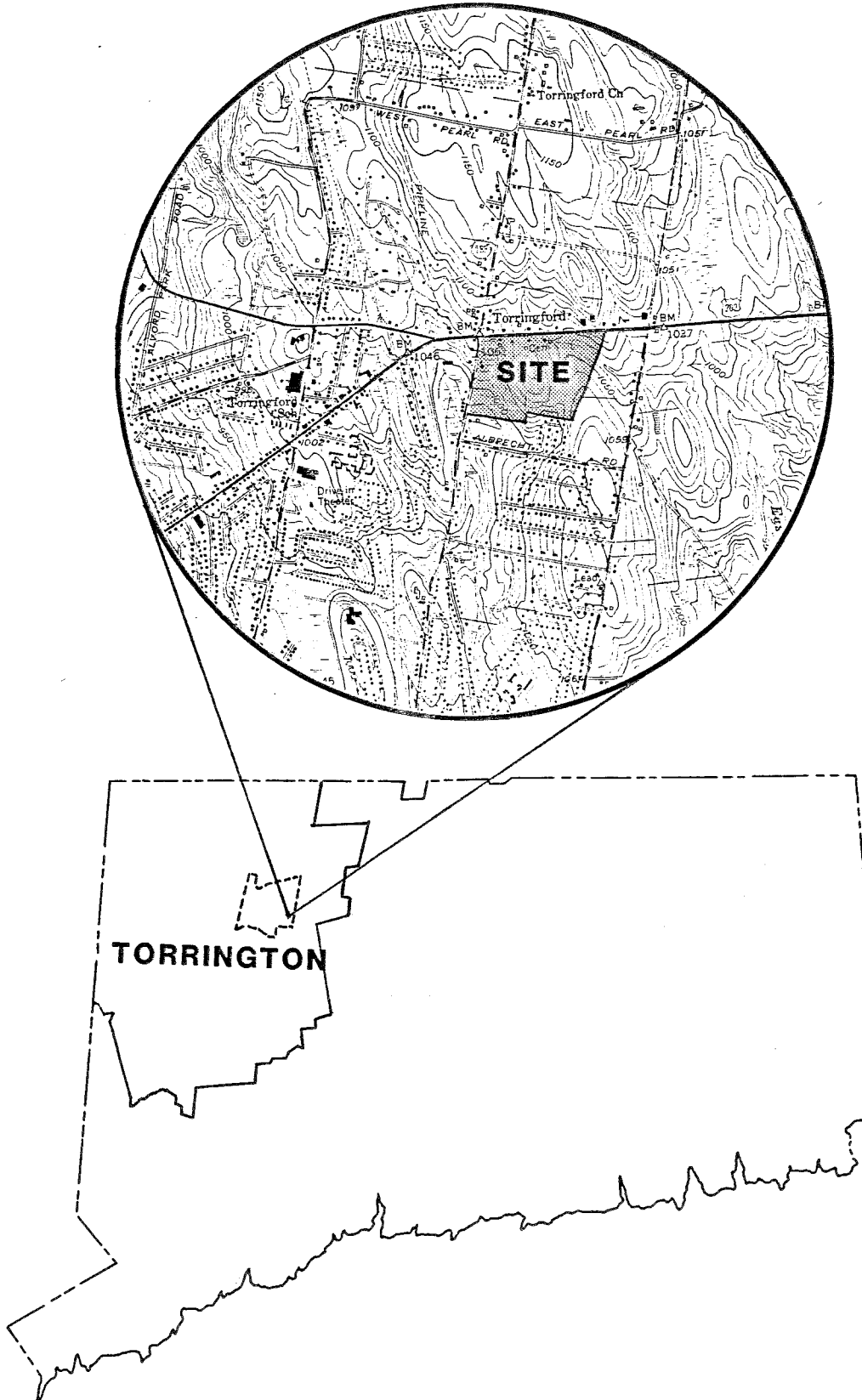
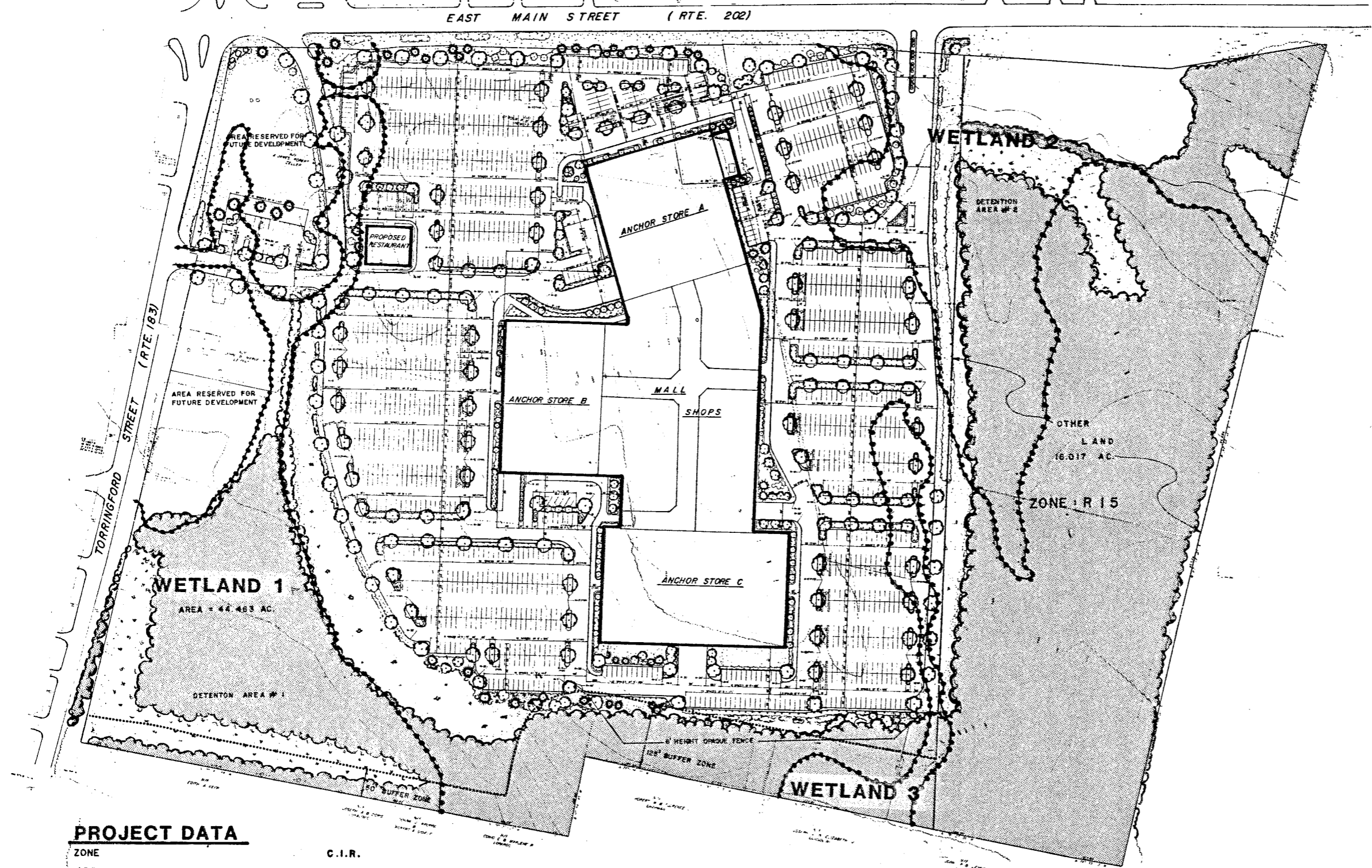






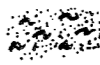
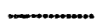
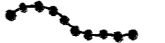


Figure 2



CONCEPTUAL LANDSCAPE LEGEND

-  PRESERVED NATURAL PLANTING
-  PROPOSED BUFFER SCREEN PLANTING
EVERGREEN & DECIDUOUS MIX
-  PROPOSED DECIDUOUS & EVERGREEN
TREES WITHIN PARKING AREAS
-  PROPOSED NATIVE HABITAT BANK
COVERINGS, GRASSES, LEGUMES, SHRUBS
-  NO MOW SLOPE-STABILIZING GRASS COVERS
-  WET MEADOW HERBACEOUS VEGETATION
-  EMERGENT VEGETATION (SHALLOWS)
-  LIMIT OF PARKING BUFFER
-  WETLAND BOUNDARY

PROJECT DATA

ZONE	C.I.R.
AREA OF SITE	44.463 AC.
GROSS FLOOR AREA	301,700 S.F.*
STORAGE / CORRIDORS (25% OF G.F.A.)	75,425 S.F.
NET SALES AREA	226,275 S.F.
BUILDING COVERAGE	15.9%**
PARKING / DRIVES	39.8%**
LANDSCAPED AREA	44.3%**
BUILDING HEIGHT	20 FT. (MAX)-1 STORY

