AD

Sept. 7, 1978

Critique of Bedminster Township's Critical Areas
(Report No. 4)

pg. 13

Note.: Expert Report

AD 0000 30E

REPORT NO. 4

CRITIQUE OF BEDMINSTER TOWNSHIP'S CRITICAL AREAS

PREPARED BY
RSWA, INC.
SEPTEMBER 7, 1978

The preservation of environmentally critical lands is an issue of importance to every community. Equally important, in our society, is the preservation of the individual rights of the landowner. The taking issue is critical to the "reasonableness" of any zoning of critical lands. The most important criteria to emerge from New Jersey case law are that "reasonableness of zoning ordinances is the test and reasonableness is presumed; and zoning ordinances must be part of a comprehensive plan or bear a reasonable relationship to one of the statutory purposes of zoning"[1] (health, safety, welfare).

Furthermore, the Municipal Land Use Law provides that zoning shall be made with "reasonable consideration among other things, to the character of the district, and its peculiar suitability for particular cases and with a view to conserving the values of property and encouraging the appropriate use of land through such municipality. (NJSA 40:55-32)."[2]

It should be the contention in this case that:

1. Agronomy, tennis courts, golf courses, playfield, and silviculture as provided for by the Bedminster zoning ordinance (1978) are not the best use of steep slopes, they are not even generally feasible. Farming on steep slopes would lead to far greater erosion than residential development. Forestry is not economically feasible at this time in Somerset County (land cost, taxes too high).

2. By excluding residential development from critical zones and by not allowing a density calculation from these lands, all practical economic benefit has been taken.

3. That the '77 Master plan allowed for inclusion of minimal credit in gross Floor Area Ratio calculations for the useable (non-critical) land on the same parcel or one immediately adjacent to the critical parcel. This is justified because the increased number of residences on the non-critical land will enjoy and benefit from the light, air, and view resulting from the immediately adjacent and visible open space."[3] This was a reasonable approach which offered the landowner compensation for preserving open space. The 1978 master plan has dropped this provision, becoming more exclusionary.

4. A more logical approach to planning of critical lands is to implement performance standards for design which will ensure environmental protection. One project which instituted such standards of minimal tree clearance, visual buffers, debris basins, detention ponds, siltation devices and water sampling is the A.T. & T. Long Lines corporate center in Bedminster Township. The project was cited by the Township Environmental Commission as "good land use for this tract of land," and received the N.J. Business Magazine Good Neighbor Award for outstanding environmental work.[4] However, development of this project occurred on critical floodplain and steep slopes as mapped by the Township

in their 1977 Zoning Plan. (See the attached article and map). The following is a conceptual analysis of each of the "Critical Zones":

Floodplains

Although floodplains are often restricted from development to reduce flood hazard, all lands contribute to runoff which result in floods. Density does not measure this runoff, but it can be derived by calculating precipitation and impervious cover. A more honest approach to the reduction in flood hazard is to limit the quantity of impervious cover in a township.

A second approach is to determine performance standards which ensure no adverse impacts within a floodplain zone. These could include: no allowable decrease in floodplain volume, all living quarters above flood level, construction to withstand flood water velocities. These standards would ensure a high level of performance, decrease the quantity of floodplain construction, yet not take away the land's value.

The Bedminster approach has been the most extreme - a taking which allows no development of floodplain and no shifting of density to a developable portion of a property to compensate the landowner.

Steep Slopes

There is no stated reason within the 1978 Bedminster Master Plan as to how fifteen percent slopes were designated as critical (and non-developable). They are proposed to be left as open space or "left wild to prevent erosion." It is not clear how 15% was decided on as a slope which is critical to erosion.

Erosion is dependent on many variables; surface cover, soil texture (erodibility), slope length, slope gradient, and grounds maintenance. Slope is not necessarily the critical variable and to base determination purely on slope is an oversimplification. The Medford Environmental Plan as prepared by WMRT provides a more reasonable evaluation of soil erodibility to be prevented by performance standards. This is an equitable solution which allows the developer to use design techniques to minimize erosion.

The Soil Conservation Service has within their development limitations section of a soil survey defined steep slopes as having severe limitations. This is defined within the Guide for Interpretations as meaning those properties which effect "bearing capacity" and the "cost of excavation."

