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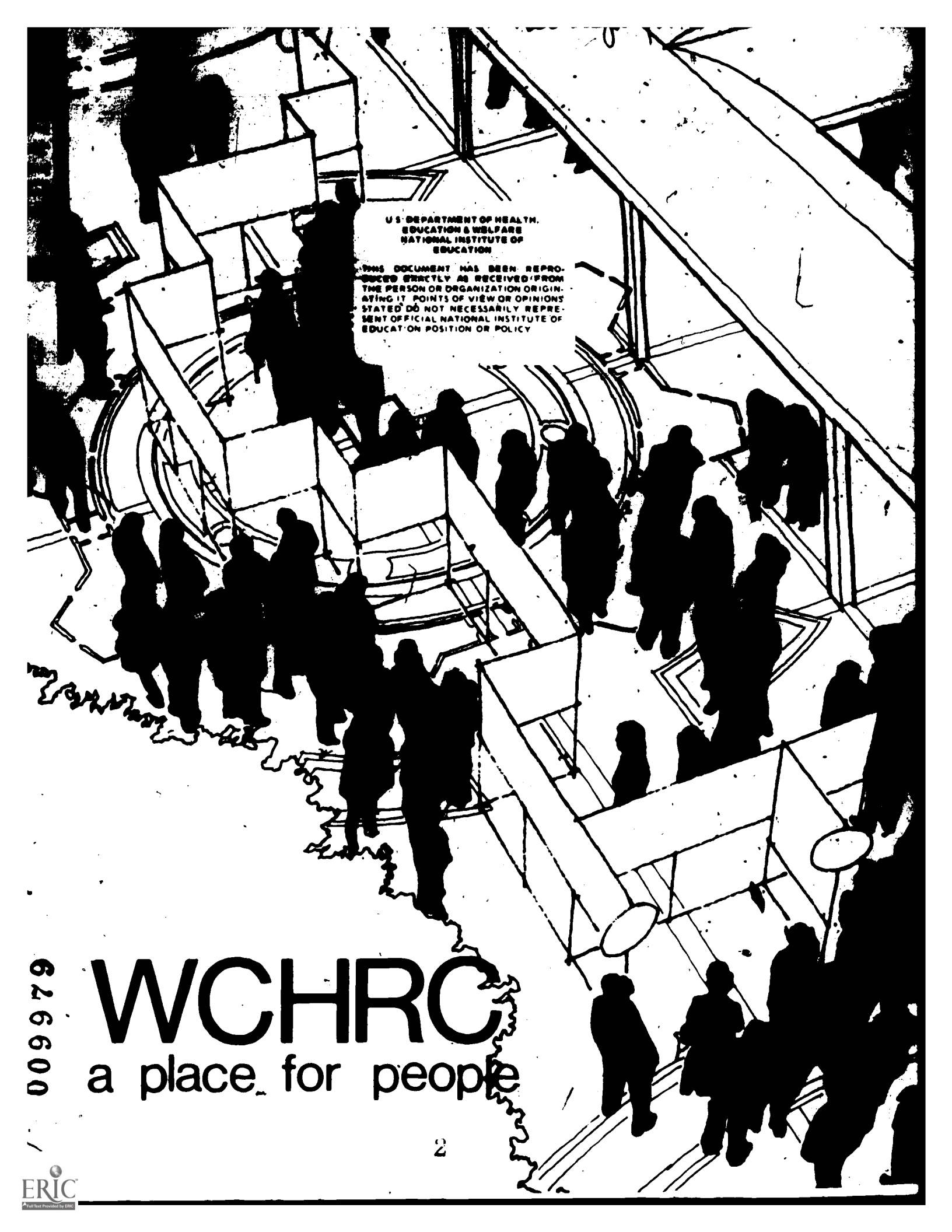
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ABSTRACT

Investigating the feasibility of a human resources campus designed to locate all Williamsburg County (a ruraly disadvantaged South Carolina county) health and social service agencies in one consolidated area, project objectives were to investigate: agency characteristics; ownership, management, and financing aspects of the campus concept; development of alternative strategies; preferred development strategy recommendations; development of general design guidelines to be followed in further campus development; and recommendations for further study or action. The methodology employed included: interview questionnaires; investigation of similar projects; literature search; meetings with project participants, government representatives, community leaders; work sessions with other agencies; and use of consultant architectural services. Project benefits were identified as: increased agency interaction and visibility; reduced facility duplication; increased range of services/facilities; and improved public accessibility. Proposals coming out of the study were: (1) ownership/management; financing models (county owns/tenants lease; eleemosynary or nonprofit corporation owns/tenant leases; combination ownership/tenants lease; and condominium ownership); (2) alternative development strategies (buildings arranged linearly along a pedestrian street; strong pedestrian arrangement to the west; buildings dispersed on the site; and new agencies clustered but removed from existing facilities); (3) recommendations re: campus role in the county. (JC)

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Issued in Furtherance of Cooperative Extension Work in Agriculture
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WILLIAMSBURG COUNTY
HUMAN RESOURCES CAMPUS
Planning Report

nov 1975

Eddie D. Wynn
Assistant Professor of Agricultural Economics and Rural Sociology

in cooperation with

- Synergy, Architectural Consultants
Clemson, South Carolina

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Preface

PURPOSE

The purpose of this study is to assist the citizens of Williamsburg County in their efforts to develop a Human Resources Campus composed of the county's primary health and social service agencies. The report is to serve as a working document to aid administrators and design professionals in the further planning and funding of the project. The report also will provide a graphic representation of the project -- a vehicle through which interest and support can be generated.