*DOES NOT INCLUDE 6000 S.F. RESTAURANT
**INCLUDES 6000 S.F. RESTAURANT

PARKING TABULATION

BUILDING TYPE/S.Q. FOOTAGE	SPACES REQUIRED
RETAIL STORES SALES AREA: 226,275 S.F. (1 SPACE/150 S.F.)	1509
RESTAURANT-(90 SEATS):	33
TOTAL REQUIRED PARKING:	1542
TOTAL PROVIDED PARKING:	1569*

* (INCLUDES 26 HANDICAP SPACES)

LITCHFIELD HILLS MALL
TORRINGTON, CONNECTICUT

PROPOSED SITE PLAN

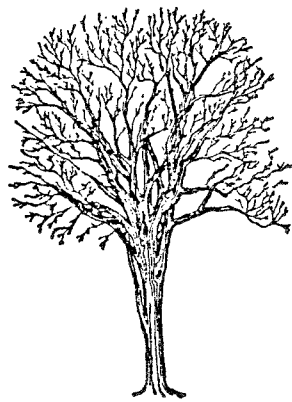
King's Mark Environmental Review Team

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- (3) discussion of soil erosion and sedimentation concerns;
- (4) assessment of the impact of the development on the wetlands and watercourses;
- (5) assessment of planning and land use issues.

PHYSICAL CHARACTERISTICS



SETTING, TOPOGRAPHY AND GEOLOGY

The proposed mall site, approximately 60.5 acres in size, is located in the Torrington section of Torrington (southeast corner of town). The site abuts East Main Street (Rte. 202) on the north, Torrington Street (Rte. 183) on the west, several residential properties on the south and private, undeveloped land on the east.

A review of air photos of the area indicates that the site and vicinity have historically been used for agricultural and residential development. An approximately 10 acre open farm field occupies the central parts of the site. The remainder of the site is mostly wooded. Based on the field walk, it appears that there is presently an increase in commercial development. Present plans indicate most of the site is in a C.I.R. zone (Commercial-Industrial Restricted). The eastern limits are in a R-15 zone, which means the minimum lot size for residential purposes is 15,000 square feet.

It is understood that the proposed mall will consist of three anchor stores, mall shops and parking lot. The mall will be accessed from Torrington Street (Rte. 183) and East Main Street (Rte. 202).

The major topographical feature of the site is a northwest/southeast trending streamline hill (drumlin) (see Figure 3). The shape of the drumlin is derived from the smoothing action of overriding glacier ice. The mall building is proposed on the drumlin. On the west side, the hill slopes moderately steeply to the southwest. Slopes on the east side are more gentle. Drainage on the east side flows to an unnamed tributary to East Branch Leadmine Brook while the west side flows to West Branch Leadmine Brook.

No bedrock outcrops were observed on the site during the field review. Geologic mapping data indicates outcropping on the north side of Rte. 202.

Boring data indicates that the bedrock surface was encountered in 1 of 6 holes on the site. The bedrock surface was encountered at 15 feet below ground level in the southern parts (B-8). The bedrock has been mapped as Hoosac Schist, a gray, rusty weathering fine to medium grained schist (see Figure 4).¹

Because the bedrock surface is relatively deep throughout the site and because municipal water by the Torrington Water Company is available to the site, the underlying bedrock should pose little or no problem in terms of the proposed project.

The surficial geologic materials (overburden) overlying bedrock on the site are called till (see Figure 5). Till is a non-sorted glacial deposit consisting of rock particles of widely varying sizes and shapes. As a result of the mode of deposition by glacial ice, a relatively shallow "hardpan" developed below the weathered or rooted surficial soil zone. Geologists name this type of glacial deposit as lodgement till. Because the "hardpan" layer characterizing the soils on the drumlin is quite compact, it has a low vertical permeability. During the wetter times of the year the more permeable soil zone above the "hardpan" layer often becomes saturated with groundwater resulting in a seasonally high water table. The seasonally high water table condition will be a hindrance in terms of constructing the proposed mall and parking facilities.

Overlying the till soils, east and west of the drumlin hill and paralleling streamcourses in the area are regulated inland-wetland soils. The wetlands were delineated by Soil Science Service of Cheshire, Connecticut. The area of regulated soils has been identified as Lg (Leicester, Ridgebury and Whitman very stony, fine sandy loams). The soils comprising this group would be

¹ Source: "Bedrock Geological Map of Connecticut" John Rodgers (1985).