The concept was originally implemented as a service to landowners in order to minimize development costs. Prime agricultural lands were and are considered by S.C.S. criteria as having slight limitations for development and are consequently termed prime sites.

With a decrease in available land for development, and a shifting emphasis in what are considered highly developable lands, resulting in a state program to preserve farmlands, more development pressure is being applied to marginal lands (those lands unsuitable for farming, yet still developable).

The S.C.S. states that development on steep slopes is more costly. To prohibit development because of increased development costs is going beyond the role of zoning (to "clearly defend any public intervention and to justify it on health, safety and welfare grounds"[5]) and involving the township in controlling the development market. This is clearly outside of the role of zoning.

A development on fifteen percent slopes when intelligently planned need not necessarily be more expensive than one on a flat site. Land costs are usually far more significant than the additional site improvement cost necessary to ensure no additional environmental impacts.

Fifteen percent slopes are not steep by contemporary standards. A fifteen percent slope involves a one foot rise over a six foot run. By contrast, attractive cities, such as San Francisco and Boston have development on slopes of up to one hundred percent.

An important consideration in the development of the residential cluster concept in Bedminster was the Radburn Plan as designed by Clarence Stein and Henry Wright in the late twenties. It is interesting to know that the next development which Stein and Wright built incorporating the Radburn concept was built on a wooded hillside in Pittsburgh. Called Chatdam Village and cited by Stein as "one of the outstanding American examples of housing and site planning", the project was built on slopes exceeding fifteen percent, at a gross density of 4.3 dwelling units per acre and net density of 12.3 dwelling units per acre. Stein further stated, "A hillside is a challenging problem for economical planning, but it offers unique possibilities for beauty, variety and convenience."[6]

SUMMARY

In terms of critical areas in Bedminster Township there are basically two issues involved. First, by making a blanket prohibition of development in so called "critical areas" the township is engaging in a taking without just compensation. This is reinforced by the fact that they simultaneously prohibit transfer of development rights to adjacent parcels. Secondly, the township declined to use the more reasonable approach in critical areas of allowing development, based upon meeting certain performance standards which would ensure environmental compatibility and protect the public welfare.

They used a blanket prohibition and excluded density transfer; there is clearly no reasonable defense for this. As the court at Mt. Laurel stated, for environmental factors "to have a valid effect, the danger and impact must be substantial and very real..." (67 NJ at 187). Bedminster township has not shown a substantial and very real danger and impact.

