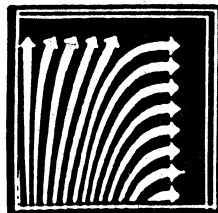


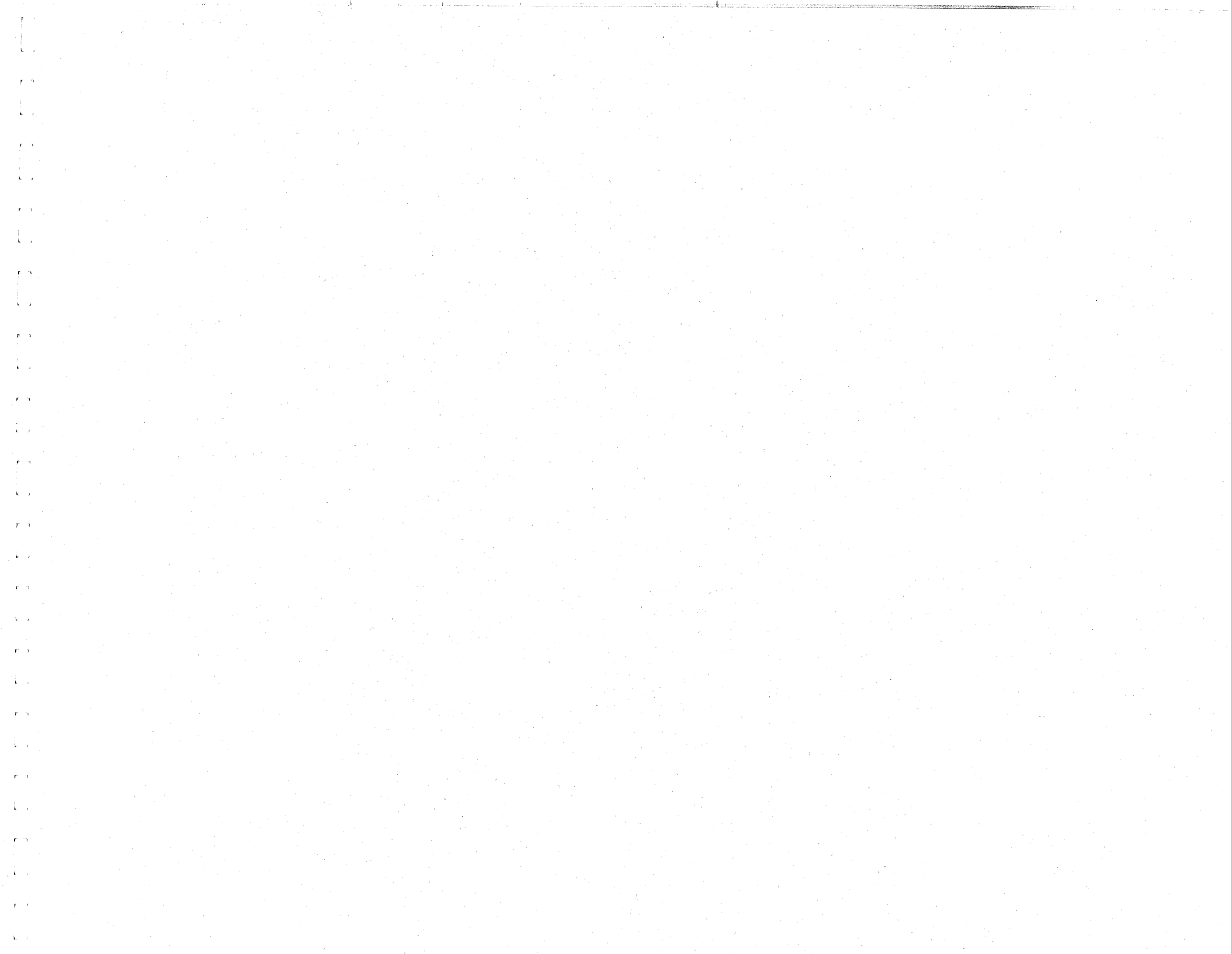


**SMALL AREA PLAN
SOUTHERN AREA**

JUNE 23, 1992



**Town of Chapel Hill, North Carolina
Comprehensive Plan**



TOWN OF CHAPEL HILL

SMALL AREA PLAN

SOUTHERN AREA

JUNE 23, 1992



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EXECUTIVE SUMMARY

Where We Are

The Chapel Hill Town Council has created an Urban Services Area around Chapel Hill which is proposed to eventually be developed to urban densities. This land is now, for the most part, undeveloped. The Small Area Plan addresses the question of how this land could best be developed.

Where We Want To Go

The Small Area Plan for the Southern Area presents a plan for preservation and development of the land generally south of Morgan Creek and north of Chatham County.

Preservation is a primary objective of the Plan. The Plan is designed to preserve the natural beauty and character of the area. It is designed to protect environmentally sensitive areas and to protect the water quality of Jordan and University Lakes. The Plan is designed to preserve the existing neighborhoods.

The Plan proposes low density residential development for most of the land, with a village of higher density between Culbreth Road and the Town park.

The village is an alternative to traditional subdivision development. The village is designed to encourage people to walk, ride bicycles and use public transit. It is designed so that all residents have easy

access to the village center which will have neighborhood stores, a central transit stop and possibly other facilities, such as a day care center.

The Plan proposes a system of local streets crossing the area east and west, north and south. Smith Level Road, Culbreth Road, 15-501 South, Mt. Carmel and Old Lystra Roads remain as they are and serve as collector roads. Many bike paths and pedestrian trails are proposed throughout.

How To Get There

The Strategies Section of the Plan presents a number of ideas on how to make the Plan a reality. Zoning the land for the proposed use and density is a major strategy proposed. Conditional Use Zoning or use of the Non-contiguous Special Use Permit is proposed for the village. Specific design guidelines and a comprehensive transportation plan would also need to be developed.

The Process

In January, 1990, the Town Council initiated the Small Area Planning process. As the first step, the planning staff wrote an evaluation and description of the existing conditions in the three Small Areas to be studied. The Town Manager

presented the Analysis of Existing Conditions to the Town Council in June, 1990. In September, 1990, the Town Council established a Small Area Plan Work Group and charged it with developing a Small Area Plan for the Council's consideration. At that time the Council also selected the Southern Area as the first area to be planned.

The Work Group met and deliberated monthly from December, 1990, to October, 1991. During that time the Work Group held three meetings designed to give the public information and to hear their ideas and reactions. These meetings were held on December 11, 1990, June 18, 1991, and October 15, 1991.

On October 28, 1991, the Work Group presented its recommended Plan to the Town Council. The Council held a public meeting on the plan on January 21, 1992. At that time, it asked the Small Area Plan Work Group for additional work. On June 23, 1992, the Council adopted the Small Area Plan as a component of the Town's Comprehensive Plan.

PURPOSE

The Plan and the Process

In June, 1989, the Chapel Hill Town Council adopted a new Comprehensive Plan. The Comprehensive Plan identified the goals of encouraging citizen participation, providing adequate opportunities for employment, preserving the natural environment, providing adequate housing, maintaining the Town character, developing a comprehensive transportation system, insuring adequate community facilities and encouraging orderly development.

The Small Area Planning process is one of the next steps in carrying out the goals of the Comprehensive Plan. The Small Area Plans are intended to be more detailed land use plans for the undeveloped portions of the Town's Urban Services Area.

The Small Area Plans are designed to provide a thorough description of the environmental constraints to development. The plans will enable potential developers to propose and the Council to evaluate and approve sensitive and desirable land development proposals.

The Small Area Plans will provide the long term community benefit of a more attractive community. Further they will help insure that public facilities are

coordinated with the land uses and provided in a timely fashion.

The Small Area Plans will give the community a sense of the costs of major public facilities and will give the Council better control over the timing of development and related facilities.

The Small Area Planning process will give the residents who live in the area and the citizens of the broader community a voice in the way the Small Areas develop. The Plans will also provide a means for discussion and cooperation between the Town government and the various special purpose governments that serve the area.

Objectives - Southern Area Plan

The goals of the Comprehensive Plan are considered and applied in the context of several important facts:

- * That this entire area is to ultimately become part of the corporate limits of Chapel Hill as urban development occurs.
- * That the entire area drains north toward Morgan Creek, making it possible to provide gravity sewer to the entire area with orderly extensions to the existing gravity systems.
- * That a large portion of this area is environmentally sensitive.

Objectives of the plan therefore become:

- * To identify areas to be protected from development.
- * To set forth guidelines for development of land not to be protected.
- * To describe transportation systems needed to support the development that will occur.
- * To suggest a network of green space and public facilities.

Goals of the Comprehensive Plan

Ensure town government that maximizes citizen participation, is representative and responsive, and serves and governs the population in an honest, efficient, and equitable manner.

Provide adequate, varied and stable opportunities for livelihood and commerce.

Encourage development that protects the natural and built environment and provides for appropriate location of land uses.

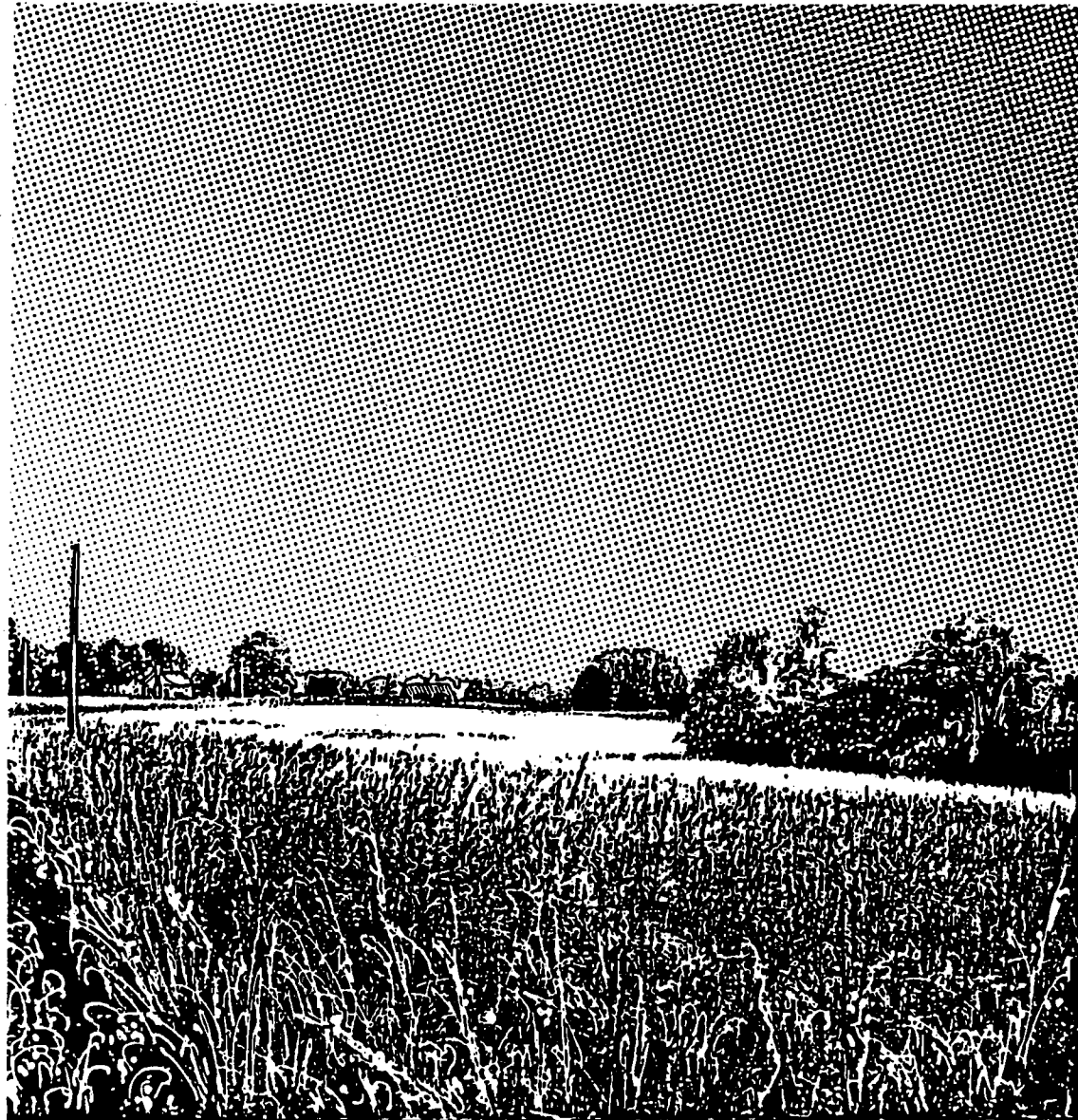
Promote the availability of safe, sanitary, decent, well-designed and affordable housing for all.

Retain and enhance areas and features of the community which define the identity and contribute to the image of the Town.

Develop a comprehensive transportation system that will enhance the mobility of all citizens by offering a variety of transportation options and reducing dependence on the automobile.

Provide community facilities and services which meet the physical, social, and cultural needs of the population and which are available to all residents.

Promote orderly development which provides for attractive, appropriate location and compatibility of land uses.



HISTORY OF THE AREA

History

The history of the Southern Area is characterized by a long and stable lifestyle of rural and agricultural pursuits. From the time of European and African habitation during the middle of the 18th Century until the 1960's, this section of Orange County remained largely in its natural state of deciduous forest land. Over 5,000 years ago, the area was sporadically inhabited by wandering bands of Native Americans who found the combination of climate, topography, and water supply suitable to sustain their hunting-gathering society. As white settlement in the area continued to expand, the Indians moved westward, virtually disappearing by the time of the American Revolution.

Land grants establishing private ownership in the names of Hogan, Blackwood and Strayhorn are found dating to the 1750's. These colonial settlers of Scotch-Irish descent established small, self-sustaining farms along what are now Smith Level and Mt. Carmel Church Roads.

Small farm activity continued through the Civil War period, and while available records show 48% of Orange County property owners had slaves in 1860, most owned only a few to help with household and farming operations. Land holdings were generally in the 100 to 500 acre

range and crop production consisted primarily of tobacco, cotton, and corn with occasional holdings of dairy cattle. The beginnings of prosperity for this part of Orange County were abruptly halted with the outbreak of the Civil War and the ensuing Reconstruction period.

The closures of the University in 1868 and 1870 and the general post-war economic downturn slowed further growth until the coming of the railroad to Carrboro in 1882. For example, a land use map completed in 1891 by George W. Tate of Bingham School showed only a schoolhouse on the road to Mt. Carmel Church, Purefoy's Mill near what is now the 15-501 bridge over Morgan Creek, and six residences in the names of Cole, Cook, Parton, Merritt, Sparrow, and Smith within the study area.

The pre-WWII period was characterized by the subdivision of some of the larger farms and the accompanying construction of vernacular farmhouses to accommodate the new residents.

Little of the post-WWII rapid growth in Chapel Hill and environs occurred in the study area. A 1962 land use map prepared for Chapel Hill's first comprehensive plan shows virtually no development within the study area's

boundaries with the exception of parts of Dogwood Acres.

During the last twenty years, however, numerous changes in both the physical and social composition of the Southern Area have occurred. External factors such as continued growth in the towns of Chapel Hill and Carrboro, the addition of improved transportation systems, and rapid expansion of the Research Triangle Park have combined to change land use patterns from agricultural to residential. Since 1970, several major subdivisions have been approved and developed adjacent to Morgan Creek along most of the area's northern boundary. In addition, many new lower density residential units, primarily single family dwellings but a few duplex townhouses as well, have been constructed in the study area.

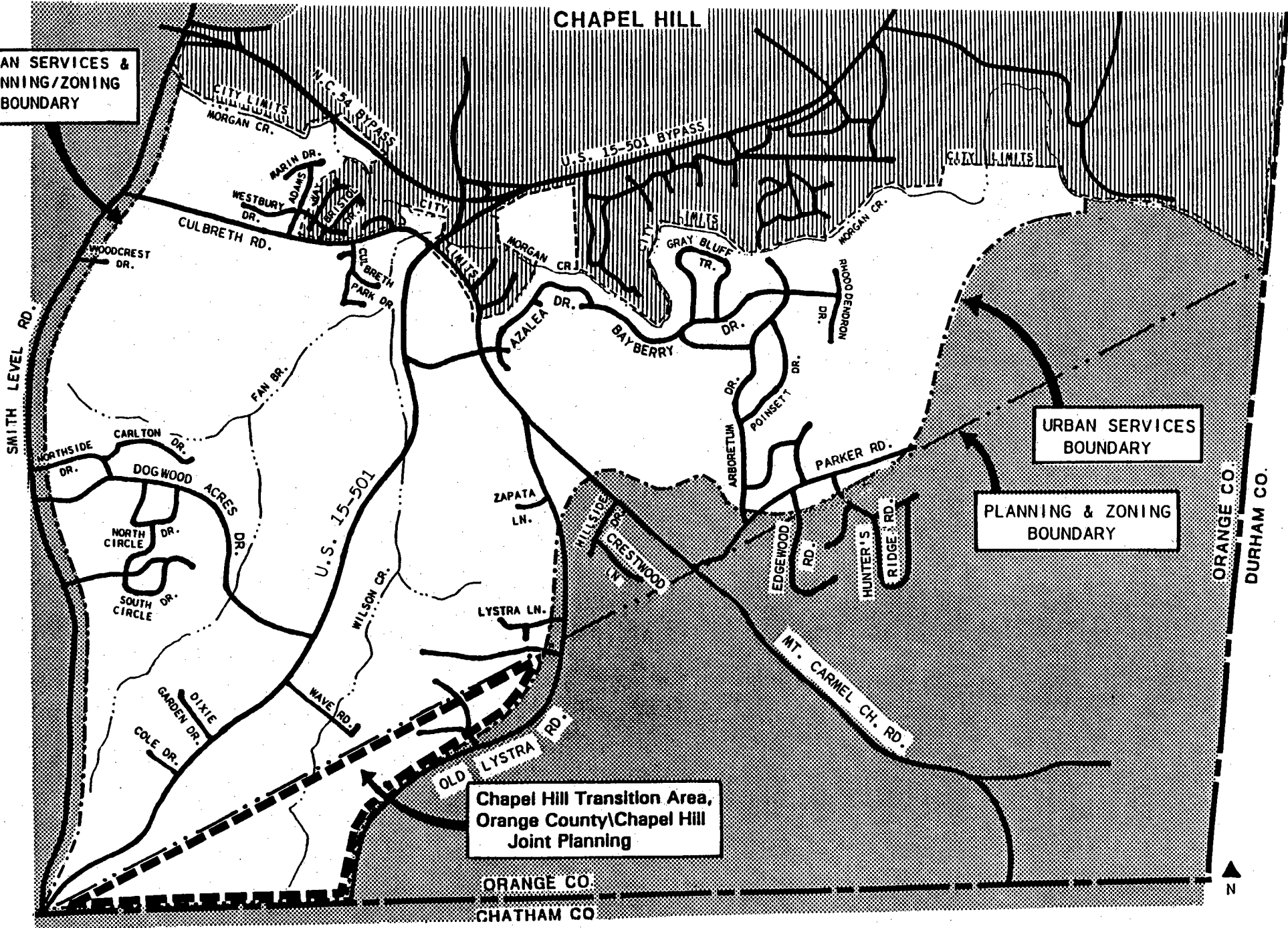
Sources:

Lefler, Hugh & Paul Wager, eds.; ORANGE COUNTY 1752-1952, Chapel Hill, The Orange Printshop (1952).