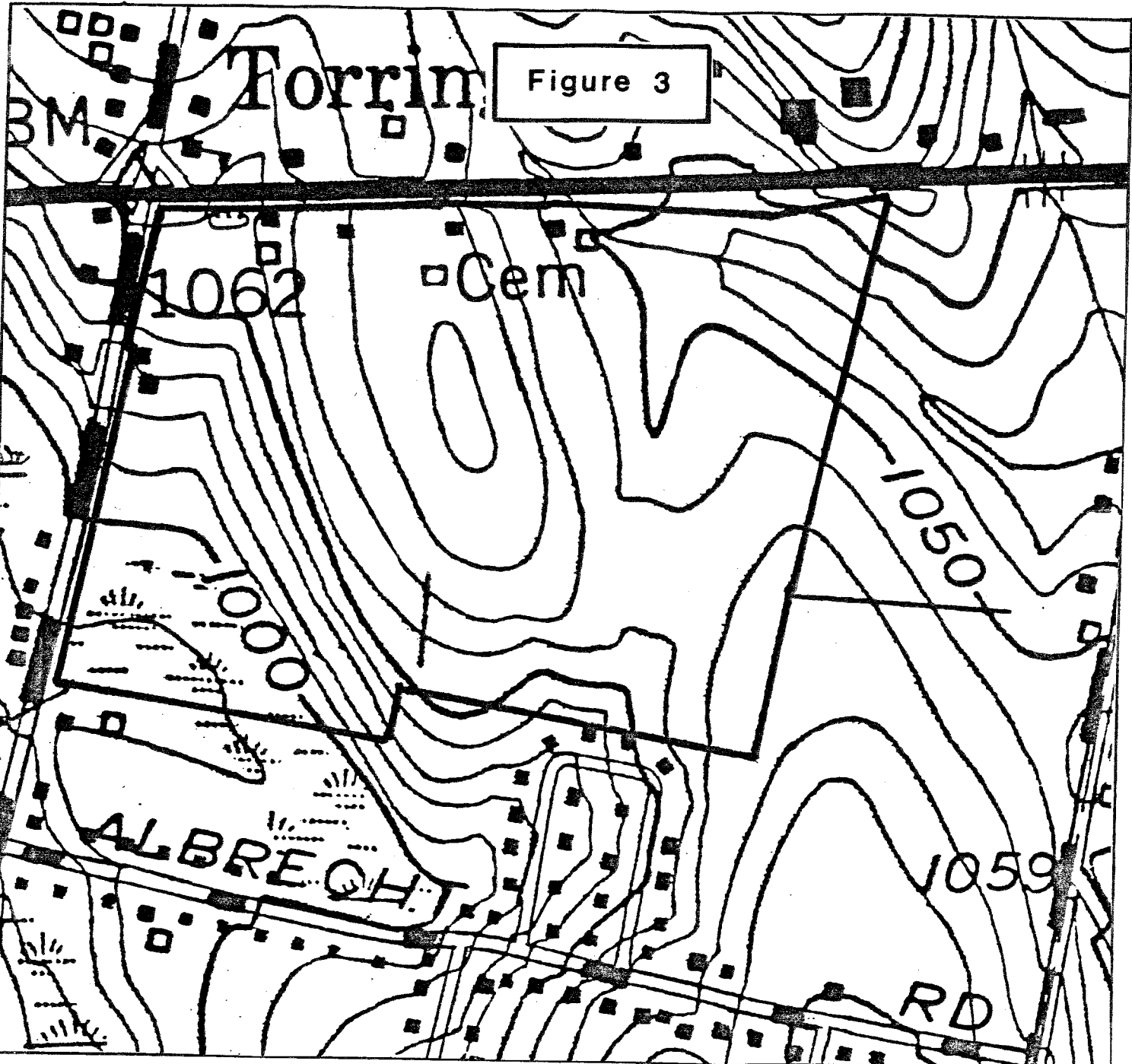


Figure 3

**LITCHFIELD HILLS
MALL**

TORRINGTON, CONNECTICUT

TOPOGRAPHY

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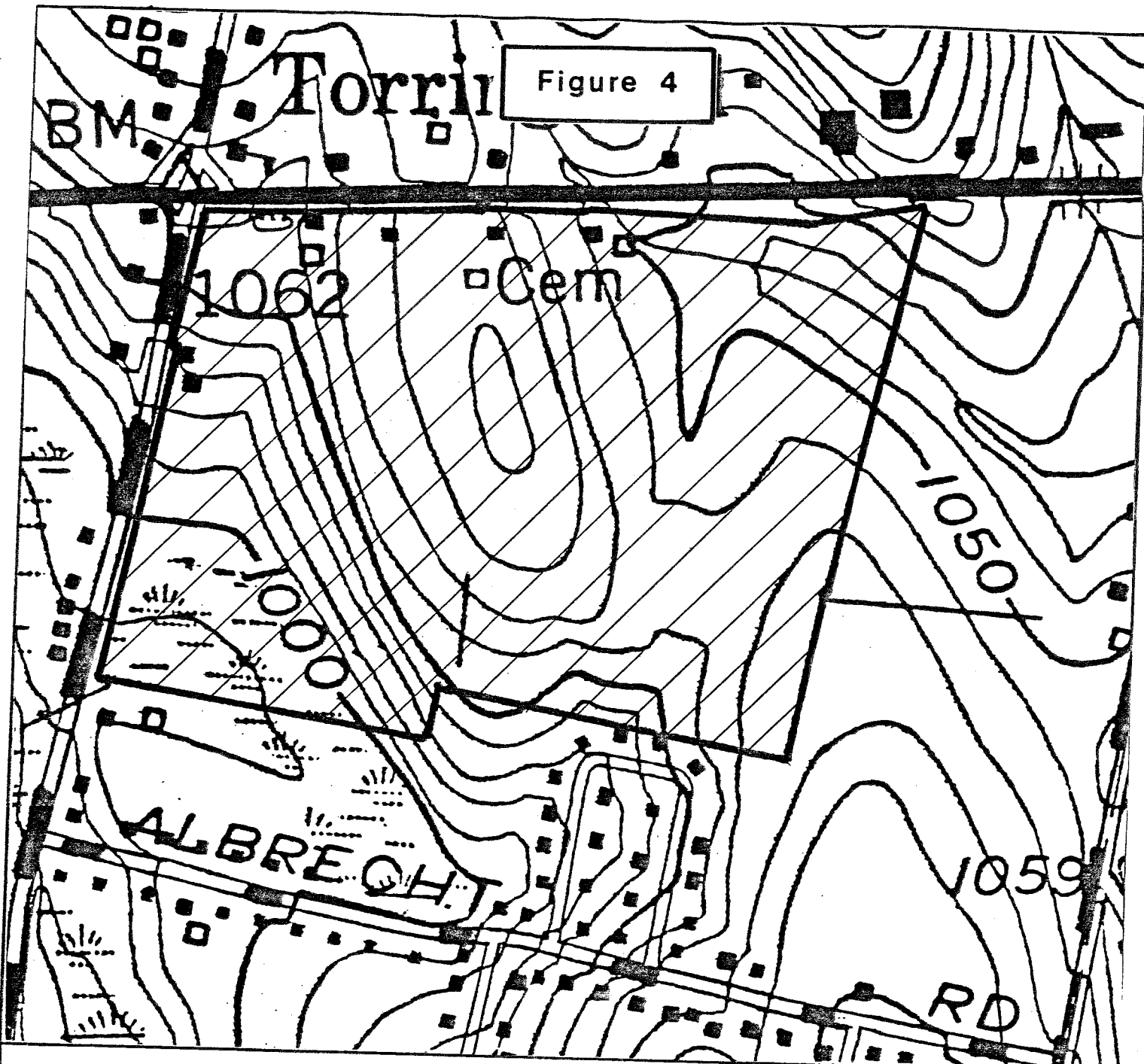


Figure 4



HOOSAC SCHIST

**LITCHFIELD HILLS
MALL**

TORRINGTON, CONNECTICUT

BEDROCK GEOLOGY

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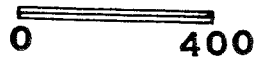
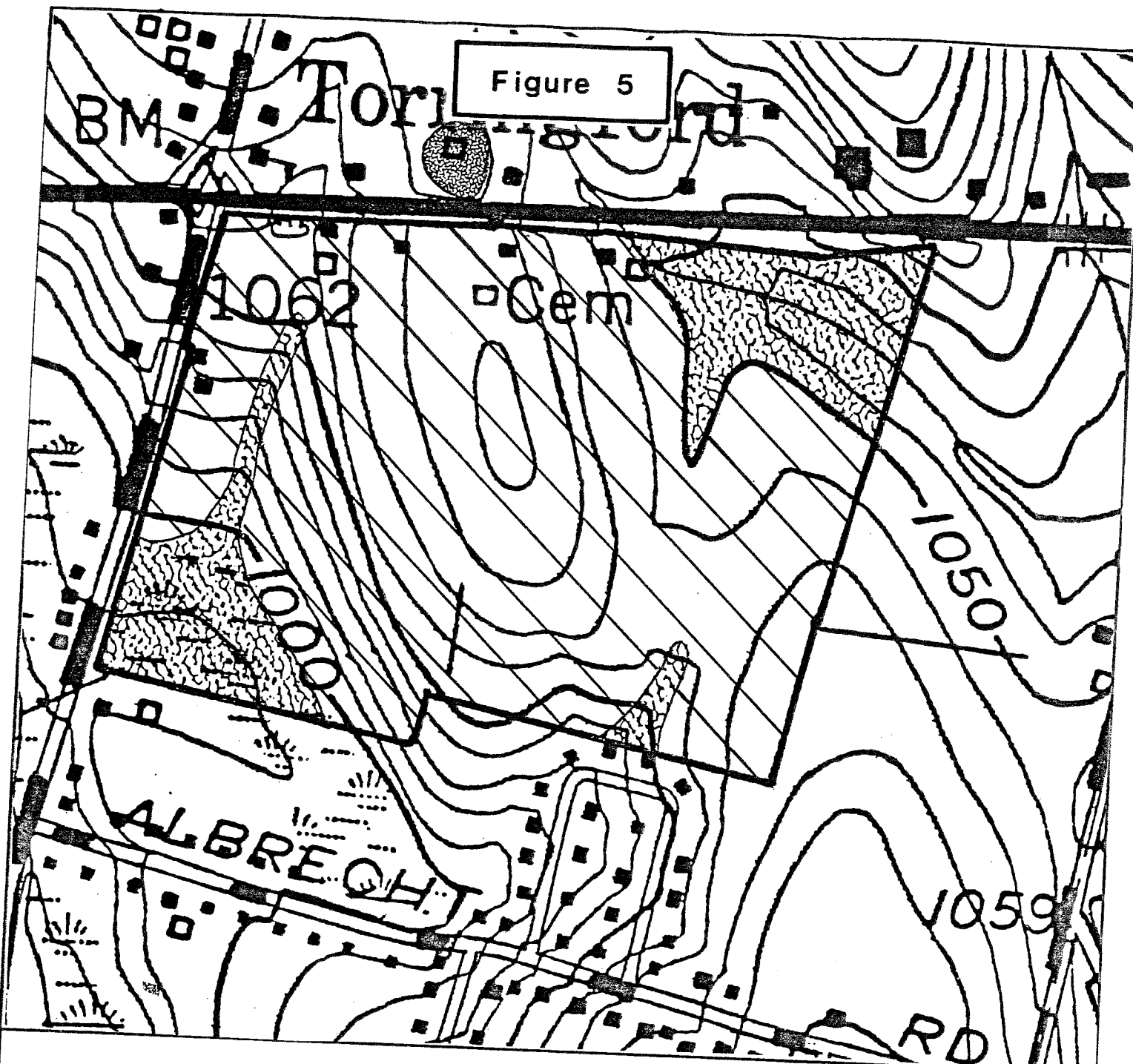


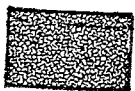
Figure 5



TILL



INLAND WETLANDS (approx.)



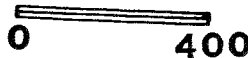
BEDROCK EXPOSURE

LITCHFIELD HILLS MALL

TORRINGTON, CONNECTICUT

SURFICIAL GEOLOGY

King's Mark Environmental Review Team



expected to have seasonal high water tables, which are usually associated with watercourses. As such, these areas are subject to frequent flooding especially during the wet time of year. The severe wetness of these areas makes construction of any type difficult. Both of these wooded, swampy areas appear to have good flood-control and sediment retention attributes. It seems likely that both areas are capable of retaining considerable peak stormwater flows. Replacing the wetlands with parking lots, roads and buildings will eventually diminish the retention function to the point where downstream flooding may be unduly aggravated unless preventative measures are taken.