Footnotes

1 Stephen A. Decter, Surface Water Control in New Jersey, Part I N.J. Committee on Drainage, 1967.

2 Ibid, 1

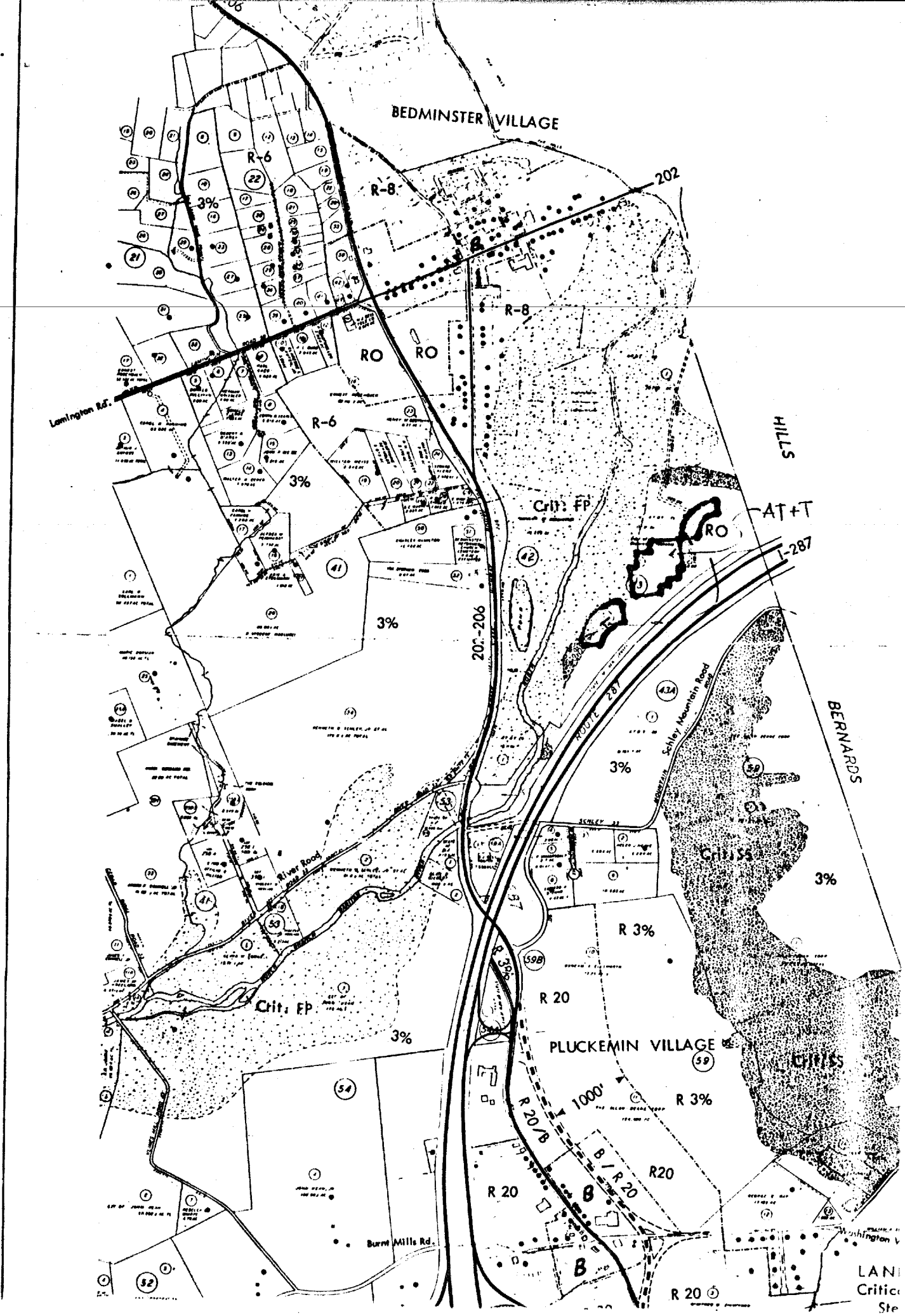
3 1977 Bedminster Master Plan.

4 Landscape Architecture, "Conservation Plan Guides A. T. & T., Gordon S. Smith, May 1978.

5 U.S.D.A., S.C.S. Guide for Interpreting Engineering Uses of Soils, Nov. 1971.

6 John Rahenkamp. Flood Plains: Public Interest on Private Property Rights. 1974 Conference, Bryn Mawr College, Pa.

7 Clarence Stein


BEDMINSTER VILLAGE
R-6
R-8
3%
202
R-8
RO
RO
Lamington Rd.
R-6
3%
Crit. FP
HILLS
AT+T
RO
-287
3%
202-206
Schley Mountain Road
ROUTE 287
BERNARDS
3%
Crit. FP
3%
R 3%
R 20
PLUCKEMIN VILLAGE
Crit. FP
3%
1000'
R 3%
R 20/B
B / R 20
R20
R 20
B
Burnt Mills Rd.
B
R 20

Conservation Plan Guides AT&T

Debris basin (above and opposite,) built to catch excess rainwater and sediment from construction area, now serves as part of overall drainage system and provides some flood protection to nearby Raritan River.