PERSPECTIVE

Methods of addressing the health care and social service needs of persons living in predominantly rural, low-income areas are increasingly being sought. Although much has been said critical of the superiority of services available to urban residents compared to those available in rural areas, less has been said about the difficulties encountered by rural, low-income persons in making use of those services that are available. These difficulties include: 1) problems in securing transportation, conveniently and at a reasonable cost, from outlying rural areas to locations offering health care or social services; 2) problems of transportation from one treatment or service facility to another; 3) lack of awareness of available health and social services on the part of potential clients; and 4) lack of knowledge on the part of health care and social service providers of programs carried on by other agencies. In addition, there are problems from the perspective

of the providers of health and social services. . For a number of reasons, it has been increasingly difficult for rural areas to attract professional personnel in the areas of health and social services. Among these reasons are isolation from the mainstreams of interaction among fellow professionals and a general lack of adequate facilities in which to practice.

A campus approach to health care and social service delivery would help to alleviate many of these problems.

Introduction

HISTORY

This study came about as a result of ~~a~~ request from the Williamsburg County Regional Health Commission for assistance from Clemson University through its Extension Community and Resource Development (CRD) section. Under Title V of the Rural Development Act of 1972, Land Grant institutions of each state provide research and educational support to develop rural areas in a pilot demonstration program. The program in CRD is also designed to assist in their efforts to develop indigenous leadership capabilities and to improve community services and facilities.

Williamsburg County is one of nine counties in two pilot areas of South Carolina involved in a concerted program for rural development. Thus, the resources for providing educational and technical assistance to support planning of the Williamsburg County Human Resources Campus came from the concerted Rural Development Project and Title V.

The decision to respond to the request for assistance was based on a number of factors: 1) the request originated from an appropriate source within the Title V and concerted Rural Development project areas; 2) the program's objectives were compatible with those of both the Title V pilot project and the concerted Rural Development project; and 3) it involved the provision of education, information, and technical assistance to a large segment of the county's leaders, professionals and interested citizens in a project requiring group or community

action to accomplish. This final factor is tailor-made to satisfy a primary objective of the Extension Community and Resource Development program.

PREMISE AND ASSUMPTIONS

The study is based on the premise that those health and social service agencies in Williamsburg County having strong program, client, and/or staff relationships should be grouped together to increase the convenience and quality of service to the citizens of the county.

In proceeding on the strength of this premise, certain assumptions were made:

1. The site selection process which preceded this study does not need to be re-evaluated.
2. Agencies selected for inclusion in the initial phase of the project will not be reconsidered.
3. The identity and operational independence of individual agencies must be maintained.
4. Ownership, management, and financing options must remain flexible.
5. Flexibility must be maintained in the development of planning strategies to enable the campus to respond to more specific program information, constraints imposed by funding sources, future administrative decisions, and deviations from present agency conceptions of growth and service projections.
6. Agency representatives are capable of presenting client-user needs and agency requirements with sufficient accuracy for preliminary planning purposes.

7. Public conception of the campus as a place exclusively devoted to treatment of the ill must be avoided so that potential of agencies seeking to avoid this image will not be obscured. Reservations have been expressed on the part of representatives of some agencies about being identified as health-related services' (translated to mean "those who seek help here are 'sick'.") For this reason, the health campus has been titled the Williamsburg County Human Resources Campus. This is an apt title, too, in view of the possible future inclusion of other agencies less directly related to "health."

SCOPE

Within the constraints of time and available resources, the study's design was tailored to maximize results. This approach enabled decisions to be made as to which issues and objects could be addressed and which could be included in recommendations for further study.

The following objectives are within the scope of this project:

1. An investigation of the characteristics of each agency with regard to
 - a. Concept of operation
 - b. Programs conducted
 - c. Area requirements (land and building)
 - d. Relationship to other agencies
 - e. Appropriate adjunct services
2. Investigation of ownership, management, and financing aspects of the campus concept.

3. The development, using data from agency analysis, of alternative strategies.
4. The recommendation of a preferred development strategy with choice reserved for local decision makers.
5. The development of general design guidelines to be followed in further campus development.
6. Recommendations for further study or action.