It is understood that regulated activity will need to take place in areas comprised of inland-wetlands soils in order to develop the mall site. Because these soils are classified as inland-wetland soils in Connecticut, they are regulated under Public Act 155. Any activity which involves modification, filling, removal of soils, etc., will require a permit and ultimate approval by the Inland-Wetland Commission. In reviewing a proposal, the Commission needs to determine the impact that the proposed activity will have on the wetlands. If the Commission determines that the wetland is serving an important hydrological or ecological function and that the impact of the proposed activity will be significant, they may deny the activity altogether or, at least, require measures that would minimize the impact. Also, if more than one acre of wetland soil is affected, a permit from the U.S. Army Corps of Engineers may be required. Therefore, the applicant's engineer should include information on the site plan such as: (1) quantify amount of fill to be placed on regulated soils; (2) fill lines; and (3) type of fill material to be used. There is also a need to determine the relative importance of the regulated wetlands and watercourses so that a sound decision can be made by the Commission.

Prior to any decision concerning the filling of wetland soils on the site, it is encouraged that the City require the applicant to address all potential environmental impacts to the wetland as it exists at the present time from a hydrologic and ecologic standpoint. Special attention should focus on the ability of the disturbed wetlands areas to: 1) provide flood storage; 2) trap sediment; 3) clean inflowing water; and 4) provide habitat for wildlife. Also, consideration should be given to the effects of the proposed wetland fillings off-site (see Wetland Considerations Section).

GEOLOGIC DEVELOPMENT CONCERNS

It is understood that the proposed mall site will be serviced by public water from the Torrington Water Company and by public sewers tied into the Torrington municipal system. Therefore, the major hydrogeologic impacts, i.e., on-site septic systems, water supply wells, etc., commonly associated with developments, which do not have access to the above utilities, would not be expected to be overly problematic. However, besides the potential impacts to regulated wetlands on the site from filling discussed in the previous section, the cutting and filling on "hardpan" soils warrants close attention.

Deep cuts in hardpan soils are extremely difficult to stabilize, especially during the wet time of year (November to May). This is due mainly to seepage of water over the hardpan layer, which creates an unstable condition below the seepage line. The weight of the unstable soil may cause slope failure and slumping. Once this begins, the slope is very difficult to stabilize. The establishment of good vegetative cover is practically impossible on these eroding slopes. Besides the unsightly conditions, the eroded soils must be removed from the base of the slope.

In order to control these potential hazards, a detailed erosion and sediment control plan is paramount prior to any construction or earthwork on the site. During the field walk, the Team's Geologist observed earthwork had been recently done on the site without erosion and sediment control measures. As mentioned earlier, this type of uncontrolled activity on "hardpan" soils can create major problems. In addition, the project engineer needs to carefully plan the artificial drainage system for the project, which is essential on the "hardpan." Of special concern, are those areas where "hardpan" cuts and fills are made. If buildings have basement facilities, they should be protected by footing drains. This will hopefully keep basements dry.

The Connecticut Soil Erosion and Sediment Control Act (Public Act 385-388), which became fully effective July 1, 1985, requires a detailed erosion and sediment control plan for the project. The erosion and sediment control plan should be properly enforced by the City. Because of the seasonally high water tables that characterize these soils and because of the high silt content in the soils, the chance for environmental damage from silt and erosion to neighboring properties and downstream watercourses and wetlands would be expected to be high unless erosion and sediment control measures are properly installed. It is suggested that temporary sediment pools be constructed prior to any land disturbance on the site. Also, it is strongly suggested that any construction be done during the dry time of year, May to November, when groundwater tables have receded. This will hopefully reduce the chance for erosion/siltation problems.

A letter from the applicant's geotechnical engineer accompanies the site plan. As indicated by the letter considerable care needs to be taken if the on-site materials (till) are used for fill material. The recommendations made in the letter by Clarence Welti must be followed very closely. It might be

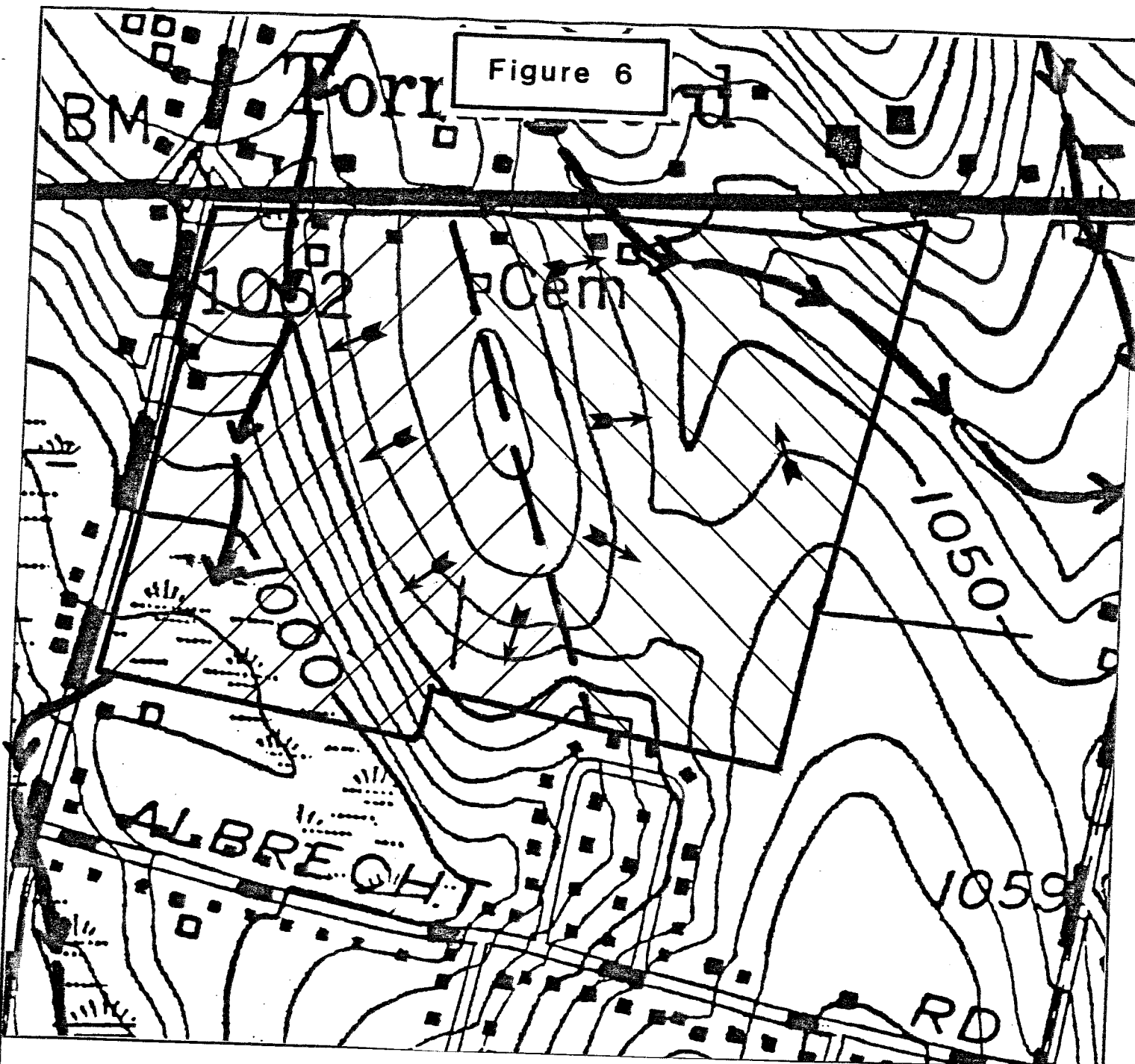
wise to have the geotechnical engineer oversee the filling and grading work on the site to insure that no problems arise.


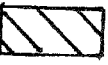


HYDROLOGY

Drainage runoff from the site can presently be divided nearly in half. The long axis of the drumlin forms the drainage boundary (see Figure 6). Surface runoff emanating in the eastern parts drains eastward to an unnamed tributary of East Branch Leadmine Brook. The Brook drains an area of 2.97 square miles or approximately 1900 acres from its mouth in Harwinton. Surface runoff in the western parts of the site flows downslope to West Branch Leadmine Brook. West Branch Leadmine Brook drains an area of 3.25 square miles or about 2080 acres from just above its confluence with East Branch Leadmine Brook. The site is located in the upper regions of both watersheds. Generally speaking, groundwater flow on the site presently reflects the surface water flow.

The proposed development will greatly change the hydrology of the headwater region of both Brooks. The project engineer indicated on the review day that even though the drumlin hill will be leveled down, present plans are to maintain the existing natural drainage boundary. Because of the tremendous amounts of filling and grading that will be required to develop the parcel, the amount of impermeable surfaces that will be created, and the drainage-directing measures to be employed, the character of the headwater regions for both Brooks will be altered markedly. According to DEP, the Brooks are both Class AA streams, which means that they are existing or proposed public drinking water supply impoundments and tributary surface waters. In this regard, it is understood that the Bristol Water Company will be diverting water from the East Branch Leadmine Brook about 1,000 feet out of Leadmine Brook Road in

Figure 6

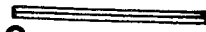



-  Portion of site that drains to West Branch Leadmine Brook
-  Portion of site that drains to East Branch Leadmine Brook
-  Watercourses showing direction of flow
-  Direction of surface flow

LITCHFIELD HILLS MALL
TORRINGTON, CONNECTICUT

WATERSHED HYDROLOGY

King's Mark Environmental Review Team

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Harwinton. A small impoundment would be created on the stream from which water would be drawn during the springtime. The water would then be transported via pump to Bristol Reservoir #8.