Other materials are on file.



URBAN SERVICES & PLANNING/ZONING BOUNDARY



Chapel Hill Transition Area,
Orange County\Chapel Hill
Joint Planning

ORANGE CO.
CHATHAM CO.

URBAN SERVICES BOUNDARY
PLANNING & ZONING BOUNDARY

ROADS, BOUNDARIES, JURISDICTIONS

THE AREA TODAY

Description

The study area is typical of Piedmont topography: heavily wooded, with rounded hills and steep ravines, laced by numerous streams. Travelling east across southern Orange County, one gradually descends out of the Piedmont and into the relatively flat land of the Triassic Basin near Durham County.

The boundaries of the study area are the Chapel Hill Town limits on the north, a ridge line which runs roughly along Old Lystra Church Road to the south and east, and on the west, along a line 250 feet east of the centerline of Smith Level Road. This area comprises land which today is generally not developed to urban densities.

Jurisdictions

The study area is outside the Chapel Hill city limits. The area is mostly within Chapel Hill's planning jurisdiction, established in 1955 as a diagonal line running through Orange County. Chapel Hill sets the zoning in this area, and property owners must build in accordance with this zoning.

A small part of the area is jointly planned with Orange County, south near the Chatham County line. Here, Orange County sets the zoning using Chapel Hill

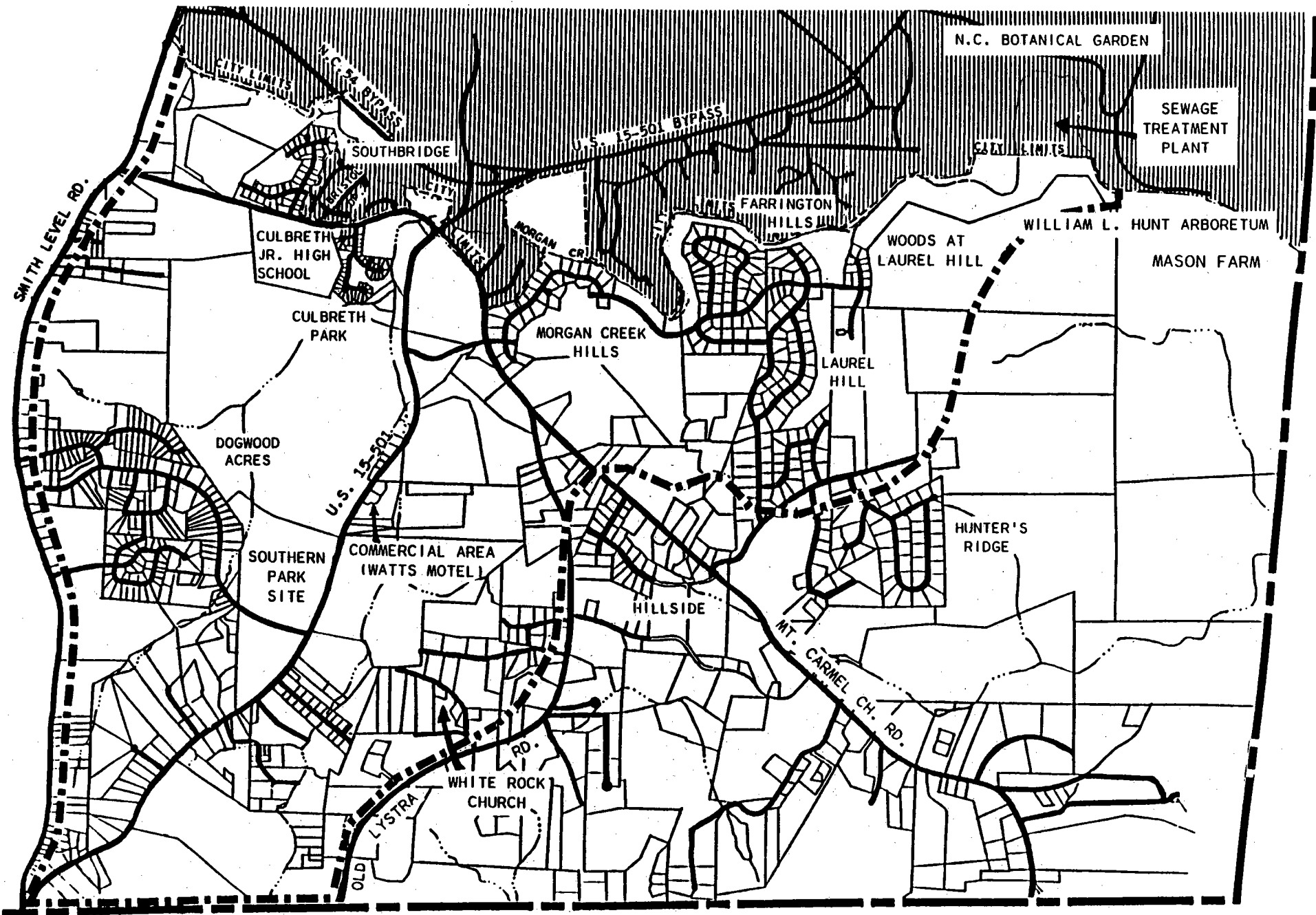
categories, then Chapel Hill works with property owners to build in accord with this zoning.

Both parts of the study area are part of Chapel Hill's "urban services area" as defined in the Comprehensive Plan. This is the area that over a long period of time

is expected to become urban in character and part of the Town of Chapel Hill.

The area adjoins the Carrboro planning jurisdiction on the west boundary of the study area. Many properties on Smith Level Road are in both Carrboro's and Chapel Hill's jurisdictions and thus are subject to each town's regulations.





COMMERCIAL AREA
(STARPOINT)

EXISTING FEATURES , LAND USE
AND COMMUNITY FACILITIES

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Land Uses

Current land uses are mainly residential, either in subdivisions or on individual lots with large acreages. Existing subdivisions include Dogwood Acres, Morgan Creek Hills, Farrington Hills, Laurel Hill, and the Woods at Laurel Hill.

Other land uses include two small commercial areas, one at Watts Motel, and one at Starpoint at the Chatham County line, a few farms and two quarries.

Transportation

U.S. 15-501 is a major highway which bisects the area from north to south. It is currently operating at or above its capacity. This road is the only one in the Small Area which crosses Morgan Creek.

Mt. Carmel Church Road and Culbreth Road provide some east-west access across portions of the area. There is no continuous road which allows people to travel in east-west directions.

Other roads serve as local access roads for the limited residential development in the area.

The area contains no bikeways and limited pedestrian facilities. There is no transit service to the area.

Community Facilities

Portions of the area, including Dogwood Acres, are served by OWASA water. The area is not now served by public sewer except for a small portion of the northern area.

The OWASA sewage treatment plant for the Town is located on Morgan Creek at the northeast edge of the area.

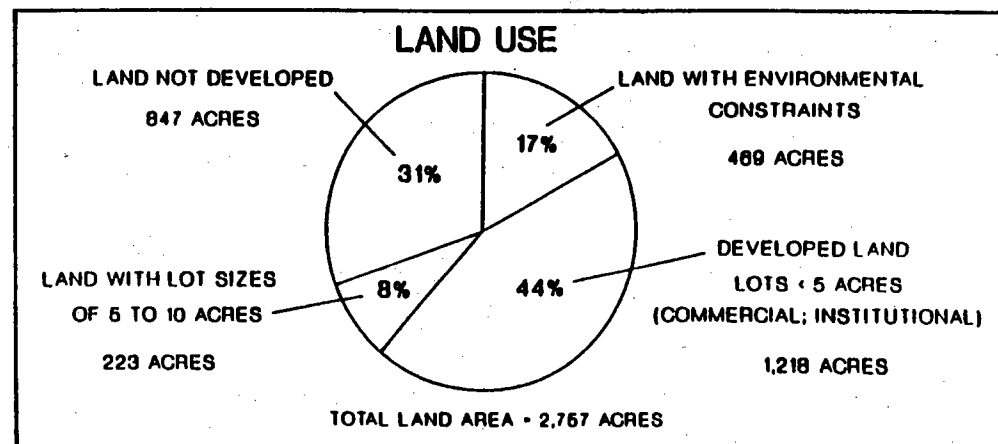
The area has one school, Culbreth Junior High School, which sits at the northern edge of the area. Playing fields are part of this facility.

The Town has acquired a 78 acre site for a future park, fire station, and park-ride lot along the west side of 15-501. The Town has received funding from the Urban Mass Transit Authority to construct the park-ride lot.

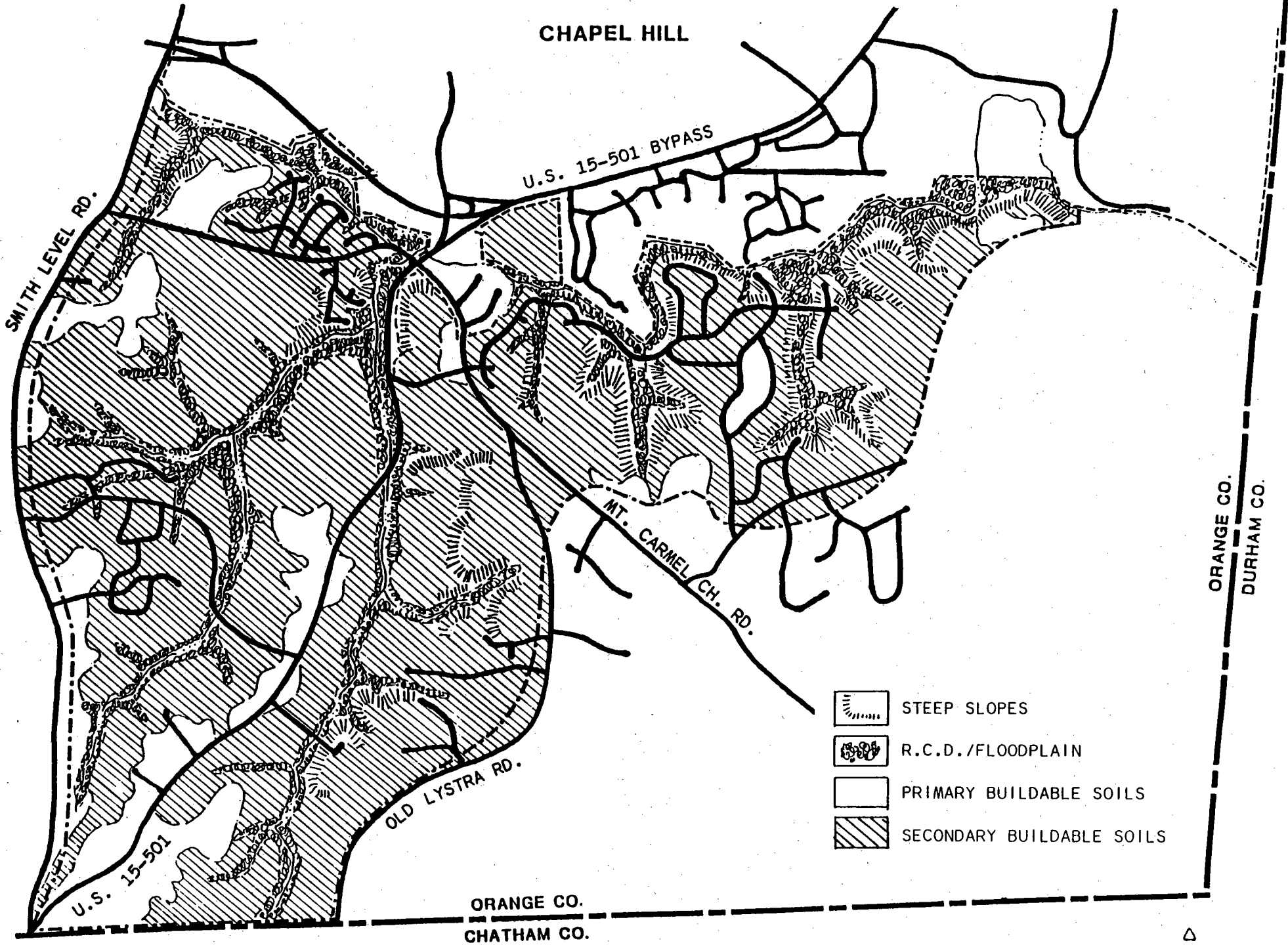
In general, the area has few public facilities, reflecting the fact that it is not very developed.





Some Basic Facts:

- The area contains about 2,750 acres.
- About 650 lots exist in the area.
- An average lot size is 4-5 acres.
- The area has about 550 dwelling units.
- An estimated 1200 people live in the area.



CHAPEL HILL



-  STEEP SLOPES
-  R.C.D./FLOODPLAIN
-  PRIMARY BUILDABLE SOILS
-  SECONDARY BUILDABLE SOILS

ORANGE CO.
CHATHAM CO.

ORANGE CO.
DURHAM CO.

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Natural Environment

Morgan Creek is one of the area's most significant natural assets. It runs from west to east and flows eventually into Jordan Reservoir. The Orange Water and Sewer Authority's sewage treatment plant serving Chapel Hill and Carrboro is located on this creek.

The area contains several sensitive natural environment areas identified in the Triangle Land Conservancy Inventory of Orange County, including Stillhouse Bottom, the Hunt Arboretum, and other areas along the steep slopes of Morgan Creek.

The area is laced with numerous streams and drainageways. Most of the area drains northward into Morgan Creek.

The area contains rolling to very steep topography typical of the Piedmont. Most of the area east of 15-501 has slopes greater than 10%, with significant areas where the slopes are greater than 20%.

Most of the area contains soils with moderate to severe restrictions for building.

Environmental Analysis

The first step in preparing a Small Area Plan is compiling information on existing

conditions, including an environmental analysis. In June, 1990, the Town Council received this report.

The environmental analysis mapped the following:

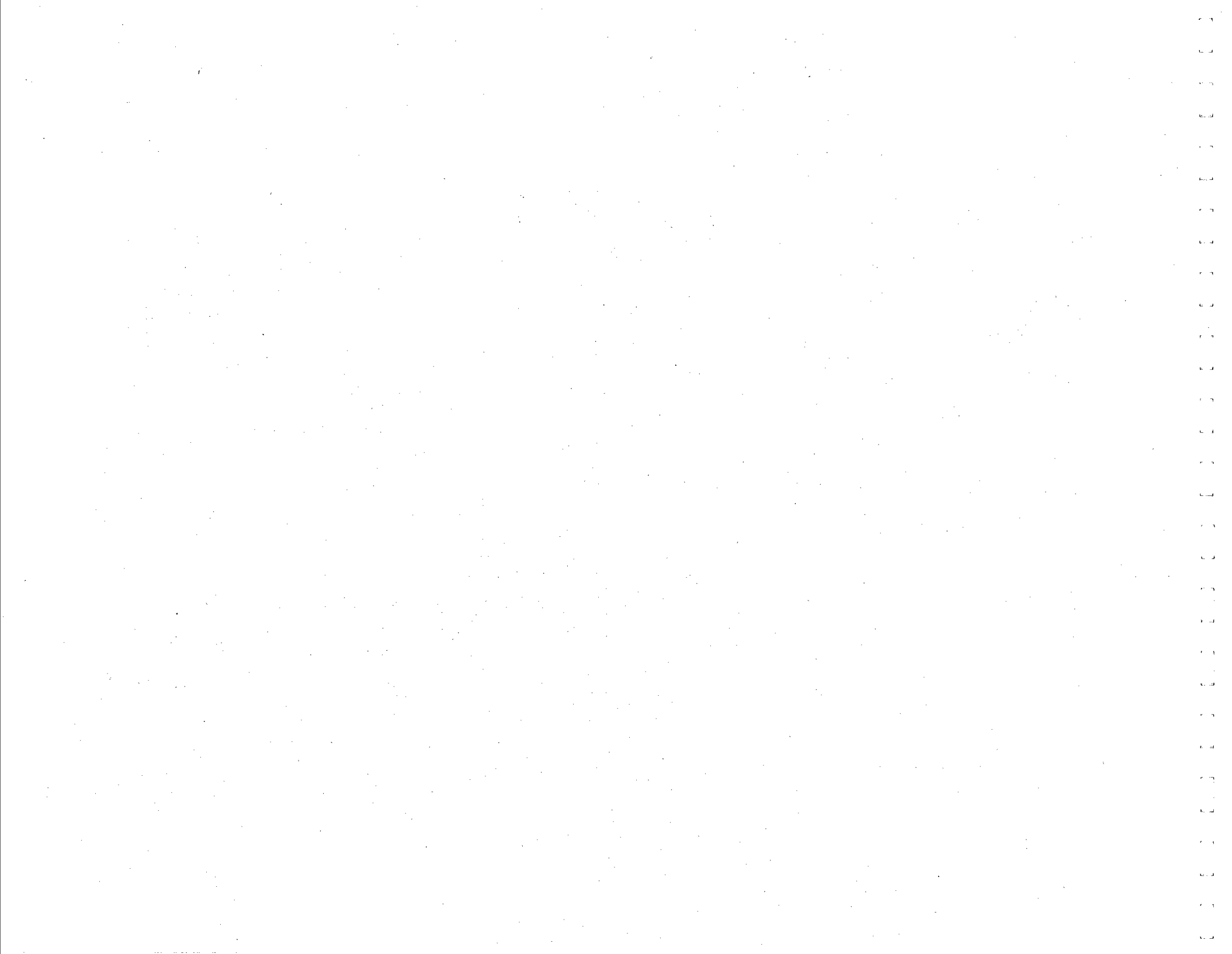
- * elevations (topography)
- * slopes
- * soils
- * land forms and watersheds

These elements were then put together to form a composite picture of the area to determine the environmental suitability of the land for preservation or development.

Generally, the analysis found the study area has increasing environmental sensitivity from west to east:

- * Between Smith Level Road and U.S. 15-501, this area is more nearly flat, with moderate soil constraints.
- * Between U.S. 15-501 and Mount Carmel Church Road, this area has more areas of steep slopes, and moderate to severe soil constraints.
- * From Mt. Carmel Church Road east, the area has steeper slopes, with larger areas of severe soil constraints.





GOALS AND OBJECTIVES

Objectives

In considering the Goals and Objectives of the Comprehensive Plan and the character of the area, the Small Area Planning Group has chosen to emphasize the preservation and development goals and objectives noted here.

Preservation Objectives

- * Protect environmentally sensitive areas including:
 - the flood plain
 - Resource Conservation District
 - the steep slopes
 - Land identified in a Triangle Land Conservancy Inventory.
- * Preserve the natural beauty of the area including:
 - the Botanical Gardens
 - Arboretum
 - Mason Farm.
- * Protect the character of the area defined in part by:
 - the natural views and vistas
 - the working farms
 - wild life areas
 - historic areas.
- * Protect the water quality of University Lake and Jordan Reservoir.
- * Preserve existing neighborhoods by:
 - avoiding undue disruptions
 - providing density transitions
 - providing vegetative buffers.