It was felt that the following objectives were not within the scope of this project:

1. Determination of health and social service consumer goals and objectives through user-needs studies.
2. Selection of any one solution as a definite development proposal by authors of the study.

METHODOLOGY

The methodology used in conducting this report included interview questionnaires; investigation of similar projects; literature search; meetings with project participants, governmental representatives, and interested community leaders; work sessions with other agencies and agency representatives having interests in the project; and use of consultant architectural services in developing the study. A chronological exposition of the study procedure is found in appendix A1.1.

1.1 Concept

1

Various providers of health-related and social services in Williamsburg County, including the County's Memorial Hospital, Physician's Office Building, Health Department, Department of Social Services, Mental Health Center, Alcohol and Drug Abuse Center, and Vocational Rehabilitation, and, perhaps, other related organizations will be located in proximity, each maintaining operational independence, but working cooperatively and conjunctively. The clustered agencies will share various common facilities such as connecting pedestrian zones, parking areas, information center, assembly spaces, food service facilities, employee lounge, daytime visitor accommodations, maintenance service and central stores. The campus will be strongly "people-oriented" and will be a major activity center of the community. The site for the campus is in Kingstree, the county seat, and takes advantage of the fact that two major healthcare facilities, the County Memorial Hospital and Physician's Office Building, are presently located there.

1.2 Implications

The implications for the community of the use of the campus concept are seen to be largely positive. The benefits predicted are:

1. Increased Agency Interaction. Formal and informal interaction of staffs and clientele will result in greater use and improved service.
2. Increased Agency Visibility. In addition to their individual identities, campus agencies gain an identification with a "place" of activity and visibility. Locating an agency becomes far simpler for users from outlying areas.

- 3. Reduced Facility Duplication. The campus concept allows agencies to share facilities that must traditionally be constructed and operated for each agency which has requirements for them.
- 4. Increased Range of Services and Facilities. The proximity of the agencies allows the development of facilities and services that d not be provided by individual agencies.
- 5. Improved Public Accessibility. The clustered arrangement of the agencies makes access to them easier, particularly when several agencies must be visited by an individual on a given day. This proximity will also simplify public transportation.

A possible detrimental effect of the campus as proposed is that the removal of several agencies from existing locations close to the town center may tend to reduce the number of consumers in that area. However, in the view of the planners, use of the proposed low-cost public transportation system (Section 4.3.2) or other public transportation to form a strong link between the campus and the existing town center may, in fact, more than compensate for this.

1.3 Proposals

The proposals in this report are:

- 1. ownership/management/financing models,
- 2. alternative development strategies, and
- 3. recommendations.



1.3.1 Five ownership/management/financing (OMF) models are presented as realistic options from which should be selected that model which best attends the day to day operations of the campus while assuring the necessary funding for its construction. The models presented are:

1. county owns/tenants lease,
2. eleemosynary (non-profit) corporation owns tenants lease,
3. for profit investors own tenants lease,
4. combination ownership/tenants lease, and
5. condominium ownership.

1.3.2 Four alternative site development strategies are proposed. Each of these is included as a viable basis for formulation of the final development plan. The alternatives vary in the manner in which they satisfy the aims of the campus as defined in this report; the strategy which best meets the priorities of the county should be selected from these alternatives:

1. Alternative "A" (buildings arranged linearly along a pedestrian street),
2. Alternative "B" (strong pedestrian arrangement to the west of the Physician's Office Building),
3. Alternative "C" (buildings dispersed on the site), and
4. Alternative "D" (new agencies clustered but somewhat removed from the existing facilities).

1.3.3 A number of recommendations for providing a proper character to the campus are presented in this report as are recommendations for further

study and action. These are to assure that the campus is designed to conform to a program that meets the needs of the county as thoroughly as possible and looks beyond this campus to its role in the county and its potential impact on other communities.

The general design criteria are those that assure a progressive, non-institutional campus where users can easily orient themselves and locate agency facilities and adjunct services. The campus must have a unified identity but one in which the identities of the agencies are not lost. Interiors and exteriors should interrelate to the benefit of both function and aesthetics, and building systems and technologies should reflect the progressive and humanistic image of the project.

Areas in which further action is recommended are: ownership, management, financing, transportation systems, soil investigation, user needs, coordination with non-campus agencies, site planning, architectural programming, graphics, staff orientation, post design evaluation, disposition of existing facilities, development of educational programs, and surrounding land use. These recommendations are supplementary to basic architectural services normally contracted for in the design and construction of public buildings but their consideration before basic architectural services are rendered is strongly recommended to enhance the chances for success of the project.

This section is an examination of the context into which the campus must fit, the agencies to be included and the services that each provides, the manner and degree in which the agencies will relate to one another, the condition of existing facilities, the facilities which agencies might share or which will provide appropriate adjunct services, and the options available for structuring ownership, management, and financing of the campus.