It seems likely that the existing high water quality of both streams would be noticeably lowered by this project. For this reason, it is most important that a sound erosion and sediment control plan be prepared, implemented and enforced. To give an example, if the uncontrolled activity observed on the site during the field review is allowed to continue, surface waters in this area will pick up significant amounts of suspended and dissolved solids and transmit these to the Brooks. This may result in strong coloration, as well as a substantial increase in turbidity in the Brooks. Debris from the parking lots, including sand and salt used in winter, spilled hydrocarbons and other automobile-related residues will be carried directly by surface runoff through the new drainage channels into either of the two water detention ponds proposed for the site. Although most of the sand and litter should be trapped within the basins, salt and other dissolved materials and some suspended particles probably will be transmitted into the Brooks. Since the detention basins will probably serve a sediment retention function, there is need for a regular maintenance program, i.e., removal of silt from the basin. It is recommended that the applicant contact DEP's Water Compliance Unit (566-5905) to determine if a permit is required for stormwater discharge to watercourses on the site. Also, in addition to contacting DEP Water Compliance, it is strongly suggested that the Bristol Water Department and the State Department of Health Services Public Water Supply section be contacted regarding the proposed mall development and public water supply reservoir/diversion on the East Branch Leadmine Brook. Appendix A contains a copy of Section 19-13-B32. Sanitation of watersheds of the Public Health Code, which regulates activity to land and

watercourses tributary to a public water supply including both surface and groundwaters. With respect to the proposed mall, it appears that sections (a), (f), (h) and (i) would be of greatest concern. In order to ensure that water quality to the streams is maintained at the highest quality, the town needs to coordinate the stormwater management plan for the mall closely with DEP Water Compliance, State Health Department Public Water Supply section, and representatives from the Bristol Water Department.

Team members were informed on the review day that flooding problems exist southwest of the site along West Branch Leadmine Brook. The applicant should be required to demonstrate that no hydrologic problems, i.e., flooding would result on or off-site following the mall development. Development of the site would be expected to significantly increase the amount of runoff shed from the site. The amount of increases will depend upon the extent of development, the amount of impervious surfaces created and the amount of vegetation removed or preserved. In order to handle post-development runoff increases, two detention basins, both created by earthen dams, are proposed in wetland areas in the southwest and northeast corners of the site. With regard to the earthen dams, the applicant should check to see if a permit will be needed by the Dam Safety Unit of DEP. Careful examination by the City's engineer of the final stormwater management plan, drainage calculations and detention basin design is warranted before final approval.

SOIL RESOURCES

The landscape of the Litchfield Hills Mall site is dominated by deep, gently to strongly sloping, glacial till soils with a firm, dense substratum (hardpan) at approximately a two foot depth. The soils on the convex

drumloidal landform are dominantly well drained to moderately well drained. The soils in the concave areas in the southwest and northeast corners of the parcel are dominantly poorly drained and very poorly drained.

The soil map included with this report (Figure 7) has been created from on-site investigation, air photo interpretation, and information provided by Soil Science Services. This map can be used for general discussion of soil limitations on this parcel. All discussions about inland wetland locations and boundaries should use the wetland boundaries mapped by Soil Science Services. A chart of important soil features and interpretations has been prepared (Appendix B). Below are listed some additional soils information and concerns:

1. Included in the area mapped Lg in the northeast corner are small narrow areas of alluvial soils along East Branch Leadmine Brook.
2. Included in areas mapped PeD are areas of moderately well drained soils on 8 to 15% slopes, small areas of poorly drained sidehill seeps and areas with extremely bouldery surfaces. The proposed grading plan includes large cuts and fills (up to 20 feet), clearing of natural vegetation off steep to very steep slopes and proposed finished slopes of 2:1. As proposed, these soil materials will be difficult to stabilize with vegetation and may be subject to slumping and severe erosion.

The "clearing limits of disturbance" shown on the plans coincide with the wetland limits at the base of the slope. Because of the large amount of earth moving proposed and the limitations of this area, the schematic is not realistic, and work will certainly extend into the wetlands area.

To minimize the hydrologic impact on the wetlands in the southwest corner and avoid potential slope stability problems, alternatives should be considered. These could include: staying off these sensitive slopes and rearranging the parking or building scheme, terracing the parking areas or using the areas "reserved for future development."

3. Currently much of the water for the wetlands in the southwest corner comes from the landform to the east. As proposed most of this area would be developed, with large impervious areas and point discharge of water rather than natural seepage and overland flow. This proposed change will impact the seasonal moisture regime of this wetlands system.

EROSION AND SEDIMENT CONTROL PLAN

An erosion and sediment (E&S) control plan has been provided for the proposed development. The following comments/recommendations for this E&S plan are listed by sheet number.

Sheet S-1

1. Trench drain #69 is shown as the outlet to one section of the drainage system. No detail for this trench drain was included. If this drain is to percolate water into the ground it should be noted that these soils typically have very slow perc rates. An alternative outlet for this water should be investigated.
2. The plunge pool shown in the northeast corner of this sheet has no outlet. This drainage outlet needs to be clarified. The high groundwater table of the wetland soil at this plunge pool is likely to be saturated much of the year, limiting percolation of drainage water into the ground.
3. The silt fence should be moved below the fill in the wetland on the western side of sheet S-1.

Sheet S-2

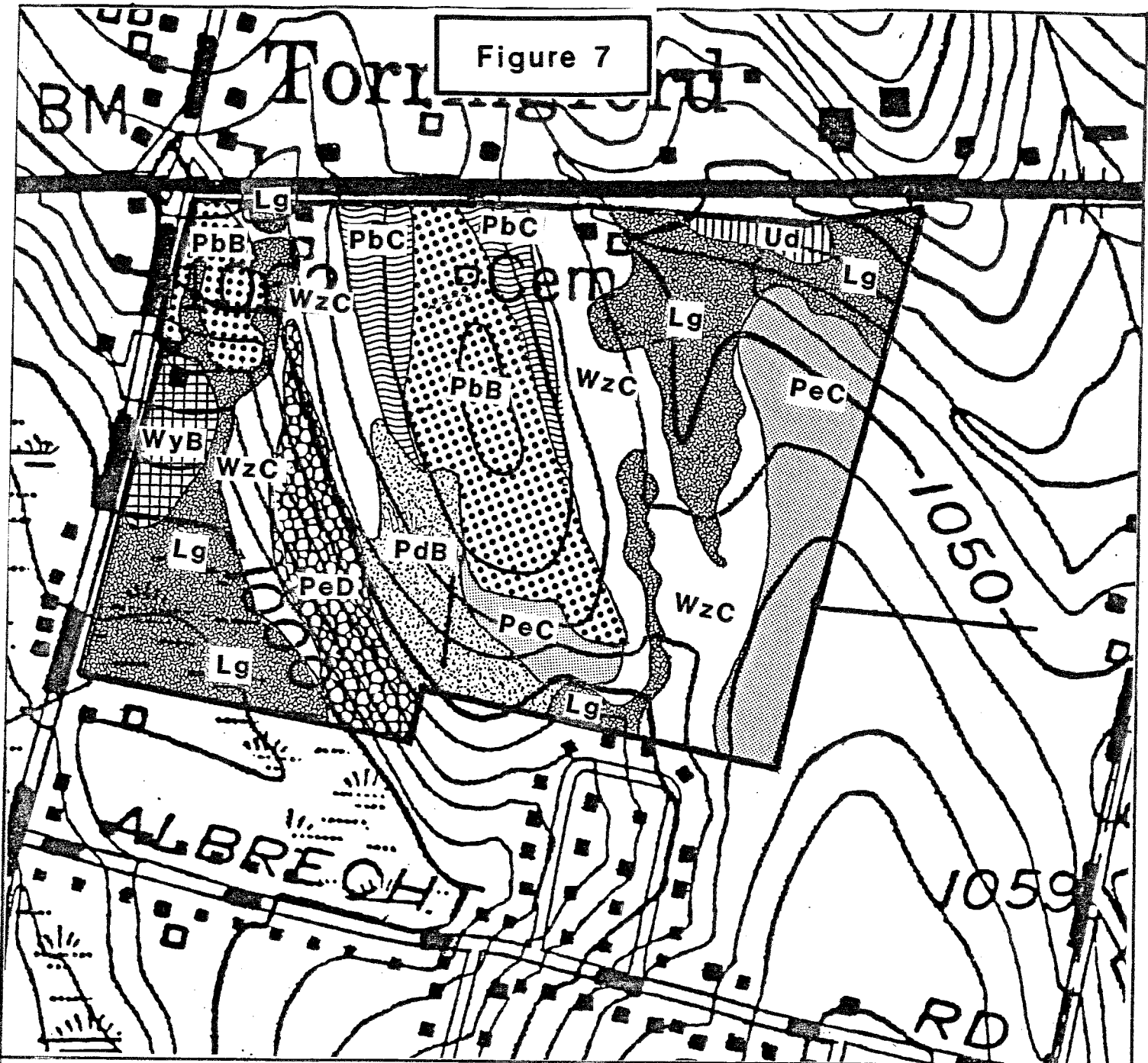
1. Rip-rap may be needed to stabilize the proposed channel through the detention basin.