Development Objectives

- * Provide a range of housing including:
 - a range of densities
 - different housing types
 - a range of costs.
- * Limit the increase in traffic to the extent possible by:
 - creating a transit friendly development pattern
 - providing neighborhoods in which people can walk or bicycle to stores, offices, parks, and other neighborhoods
 - linking the area to the University and central Chapel Hill with bicycle and pedestrian paths.
- * Provide appropriate support structures including:
 - parks and open space
 - roads and transit
 - community facilities.
- * Maintain the beauty and character of the area by:
 - ensuring that buildings are aesthetically integrated with the topography
 - prohibiting strip commercial development along 15-501.
- * Ensure that development incorporates:
 - bicycle and pedestrian systems
 - mass transit systems.

DESIGN CONCEPTS

BUILDING BLOCKS

The three design concepts can be thought of as "building blocks," the basic forms of land use patterns that could be pursued in the Southern Area. The concepts are not mutually exclusive; they could be mixed and matched to fit the preservation and development objectives for the area.

CONVENTIONAL PATTERN

We are using the term Conventional Pattern to describe the suburban development pattern that rose to prominence in the second half of the twentieth century. It is characterized by single family homes, on large lots, separated from commercial and office

uses. This form of development was originally made possible by growth in automobile use and by building the roads necessary to extend residences further and further into undeveloped areas.

The Chapel Hill Context

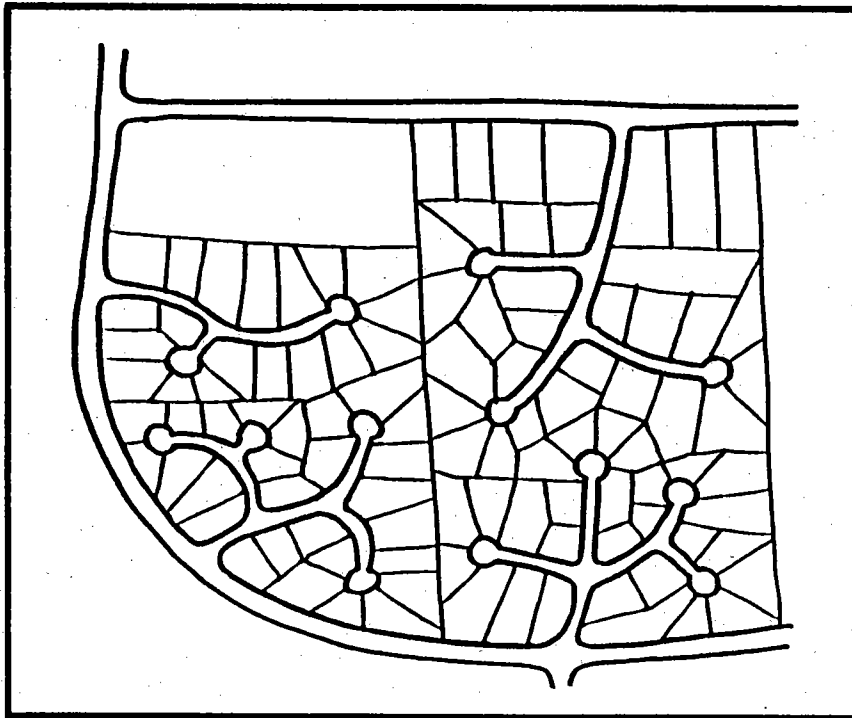
Many of Chapel Hill's desirable residential areas have been created on a large-lot subdivision pattern that are examples of the Conventional Pattern. This has been the main residential option of choice over the last fifteen years. Prices for single family homes on large lots soared during the 1980's, with many houses selling in the \$250,000 - \$400,000 range.

Advantages:

- Residences are located away from higher intensity uses and work locations
- Privacy - individuals own their own open space
- Opportunity for distinctive homes
- Market predictability

Disadvantages:

- Requires reliance on individual automobiles
- Inefficient use of land
- Few opportunities for preservation of environmentally sensitive land
- Delivery of services is costly



CLUSTER PATTERN

The term Cluster Pattern means a basically suburban type of development with the houses separated from other uses. As with the Conventional Pattern, the residents are for the most part dependent on an automobile for working, shopping and leisure time activities. The main distinguishing feature of the cluster is that the houses are grouped together in order to create wide expanses of open space, common to everyone who lives in the cluster. Clusters stand alone, they are not linked to adjacent development.

The Chapel Hill Context

Chapel Hill has few examples of cluster-type development patterns. The few that do exist are either small-lot subdivisions, with significant stands of open-space, or multi-family developments.

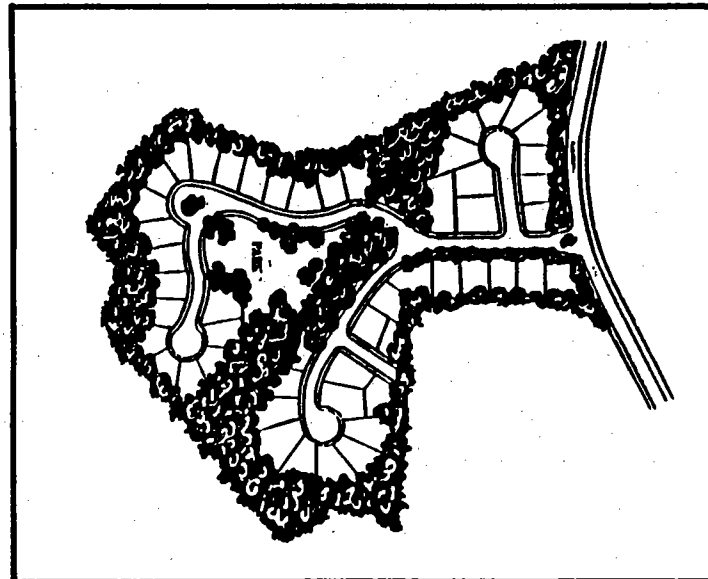
It is the intent of the Small Area Plan that the Cluster Pattern would not be used to increase density on a site. Using the Cluster Pattern is intended as a way to plan the site so as to group buildings within the most buildable portion, and preserve the steep slopes and flood plains and view corridors.

Advantages:

- Some opportunities for alternatives to the private automobile
- Opportunity to permanently preserve sensitive land
- Delivery of services is more economical
- Individuals benefit from common open space

Disadvantages:

- Lower levels of individual privacy
- Lower levels of market predictability
- Most trips are still made by automobile

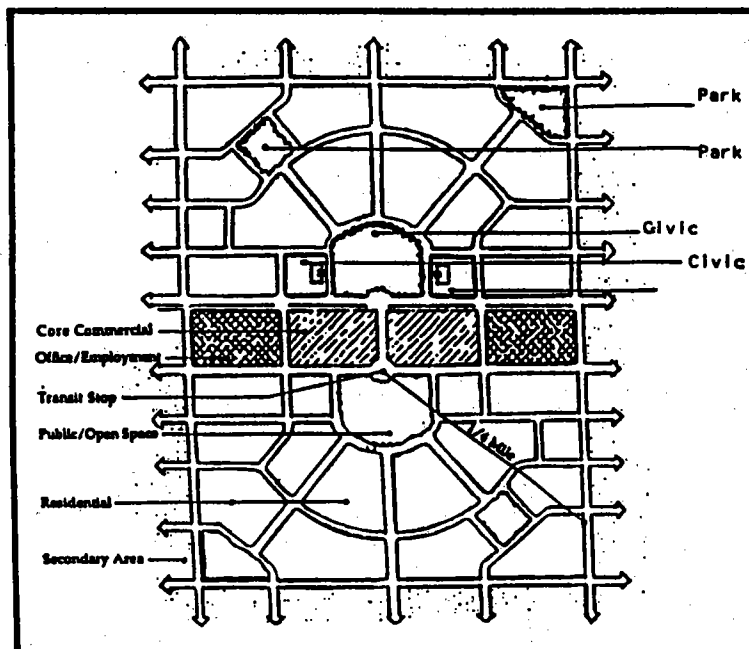


VILLAGE PATTERN

The term Village Pattern describes the type of urban development that took place through the first half of the twentieth century. The early towns were often built on a grid pattern around a town center containing civic space, shops and offices. Homes were not necessarily separated from other uses, but most shops, homes and other uses were of a similar scale. People were not dependent on cars for every activity and front yards were not oriented around driveways and garages.

Chapel Hill Context

Chapel Hill has several examples of a village pattern. Most notable, of course, is the Downtown area where residences are compactly located within easy walks of stores, services, and employment. On a different scale, some of the principles of the village pattern also are evident in the Glen Lennox neighborhood and the Timberlyne area.



Advantages:

- Various housing types offered
- Opportunity for mobility without an automobile
- Amenities and services are close by
- Opportunities for community interaction
- Public services provided more efficiently
- Efficient use of land
- Opportunity to preserve sensitive land

Disadvantages:

- Must be developed as a complete package of residential, commercial and office uses
- Needs development organization with high level of skill in village development
- Requires specific Town guidelines

COMPARISON OF THREE PATTERNS

Characteristics	Conventional Pattern	Cluster Pattern	Village Pattern
Land Uses	Residences separated from commercial & office uses.	Residences separated from commercial & office uses.	Residences integrated with commercial & office uses.
Road Systems	Cul-de-sacs used extensively. Residential streets serve only as access to homes. Larger streets carry traffic.	Cul-de-sacs used extensively. Residential streets serve only as access to homes. Larger streets carry traffic.	Interconnected street system. All streets serve to both provide access to homes and to carry traffic.
Public Transit	Available to residences adjacent to major streets.	Available to residences adjacent to major streets.	Access within walking distance of every unit.
Bike Paths	Provided on major streets.	Provided on major streets.	Connect all users and areas.
Sidewalks	Provided on major streets.	Provided on major streets.	Provided on all streets.
Open Space	Mainly in private ownership.	Mainly in private ownership.	Mainly in common ownership.
Recreation Space	Mainly passive.	Active & passive.	Active, passive, and neighborhood oriented.
Civic Space	Provided in downtown.	Provided in downtown.	Provided in center of village and neighborhoods.
Housing Types	Usually one type.	Usually one type.	Often different types.
Lot Size	1/4 to 5 acres.	1/4 to 1 acre.	Multifamily to 1/4 acre.
Public Services	Extended throughout.	Extended to a smaller area.	Extended to a smaller area.

THE PLAN

This report has examined the conditions of the area today, established preservation and design objectives, and identified various possible patterns of development. Building on all of this, this chapter presents a long-range plan for the Southern Area.

In formulating the plan, the Work Group first considered three alternative plans for the area (See Appendix). The adopted plan is an outgrowth of consideration of those three plans.

The plan combines all three Design Concepts: The Conventional Pattern, the Cluster Pattern and the Village Pattern. The Village is shown south of Culbreth School and west of 15-501.

The Village Pattern consists of mostly residential uses: single family detached houses, townhouses and apartments. The Village has a small office and commercial area within easy walking distance of the residences.

The Village Pattern offers the opportunity to integrate various housing types with a small commercial and office area within walking distance of all residential units. The Village Center could also contain a school site or other civic buildings. Active and passive recreation areas are proposed throughout the Village. An interconnected street system is proposed to provide access to homes, carry traffic

















and provide a pedestrian, transit and bicycle system.

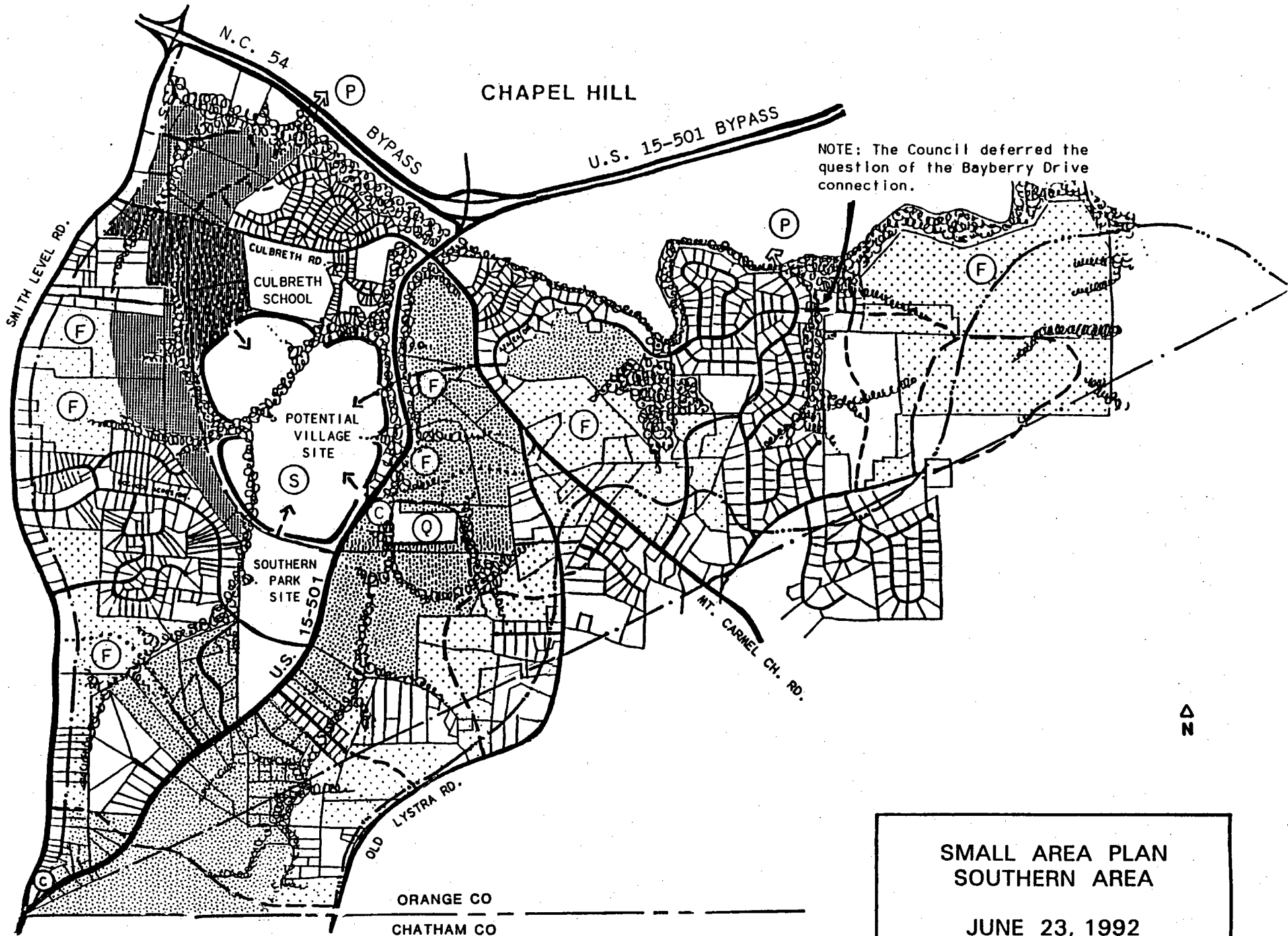
Elsewhere in the Area, residential densities range from four units per acre to one unit per five acres. New commercial uses are within the Village Center only. The existing commercial areas at Starpoint and along 15-501 remain.

The flood plains and steep slopes are shown as environmentally sensitive areas which will require special protection. The extent to which they will be protected will depend on the regulatory mechanisms adopted by the Town Council as part of the implementation of the Plan.

The Plan shows a network of existing arterial and proposed local roads, bikepaths, sidewalks and greenways. The Plan is designed to enhance mobility by offering a variety of transportation options. The Plan has the intent of reducing dependence on the automobile, particularly within the Village. No new arterial roads are proposed. A transit lane for buses and high occupancy vehicles is proposed along 15-501 South from the Village Center into Town. Pedestrian connections are proposed across Morgan Creek both east and west of 15-501 South.

Larger format versions of the Plan show a greater level of detail, and are available separately.

LEGEND	
	AREAS TO BE PRESERVED
	EXISTING COMMERCIAL
	EXISTING QUARRY
	EXISTING RESIDENTIAL/SUBD.
	FARMLAND (TAX STATUS)
	POTENTIAL PEDESTRIAN CONNECTION
	POTENTIAL SCHOOL LOCATION
FUTURE RESIDENTIAL	
	4 UNITS PER ACRE
	2 UNITS PER ACRE
	1 UNIT PER ACRE
	1 UNIT PER 5 ACRES
ROADWAYS	
	EXISTING
	PROPOSED - LOCAL STREET
	PROPOSED - LOCAL - IF FARMLAND DEVELOPED
BOUNDARIES	
	PLANNING/ZONING JURISDICTION
	URBAN SERVICES BOUNDARY



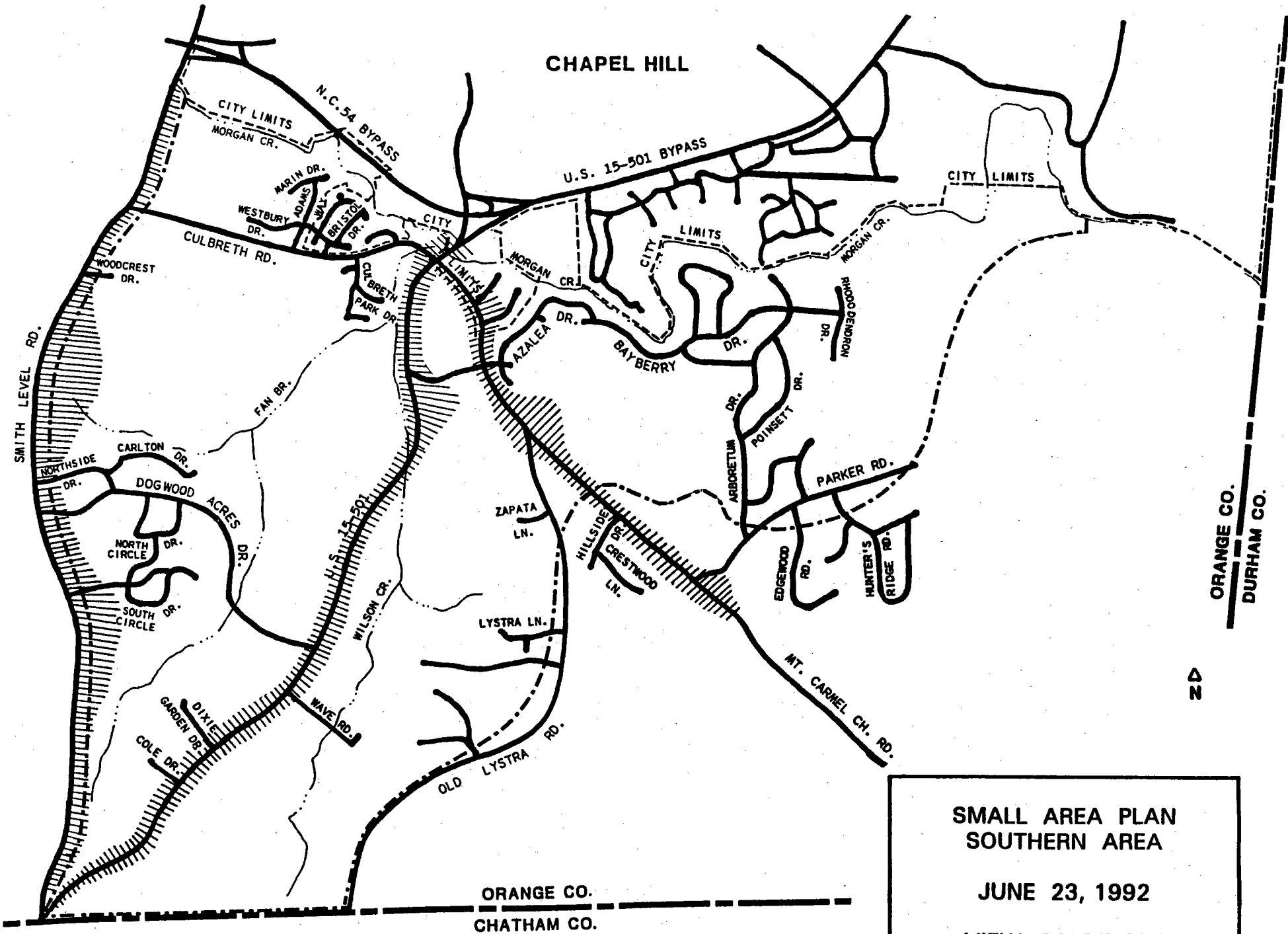
SMALL AREA PLAN
SOUTHERN AREA

JUNE 23, 1992

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CHAPEL HILL



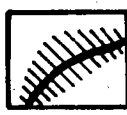
ORANGE CO.
DURHAM CO.