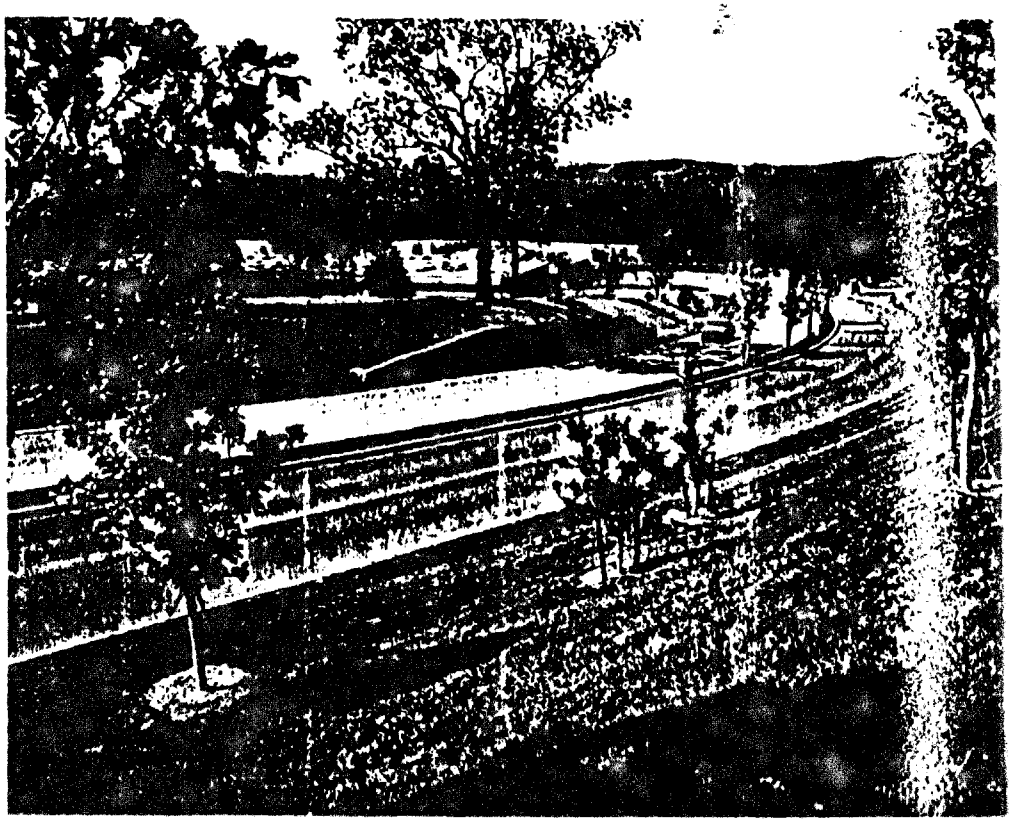
By GORDON S. SMITH

Bedminster Township, N.J.
What is described here as the most extensive conservation-planning project for any major new American Telephone and Telegraph Company facility has weathered its first year.

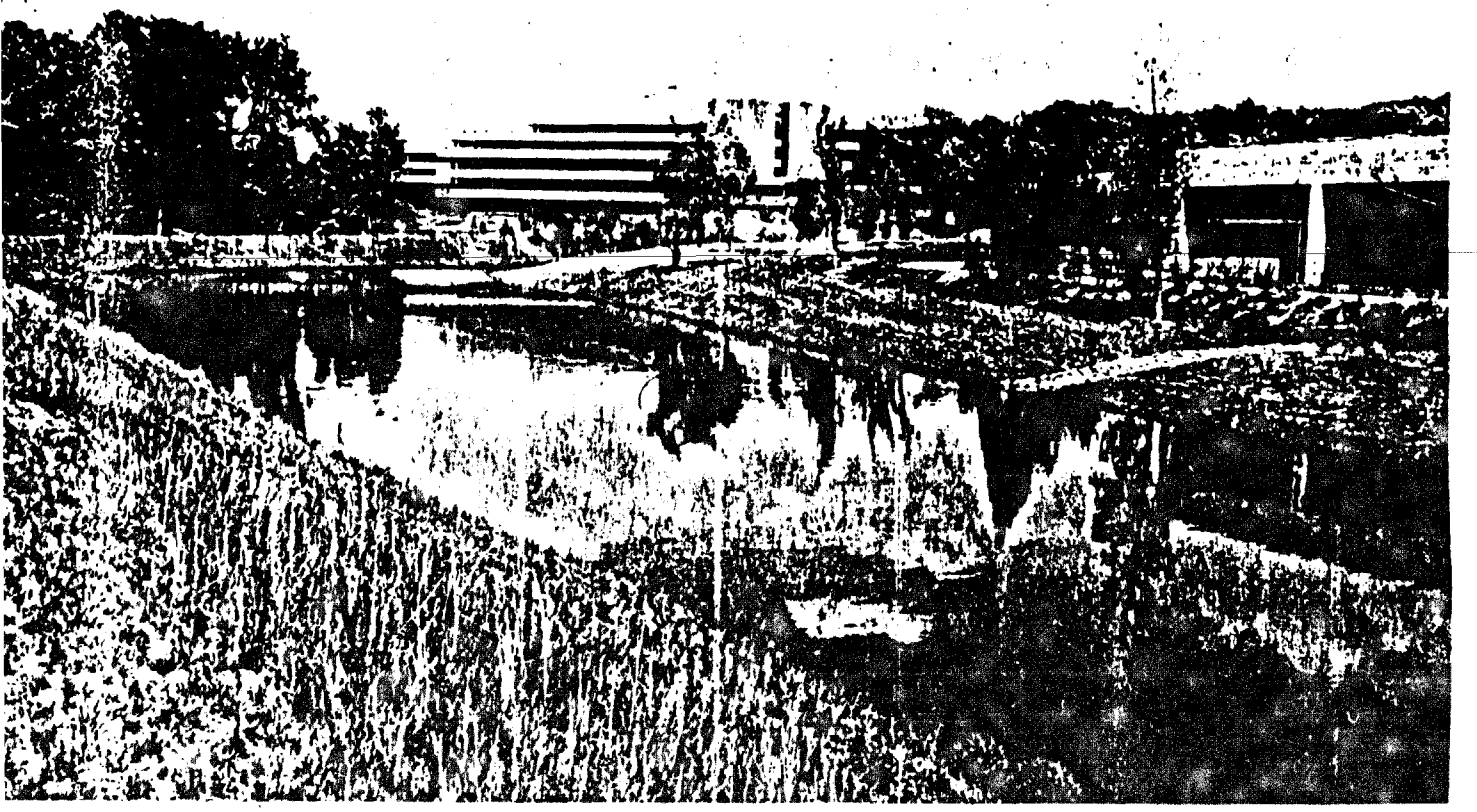
This new national headquarters of AT&T Long Lines Department overlooks the North Branch of the Raritan River, occupying only 29 a. of buildings and roads blending into a 422 a. site in a rolling semi-wooded landscape of estates and old farms.