Sheet S-3

1. Filter fence is needed along the east side of the proposed land filling.
2. Two drains are proposed to outlet on the fill slope on the east edge of the land grading. The drainage pipe should be extended at least to the toe of the proposed slope.
3. Trench drain #88 is shown as the outlet to one section of the drainage system. See comment on sheet S-1.

There is an existing potential E&S problem on the site due to the top soil removal in the drumlin area. This area could be seeded to a temporary seed mix such as annual rye. The Connecticut Guidelines for Erosion and Sediment

Figure 7



- LG - LEICESTER, RIDGEBURY AND WHITMAN
VERY STONY FINE SANDY LOAM *
- PbB - PAXTON FINE SANDY LOAM, 3-8%
SLOPES
- PbC - PAXTON FINE SANDY LOAM, 8-15%
SLOPES
- PdB - PAXTON STONY FINE SANDY LOAM,
3-8% SLOPES
- PeC - PAXTON VERY STONY FINE SANDY
LOAM, 3-15% SLOPES
- PeD - PAXTON VERY STONY FINE SANDY
LOAM, 15-35% SLOPES
- Ud - UDORTHENT'S SMOOTHED
- WyB - WOODBRIDGE STONY FINE SANDY LOAM,
3-8% SLOPES
- WzC - WOODBRIDGE VERY STONY FINE SANDY
LOAM, 3-15% SLOPES

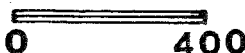
* WETLAND SOILS

**LITCHFIELD HILLS
MALL**


TORRINGTON, CONNECTICUT

SOILS

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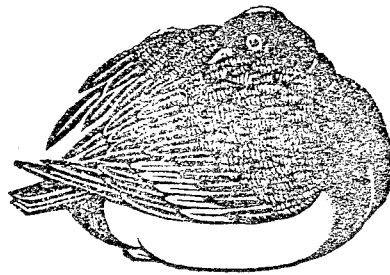
Control should be followed for this temporary seeding.

Extensive wetland filling is proposed for this development. The wetland filling is dominantly for the construction of the parking areas, roads and storm water detention basins. Alternative plan layouts that would reduce wetland filling should be investigated. If parking could be reduced in wetland areas this would reduce some of the filling. Because such extensive wetland filling is proposed, consideration should be given to placing conservation easements on the remaining wetlands on-site, to minimize the effect of future development on these areas.

Salt tolerant grasses may be needed along the road and parking lot edges where snow will be piled. These grasses will survive the salt laden snow burden and protect the edges from spring erosion.

Buffers are needed along the eastern, southern and western edges of the proposed development to trap trash and provide a visual and noise barrier. Fencing can provide a barrier to trash, sight and sound. The proposed 8 foot high opaque fence might be extended to the eastern and western edges of the proposed development for this purpose. Evergreen shrubs and trees can provide a barrier to sight and sound. Increasing the amount of evergreen perimeter plantings would provide a better sight and sound buffer.

BIOLOGICAL RESOURCES



WETLAND CONSIDERATIONS

Wetland Classification and Character

The parcel of land under review is approximately 60.480 acres at the corner of Rte. 202 and Rte. 183 in Torrington, Connecticut. Konover Development Corporation, the land owner, is proposing the development of Litchfield Hills Mall. This proposed development will result in the direct filling of approximately 5.8 acres of wetlands and have indirect impacts on another 9.7 acres of adjacent wetlands. The majority of the wetlands, 8.617 acres, are located on the eastern slope of the proposal site. These are typified by Leicester, Ridgebury, Whitman, very stony, fine sandy loam mineral soils, on a 0-12% slope. These wetlands are divided into two main bodies, one running to the north where it intercepts the East Branch Leadmine Brook, and the other running to the south, off of the property.

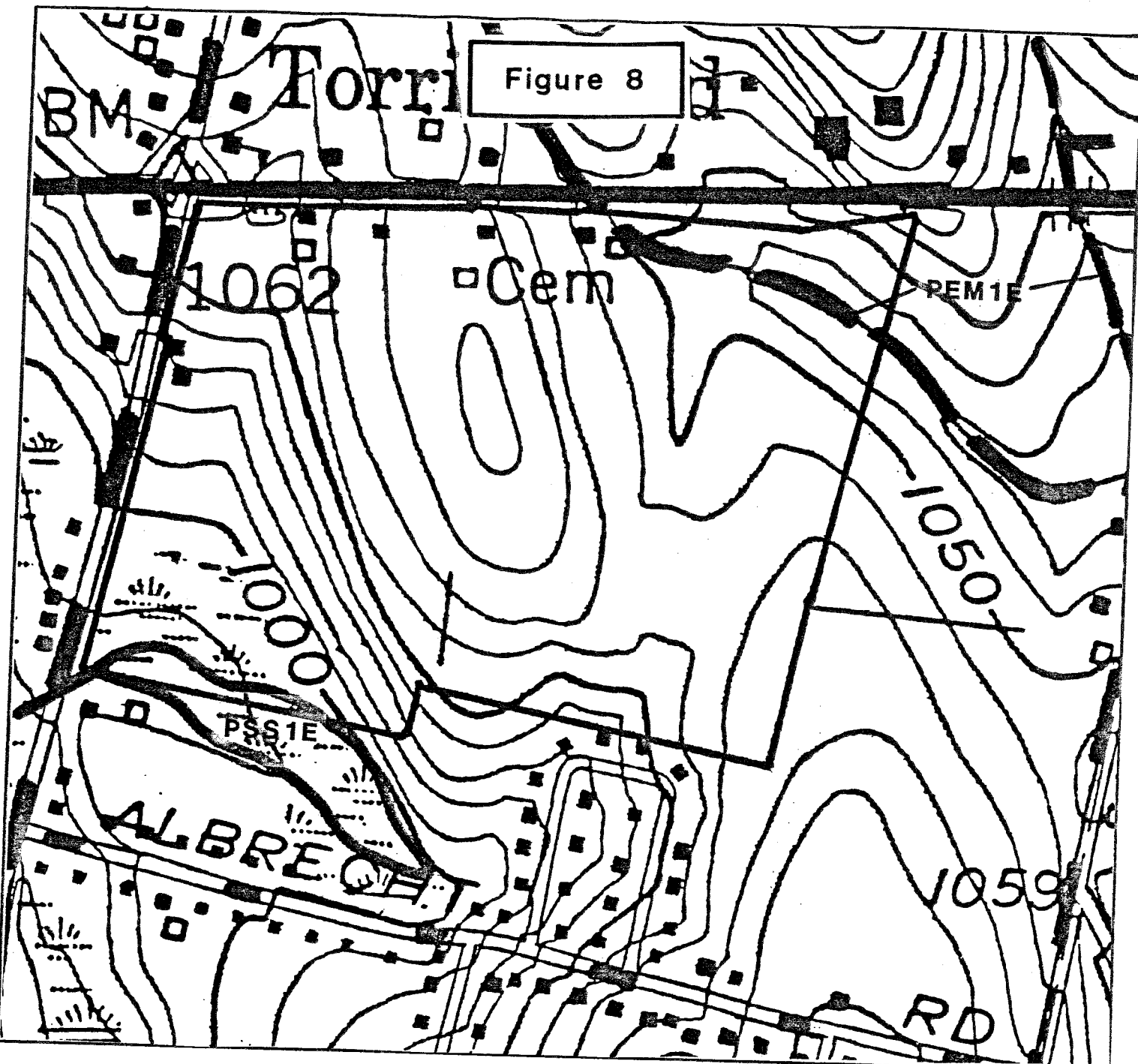
The remaining 6.9 acres of wetlands are located on the western portion of the site. These wetlands run from north to south following an intermittent seasonal watercourse and broadening towards the south into a large wooded shrubbed swamp. As defined by the Fish and Wildlife Service, under the National Wetlands Inventory, all of these wetlands are classified as follows (see Figure 8):

PSS1E - Palustrine; scrub/shrub; broad-leafed deciduous;
seasonally saturated.

