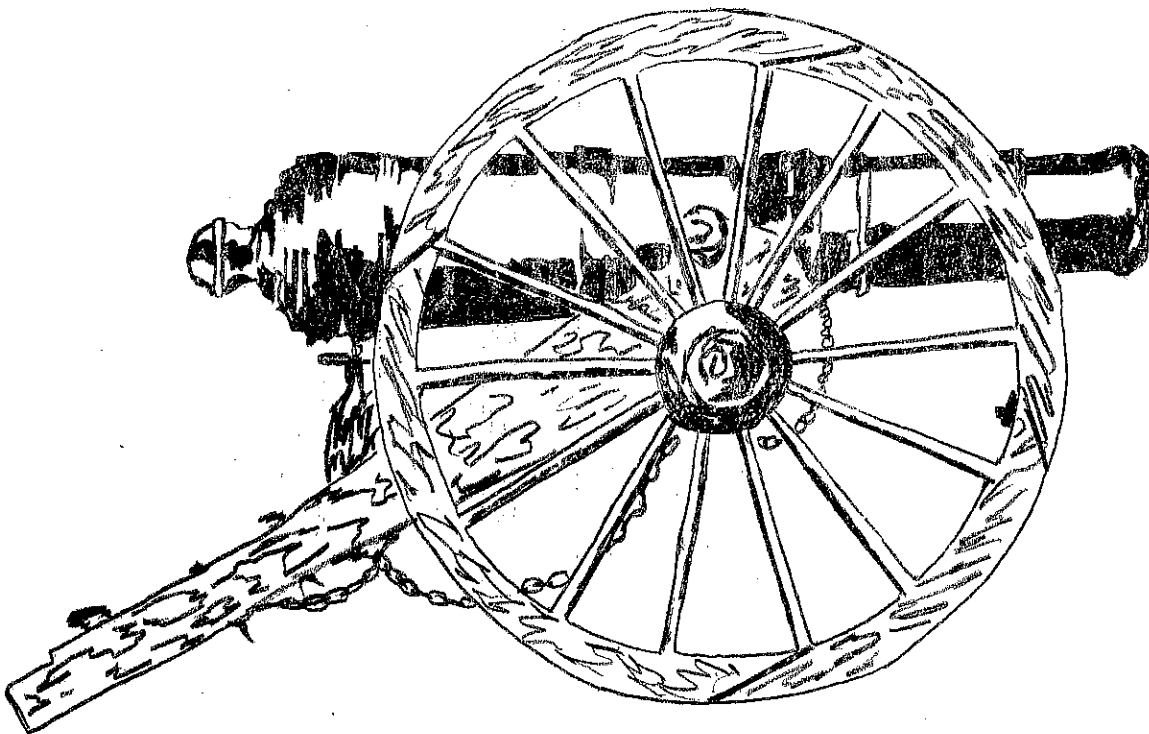


EASTERN CONNECTICUT MEASURE PLAN

ENVIRONMENTAL REVIEW TEAM REPORT
ON
FRANK COOLEY SUBDIVISION



RESOURCE CONSERVATION & DEVELOPMENT PROJECT

Assisted by:
UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service

ENVIRONMENTAL REVIEW TEAM REPORT
ON
FRANK COOLEY SUBDIVISION
TOWN OF KILLINGLY, WINDHAM COUNTY, CONNECTICUT

This report is the outgrowth of a request from the Killingly Planning Commission, Town of Killingly, with the approval of the owner and/or developer, to the Windham County Soil and Water Conservation District. The S&WCD referred this request to the Eastern Connecticut Resource Conservation and Development Project Committee for their consideration and approval as a Project measure. The request had been approved and the measure reviewed by the Environmental Review Team.

The soils of the site were mapped by a soil scientist, of the USDA - Soil Conservation Service. Reproductions were made of the soil survey, natural soil group descriptions, proportional extent of soils, and a table of limitations for urban development and were forwarded to all members of the team prior to their review of the site.