SMALL AREA PLAN
SOUTHERN AREA

JUNE 23, 1992

VIEW CORRIDORS
TO BE PROTECTED



VIEW CORRIDORS

ORANGE CO.
CHATHAM CO.

PROJECTED IMPACTS

Overview

This section describes the anticipated impacts of the plan on needed public facilities.

Buildout of the southern area as envisioned in this plan would result in an estimated population of approximately 5,500 people. Current economic conditions, the need to extend costly major sewer lines, and cost of developing relatively steep topography suggest that development will occur gradually over the next twenty years.

Overall, the total population of this area would be significantly lower under this new plan than under the plan currently in place.

Pattern of Development

The plan suggests that urban development will occur from the existing city limits extending outwards, especially in the area west of 15-501. This is the area that, on a relative scale, is the most suitable for urban development based on an analysis of environmental characteristics. Within this area, a village is located; the village will have the look and feel of a centrally located urban neighborhood.

The plan balances development with preservation of environmentally sensitive

areas and open space. Farmland is shown to remain as farmland, so that denser urban areas are offset by significant areas of open space, viewsheds and wild life corridors in the overall plan.

Water/Sewer Extension

The southern area needs a significant investment in major water and sewer lines to support the Town's general policy of providing urban development with public water and sewer. The Town's Comprehensive Plan goals and objectives discourage the use of septic tanks. However, for this small area plan it may be appropriate to consider septic tanks for areas on the fringe shown with five-acre minimum lot sizes, and possibly areas shown with one-acre minimum lot sizes. One of the impacts of the Small Area Plan is less need for extension of public sewer east of 15-501.

Transportation

This plan would result in significantly lower automobile trip generation than buildout according to the plan currently in place. Increased use of public transit, bicycles and pedestrian movement is particularly likely in the village area. About 15,000 new daily auto trips would be generated by new development in this

area. This projection assumes adequate public transit services and a comprehensive system of bicycle and pedestrian facilities within the village area and adjacent residential development. The 15,000 trips compares with an estimated 31,000 new auto trips projected under the Town's 1986 Land Use Plan.

Schools

The school system's report, Long-Range Facility Plan for the Nineties (1990), recommends that two elementary schools, one middle school and one high school be built in the Chapel Hill-Carrboro School District over the next ten years. The school system is looking to the undeveloped areas to the north and south of Chapel Hill for possible sites.

In the southern area plan, the village center represents an ideal location for a possible school. The juxtaposition of the village and the southern park site creates possibilities for a neighborhood in which many children could walk to school and have easy access to the park.

Parks and Recreation

The Town's planning standard for a neighborhood park is one park for every 5,000 persons. The Town has already purchased land for a community-wide park in the Southern Area. The 1989 Community Facilities Report anticipated that the community park would serve the needs of the southern area for a neighborhood park. In addition, the village center would contain an area for an urban park which would also function as a neighborhood park.

In the 1991 Capital Improvements Program, the Town Council decided to defer beginning improvements to the Southern Community Park until a later date. It is possible that improvements may not be available until after 1995; and likely that the full master plan will be implemented over a ten-to-twenty year period.

The plan's emphasis on a transportation system which provides alternatives to the automobile fits well with the concept of a greenway system. As a general approach, greenways would be appropriate along major streams in the area, especially Fan Branch and Wilson Creek. These should be linked to the bikeway and sidewalk system. The location of greenways, bikeways, and sidewalks need to be balanced against the

need to protect critical environmental areas, especially along Morgan Creek where several sites are listed in the Triangle Land Conservancy Inventory of Natural Areas (1988).

Public Safety

The Town has a general standard of a five-minute response or a one and one-half mile service radius for determining the need for additional fire stations. The southern area is the only portion of the urban services area which is not within these standards.

The master plan for the Southern Community Park includes a site for a future fire station. In 1991, the Town deferred starting construction on this station, citing that current growth trends make it unlikely that a fire station would be needed before 1996.

RECOMMENDED STRATEGIES

We have established where we are, and outlined a vision of where we want to go. So how do we get there?

No one regulatory tool will allow the plan to be implemented. A set of existing and newly created tools will need to be used in a coordinated strategy.

Existing Tools

Traditional Zoning can control what can be built, where, and how much of it. Example: Agricultural areas can be zoned "Rural Transition," requiring a 100,000 square foot minimum lot size and permitting a limited range of uses.

Conditional Use Zoning can allow a property owner to request rezoning to allow a specific development. Under this process, the Town can compare the specific site plan to the Comprehensive Plan and, if consistent, can approve the rezoning only for a specific use and design. Example: Land designated "Village" in this plan is currently zoned for low-density residential use. A request to rezone to allow higher density and commercial use, as called for in this plan, can be entertained and approved (if consistent with this plan) or denied (if not consistent with the village concept described herein).

The Capital Improvements Plan that is prepared as an annual part of the Town's budget process can be adjusted to include components of this plan. Example: the proposed pedestrian/bicycle bridges across Morgan Creek can be included in the CIP for construction.

Purchase of land or conservation easements can be funded by Open Space Acquisition funds that are periodically available to the Town through successful bond referenda. Example: a pasture along Smith Level Road that is of particularly high scenic value can be permanently preserved by purchase of a conservation easement that permanently precludes development of the tract.

New Tools

Non-contiguous Special Use Permits could be used to equitably preserve open space. Example: Development regulations could be drafted for village development that would require a certain amount of open space to be preserved. The developer could preserve the required open space off-site, in designated areas, as a part of a Special Use Permit for commercial development in the village. This new tool would need to be created by an amendment to the Town's Development Ordinance.

Design Guidelines for the village or for clustered residential areas could be drafted and serve two purposes: a guide for developers in the design of proposed developments, and a guide for the Town Council in determining whether a proposed development or conditional use zoning request is consistent with the Comprehensive Plan.

A Townwide Transportation Management Plan would help assure that newly developing areas can be served by transportation modes other than the automobile. Chapel Hill is currently developing such a plan, that will suggest strategies related to increasing transit ridership, developing bicycle paths, and promoting land use patterns that can be walked.

New Zoning Districts could be created that would better match the proposed land use categories. Example: A new district could be created that would call for a one acre minimum lot size, to match the one unit per acre land use designations. New districts can be created by a Development Ordinance amendment; applying them would be a rezoning.

Other tools that may be of value that merit future consideration are described in the Appendix.

How to Start

Adoption of this Plan is the starting point. As a component of Chapel Hill's Comprehensive Plan, The Small Area Plan's objectives can be incorporated into public Capital Improvements Plans, and can be part of the basis for approval or denial of rezonings and development applications.

Rezoning should be initiated. Portions of the area should be rezoned to reflect the densities called for in the Plan.

Design Standards for the Village and Cluster development should be prepared, including guidelines for developing on steep slopes.

Conditional Use Rezoning should be encouraged for the village and cluster residential areas.

A Development Ordinance Amendment should be prepared to create the new tool, "Non-contiguous Special Use Permits."

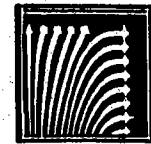
A Townwide Transportation Management Plan has been initiated by the Council, and is currently being discussed and developed by the Town's Transportation Board. Special emphasis should be given to transportation issues for newly developing areas, particularly this southern area.





**SMALL AREA PLAN
SOUTHERN AREA**

JUNE 23, 1992



**Town of Chapel Hill, North Carolina
Comprehensive Plan**

APPENDIX

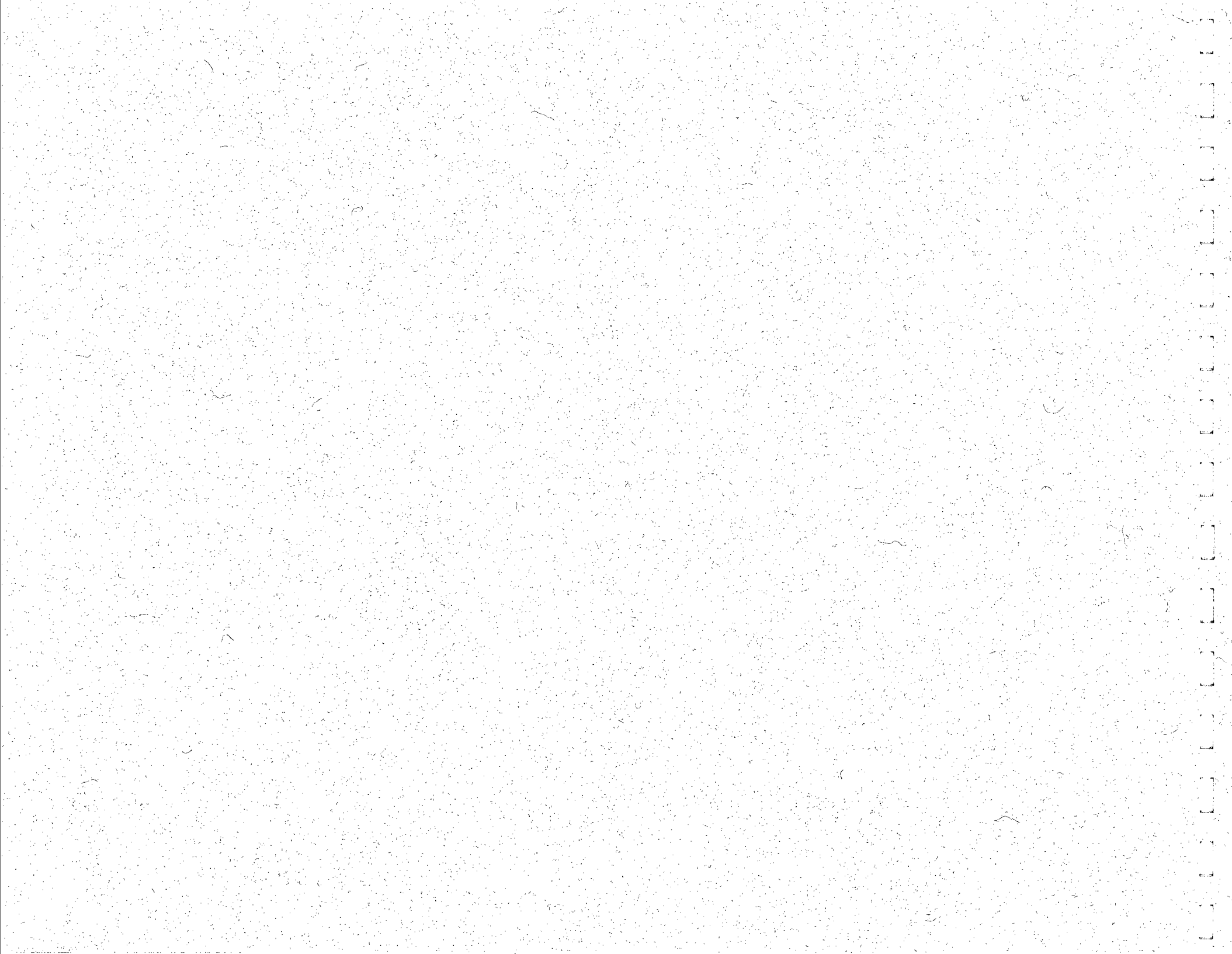
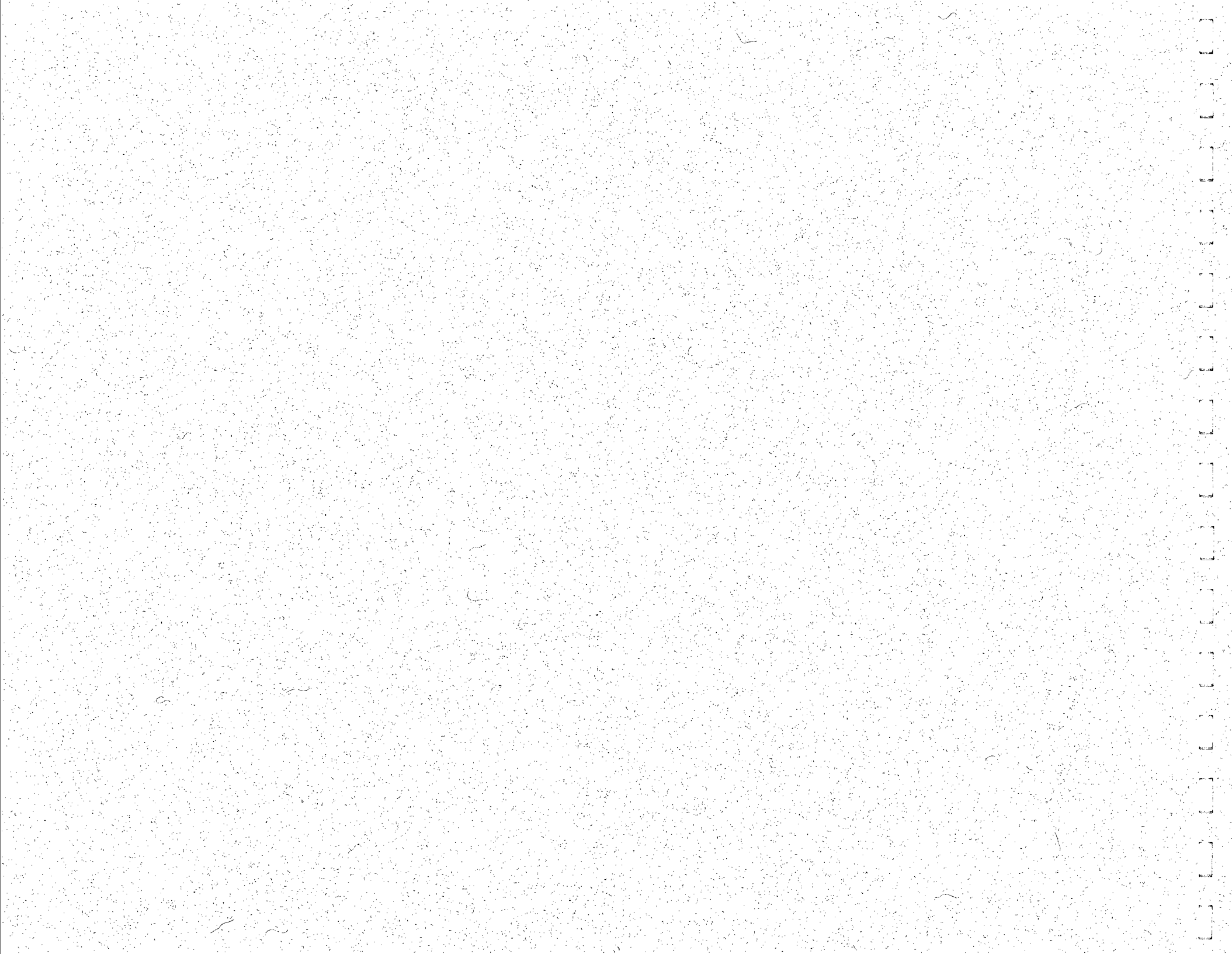


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EXISTING CONDITIONS OF THE AREA

Existing Conditions of the Area

The following series of maps describes the natural and man-made features of the area as it is today. This information and these maps serve as the base upon which the Recommended Plan was developed.

The Existing Conditions report was prepared in June 1990, and reflects the existing conditions at that time.

Summary of Major Findings

Land character in the Southern Area is highly defined by the numerous natural drainage ways and steep slopes.

Many sensitive natural environment areas exist along Morgan Creek including among others Stillhouse Bottom and Hunt Aboretum.

The area is laced with numerous streams and drainage channels.

Most of the area's natural drainage flows toward Morgan Creek.

The only area serviced by sewer lies along the south side of Morgan Creek.

The only major development west of 15-501 South is Dogwood Acres.

East of 15-501 South, residential subdivisions exist in the Mt. Carmel Church Road/Parker Road area.

Most of the area east of 15-501 South contains land with major building restrictions.

Most of the area west of 15-501 South has moderate building restrictions.

EXISTING CONDITIONS

Existing Conditions

The Existing Conditions map is a graphic composite of information from aerial photographs, utilities maps and ownership maps.

Boundaries:

The boundaries generally are Smith Level Road on the west, Chatham County line and the Urban Services Boundary on the south, and the town limits on the north.

Population - approximately 1200

Adjoining and near-by Properties:

- 1 Carolina Meadows
- 2 Finley Golf Course
- 3 Morgan Creek Sewage Treatment Plant
- 4 Botanical Gardens
- 4 William L. Hunt Arboretum
Mason Farm
- 19 Aqueduct Conference Center

Community Facilities:

- 5 Culbreth Junior High School
- 6 The Future Southern Park/Fire Station/Park-Ride Lot

Major Development:

- 7 Dogwood Acres
- 8 Morgan Creek Hills
- 9 Farrington Hills
- 10 Old Bridge
- 11 Laurel Hills

- 12 Culbreth Park (approved)
- 13 Southbridge (approved)
- 14 Sycamore Run
- 15 The Woods at Laurel Hill (under construction)

Other Uses:

- 16 A commercial area at Watts Motel
- 17 Quarry east of 15-501 behind Watts Motel
- 18 Star Point Commercial Center

Significant Natural Areas:

- 4 Morgan Creek Anomone Berlandieri Slope
- 4 Part of the Hunt Arboretum
- Other significant natural areas along Morgan Creek
- 20 Stillhouse Bottom

Other Features:

A Duke Power overhead transmission line exists along Morgan Creek from Smith Level Road to the Gray Substation at the intersection of Fordham Boulevard and South Columbia Street.

The area is predominantly wooded.

Transportation Systems:

North/south access to this area is provided by US 15-501 South, Smith Level Road, and Old Lystra Road.

There is inadequate east/west access through this area. Existing Culbreth Road/Mt. Carmel Church Road provides limited east/west movement for a portion of the area, as does Dogwood Drive.

The Laurel Hill Parkway will provide a primary east/west access across this area.