PEM1E - Palustrine; emergent; persistent; seasonally saturated.

The wetlands have the following vegetative character. Wetland (1), the western portion of the site, running north to south: Red Maple (Acer rubrum), Highbush Blueberry (Vaccinium corymbosum), Winterberry (Ilex verticillata), Smooth Alder (Alnus serrulata), Hemlock (Tsuga canadensis), Mountain Laurel

Figure 8



PSS1E Palustrine, scrub/shrub,
broad-leaved deciduous,
seasonally saturated

PEM1E Palustrine, emergent,
persistent, seasonally
saturated

LITCHFIELD HILLS MALL

TORRINGTON, CONNECTICUT

NATIONAL WETLAND INVENTORY

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(Kalmia latifolia), Yellow Birch (Betula lutea), Tussock Sedge (Carex stricta), Soft Rush (Juncus effusus), Jewelweed (Impatiens capensis), and Goldenrod (Solidago sp.). Wetlands (2) and (3), on the eastern slope of the site, contain much of the same vegetation with some additions: Gray Birch (Betula populifolia), Spicebush (Lindera benzoin), and Cinnamon Fern (Osmunda cinnamomea).

All species mentioned above were identified in Micheal Klien's biological inventory and wetland evaluation, which was submitted with the application. The wetlands on site are in good condition, with the exception of a portion of the East Branch Leadmine Brook. Substantial disturbance has occurred near a house and barn adjacent to where the brook crosses under Route 202. This disturbance is primarily due to the creation of grazing and pasture area for horses. The rest of the wetlands on the site represent fair to good wetland systems.

Wetlands Functional Values

These wetlands primarily act as intermittent streams for surface runoff and ground water seepage. Some of the other functions which exist include wildlife habitat, water purification, sediment filtration, flood water storage, nutrient recycling, and visual and aesthetic diversity.

With respect to habitat these wetlands vary from fair to very good. Their location, perched within the uplands, offers some vegetative and ground cover diversity desirable for mammals typically adapted to such areas, i.e., rabbits, squirrels, skunks, racoons, deer, etc. The scrub/shrub wetlands on the western portion of the property provides a dense undergrowth and is an excellent nesting area for birds. The site, as a whole, is of good habitat value since it possesses several ecological communities which provide the desired natural diversity for wildlife.

Impacts of Proposed Development

As proposed, the Litchfield Hills Mall Development will fill approximately 5.9 acres of wetlands and have secondary or indirect impacts to the approximately 9.6 acres remaining. This loss of wetlands will have a severe impact on their habitat value. Essentially, all 15+ acres of wetlands will be lost as desirable habitat due to filling, created detention areas, increased traffic and noise pollution, and subsequent air, water and ground pollution increases, which are the secondary impacts of such developments. The sanding and clearing of parking areas during winter months will increase sediment pollution within already reduced systems. This increased sediment flow will effect vegetation habitat and quality, and could create maintenance problems for the proposed detention basins. Sediment flow into Leadmine Brook tributaries will increase due to the reduced filtration capabilities of the wetlands. This increased sediment flow will also effect the water purification and pollution abatement abilities of the wetlands.

Aesthetic and ecological diversity will also be lost as a result of this development. The size of the project and the degree of topographic restructuring proposed, will reduce the aesthetic character of the area. This is primarily due to the substantial loss of open space which will occur. The loss of these wetlands and open space within an area already under development pressure, will eliminate educational opportunities for surrounding residents.

Based upon the hydrologic and runoff calculations supplied within the application, there does not appear to be a problem with flood storage. Though wetland storage has been reduced, the proposed detention basins appear to be more than adequate to control predicted site runoff flows.

Considerations, Recommendations & Conclusions

- (1) Detention berms, roughly 9 feet in height, will be constructed within existing wetlands in order to control runoff. Such construction within

wetlands is not desirable due to the influences it will have on the existing wetland characteristics. The pooling of water, even for short periods of time, could alter the character and functions of these wetlands. In addition, the developer plans to keep the existing vegetation inside of the detention area. This will lead to increased debris flow into the detention area, and ultimately lead to increased debris flow into the outlet structure, creating potential hazards and increased maintenance. On the other hand, removal of this vegetation is not recommended due to its age, stabilizing function and value as potential habitat. The option of moving these detention areas out of the existing wetlands should be considered. Lastly, due to the size, and amount of water these structures will detain, it is recommended that the developer submit an application to the Dam Safety Unit of the Department of Environmental Protection.

Structures of such size could present a hazard if they were to breach during high water conditions. The Dam Safety Unit should be notified to verify if such potential hazards exist, and evaluate construction plans.

- (2) The southwest corner of the proposed parking area will have a 50 foot drop off at its edge, with a 2 to 1 slope. The toe of this proposed embankment directly borders the wetlands. This hillside, composed of the till taken from the drumlin, poses several potential problems to the wetlands. First, the proposed 2 to 1 slope will be highly susceptible to erosion in the first few months of its creation. This could result in high amounts of sediment pollution within the wetland. If severe sedimentation were to occur it could also influence the holding capacity of the proposed detention basin in that area. An embankment with a slope of 3 to 1 or more is preferred, while further encroachment into the wetlands should be avoided.

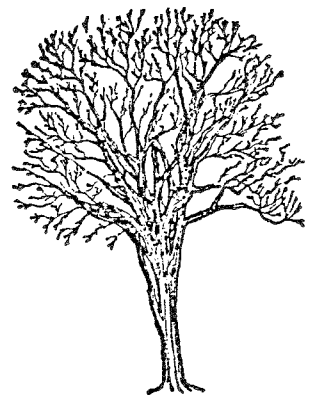
- (3) Due to the extent of the development on the site, and the developer's view that he must keep the option to develop the remaining open areas, no opportunity exists to create new wetlands on site. In light of the amount of wetlands being filled and influenced, creation of new wetland areas should be considered. These kinds of technical improvements are feasible on site.
- (4) If development of any nature does occur on this site, proper monitoring and maintenance of sediment and erosion control devices will be crucial in mitigating the potential hazards associated with the highly erosive soils found there. Hay bales and sediment fences should be properly secured and regularly cleaned and checked to insure best results.

In conclusion, the Inland Wetlands Commission needs to consider if this project is consistent with the State's Inland Wetlands and Watercourses Act, Sections 22a-36 through 22a-45, inclusive. Included in these considerations should be possible mitigation methods and feasible alternatives for the project.

THREATENED AND ENDANGERED PLANT AND ANIMAL SPECIES

According to the DEP - Natural Diversity Database there are no Federally listed Endangered Species or Connecticut "Species of Special Concern" that occur within the study area. The Natural Diversity Data Base contains the most current biologic data concerning endangered or threatened plant or animal species. On-going research continues to locate additional populations of species or locations of habitats of concern as well as updating existing data.

**LAND USE AND PLANNING
CONSIDERATIONS**



PLANNING CONSIDERATIONS

The project site is bordered on the north and west by mixed residential and commercial use, on the east by undeveloped woodland and open land, and on the south by woodland and residential development off Albrecht Road. The project plans offer generous vegetative buffering to the east and west which will serve to minimize aesthetic impact in these adjacent areas. Proposed landscaping along the principal entrance to the project will enhance the aesthetic appearance of the mall as viewed from Route 202 and foster the compatibility of the project with other land uses along Route 202.

The most significant visual intrusion of the project appears to be to the south of the site for those residences located off Louis Circle. However a minimum 125 foot vegetated buffer zone and 6' high opaque fence are proposed to mitigate the adverse impacts in this area.

The City of Torrington is in the process of updating its 1967 Master Plan. The Litchfield Hills Council of Elected Officials is a new regional planning organization and does not currently have a regional plan of development. Thus an assessment of the consistency of the proposed project with the goals of a current city or regional plan is not possible. The compatibility of the project with the comprehensive plan of the City as expressed through its zoning regulations is also problematic since the zoning of the parcel is under litigation. The applicant has indicated however that arrangements have been made with the City and the Torrington Water Company to service the site with potable water and sewer facilities.

The State Policies Plan for the Conservation and Development of Connecticut, 1987-1992 is a statement of the growth, resource management and public investment policies of the state. The plan was prepared by the Office

of Policy and Management and adopted by the Connecticut General Assembly in 1987. The objective of the Plan is to give a balanced response to human, environmental and economic needs in a manner which best suits the future of Connecticut. Regional planning organizations in the state have been encouraged by OPM to foster implementation of the Plan at the local level.

According to the Locational Guide Map which accompanies the State Plan, the subject site has been classified as a "Conservation Area." The State Action Strategy for conservation areas is to "plan and manage for the long term public benefit and 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 subject site has been classified as a conservation area because it is located within a potential public water supply watershed.