2.1 Context

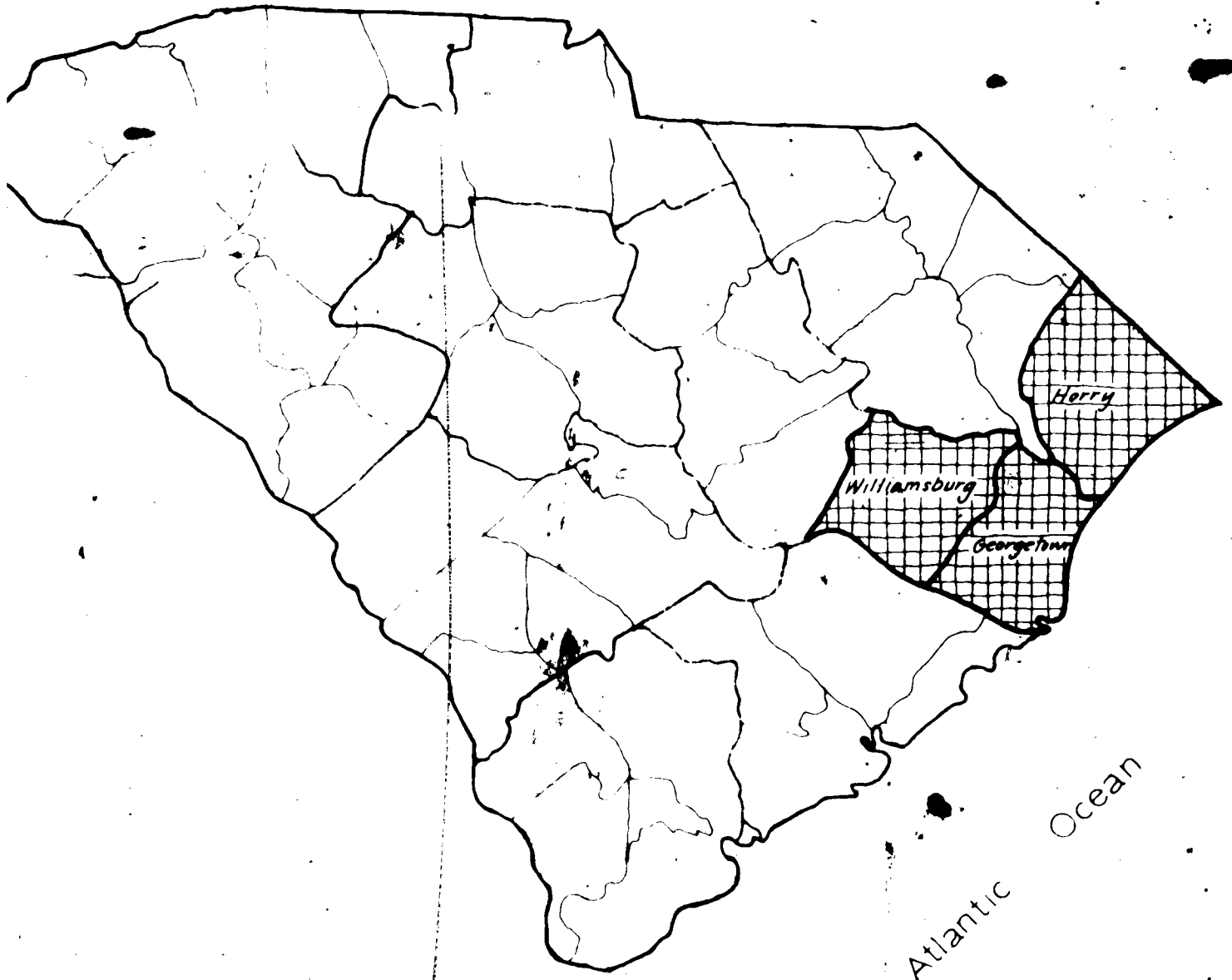
The geographic climatic, demographic, economic, and existing site context are summarized in this section. More detailed information is contained in Appendix 2.

2.1.1 The County

Williamsburg County is located in the southeastern "Platlands" of the Coastal Plains section of South Carolina, some thirty to forty miles inland from the Atlantic Ocean. It is part of the Waccamaw Regional Planning District which also includes Georgetown and Horry Counties. The climate is temperate with good rainfall distribution (see Figure 1).

The population of the county is approximately 35,000 with an urban/rural ratio of 10%/90%. The population is approximately 60% nonwhite. The county seat and largest town, Kingstree, has a population of approximately 3,500 (see Figure 2).