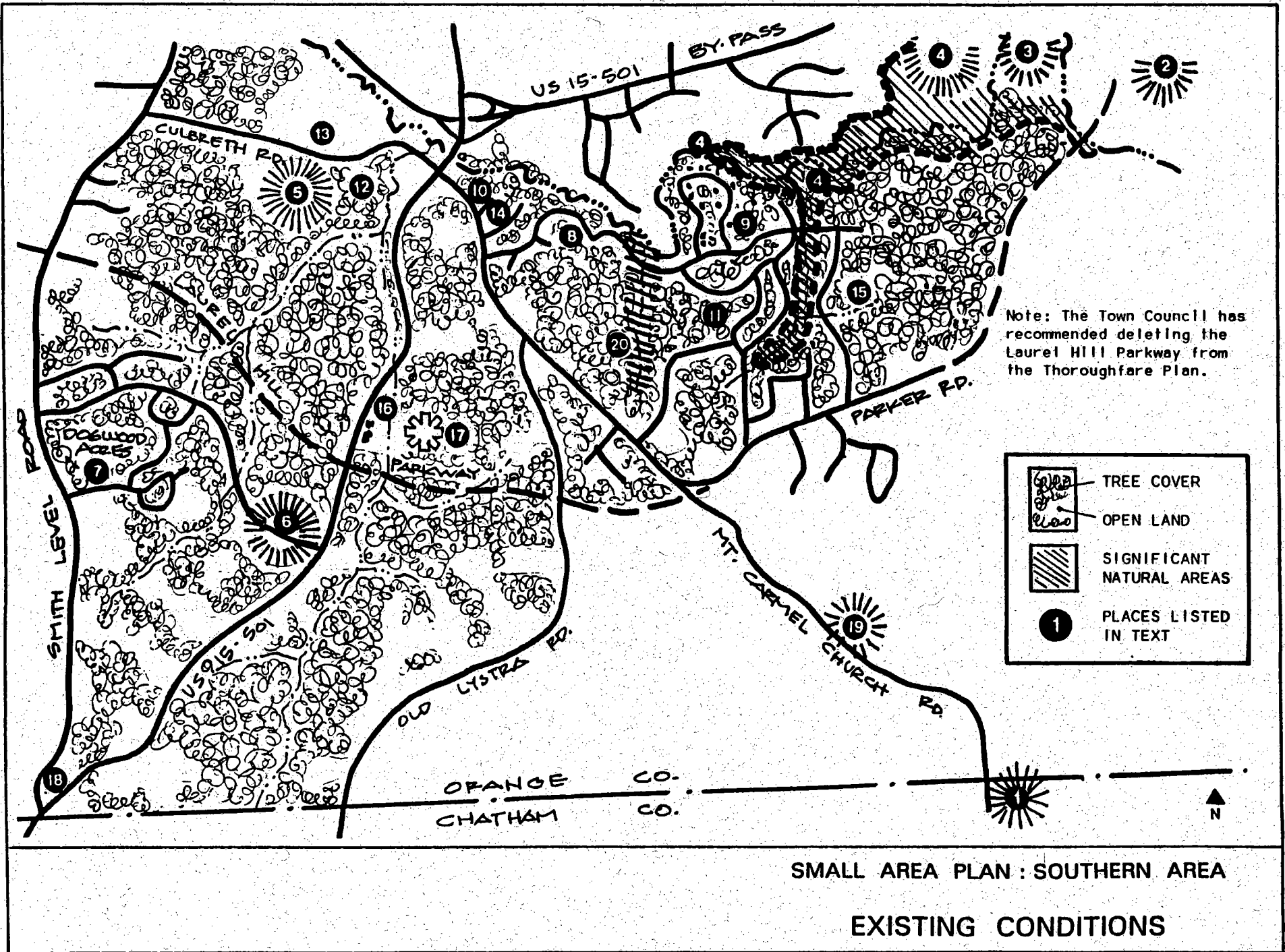
Existing development is served by a limited local street system. No collector street system exists to serve this area.

Morgan Creek acts as a barrier to access Fordham Boulevard and the University and the Town. The single crossing of Fordham Boulevard at 15-501 South is a choke point for the entire area.

Limited transit service exists along Smith Level Road and along Fordham Blvd. A 500 space park/ride lot has been proposed for the Southern Park.

No formal bikeway facilities serve this area. No sidewalks serve the area except for a small area along Culbreth Road.

All major thoroughfares in this area are operating below Level of Service D.



SLOPES

Slopes Study

Slopes Explanation:

We have categorized the slopes into five categories:

0 to 5 % -Prime Buildable.

5 to 10% - secondary buildable with minor restrictions.

10 to 15 % - secondary buildable with restrictions. Additional site preparation techniques which minimize grading and site disturbance are necessary.

15 to 20% - conserved. Building and site preparations can occur, but site restrictions are severe. These areas require customized architectural solutions and specialized site design techniques and approaches.

+ 20 % - preserved. Requires that detailed soil, hydrology and bed rock, and other engineering/environmental studies be made to determine acceptable building and site engineering techniques.

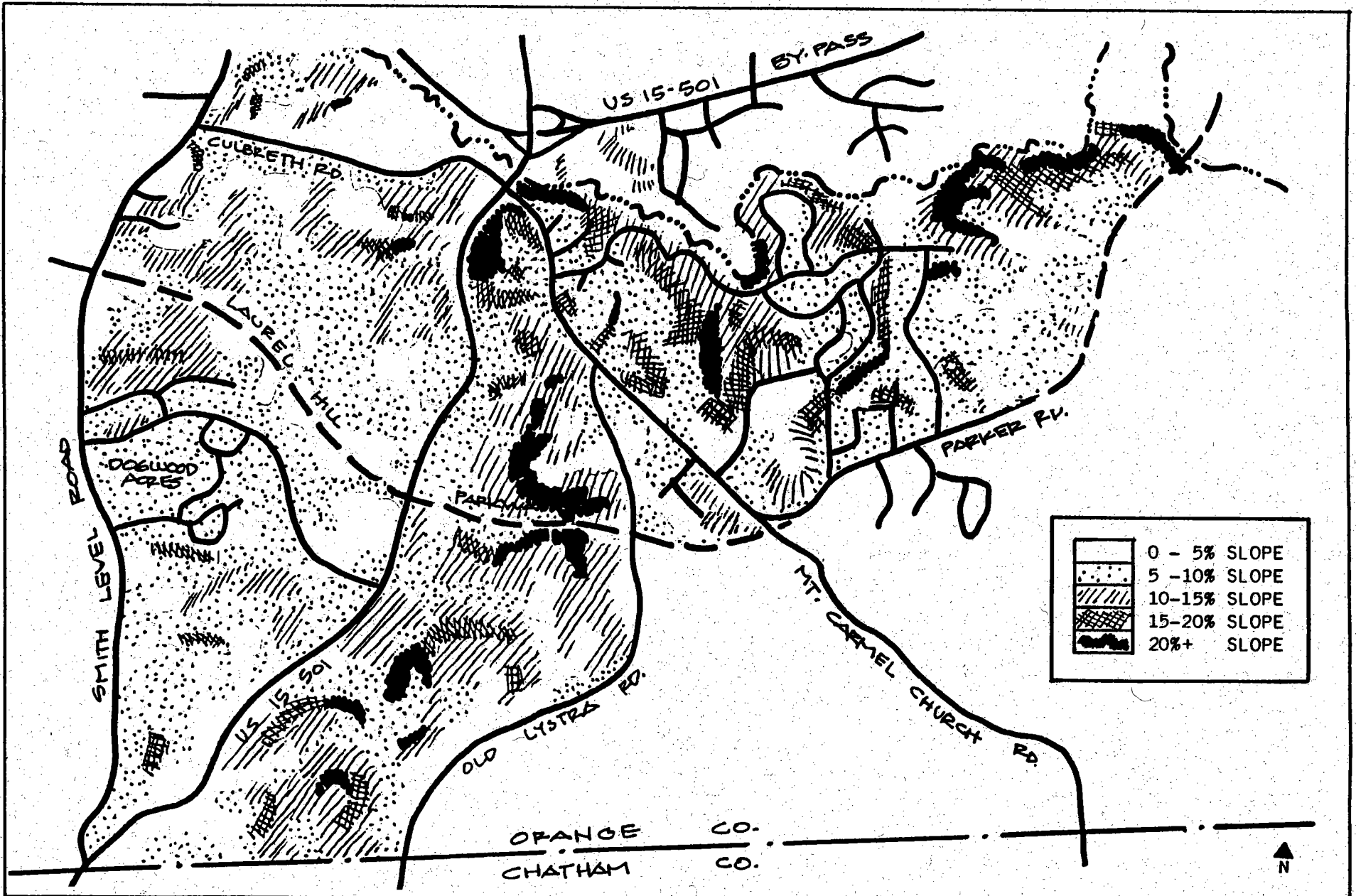
Area Summary

The Southern area, as a whole, contains numerous steep slopes.

The area between Smith Level Road and Pittsboro Road is gently rolling (0 to 10% slopes). However, within this area, some steep slopes exist (15 to 20 percent and greater) immediately southeast of Culbreth Junior High School and across Fan Branch.

The area between 15-501 South and Old Lystra Road (Wilson Creek area) contains mainly slopes greater than 10 percent.

The Mt. Carmel Church Road-Parker Road area is divided between slopes up to 10 percent and 10 percent or greater, primarily along the many natural drainage ways in this area. Several pockets of very steep slopes (in excess of 20 percent) exist within Stillhouse Bottom and in several areas along Morgan Creek.



	0 - 5% SLOPE
	5 - 10% SLOPE
	10-15% SLOPE
	15-20% SLOPE
	20%+ SLOPE

SMALL AREA PLAN : SOUTHERN AREA

SLOPE STUDY

ELEVATIONS

Elevation Study

Elevation Study Explanation:

The Elevation Study gives a graphic interpretation of the topography.

Area Summary

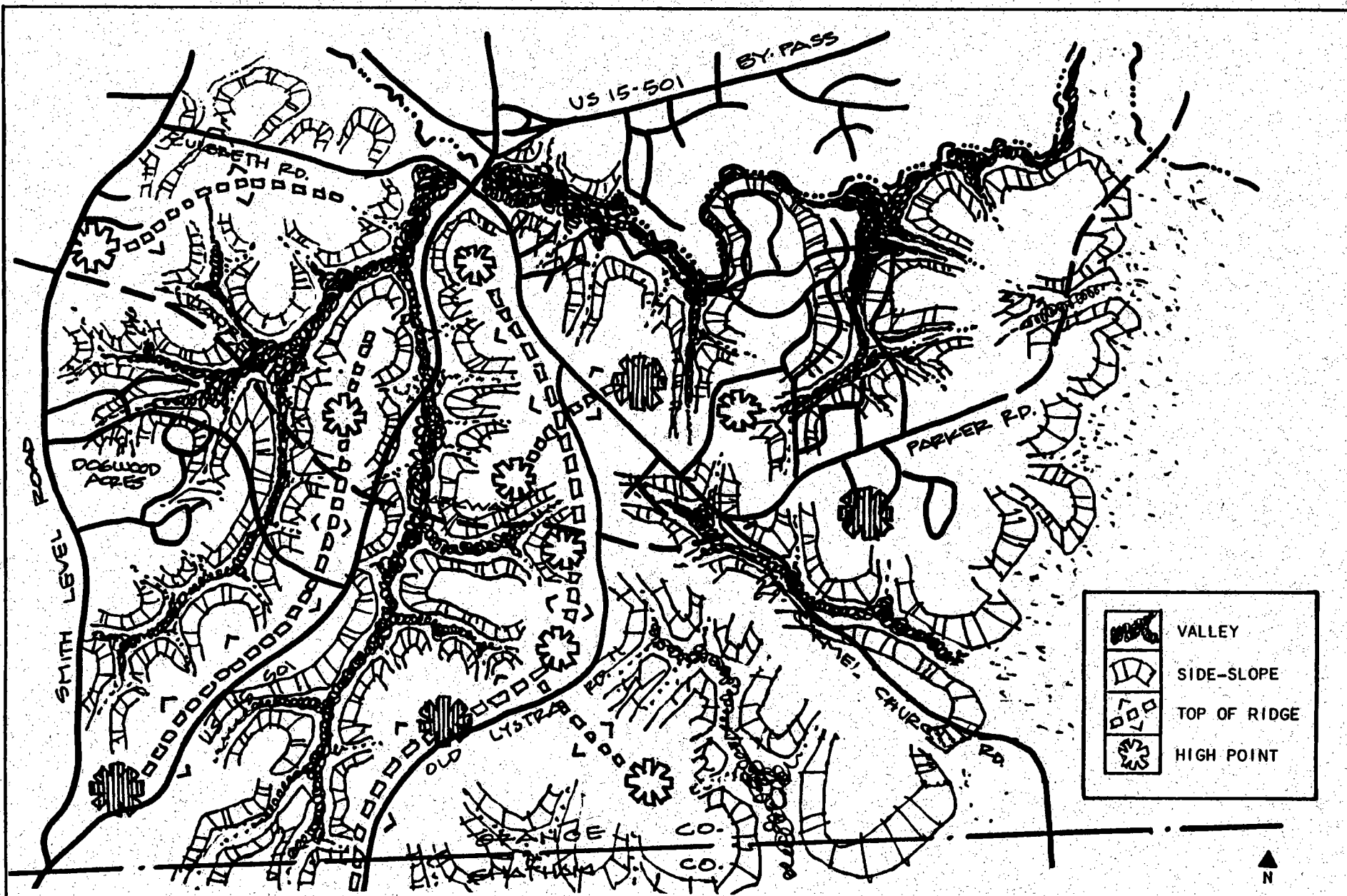
The area ranges in elevation from 230 feet (the eastern most portion of Morgan Creek) to 570 feet (at three places: along Mt. Carmel Church Road, Old Lystra Road and at Star Point)

Ridge lines exist along Smith Level Road, 15-501 South, Old Lystra Road and Mt. Carmel Church Road.

Major streams within the area include the Fan Branch, Wilson Creek and Stillhouse Bottom. A small area in the southeast corner drains south along Back Branch.

The topography along the south side of Morgan Creek is very steep. "Fingers" of steep slopes exist along portions of Wilson Creek and Fan Branch.

Flat areas exist primarily along the tops of the ridges.



SMALL AREA PLAN : SOUTHERN AREA
 ELEVATION STUDY / LAND STRUCTURE

LAND FORMS and INFRASTRUCTURE

Land Forms and Infrastructure

Land Forms and Infrastructure Explanation:

This map identifies and delineates the land forms that make up the various watersheds and drainage basins within the study area. The map further illustrates the location of existing water and sewer lines and roads in relation to the small area drainage basins and waterways.

Area Summary

Site Structure:

This area is divided by a series of ridges running north and south. These ridges subdivide the Morgan Creek drainage basin into a series of watersheds.

Two other minor drainage basins exist: one at the northeast corner of the site draining eastward, the other in an area between Old Lystra Road and Mt. Carmel Church Road draining to the southeast.

The site structure is formed by high plateaus along the tops of the north-south ridges and natural drainage channels flowing from the uplands toward the streams, forming "fingers" of land parcels.

Drainage Basins Refined:

The Southern Area is primarily one watershed drainage basin - Morgan Creek. However, the area with numerous major drainage channels should be subdivided into sub-watershed basins. For planning purposes, we have subdivided the study area within the Morgan Creek drainage basin into eight watershed areas.

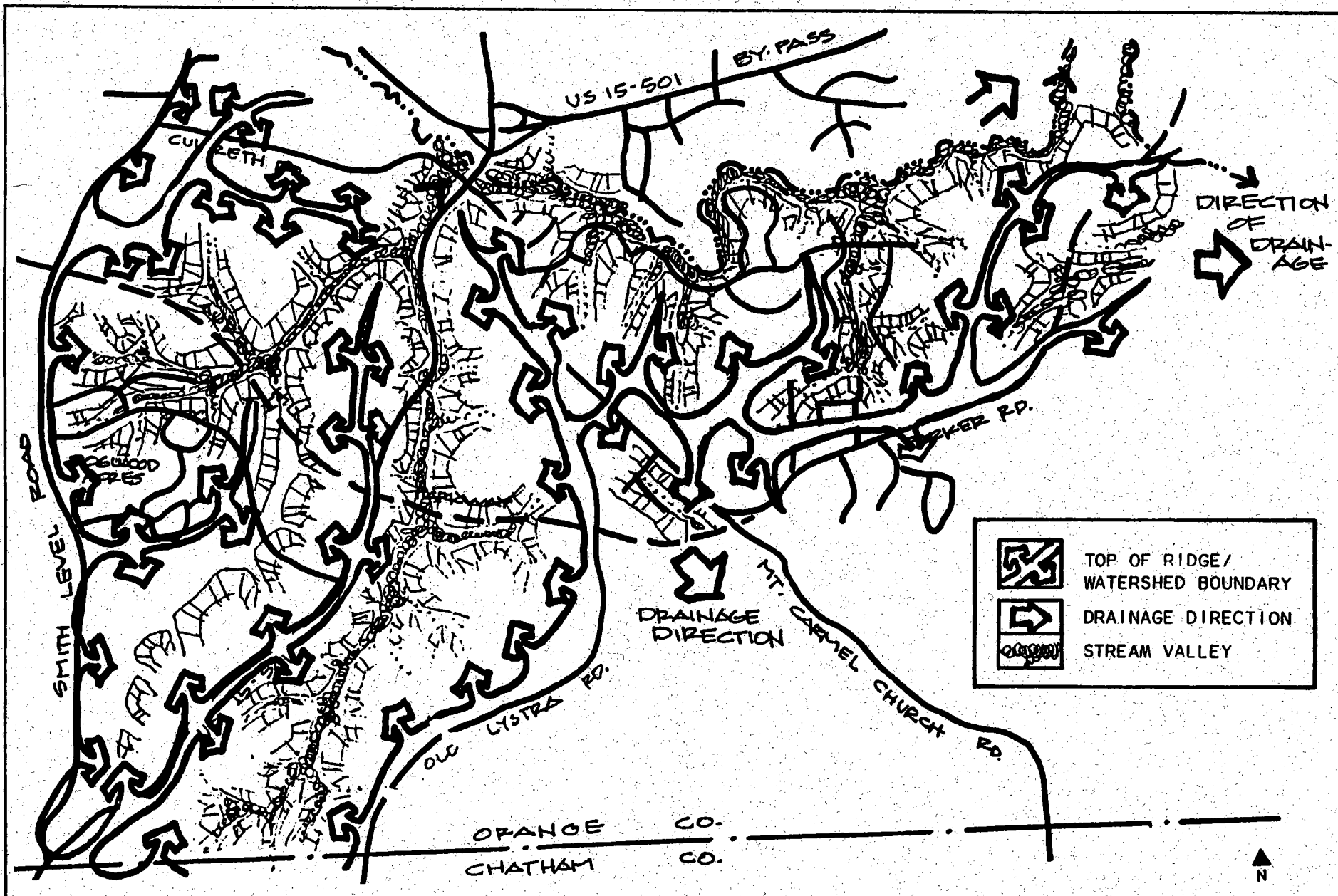
Utilities:

Major water lines exist along Smith Level Road, along Culbreth Road to the Junior High School, along South Columbia Street/15-501 South to Mt. Carmel Church Road, south to Bayberry Drive.

The subdivisions within the study area are serviced with smaller utility lines.

The Dogwood Acres Subdivision is its own sanitary district and is serviced by the Orange Water and Sewer Authority.

A major trunk line exists along Morgan Creek terminating at a Morgan Creek Sewer Treatment Plant at the northeast corner of the study area.



SMALL AREA PLAN : SOUTHERN AREA
 LAND FORMS / INFRASTRUCTURE

SOILS / DEVELOPMENT SUITABILITY

Soils/Development Suitability Study

Soils Explanation:

The Soils/Development Suitability Study presents an interpretation of the Orange County Soils survey in terms of buildability and erodability. The analysis also classifies and ranks soils according to development constraints and suitability for development.