The Individual Water Supply Plan for the Bristol Water Department, dated October 30, 1987 identifies the future water supply source in this area as the "Leadmine Brook Diversion." According to the report,

"This proposed diversion site will be located along the East Branch Leadmine Brook approximately 1000 feet south of Leadmine Brook Road in Harwinton. (ed. note: this is about two miles southeast of the proposed mall site.)

The watershed area above this point covers approximately 2.89 square miles of sparsely developed land with a heavily developed section in Torrington bordering the upper fringe of the watershed.

As with the Rock Brook Diversion, a small impoundment structure would be constructed in conjunction with a pump station and transmission main. The water from this diversion, due to its lower elevation, would have to be pumped up to Reservoir No. 8.

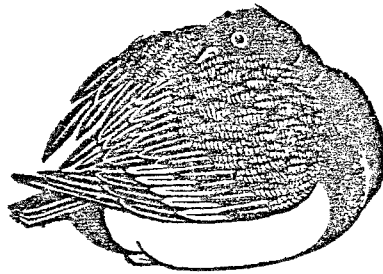
The safe yield of this diversion was calculated to be 0.9 MGD and the average yield will be 3.0 MGD. This diversion will also only be used during high spring runoff."

According to the State Plan, State actions in conservation areas should be designed to "undertake or support only those uses which are compatible with the resource or hazard of concern, including evaluations of both direct and secondary impacts." Use of water supply watershed lands in particular should

not "create an intentional or unintentional point or non-point source of contamination without adequate manmade interceptions and control safeguards as approved by the Department of Health Services and Environmental Protection."

According to the Connecticut Department of Environmental Protection's report entitled "Protecting Connecticut's Groundwater," retail commercial development is a land use posing a major threat to water quality. To the extent that the proposed project diminishes the quality of surface or ground water off-site, it is incompatible with the conservation area designation in the State Plan. It is recommended that the City of Torrington consult with the Bristol Water Company, the Connecticut Department of Health Services, the Connecticut Department of Environmental Protection, and the applicant to identify appropriate mitigating measures for the project. The City may also wish to request the applicant to prepare an assessment of the impact of the proposed project on the businesses in downtown Torrington.

APPENDICES



Appendix A: Sanitation of Watersheds
of the Public Health Code

SANITATION OF WATERSHEDS

Sec. 19-13-B32. Sanitation of watersheds. Unless specifically limited, the following regulations apply to land and watercourses tributary to a public water supply including both surface and ground water sources.

(a) As used in this section, "sewage" shall have the meaning found in section 19-13-B20(a) of the public health code: "Toxic metals" shall be arsenic, barium, cadmium, chromium, lead, mercury and silver and the salts thereof; "high water mark" shall be the upper limit of any land area which water may cover, either standing or flowing, at any time during the year and "watershed" shall mean land which drains by natural or man-made causes to a public drinking water supply intake.

(b) No sewage disposal system, cesspool, privy or other place for the deposit or storage of sewage shall be located within one hundred feet of the high water mark of any reservoir or within fifty feet of the high water mark of any stream, brook, or watercourse, flowing into any reservoir used for drinking purposes.

(c) No sewage disposal system, cesspool, privy or other place for the deposit or storage of sewage shall be located on any watershed, unless such facility is so constructed that no portion of the contents can escape or be washed into the stream or reservoir.

(d) No sewage shall be discharged on the surface of the ground on any watershed.

(e) No stable, pigpen, chicken house or other structure where the excrement of animals or fowls is allowed to accumulate shall be located within one hundred feet of the high water mark of a reservoir or within fifty feet of the high water mark of any watercourse as above mentioned, and no such structure shall be located on any watershed unless provision is made in a manner acceptable to the commissioner of health services for preventing manure or other polluting materials from flowing or being washed into such waters.

(f) No toxic metals, gasoline, oil or any pesticide shall be disposed of as a waste into any watercourse tributary to a public drinking water supply or to any ground water identified as supplying a public water supply well.

(g) Where fertilizer is identified as a significant contributing factor to nitrate nitrogen occurring in excess of 8 mg/l in a public water supply, fertilizer application shall be made only under current guidelines established by the commissioner of health in cooperation with the state commissioner of agriculture, the college of agriculture of the University of Connecticut and the Connecticut agricultural experiment station in order to prevent exceeding the maximum allowable limit in public drinking water

of 10.0 mg/l for nitrite plus nitrate nitrogen.

(h) Where sodium occurs in excess of 15 mg/l in a public drinking water supply, no sodium chloride shall be used for maintenance of roads, driveways, or parking areas draining to that water supply except under application rates approved by the commissioner of health, designed to prevent the sodium content of the public drinking water from exceeding 20 mg/l.

(i) The design of storm water drainage facilities shall be such as to minimize soil erosion and maximize absorption of pollutants by the soil. Storm water drain pipes, except for crossing culverts, shall terminate at least 100 feet from the edge of an established watercourse unless such termination is impractical, the discharge arrangement is so constructed as to dissipate the flow energy in a way that it will minimize the possibility of soil erosion, and the commissioner of health finds that a discharge at a lesser distance is advantageous to stream quality. Special precautions shall be taken to protect stream quality during construction.

Appendix B: Soils Limitation Chart

DRAINAGE CLASS AND DEPTH TO SEASONAL HIGH WATER TABLE

MAJOR LIMITATIONS TO THE DEVELOPMENT OF:
SMALL COMMERCIAL BUILDINGS
ROADS AND STREETS

GENERAL SOIL PROPERTIES

MAP UNIT NAME

MAP UNIT NAME	GENERAL SOIL PROPERTIES	DRAINAGE CLASS AND DEPTH TO SEASONAL HIGH WATER TABLE	MAJOR LIMITATIONS TO THE DEVELOPMENT OF: SMALL COMMERCIAL BUILDINGS ROADS AND STREETS
Lg - Leicester, Ridgebury, and Whitman very stony fine sandy loam	Undifferentiated unit of glacial till soils formed in dense loamy material	Poorly to very poorly drained 0-1.5 ft.	Subject to frost action, wetness
PbB - Paxton fine sandy loam, 3-8% slopes	Glacial till soils formed in dense loamy materials	Well drained 1.5-2.5 ft.	None
PbC - Paxton fine sandy loam, 8-15% slopes	Glacial till soils formed in dense loamy materials	Well drained 1.5-2.5 ft.	Slope, seasonal wetness None
PdB - Paxton stony fine sandy loam, 3-8% slopes	Glacial till soils formed in dense loamy materials	Well drained 1.5-2.5 ft.	Seasonal wetness None
PeC - Paxton very stony fine sandy loam, 3-15% slopes	Glacial till soils formed in dense loamy materials	Well drained 1.5-2.5 ft.	Slope on areas >8%, seasonal wetness None
PeD - Paxton very stony fine sandy loam, 15-35% slopes	Glacial till soils formed in dense loamy materials	Well drained 1.5-2.5 ft.	Slope, seasonal wetness None
Ud - Udorthents smoothed	Variable, highly disturbed by cutting and filling	Well to moderately well drained 1.5-2.5 ft.	Seasonal wetness None
WyB - Woodbridge stony fine sandy loam, 3-8% slopes	Glacial till soils formed in dense loamy material	Moderately well drained 1.5-2.5 ft.	Seasonal wetness, slope Subject to frost action
WzC - Woodbridge very stony fine sandy loam, 3-15% slopes	Glacial till soils formed in dense loamy material	Moderately well drained 1.5-2.5 ft.	Seasonal wetness, slope on areas >8% Subject to frost action

NOTES

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, soil scientists, foresters, climatologists, landscape architects, recreational 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 83 town area serving western Connecticut.

As a public service activity, the Team is available to serve towns and/or developers within the King's Mark RC & D Area - free of charge.

PURPOSE OF THE ENVIRONMENTAL REVIEW TEAM

The Environmental Review Team is available to assist towns and/or developers in the review of sites proposed for major land use activities. For example, the ERT has been involved in the review of a wide range of significant land use activities including subdivisions, sanitary landfills, commercial and industrial developments, and recreational/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 site, and highlighting opportunities and limitations for the proposed land use.

REQUESTING AN ENVIRONMENTAL REVIEW

Environmental Reviews may be requested by the chief elected official of a municipality, or the chairman of an administrative agency such as planning and zoning, conservation, or inland wetlands. Environmental Review Request Forms are available at your local Soil and Water Conservation District, and the King's Mark ERT Coordinator. This request form 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 investigate. When this request is approved by the local Soil and Water Conservation District and King's Mark RC & D Executive Committee, the Team will undertake the review. At present, the ERT can undertake two (2) reviews per month.

For additional information regarding the Environmental Review Team, please contact your local Soil and Water Conservation District or Nancy Ferlow, ERT Coordinator, King's Mark Environmental Review Team, King's Mark Resource Conservation and Development Area, 322 North Main Street, Wallingford, Connecticut 06492. King's Mark ERT phone number is 265-6695.