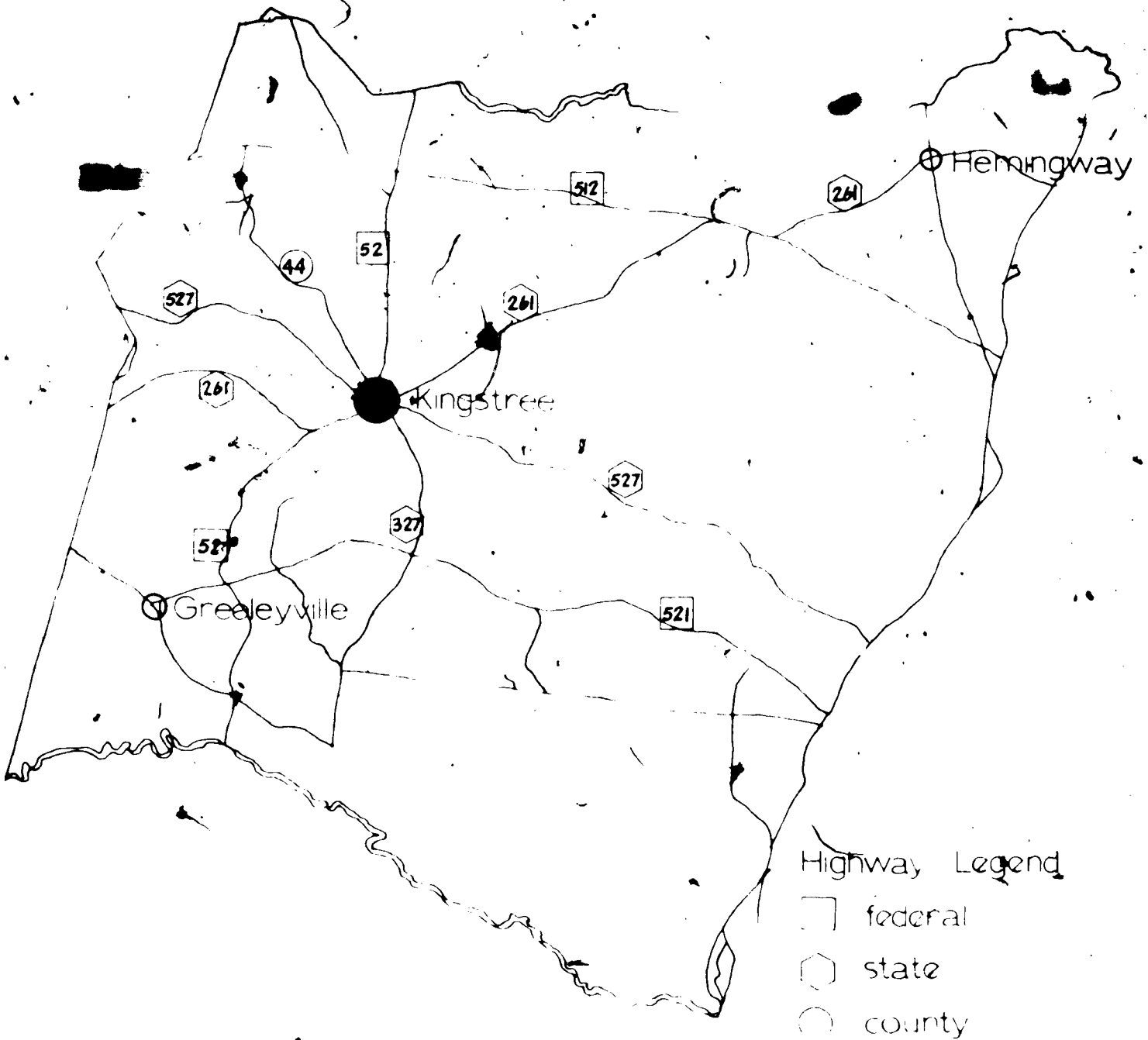
The economy reflects a labor force that is almost evenly divided between the historically dominant agricultural and the growing non-farming



Waccamaw Region Planning District

County Location Map

fig 1



Williamsburg County

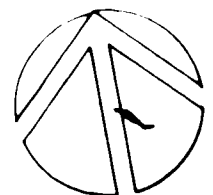


fig 2

sectors of the economy. The median income in 1969 was less than \$5,000, while in 1970, 48.3% of the population had incomes below poverty level and just over 25% of the county residents 25 years or older had completed high school educations.

Recently the county has begun increasing in population, reversing a twenty-year trend. It has greatly improved its medical and educational services, and has begun to attract new industry.

2.1.2 The Site

Location. The proposed site of the Williamsburg County Human Resources Campus is southeast of the town center of Kingstree and just within the city limits (see Figure 3). A total of 16 acres, this site is composed of two county-owned parcels: the Williamsburg County Memorial Hospital property (10 acres) and the Physicians Office Building property (6 acres). The site is bounded on three sides by highways: on the southwest by S. C. 377 and on the northwest and northeast by S. C. 527. The southeast property line borders additional county-owned property -- the Williamsburg County Technical, Vocational, and Adult Education (TEC) Center site; the temporary office of the Employment Security Commission is also located on this property. If required for proper development of the campus, portions of this property to the southeast might be acquired for part of the campus site (see Figures 6 and 7).