Consideration is also given to hydrologic and geologic conditions in evaluating the development suitability. Specifically, depth to ground water and depth to bedrock were investigated and incorporated into the suitability evaluation.

The four classifications of development constraints are:

- 1. Few to no constraints*
- 2. Moderate constraints (Minor building restrictions)*
- 3. Moderate to severe constraints (Major building restrictions)*
- 4. Severe development constraints (Generally the high cost of development associated with acceptable building techniques precludes development in this category.)*

Area Summary

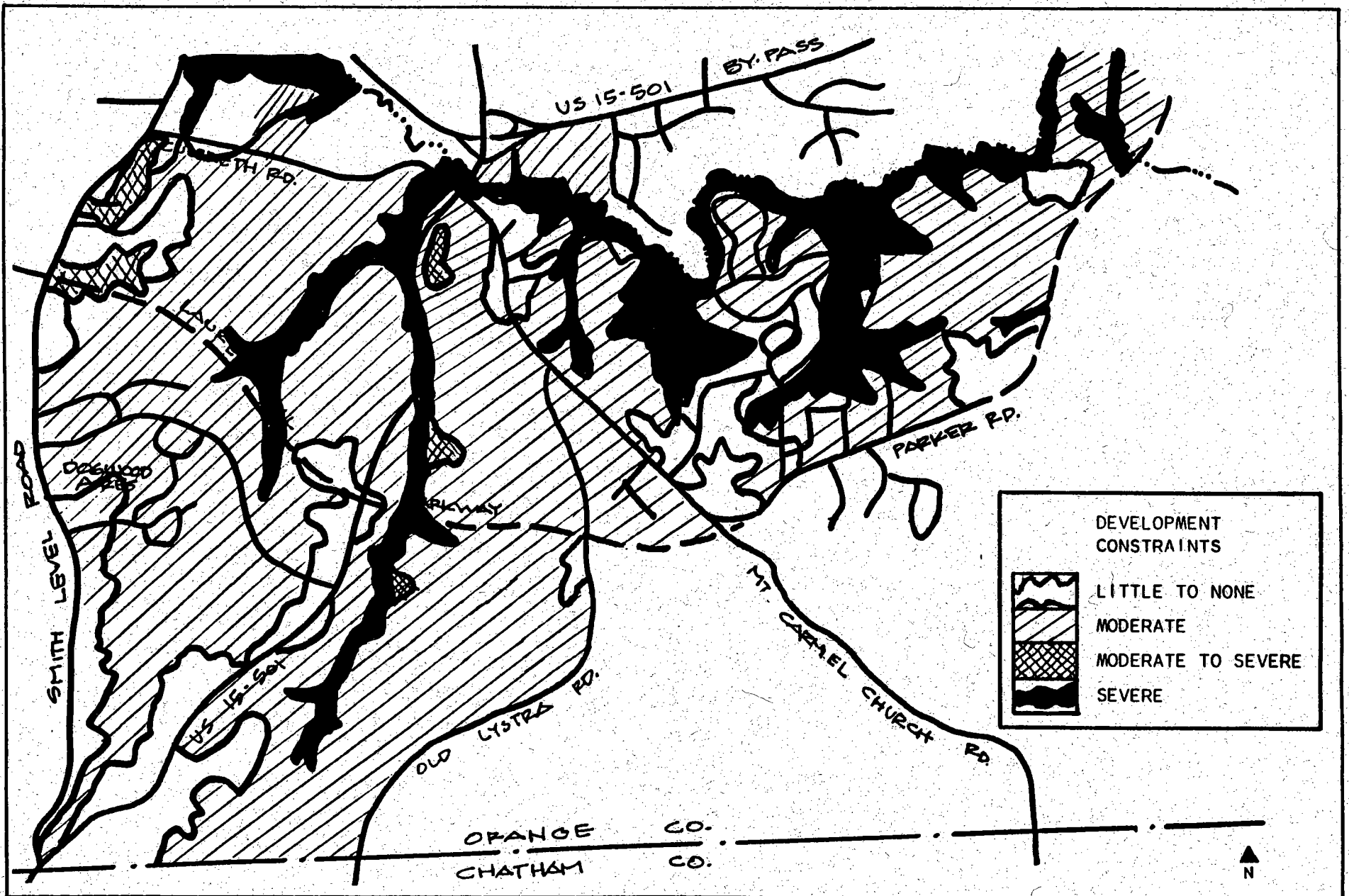
The areas containing few to no development constraints are located mainly along 15-501 South from Watts Motel to the Chatham County line, and along parts of Smith Level Road and along parts of Parker Road.

Most of the area contains moderate constraints.

Moderate to severe constraints exist along Smith Level Road near Culbreth Road, mainly due to the high water table.

Two other areas adjacent to Pittsboro Road and Old Lystra Road contain moderate constraints due to shallow depths to bedrock.

Severe constraints exist along the major streams and areas along the south side of Morgan Creek such as Stillhouse Bottom where very steep slopes exist.



SMALL AREA PLAN : SOUTHERN AREA
 SOILS : DEVELOPMENT SUITABILITY

SUMMARY ANALYSIS

Summary Analysis

Summary Analysis Explanation:

The Summary Analysis is an overlay map of the environmental inventory---topography, soils, slopes---and existing conditions.

The Summary Analysis identifies classifications of buildable land, drainage patterns and watersheds.

The land is classified into three categories:

- 1. Prime Buildable -- few or no building constraints*
- 2. Secondary Building Constraints -- Some building constraints due to poor soils, steep slopes or other hydrologic/geologic conditions.*
- 3. Building restricted -- Major building constraints due to extreme slopes, soil, hydrologic, geologic conditions and flood plains. Additional site analysis of soil conditions and hydrologic/geologic conditions is needed to determine acceptable building and site engineering techniques.*

Area Summary

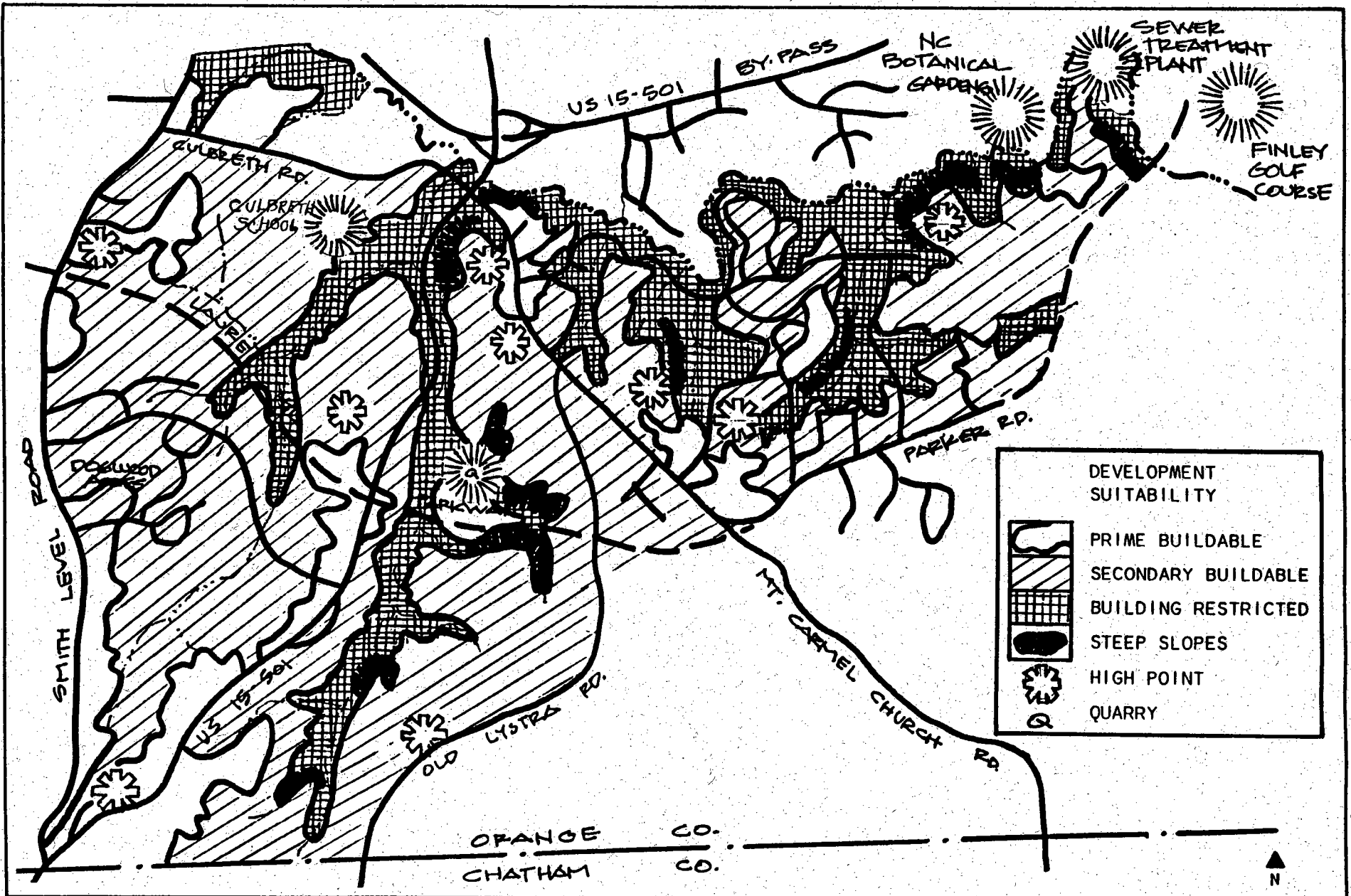
The areas along the stream beds, the steep slope areas adjacent to Morgan Creek, and an area along Smith Level Road contain a high water table and the building restricted land.

Most of the area contains mainly secondary buildable land with the prime buildable occurring along the tops of the ridges.

Several major high elevation points exist within this area. These are: on old Lystra Road near the Chatham County line, on 15-501 South near Star Point, on a hill immediately north of Mt. Carmel Church Road near Hillside and off of Parker Road at Hunters Glen.

Secondary high elevation points exist along Smith Level Road near Woodcrest Drive, on a hill to the northwest of 15-501 South near Watts Motel, two points southeast of Mt. Carmel Church Road overlooking 15-501 South, two points along the west side of Old Lystra Road and a point overlooking the Botanical Gardens.

The proposed Laurel Hill Parkway alignment bisects the site from Ray Road and Smith Level Road eastward and along Parker Road to intersect with NC 54.



SMALL AREA PLAN : SOUTHERN AREA
SUMMARY ANALYSIS

OTHER DEVELOPMENT ALTERNATIVES CONSIDERED

Development Alternatives Considered

The Small Area Plan Work Group considered the following three Development Alternatives as part of the process of developing the Recommended Plan. The Recommended Plan grew out of these alternatives.

The first alternative describes the area if it is developed according to the 1986 Land Use Plan, the Conventional Pattern defined previously. The second alternative describes the area if it is developed according to a modification of the 1986 Land Use Plan, still basically Conventional but with some Cluster Pattern development. The third alternative describes the area with some Conventional, some Cluster and some Village Pattern development.

Alternative I - The 1986 Land Use Plan (with no adjustments)

This map identifies the area as mainly low density residential, with some medium density areas.



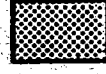



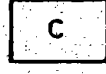
Multi-family development is shown in areas designated for multi-family uses in the Land Use Plan.

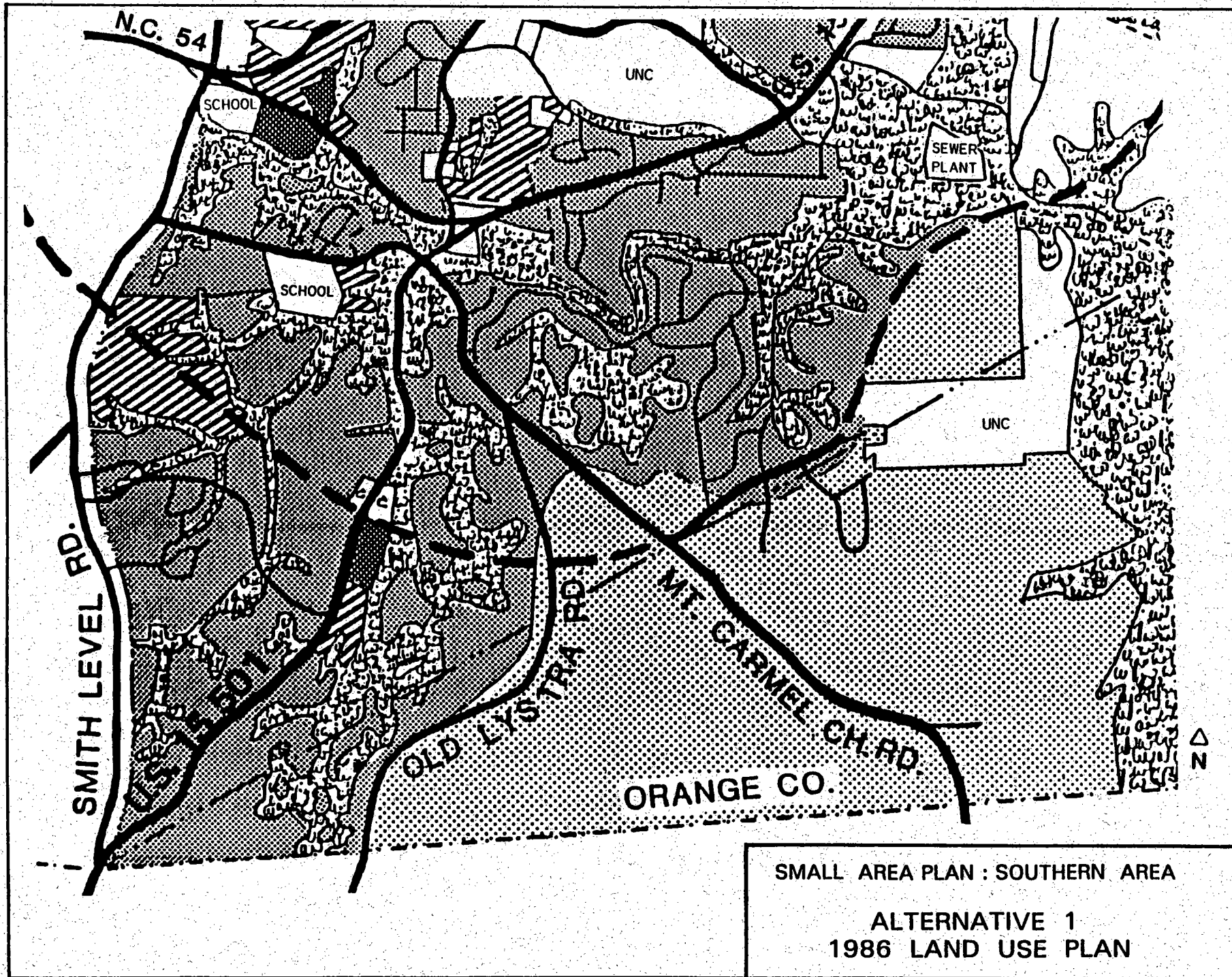
The commercial area near 15-501 and the Laurel Hill Parkway is shown on both sides of 15-501, to reflect the current plan.

The commercial development at Starpoint remains as is.

The floodplain and the steep slopes are shown as protected although specific mechanisms to protect steep slopes are not part of existing law.

Laurel Hill Parkway is shown on this map.

LEGEND	
	CONSERVATION/ OPEN SPACE
	RURAL RESIDENTIAL 1 UNIT/2 ACRES
	LOW DENSITY 0-4 UNITS/ACRE
	MEDIUM DENSITY 4-8 UNITS/ACRE
	HIGH DENSITY 8-15 UNITS/ACRE
	THOROUGHFARE PLAN
	COMMERCIAL



OTHER DEVELOPMENT ALTERNATIVES CONSIDERED

Alternative II - The 1986 Land Use Plan Modified

In this alternative the area is shown as mainly low density residential (one unit per acre to one unit per five acres.)

No multi-family development is shown.




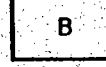


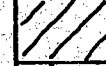
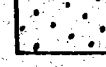
The area contains neighborhood commercial areas at Starpoint and on 15-501.

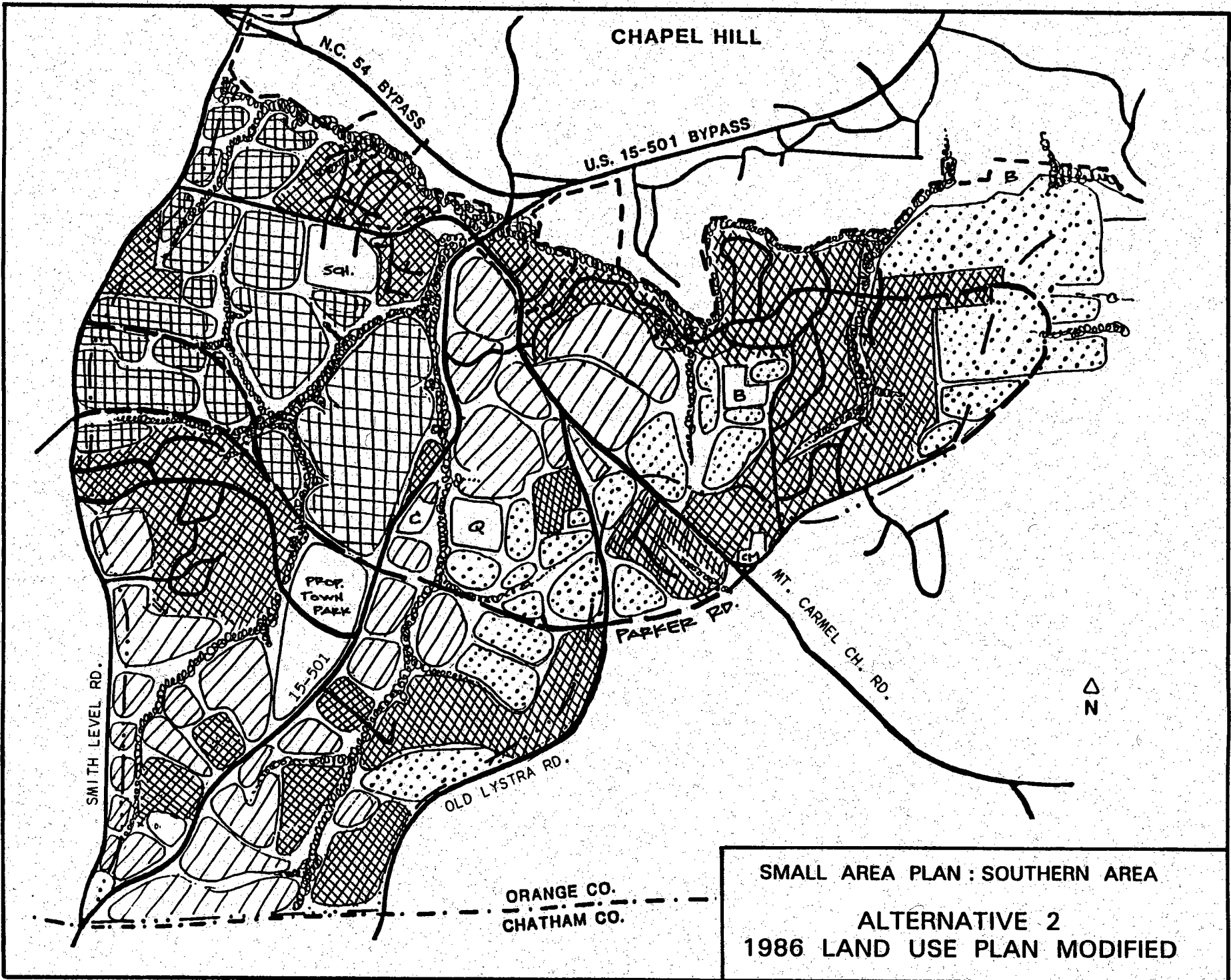
No expansion of the existing commercial areas is shown.