"This project marks the first time that the buildings and everything connected to them have been planned to fit into the surrounding environment," says AT&T supervising architect Joe Franco. "This is the most extensive conservation planning" on any new AT&T office.

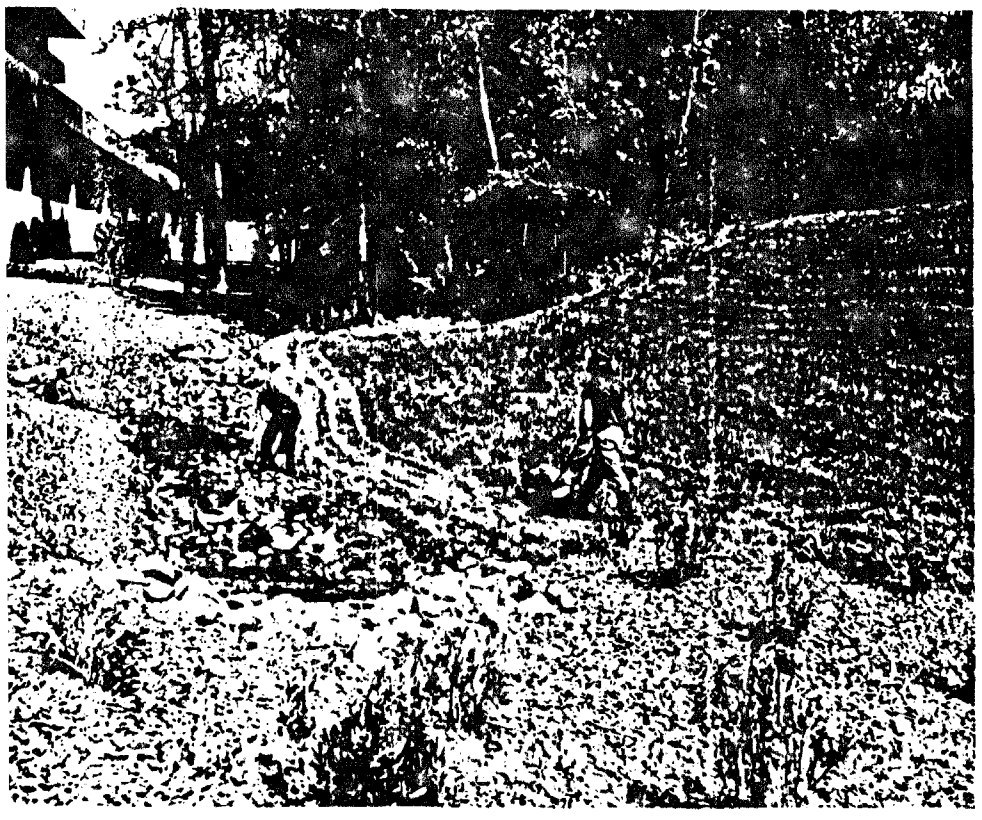
"AT&T agreed to do everything we asked so the result is good land use for this tract of land," says Candace Ashmun, environmental commissioner of the township and