The team that reviewed the Cooley Subdivision consisted of the following personnel:

Soil Conservation Service

- A. Weeks, District Conservationist and Team Coordinator
- E. Minnick, Engineering Specialist
- L. Small, Resource Conservationist
- D. Hutchison, Soil Scientist

Connecticut State Department of Environmental Protection

- J. Piza, Fish Biologist
- G. Clotier, Forester
- D. Meade, Geologist

Connecticut State Department of Health

- F. Grosso, Sanitarian

Northeastern Connecticut Regional Planning Agency

- J. Hester, Planner

The team met and reviewed the entire site on March 1, 1973. Reports from each team member were sent to the Team Coordinator for review and summarization.

This report is not meant to compete with private consultants by supplying site designs or detailed solutions to development problems. The report identifies the existing resource base and evaluates its significance to the proposed development and also suggests considerations that should be of concern to both the administrative agency and the developer. The results of this team action are oriented toward the development of a better environmental quality and the long-term economics of the land use.

The Eastern Connecticut RC&D Committee hopes you will find this report of value and assistance in making your decisions on this particular site.

If you require any additional information, please contact:

Albion Weeks, District Conservationist
Brooklyn Agricultural Center
Wolf Den Road
Brooklyn, CT 06234

SUMMARY

Frank Cooley Subdivision

WATER SUPPLY

Wells drilled into bedrock are the only feasible means of deriving water supplies at the present time. One might expect true yields in the vicinity of 3 to 7 gallons per minute but recognize that a range from 0 to 50+ gallons per minute is possible. The US Geological Survey has designated this area as one in which water quality is generally good. The large thickness of unconsolidated materials should provide good renovation of waste water and coupled with a large dilution factor water quality should not deteriorate.

Due to the great thickness of overburden, bedrock should not present any problems. The unconsolidated material, if it is fairly uniform and similar to that observed, should provide fairly good drainage for leachfields. Water quality from on-site wells should be good but quantity might be questionable. Wells should be protected from potential pollution hazards.

WASTE DISPOSAL

The well drained deep soils on moderate slopes would have little or no problems with sewage disposal systems. Systems on steep soils will have a greater chance for failure. Care should be taken when constructing a sewage disposal system adjacent to the two natural waterways to prevent a potential pollution hazard to Snake Meadow Brook. Poorly and very poorly drained soils would have severe limitations for waste disposal systems.

FOUNDATION DEVELOPMENT AND GRADED CONDITIONS

No significant problems should be encountered for building foundations except in the areas adjacent to the streams. Grading and establishment of proper cover on disturbed areas should easily be accomplished with proper liming, fertilizing and seeding techniques. Disturb small areas at any one time. Silt basins should be considered in the natural waterways to protect Snake Meadow Brook from silt and sedimentation.

ROADS AND UTILITIES

Properly designed storm drains should be installed along all streets. The narrow section located on the north end of the subdivision does cross a natural waterway or depression. The contours on the plot plan are in error and do not show the deep depression. If a road is to be built across this depression both cutting and filling will be needed. Construct small amounts of roads at any one time and stabilize the area before building additional roads. Consider the use of temporary debris basins to protect Snake Meadow Brook from silt and sedimentation.

HAZARDS

None observed by the team members.

AESTHETIC AND PRESERVATION

Forestry - see attached report.

The property has a varied topography, an interesting association of trees, shrubs and other plants and provides an excellent opportunity for an imaginative setting for individual home sites. One or more ponds should be considered for both aesthetics and recreational uses. No known historic or archeologic sites which merit preservation are present.

SERVICES TO SUPPORT DEVELOPMENT

Road Network: The slope on Jacques Road, the principal road which enters and continues through the development, exceeds 15 percent and will be a potential hazard. The steepness may cause difficulty in clearing during winter months and other maintenance problems related to excess runoff during wet periods. Unless the road is well drained, ice formation during the winter could be a safety hazard for pedestrian and auto traffic.

It may be very hard to complete Jacques Road north to Cranberry Bog Road because of rough topography adjacent to the unnamed brook which runs east to west into Tetreault Pond and is perpendicular to the proposed completed road.