Parker Road is shown as an east-west local connector between Smith Level Road, 15-501, Old Lystra Road and Mount Carmel Church Road.

Steep slopes are not indicated on the map, reflecting the fact that we have no specific mechanisms to protect them.

Laurel Hill Parkway is not part of this alternative.

LEGEND	
	AREAS TO BE PRESERVED
	EXISTING COMMERCIAL
	EXISTING QUARRY
	BOTANICAL GARDENS
	DEVELOPED AREAS
FUTURE RESIDENTIAL	
	2 UNITS/ACRE
	1 UNIT/ACRE
	1 UNIT/5 ACRES



CHAPEL HILL

N.C. 54 BYPASS

U.S. 15-501 BYPASS

Sch.

B

C

R

PPON
TOWN
PARK

15-501

PARKER RD.

MT. CARMEL CH. RD.

SMITH LEVEL RD.

OLD LYSTRA RD.



ORANGE CO.
CHATHAM CO.

SMALL AREA PLAN : SOUTHERN AREA
ALTERNATIVE 2
1986 LAND USE PLAN MODIFIED

OTHER DEVELOPMENT ALTERNATIVES CONSIDERED

ALTERNATIVE III - VILLAGE PATTERN

In this alternative the areas most suitable for development are shown in the Village Pattern. These areas are near the Town and the University.

The most environmentally sensitive land and the land farthest away from the Town is shown at very low density, five to ten acre lots.

Some of the housing is clustered to protect environmentally sensitive areas.

A central, main village is shown just west of 15-501, with a village center containing neighborhood commercial and possibly office, recreation, day care, library, main bus stop, school and other uses.

Adjacent Villages also contain a village center, although of smaller scale designed to provide neighborhood commercial and other uses.


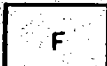

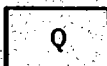
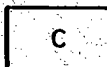

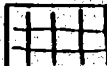
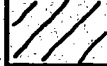

The Villages are connected with roads and pedestrian and bicycle paths.

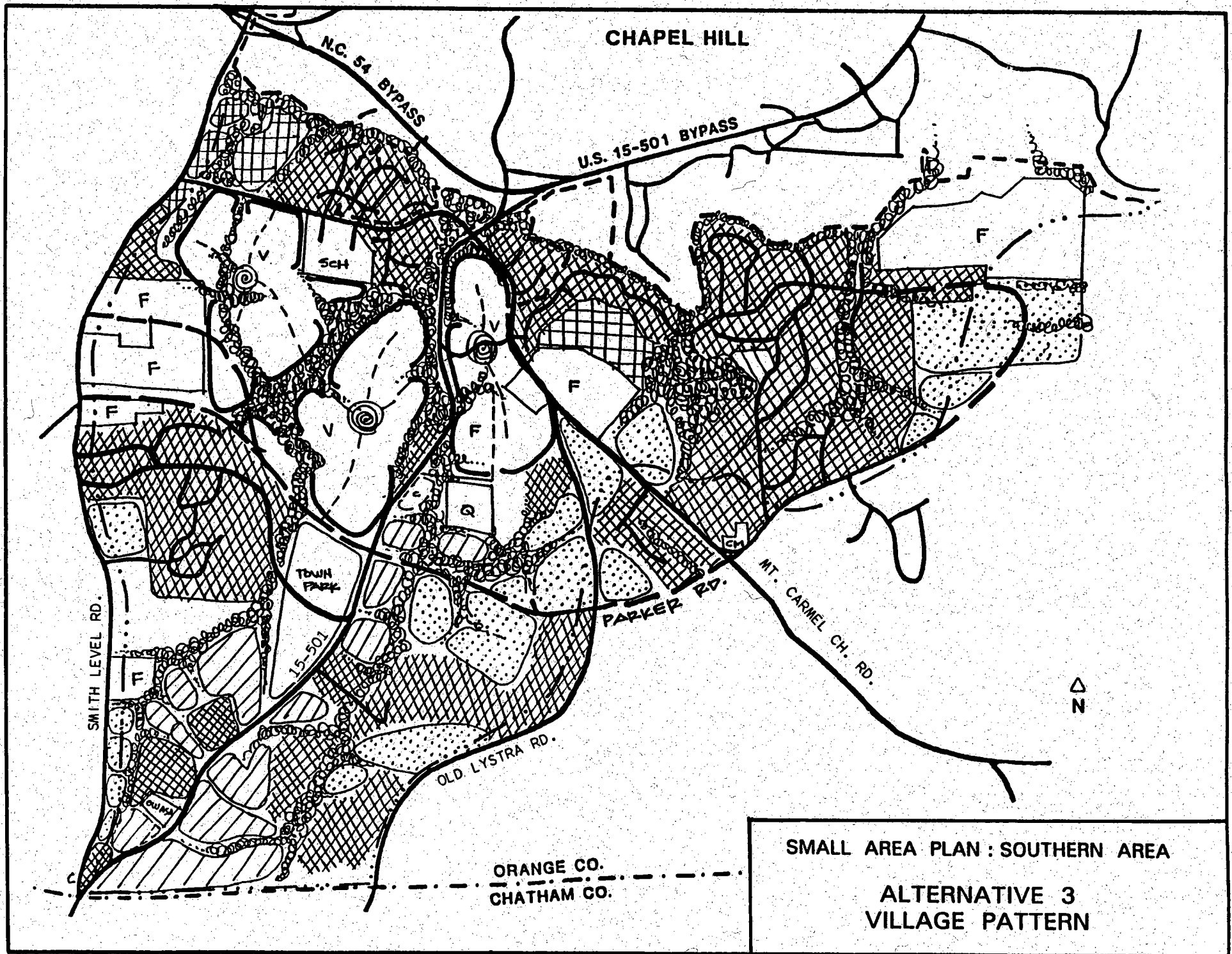
Farmland is designated as such.

Parker Road is shown as an east-west local connector between Smith Level Road, 15-501, Old Lystra Road and Mount Carmel Church Road.

Laurel Hill Parkway is not part of this alternative.

Steep slopes are shown on this map as areas to be preserved.

LEGEND	
	AREAS TO BE PRESERVED
	FARM LAND
	VILLAGE
	EXISTING QUARRY
	EXISTING COMMERCIAL
	DEVELOPED AREAS
FUTURE RESIDENTIAL	
	2 UNITS/ACRE
	1 UNIT/ACRE
	1 UNIT/5 ACRES



SMALL AREA PLAN : SOUTHERN AREA

ALTERNATIVE 3

VILLAGE PATTERN

POPULATION AND DWELLING UNIT ESTIMATES FOR ALTERNATIVES

Density:	ALTERNATIVE I			ALTERNATIVE II			ALTERNATIVE III			THE ADOPTED PLAN		
	Acres	Units	People	Acres	Units	People	Acres	Units	People	Acres	Units	People
Existing	785	550	1199	785	550	1199	785	550	1199	785	550	1199
High (10/Acre)	14	140	305									
Medium (5/Acre)	143	715	1558									
Medium (4/Acre)										70	280	610
Low (2/Acre)	1069	2138	4660	539	1078	2350	34	68	148	86	172	375
Rural (1/Acre)	205	205	446	810	810	1766	270	270	588	447	447	975
Rural (1/5 Acres)				425	85	185	342	68	148	347	69	150
Village							160	870	1896	196	980	2136
Neighborhood							296	1176	2563			
TOTAL:	2216	3748	8168	2559	2523	5500	1887	3002	6542	1931	2498	5445
Farmland: (If Developed) @ 1 unit/1 ac. @ 1 unit/5 ac.							142 132	142 26	309 56	256 144	256 28	558 63
Total Farmland							274	168	365	400	284	621
Cumulative Totals:	2216	3748	8168	2559	2523	5500	2161	3170	6907	2331	2782	6066

COMPARISON OF THE IMPACTS OF ALTERNATIVES

	Estimated Population	Development Pattern	Water & Sewer	Transportation	Schools	Parks	Public Safety
Alternative 1 (1986 Land Use Plan)	8,200	Low-Density Residential	Yes - Throughout Area	31,000 Trips Added	None Located	Southern Community Park; Greenways	1 Fire Station
Alternative 2 (Revised Alt. 1)	5,500	Cluster and Very Low Density Residential	Yes - Only in portion of Area	25,000 Trips Added	No Location Specified	Southern Community Park; Greenways	1 Fire Station
Alternative 3 (Several Villages with Low-Density Areas)	6,500	Mix of Densities Near Town	Yes - May Need Only in Portion of Area	16,000 Trips Added	Locate in Village Centers	Southern Community Park; Greenways; Village Center Parks	1 Fire Station
Alternative 4 (One Village with Low-Density Areas) *Adopted Plan*	5,500	Mix of Densities Near Town	Yes - May Need Only in Portion of Area	15,000 Trips Added	Locate in Village Center	Southern Community Park; Greenways; Village Center Parks	1 Fire Station

PUBLIC FACILITIES DATA AND COSTS

Water / Sewer

We list the cost of major projects needed to serve the area. These projects are also shown on the attached map. We indicate which projects are to be paid under OWASA'S policies as a cost of development, and those which are anticipated to be paid by OWASA as a system-wide improvement. Costs are shown in 1991 dollars.

Water Lines

1. 15-501 (Starpoint to Mt. Carmel): Provide a 12" water main along U.S. 15-501 south from Culbreth Road to proposed southern water tank site. To be funded by developer or OWASA (Estimated cost \$800,000).
2. Mt. Carmel Church Rd: Provide a 12" water main along Mt. Carmel Church Rd. To be funded by developer or OWASA (Estimated cost \$360,000).
3. Water Tank: Construct a 0.5 million gallon elevated finished water storage tank located in the vicinity of U.S. 15-501 and Smith Level Rd. This facility would support expansion of the water system in the urban services area. To be funded by OWASA (Estimated cost \$950,000).

Sewer Lines

1. Morgan Creek Upgrade: Upgrade existing sewer line along Morgan Creek to a 30" line. To be funded by OWASA (Estimated cost \$1,160,000).
2. Fan Branch Interceptor: Extend main sewer line down Fan Branch. To be development-funded (Estimated cost \$1,375,000).
3. Wilson Creek Interceptor: Extend main sewer line down Wilson Creek. To be development-funded (Estimated cost \$1,400,000)

TOTAL ESTIMATED WATER AND SEWER COST: \$6,045,000

Schools

One elementary school is projected to be located in the area. Cost estimates are provided by the Chapel Hill-Carboro School System's 1990 report, Long-Range Facility Plan for the Nineties. The building size would be approximately 91,000 square feet; and the acreage needed to support the facility is approximately 15-20 acres (Estimated cost \$11,000,000).

TOTAL ESTIMATED SCHOOL COST: \$11,000,000

Town Facilities

Fire Station: The Town's Capital Improvements Program shows the need for a fire station to serve the area (Estimated cost \$650,000).

Southern Community Park: The Town-owned site of approximately 80 acres will eventually be developed according to a master plan, with improvements to serve the Southern Area, and the community (Estimated cost \$5,500,000).

TOTAL ESTIMATED TOWN FACILITIES COST: \$6,150,000

URBAN SERVICES & PLANNING/ZONING BOUNDARY

CHAPEL HILL





CITY LIMITS

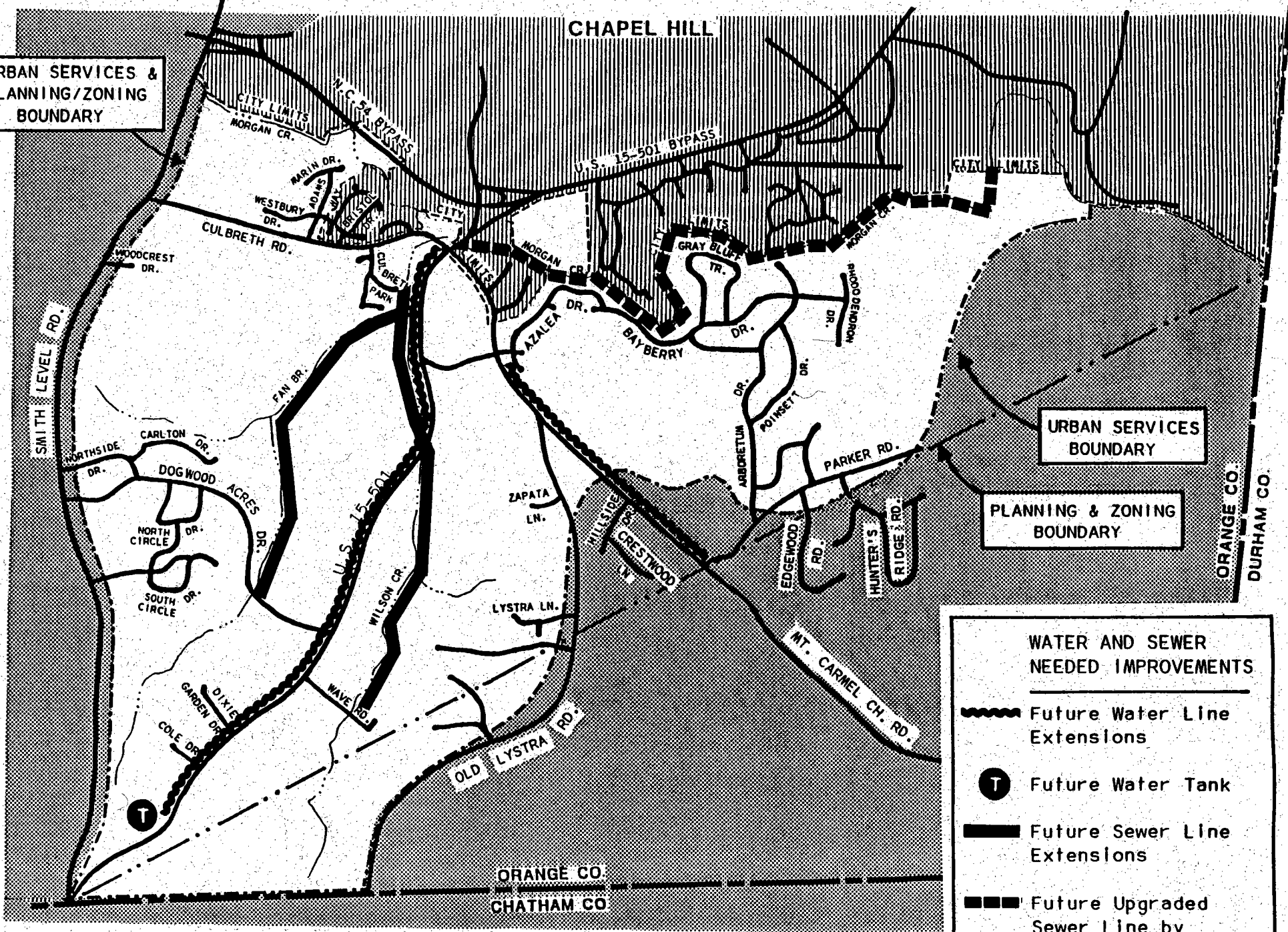
URBAN SERVICES BOUNDARY

PLANNING & ZONING BOUNDARY

ORANGE CO.
DURHAM CO.

WATER AND SEWER NEEDED IMPROVEMENTS

-  Future Water Line Extensions
-  Future Water Tank
-  Future Sewer Line Extensions
-  Future Upgraded Sewer Line by OWASA



URBAN SERVICES & PLANNING/ZONING BOUNDARY

CHAPEL HILL

URBAN SERVICES BOUNDARY

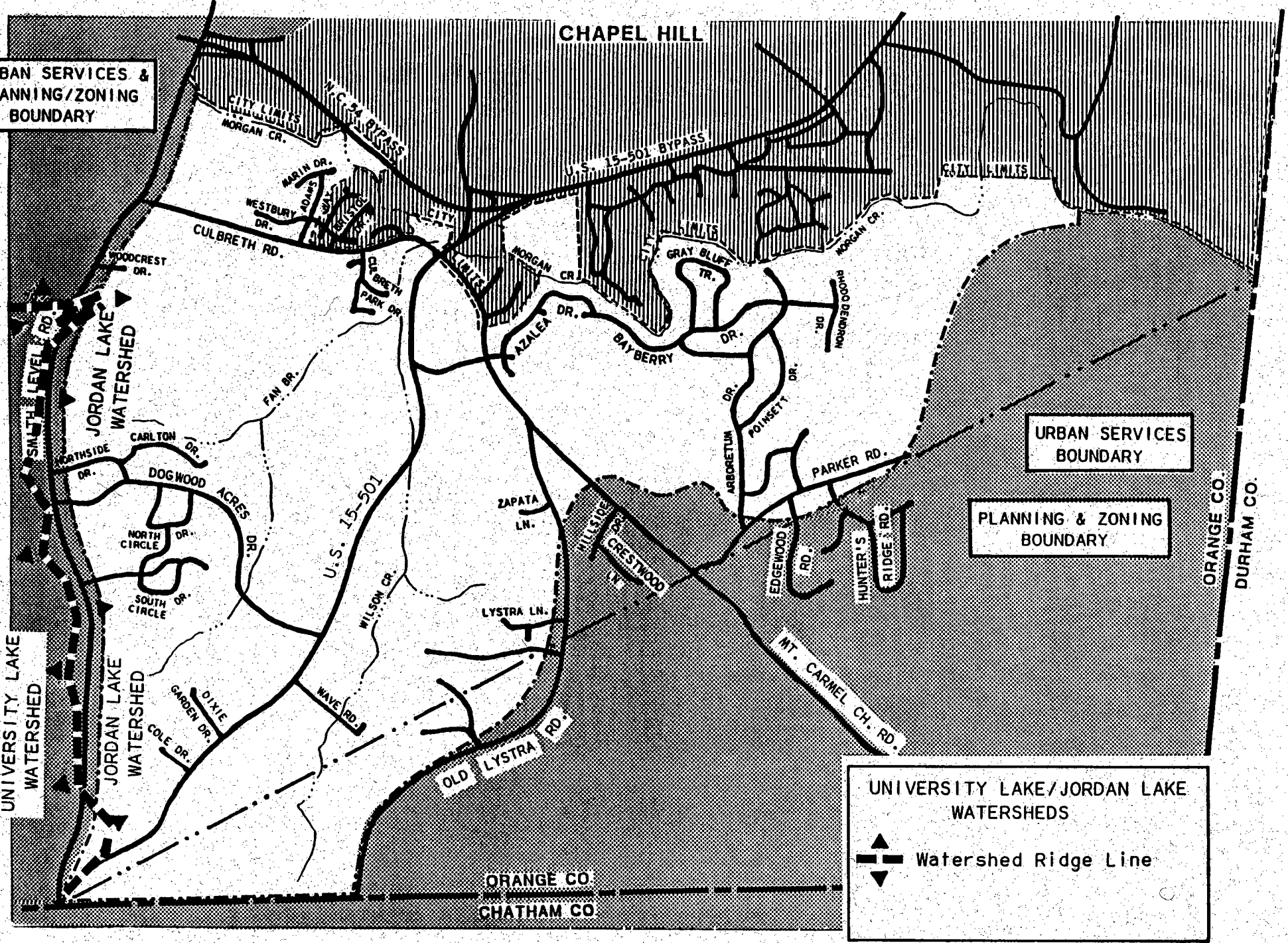
PLANNING & ZONING BOUNDARY

UNIVERSITY LAKE/JORDAN LAKE WATERSHEDS

Watershed Ridge Line

ORANGE CO.
CHATHAM CO.