Through Large-Scale Project



Natural woodland vegetation (below) was left undisturbed within a few feet of the building. Trees along roadway (below, opposite) were removed during construction, stored and then replanted.



also an official of the Upper Raritan Watershed Association.

Faced with the need to move from inadequate New York City offices, AT&T officials considered 55 locations in northern New Jersey, a locale required to keep the new facility and its 3000 employees near other Bell System facilities built or planned here.

Oddly enough, local people were little interested in the prospect that the AT&T facility would double local tax revenues. But they *were* determined that there would be minimum adverse impact on their treasured environment — insisting on a complete natural resource conservation plan for the office complex.

Bedminster's Planning and Zoning Board has already redrafted zoning ordinances to provide information and flexibility for good land use decisions. Included were requirements based on New Jersey's "Standards for Soil Erosion and Sedimentation Handbook," developed with help from the USDA Soil Conservation Service.

The $40 million AT&T project gave Bedminster its first real chance to test these safeguards.

Thus, the office complex was designed to fit the landscape. The 393 a. remainder was to be kept open under a perpetual deed restriction; the building almost hidden from nearby roads. All-electric heating would eliminate air pollution, a tertiary sewage disposal plant was designed to treat twice the estimated needs, and the complete conservation plan would eliminate excessive erosion.

Before approving AT&T's building plans, the Bedminster Planning Board required a detailed environmental impact statement; and subsequently officials imposed 14 major conditions that included advice from the Somerset-Union Soil Conservation District and the SCS technical staff.

With AT&T funds, the township hired engineer Charles Anderson to be a full-time on-site inspector and environmental monitor during 38 months of building, reinforced by a monitoring committee.

The first conservation step was to shape two large debris basins below construction. Shallow ditches backed by a mound of earth 1800 ft. long connected the two basins, diverting all runoff water to the basins, where most of its silt settled out. Any silt remaining was caught below the basins by small dams of hay bales. The two debris basins were designed to hold back millions of gallons of potential floodwater.

Clearance crews removed 130 trees of various sizes and species, storing them in a temporary nursery off-site. (Ninety-eight were later transplanted around the building.) Wood chips from other trees were stockpiled for later use. Topsoil was also stockpiled in a 3500 cu. yd. hill. This and a larger hill of earth from the building site were seeded with temporary grass mixtures to prevent erosion. The construction site was fenced to keep equipment out of adjacent areas so as to leave as much land as possible undisturbed. Seven water sampling stations were set up on North Branch tributaries to record water quality biweekly before, during and after construction. This data was to ensure that the Raritan River remained potable and fishable.

The complex is now complete and doing business; its employees working in offices surrounded by many of the advantages of country living. Inside, tropical trees and flowering shrubs dominate a four-floor, skylighted atrium in each of the three sections of the complex.

The diversions below the building site have now been leveled, and the smaller of the two debris basins is also gone. The other debris basin has become a picturesque pond. It also retains silt from an adjacent interstate highway and overflow from the nearby Raritan River during heavy rainstorms.

Nature trails, made of wood chips from discarded trees, wind through the nearby wooded areas untouched by the construction work. In a few places, construction access roads have been converted into nature trails which get considerable good weather lunchtime use by employees. Instead of the usual spread of asphalt parking lots, two multi-layer garages concentrate the parking.

Looking to the future landscape efforts, Pierce reports that a land management plan for post-construction conservation work is already in operation.

Recently AT&T Long Lines received the Good Neighbor Award from *New Jersey Business Magazine* for their outstanding environmental work. Conservationists involved in the project agree that it is an excellent example of tailoring industry to fit the landscape. As such, it sets the pace for better conservation planning in similar developments and represents a tremendous advance in the continuing effort to bring about proper land use in many fast-growing urban communities.