Services to Support Development: This development is located within a diffuse village center known as South Killingly. There is no commercial development in the immediate vicinity of South Killingly to service the needs of a steadily growing population in that area

of the town. The closest commercial center is the Danielson-East Brooklyn area. Children who will travel by bus to the Killingly public schools in Danielson have approximately average length rides. There is no large employment center within the South Killingly area.

ATTACHMENT

FORESTER'S REPORT

HOUSING DEVELOPMENT BEING CONSTRUCTED IN FOREST LAND. FOREST LAND CONSISTS MOSTLY OF OLD FIELD WHITE PINE - 41 - 60 YEAR AGE CLASS AND MIXED HARDWOODS, PRINCIPALLY OAK AND MAPLE. MIXED HARDWOODS ARE GROWING ON MOIST SOILS, WITH CONSIDERABLE SLOPE. WHITE PINE COMPRISES 70% OF THE STAND AND ARE LOCATED ON THE BETTER DRAINED FINE, SANDY LOAM SOILS ON LIGHT TO MODERATE SLOPES.

PRESENT CONSTRUCTION SHOWS OWNER HAS RECOGNIZED VALUE OF LARGE TREES AROUND HOME LOTS, BUT BETTER PLANNING AND CONTROL OF EQUIPMENT OPERATORS IS NEEDED. TWO OUTSTANDING SUGAR MAPLES ALONG ROAD HAVE BEEN DAMAGED NEEDLESSLY AND SEVERAL POTENTIAL SHADE TREES ON DEVELOPED LOTS HAVE BEEN PLACED IN JEOPARDY DUE TO PLACING OF FILL OVER THE BASE OF THE TREES.

THE FORESTED TRACT HAS GREAT POTENTIAL FOR DEVELOPMENT AS AN ENVIRONMENTALLY PLEASING LANDSCAPE.

1. CAREFUL PLACING OF HOMES WITHIN THE FORESTED LOT IS NEEDED.
2. MINIMUM CUTTING AND CLEARING SHOULD BE DONE TO PRESERVE THE EXISTING TREE COVER.
3. THE IMPORTANCE OF CAREFUL OPERATION OF EQUIPMENT, AND MINIMUM DISTURBANCE TO ROOT SYSTEMS OF RESIDUAL TREES SHOULD BE STRESSED.
4. FITTING THE FOUNDATION INTO THE LANDSCAPE WITHIN THE LIMITS OF LOT RESTRICTIONS SHOULD BE MADE FOR PURPOSES OF PRESERVING FORTY (40) OR MORE YEARS OF GROWTH ON THE EXISTING STAND.
5. RESEARCH FINDINGS BY THE N.E. FOREST EXPERIMENT STATION SHOW THE HEAVILY TREADED LOTS ARE APPRAISED FROM 1000 TO 6000 DOLLARS MORE THAN LOTS WITH HOUSES OF SIMILAR VALUE ON EXPOSED LOCATIONS.
6. THE MIXED HARDWOOD STAND IS LOCATED ON A STEEP, WET SLOPE AND DOES NOT APPEAR TO HAVE SUFFICIENT SIZE FOR LOT DEVELOPMENT. IT SHOULD BE LEFT RELATIVELY UNDISTURBED.
7. SALVAGE OF PINE PULP AND SAWLOGS MAY BE FEASIBLE ON THE LOTS BEFORE DEVELOPMENT. MARKING OF ACCESS ROAD LIMITS, FOUNDATION AND (20) TWENTY FEET OF WORKING AREA, AND INDIVIDUAL TREES FOR THINNING COULD BE DONE PRIOR TO DEVELOPMENT. MATERIALS WOULD BE GIVEN TO OPERATOR IN EXCHANGE FOR CAREFUL LOGGING AND CONSERVATIVE THINNING. NAMES OF OPERATORS ARE AVAILABLE FROM THE REGIONAL FORESTER, DEPT. OF ENVIRONMENTAL PROTECTION, RD #1, VOLUNTOWN, CT. (BOX 23A). 06384
8. RAPIDLY DEVELOPING AREA, COMPATIBLE TO AREA IN GENERAL. LAND USE VALUE NOT COMPATIBLE TO FOREST USE VALUE.