Soils. According to the Kingstree Land Use Plan (see Appendix 5), the site is composed of soil types Norfolk (10), Orangeburg (22-B-1 & 22),



Site & Agency Locations

Kingstree City Map

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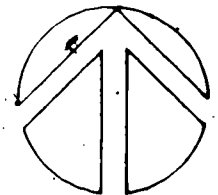


fig 3

and Coxville (75). Of these, only the Coxville type presents possible serious limitations to construction because of drainage. This limitation does not appear insurmountable. These soil data maps are intended to indicate only broad patterns of soil composition, consequently, further soil investigations should be conducted to assist in evaluating more precisely the problems that actual conditions might present.

Tree Cover. The center of the site is predominately clear of trees. At the periphery, there are two large stands of trees: one extending along both sides of the southeast border of the site is largely pine, with scattered deciduous trees as the band approaches Highway 377. The other, in the northeast corner of the site is also predominately coniferous but includes a number of fine specimens of live oak and a few deciduous trees. There is, in addition to these trees, a sparse line of deciduous trees parallel to Highway 527 on the northwest. The hospital site has been lightly landscaped with trees that are still too immature to contribute significantly to shade or form on the site.

Existing Buildings. There are two existing structures on the site, the Williamsburg County Memorial Hospital and the Physicians Office Building.

Hospital

The existing County Hospital is a 60-bed, acute-care facility providing basic medical, surgical, pediatric, obstetric, and emergency services. The hospital also provides laboratory, x-ray, inhalation therapy and physical therapy services. The present hospital staff is 115 employees.



The building was constructed in 1965 and has been well maintained. The hospital averages over 50 patients and approximately 100 visitors per day. There are expansion plans in two phases up to 125-bed service and 250 employees. This full expansion will mean a daily hospital-related population infusion into the campus of approximately 600 people.

Physicians Office Building

The existing Physicians Office Building provides office space for six private physicians on a team basis and houses the Williamsburg County Rural Health Extension Program. The total staff of the Physicians Office Building is currently 20. The building will shortly undergo the last of three planned phases of growth creating sufficient space for a total of 12 physicians' offices. The Rural Health Extension program also plans to expand its staff. The total staff housed in this facility will then be approximately 40. Including patients, the Physicians Office Building will contribute approximately 450 people to the daily population of the campus. With the addition of those who accompany patients, it is estimated that this figure will be 600 or more.

2.1.3 Site Justification

The selection of the hospital-physicians building site as the site of the proposed Human Resources Campus preceded the initiation of this planning study. None-the-less, a discussion of the rationale of that selection is appropriate to this report.

The considerations in support of the selection of this site are:

1. The hospital and physicians building, already on the site, are both crucial to the campus concept. These are also the only two agencies proposed for inclusion in the campus that are currently in adequate facilities for long term use (see Section 2.2.6).
2. This site is available. It is already owned by the county and is not proposed for other uses or development as is the case with county property in the town center.
3. This site is already an obvious "destination area" of the proposed low-cost public transportation system because of the existing hospital and physicians office building and this system is to be operated by the adjacent Manpower Training Center (see Section 4.3.2).
4. By far the majority of users of campus agencies do not, in fact, live in the city of Kingstree at all, but in rural areas of the county. This site affords the opportunity of developing the campus as an actual and symbolic tie between urban and rural sectors.

There is also a problem presented by this site selection. This and considerations of how it might be dealt with follow:

The distance from this site to the commercial center of town makes access to existing commercial activities more difficult. This could result in a reduction in the number of customers to certain businesses, inconvenience to campus employees and visitors who require services not available at the campus, and difficulties for rural

users of the campus who must arrange transportation with others who are going into town.

The problem can be dealt with through two complementary approaches. First, it is obvious that the campus will have to be somewhat more self sufficient: services will have to be provided on the campus that, in a more urban site, could be left to the private sector to provide. Second, implementation of the proposed low-cost public transportation system to include provision of a strong transportation link between the town center and rural portions of the county, by way of the Human Resources Campus, should offset problems created by the distance of the campus from the commercial area, by stimulating consumer activity.

2.1.4 Summary

Williamsburg County is a predominately low-income rural county that has just begun to reverse the trends of declining population, inadequate services, and dependence on a predominantly agricultural economic base. The site selected appears to be the most feasible site, if the hospital and physicians building are to be included in the campus. It also offers the advantages of being available for this development, increasing the efficiency of the proposed transportation system, and serving as a link between the rural and urban portions of the county. The measures required to solve the problems that this site presents may, in fact, prove beneficial to both the delivery of health and social services and the commercial interests in Kingstree.

2.2 Analysis of Agencies

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Brief descriptions of agency missions and specific services are given in this section. More detailed analyses, area requirements, client process diagrams, and space relationship diagrams and matrices are included in Appendix 3.