ORANGE CO.
DURHAM CO.



OTHER POSSIBLE IMPLEMENTATION STRATEGIES

Other tools that may be of value that merit future consideration are described here:

Adopt a Short Range Transit Plan that would propose a comprehensive transit service plan for the area and include capital and operating projections.

Use Overlay Zoning Districts where appropriate. Where a land use plan calls for preservation of steep slopes, wetlands, historically significant properties, or key vistas, such areas might be preserved through adoption of an overlay zoning district. The underlying zoning still controls types of uses, but an overlay district might add extra requirements.

Encourage Purchase of Development Rights where appropriate. Where a land use plan calls for preservation of land in its existing state, such as a farm, but where public ownership is not appropriate, the development rights for that tract could be purchased. In such a case, the land would remain in private ownership and use, but with significant deed restrictions that prevent it from being developed in the future.

Pursue authority to use Transfer of Development Rights where appropriate. Similar in concept to purchase of development rights, this is a system of transferring development rights from one

property to another. In this system, the owner of property designated on a land use plan for commercial or higher density residential use can achieve those more intensive uses only by purchasing development rights from other land in the area. "Sending Areas" and "Receiving Areas" are designated on a land use plan: the sending areas are those where land is to be preserved; receiving areas are those where more intensive uses may be allowed.

Amend the Development Ordinance to include specific Requirements. Development regulations can be adjusted to require a wide variety of items in order to achieve land use objectives including protection of steep slopes and preservation of open space.

Offer Incentives to developers to achieve various objectives. Development regulations can be adjusted so that there is an incentive for the developer to include components in development plans that would achieve the Plan's objectives.

STRATEGIES FOR ACHIEVING THE SMALL AREA PLAN OBJECTIVES

	Zoning	Conditional Use Zoning	Non-Contiguous Special Use Permit	Purchase of Land	Purchase of Development Rights	Transfer of Development Rights	Donation of Land	Purchase or Donation of Easement	Designate Design Standards	Offer Incentives	Transportation Management Plan	Capital Improvements Program	Short-Range Transit Plan	Overlay Zoning
Protect Environmentally Sensitive Areas	•	•	•	•	•	•	•	•	•	•				•
Preserve the Natural Beauty of the Area		•	•	•	•	•	•	•	•	•				•
Protect the Character of the Area		•	•	•	•	•	•	•	•					
Protect the Water Quality of Jordan and University Lakes	•	•	•	•	•									•
Preserve the Existing Neighborhoods	•	•			•									
Provide a Range of Housing	•	•								•				
Limit the Increase in Traffic		•							•	•	•	•	•	
Provide the Appropriate Support Structures		•							•			•		
Ensure Bicycle, Pedestrian, and Transit Systems								•	•		•	•	•	

NOTES FROM 1ST PUBLIC MEETING

SMALL AREA PLAN MEETING DECEMBER 11, 1990

Transportation Questions:

What is the status of the Laurel Hill Parkway?
When is the Council going to make the decision?
Are there any plans for any other roads?
Smith Level Road serves as the eastern boundary of the University Lake Watershed.
Why are no other crossings of Morgan Creek being considered?
Is there no plan to relieve the problem of getting into Chapel Hill?
What are the plans for Parker Road?
What are the plans for widening 15-501?
Are there plans to expand South Columbia Street to four-lanes?
Are there any plans to make it possible for all the new growth south of town to get into town?
Concern expressed that traffic will be slowed down by busses on 15-501.
If South Columbia is widened, would it ruin the yards that are adjacent?
Have the existing park and ride facilities had the desired effect?

General Comments and Questions (in response to the staff's questions to the people present):

Staff's Questions:

What do we need to know about the history of the area in order to develop the Small Area Plan?

What natural and man made features do you think should be preserved?

How can the area develop in a way that will respect its history and preserve the areas that need to be preserved?

What public facilities are needed in the area?

Responses:

What are the plans for annexation?
Advantages and disadvantages?
Commercial development should not be strip commercial, but preserve areas around Star Point and Watts Motel.
Botanical Gardens - more areas need to be protected - example is OWASA sewer easement which people use - save stands of Laurel and Rhododendron.
Bayberry Drive is a collector Road - no place to walk or ride bikes. We need alternatives to the auto.
Need bike paths on Mt. Carmel Church Road.

Need foot bridge or bike bridge over the creek.

Need bike lanes along Smith Level, 15-501 - South Columbia.

Where Bayberry ends (goes straight up) are many historic cabins.

Ancient graveyard - Merritt Family - between school and parkway.

Stillhouse area should be preserved - too steep to be developed.

Preserve the scenic vistas.

Public parks needed.

Concerned about wildlife, deer and birds, when developed.

Bikeways and footpaths do not need to be paved sidewalks - could be through the woods.

Keep bikes and walkways separate.

Whole Morgan Creek area should be protected. But, do not want walkways there.

Need both walkways to get us into town and scenic walkways.

Protect existing neighborhoods.

Concern with Dogwood Acres being a cut through road for the new park.

Why do we have to have development?

Need an east-west access and better north-south access.

An east-west parkway is too close to Carlton Drive.

Are there plans to extend Carlton Drive?

Need better access of area, but that will not occur; so you need low density if you are not willing to build roads - and he votes for that.

NOTES FROM 1ST PUBLIC MEETING

Where you build more roads, you get higher density; meanwhile, develop alternatives to the auto - it is only a mile and a half to the center of town.

What about Chatham County development feeding more traffic into the area?

Encourage park and ride.

Would like to see more cluster development to preserve open space and provide utilities more easily.

Will town annex Dogwood Acres?

Are there plans for extension of water and sewer and gas lines?

Ed Holland - In Starpoint - will be adding an elevated tank.

Need a bus system - perhaps an alternative to big city busses - smaller system.

Is there hope for people who own property to develop their property?

Need a plan that supports this.

Planners should allow people to develop land with caution and sensitivity - for income.

No way to cross the by-pass. Need a way to do this.

What are the plans, timetable, for the Southern Community Park?

Stop University from applying for research money. University feeds growth.

Cynical about process. Many many plans; every time Council changes, the plans change.

Need road planning.

Residential areas developed before planning are the best.

We have a tendency to make plans and then not stick with them.

Comments Turned in on cards:

No shopping center at 15-501 and Mt. Carmel Church Road.

No sidewalks; no street lights; no curbs. Preserve semi-rural character and beauty of the area.

Keep Morgan Creek area nice for pedestrian walking.

Pedestrian and bike bridge across Morgan Creek.

Roads that access the area have open and scenic areas (Smith Level, Mt. Carmel Church). Development should be localized and off of the roads to preserve the feeling of a rural area.

Need to move traffic faster on 15-501. Restrict high density housing on Smith Level.

Don't develop the Southern Park until the traffic problems are solved.

NOTES FROM 2ND PUBLIC MEETING

SMALL AREA PLAN MEETING JUNE 6, 1991

Present: 71 citizens, Small Area Plan Work Group Members, Transportation Board Members, 6 staff.

General Comments and Questions:

Supportive of Alternative III, with density, surrounded by very low density, but is concerned about equity to low density property owners. What about a Transfer of Development Rights program?

Supportive of bikeways, need more intricate connection between villages. Take away Laurel Hill Parkway and only allow local roads. Replace the parkway with intricate grid system.

Parker Road might be the Pittsboro Street Extension of 2010. Congestion will catch up with roads and fill them. Bypasses discourage Mass Transit by encouraging sprawl.

Alternative I is good, while Alternative III is a disaster. Population of alternative III is four or five times greater than Alternative I. Concerned about traffic and coming smog. The Village concept will not work. People will still use cars. Refers to recent denial of Bennett rezoning; says this is the same idea.

Opposition to the Parker Road Extension, as it looks like Laurel Hill Parkway, or another bypass. The continuation of low density development (one unit per two acres) would be best as Mt. Carmel Church Road is a scenic road. No widening or changes in Mt. Carmel Church Road is the best approach, except for safety improvements and bikeways). Concerned about Chatham County traffic on Mt. Carmel Church Road.

Supportive of conservation and open space preservation. Expand these themes to include wildlife protection. Generally supports Alternative I, except delete Laurel Hill Parkway/Parker Road Extension. Need a walkway from end of Arboretum Drive across Morgan Creek.

The area as planned and developed, has so far been its own best protection. The village concept will not work, as we do not have the needed critical mass. A Greenway and bikeway improvements would be nice. The Village is a major change in the way this area will develop, as you need density for a village. Do not need east west connector if we do not have villages.

Farmland cannot exist next to a village unless there is a permanent agreement.

The conceptual plans do not honor topography - Village Center astride Bennett Road. One-half acre lot development proposed adjacent to Morgan Creek is on slopes that are too steep. Also, it would sandwich Morgan Creek Hills between half acre lot subdivisions.

Opposed to parking decks on campus. Village plans general now; but planning for mass transit is very important. Village centers can not support dense commercial development; but it can support higher density housing and mass transit. A mix of housing types would be favorable. Would like to see Village plan pursued because of mass transit.

The area is beautiful countryside, just two miles from town. Wants greenways, scenic views and farmland protected. Also wants watershed and wildlife protected.

Planning staff should be commended for bringing exciting ideas together in a well presented document. Concerned about 15-501 being at or above capacity. Are there any bypasses planned? If not, there should be. If Laurel Hill Parkway is eliminated, then what is in its place?

NOTES FROM 2ND PUBLIC MEETING

Existing developed areas should be protected and a long range plan should provide for another crossing of Morgan Creek. Citizen referenced the letter that he distributed. The letter reminds everyone that the Council stated on February 23, 1981 that Bayberry Drive is only a temporary connection across the UNC Arboretum land, and that the connection should be closed when there is a second means of access to the area east of the UNC Arboretum land. Therefore, Bayberry should be shown as disconnected in long range plans.

Congratulations to the board on presenting the alternatives. Alternative III has some advantages, but disadvantages outweigh them. Alternative III would force rapid growth and damage the environment. Alternative I has served well, but is outdated.

Alternative II comes closest to fitting the environment and the terrain. The bikepaths and pedestrian paths are good. A Morgan Creek crossing is needed for bicycles and pedestrians.

There is a lot of interest in open space protection. We need a different way of developing land; we need a change in the land use patterns.

Citizen liked features from all three alternatives; and did not want to choose only one. Have at least something like a village in an area that will not impact people adversely. Have busses and bikeways, and incorporate affordable housing. We need to work on the cluster idea; have conservation easements. Have one village. Use all three alternatives.

Good that you are trying to prevent run-away suburbia. Need to give a lot of attention to detail. Mixed use did not work; does not want Chapel Hill North type of development. Area between Mt. Carmel and 15-501 is not a good place for a village. Village should not be intense high density development, but should be paths, composting, mix of housing types. Should be low density, human scale.

No green areas are left in Alternative III. Parker Road Extension must be removed as it is an obstruction to reasonable development. Parker Road is the "son of Laurel Hill Parkway," at 47' wide. Northeast corner of study area shows farmland incorrectly (Mason Farm or Hunt property).

Preservation of watersheds and ecosystems are needed. Say how much land needs to be preserved as a part of each development.

Have conservation corridors along streams and work to preserve Mason Farm. Look at acquisition as a possibility for protection. Use Transfer of Development Rights (TDRs) for equity and preservation. Also, consider special tax treatment for permanently preserved land.

The roads need to be narrower. Put the parking at the edge of the community; only bikes and pedestrians inside. Bring in or incorporate input from an outside expert (like Randall Arendt).

The environmental movement has cut off the building of new roads, requiring the widening of existing roads. Need to consider new roads, or else all the new traffic will go onto existing roads. Not building roads will change the character of the area.

Use the term compact or village, not cluster development. Asked about estimated population for each alternative. Which patterns have the density to support water and sewer extension? Alternative I results in the most sprawl. Need to estimate public service costs for each pattern. Also, there is the need to protect steep slopes.

Alternative II with cluster is outdated; it was developed at a time when it was necessary for environmental protection.

NOTES FROM 2ND PUBLIC MEETING

There are new protections now: wetlands, watersheds, and soil conservation issues.

"Non-contiguous PUD" - New Jersey idea for transferring development rights within a PUD. Allows 50% open space, 50% in density of 2 to 6 units per acre. But can be an assembly of disparate parcels. We are looking at 10 to 15 years from now; don't apply 20 year old solutions. Start with Alternative III.

Think of minimum development densities. Useful to have a sense of quantity.

Wants area surrounding the abandoned Watts Motel to be commercial. Need to widen 15-501 to a four-lane highway.

Likes Laurel Hill Parkway. Need affordable housing in connection with clean industry. Development needs to be planned. Need for more tax base. Notes UNC job expansion. Where will people live?

Need to know total amount of growth proposed for each plan. Notes existing traffic plans and importance of timing in development.

Make it easier to ride the bus or bike, rather than to use a car.

The village pattern is idealistic; there are plenty of them around. These villages are in the wrong place. Isolate one neighborhood from another to discourage through traffic.

Wave Road is an example of unprotected steep slope development. Maps have a problem with definitions; for example, they say Wave Road is surrounded by developed land and others say it is not. Question: How can the same land in the different alternatives call for such different densities?

In Alternative I, much land is one unit per acre. That works well. There needs to be a trade off if the developer is allowed higher densities.

This is about money. One-half million in tax base for Chapel Hill. This represents government taking land and taxing property owners. Father had to put curb and gutter in his tobacco field in Goldsboro.

Doesn't favor any of the alternatives, but Alternative I is the best. Leave land alone. Do not develop it.

Conclusions about Laurel Hill Parkway - take off Parker Road Extension (creeping incrementalism).

Prefers park and ride lot at Cole Park Plaza rather than Southern Park.

Description of use value taxation. Prefers Alternative III. Talked about Randall Arendt's promotion of cluster. Arendt makes people do two plats: conservation and cluster, with the same number of units. Cluster is more desirable.

Orange County Natural Areas survey notes a number of areas along Morgan Creek for preservation. Need pedestrian and bike access to town over Morgan Creek.

Density is driven by the land use plan. If you assume a certain density then it will happen. Wants committee to take the density as a question, rather than as an assumption. Limitation of two bridges over Morgan Creek argues for lower overall density.

Most of the existing development is harmonious. Does not want innovative development.

Has lived in the community for 60 years. Does not see the major land owners here tonight. Does not understand what is being proposed.

NOTES FROM 2ND PUBLIC MEETING

Referred to sentence in History section which spoke of northerners looting the land. Landowners are like southerners; feel like carpet baggers are coming down and looting (by limiting options and value) Lives in Chatham County, but owns land in Orange County.

What are the current vacancy rates?
How many houses are currently on the market?

Wants to be clear about density. For example 100 acres of land. If one acre lots, then 100 houses. If development was clustered with 50% open space and 100 houses, then houses are built on one-half acre lots. Assessing where a village's density fits in.

Explain how non-conforming uses and lots would be handled if zoning were changed. Also, explain how these alternatives would affect present zoning and explain which alternative would allow the most commercial development.

NOTES FROM 3RD PUBLIC MEETING

SMALL AREA PLAN MEETING OCTOBER 15, 1991

General Comments and Questions:

Against extending Wave Road to Old Lystra Road, concern expressed about the poor design of Wave Road, particularly steep slopes and inadequate sight distances.

Several comments against extending Carlton Drive to the planned village center, wanted Carlton to remain a dead-end street. Safety is a concern as Carlton Drive is narrow and has a very bad "S" curve where it joins Northside Drive. Many Carlton Drive residents purchased in this area for seclusion and natural beauty in addition to the safety that a dead-end street offers to children, dogs, and bicycles. Additional traffic on Carlton would devalue property.

Traffic is heavy on 15-501 and this situation should be improved before additional development is approved. Safe bicycle paths and/or other facilities are needed so that people can use bicycles instead of cars.

Are the economics of this plan, particularly the village portion feasible?

The overall concept of the Plan is good, focusing on building a community - not just houses and streets. There is a good opportunity to blend a village center with the Town's park land. Better access should be provided from the village center to the park.

The attempt to make road connections from Smith Level Road to 15-501, and from Mt. Carmel Church Road to 15-501 might not be necessary. The fact that there is not a southern loop or a Parker Road extension on the plan is progress.

Is the designated density of 1 unit per 5 acres in the eastern area of the plan actually needed? Do existing drainage basins and other environmentally significant features dictate the need to preserve this much land outside of the Resource Conservation District (RCD)?

The need for bikeways exists along Smith Level Road, 15-501, and Old Lystra Road. In particular, improvements are needed at the intersection of Smith Level Road and Culbreth Road.

Streets in residential areas should interconnect. When they do not interconnect between neighborhoods, people have to drive longer distances to reach their destinations and traffic is

concentrated on a few overloaded roads.

Could the Star Point commercial activity node be expanded? Or, could the plan designate the land adjacent to the commercial area as high-density residential?

There is not a need for commercial uses in the proposed village, although there is the need for more moderate cost housing.

Affordable housing is needed in the area with facilities to encourage walking and bicycling. The village center is a good idea.

It is unfair to designate farmland for very low density after families have owned the land for years. It is not fair for the Town to have the authority to tell owners how to use their land.

The Design Council of Chapel Hill believed that the proposed density in the southern area is too low, and that land owners should be compensated for possible loss in land value. Also, greater efforts should be made to encourage affordable housing, and the Plan does not encourage development of compact urban housing.

NOTES ON 3RD PUBLIC MEETING

There should be more opportunity for higher density development in the southern area, not just in the village center. In particular, more density might be appropriate in the area east of the Southern Community Park site.

Lower densities such as 1 unit per 20 acres and more designated open space would be favorable.

Praise for the sensitivity of the Work Group and Town Staff to the concerns that have been raised through the process of developing this Plan. The Group has struck a visionary balance between the needs for housing, and the need to recognize the special value and character of the southern area.

Preserving visual corridors along the major roads is good. Using techniques such as transfer of development rights offers the opportunity to work with land owners along these visual corridors.

It is the right of the Town to plan for the future development of the area.

When people purchase land they cannot expect the surrounding vistas to remain unchanged - just for their benefit. Property owners should be able to use their land as they see fit, and not be required to retain "scenic views" when developing a site.

The preservation and appropriate development of open space and natural areas is important. Conservation easements should be used to preserve sensitive open space, also permitting smaller, more affordable homes to be built at a specific distance from conservation easements.

Could pedestrian and bicycle bridges be built to help minimize the extreme slopes?

JUNE 23, 1992

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