- 2.2.1 Williamsburg County Department of Social Services (DSS) is a multi-programmed agency of assistance and service to relieve economic needs and strengthen family life. DSS administers the Food Stamp Program, the Public Assistance Program, and Service Programs that include Adult Services and Family Services (see Section A3.1).
- 2.2.2 Williamsburg County Health Department (HD) monitors health care needs of the community. The Health Department offers four basic services: Clinical Services, Environmental Services, Home Health Services, and maintenance of Vital Statistics (see Section A3.2).
- 2.2.3 Williamsburg County Community Mental Health Center (MH), the County Office of the Mental Health Center for Horry-Georgetown-Williamsburg Counties, seeks to meet the mental health needs of the community through direct therapy services, information and referral services, and after care and rehabilitation services for former psychiatric patients (see Section A3.3).
- 2.2.4 Williamsburg County Commission on Alcohol and Drug Abuse (AL/DA) provides individual and family counseling for alcohol and drug related problems, educational programs, and follow-up counseling for clients (see Section A3.4).

2.2.5 Williamsburg County Vocational Rehabilitation Office (VR), one of two satellite offices located in the county, has the charge to restore individuals, who qualify for benefits, to productive employment through counseling and the purchase of rehabilitation services, prosthetic devices and other treatment aids (see Section A3.5).

2.2.6 Existing Facilities. None of the existing facilities of agencies slated for inclusion in the Human Resources Campus, with the exception of the hospital and the physicians building which are already on the proposed campus site, (see Section 2.1.2) are adequate for long-term use by these agencies. Each of these off-campus facilities is characterized by one or more of the following conditions.

1. Deteriorating physical conditions, structural defects, or non-fire-resistive construction.
2. The building was not planned and constructed for its present use and remodeling would be impractical.
3. The heating, ventilating, or lighting facilities are inadequate and cannot be practically corrected.
4. The building is so located that it is not conveniently accessible to the public, or is in an undesirable location.
5. There is an objectional nuisance in the neighborhood such as traffic noise, smoke, or unpleasant odors which cannot easily be corrected.
6. The site is too small for adequate off-the-street parking areas, and all other nearby parking facilities are either unsuitable, inadequate, or too expensive for use by the average visitor.

7. The facility is inadequate in size to provide the necessary space for existing or proposed personnel or programs for the area.
8. The facility is not conveniently located with respect to other agencies with which it has a strong program, staff and/or client relationship.

Conditions 1 through 7 of the above listing parallel those conditions listed in the S. C. State Plan for Construction and Modernization of Hospitals and Related Facilities (1973) used in determining adequacy of facilities for designated uses.

2.3 Inter-Agency Relations.

A major justification of the campus concept is the opportunity afforded for meaningful inter-agency relations. These range from the formal, (joint programs, data exchange, cooperative activities, etc.) to the informal (staff social interaction, program discussions, etc.). The result of these various levels of interaction is the influencing of policies, attitudes, and capabilities of agencies to better serve the interests of the public.

Matrix Development: There has been no effort to analyze official records of agencies to quantify the extent of interaction among them. In data collection and interviews it quickly became apparent that, because much existing agency interaction is in the form of informal referrals, the official total would not be an accurate measure. In

addition, the agencies do not, at present, relate as closely as is desirable, in part because of their dispersed locations. Therefore, agency interaction as described in this report is an indication of both existing interaction (including estimates of informal but very real relationships recognized by directors of the agencies) and of anticipated interaction where specific programs are envisioned. The strength of the interaction of any two agencies, as shown in the accompanying matrix, (figure 5), is a subjective evaluation, based on data from interviews with agency directors and subsequently verified by them. This quantification is adequate for preliminary planning purposes, particularly when viewed in the context of this site, where even the maximum distance possible between any two agencies is easily within the limits appropriate to high levels of interaction, and in the context of the life of building structures, during which programs will undoubtedly change beyond our capacities to predict -- reinforcing some relationships and diminishing others.

2.4 Common Facilities and Services

The location of a variety of related agencies on a single site provides the opportunity to incorporate shared facilities into the campus, thus expanding and improving the services available to the public. These may be facilities or services that are traditionally provided to one or more agencies, thus decreasing expensive duplication, or they may be facilities that are valuable to the programs of several agencies, but not economically justifiable for inclusion in each individual agency

Agency Populations & Facilities

existing

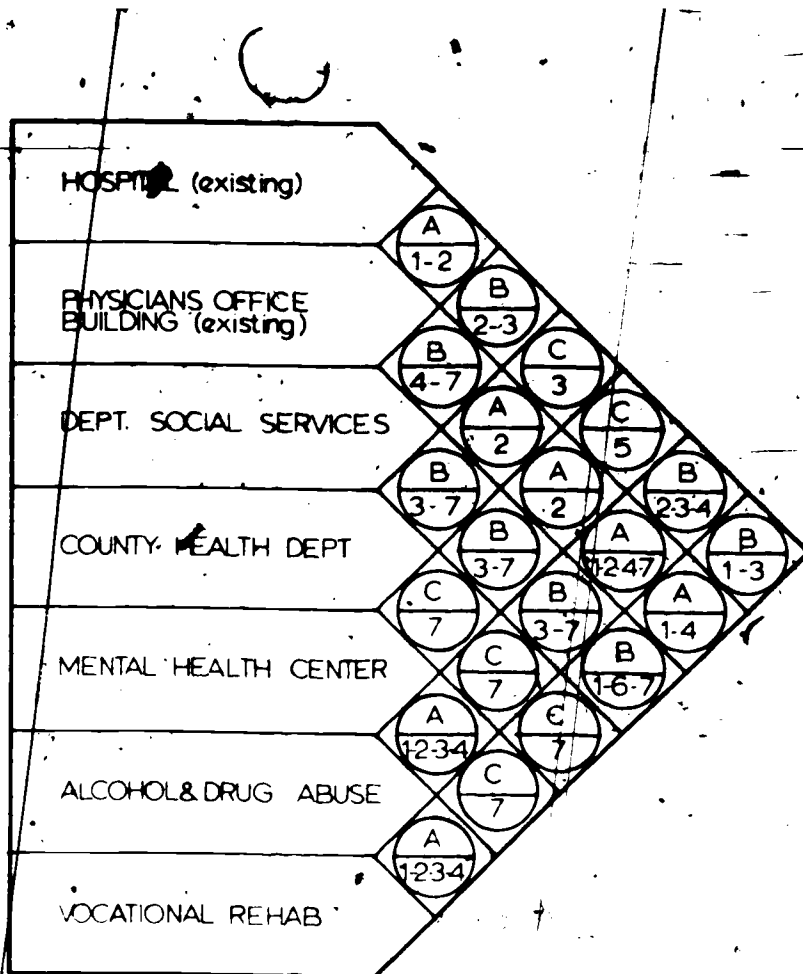
		STAFF	NUMBER CLIENTS/DAY	ESTIMATED NUMBER VISITORS/DAY	ESTIMATED MAXIMUM DAILY POPULATION	FACILITIES SIZE (SQ. FT.) AND CONDITION*
DSS	WELFARE OFFICE	28	65 to 85	40 to 60	165 ±	3100 sq. ft. 1, 2, 3, 6, 7, 8
	FOOD STAMP PROGRAM	18 perm. & 5 temp.	70 to 90	40 to 60	170 ±	4200 sq. ft. 2, 4, 8
HD		18 perm. 4 temp. & periodic	50 to 60	15 to 20	100 ±	4100 sq. ft. 2, 7, 8
MH		3 perm. 8 temp. & periodic	3 to 5 plus 50+ day care	3 to 5	65 ±	1000 sq. ft. 2, 7, 8
AL/DA		4 perm. 3 temp. & periodic	3 to 5 plus 20+ classes	1 ±	30 ±	1000 sq. ft. 4, 7, 8
VR		3 perm. 1 periodic	3 to 6	1 ±	10 ±	600 sq. ft. 1, 7, 8
HOSPITAL		115	45 to 60	80 to 100	275 ±	60 beds
PHY OFF BLDG	PHY OFFICES	16	180 to 220	80 to 120	360 ±	6 doctors suites
	RURAL HEALTH EXT. OFFICE	4 plus periodic consultants	Clinics held at 5 outlying centers in county consultation & referrals as required.			H.Q. at Phy. Off. Bldg. 5 outlying centers.
TOTALS		209 perm. 16 temp. & periodic	420 to 600	260 to 370	1175	

* see listing of conditions 1 through 8, Section 2.2.6

fig 4

projected

STAFF	NUMBER CLIENTS/DAY	ESTIMATED NUMBER VISITORS/DAY	ESTIMATED MAXIMUM DAILY POPULATION	FACILITIES (SQ. FT.)	BASIS OF PROJECTION
34	200-275	110-150	450 +	17,700	210 sq. ft. per employee as suggested by DSS facilities planning office
27 perm. 6 temp. & periodic	75 to 110	25 to 35	165 +	7,600	Director & staff estimates and planners' projections
13	12 to 15 plus 60+ day care	8 to 10	95 +	4,600	Director & staff estimates and planners' projections
7	10 to 20 plus 20+ classes	4 to 5	50 +	2,300	Director & staff estimates and planners' projections
5	5 to 10	3 to 4	18 +	2,100	Director & staff estimates and planners' projections
250	90 to 120	180 to 240	600 +	125 beds	Existing expansion plans
32	400 +	200 +	600 +	12 doctors' suites	Existing expansion plans
8	Program dependent upon budget request approvals by S.C. Regional Medical Program			Relocate or renovate 2 of 5 existing centers	Existing expansion plans
421 perm. 6 temp. & periodic	750 to 1000	500 to 650	2000		



RELATIONSHIPS
A. Essential
B. Important
C. Not strongly related
D. Undesirable

REASON
1 Client
2 Staff
3 Communication
4 Operation
5 Image
6 Materials
7 Referral

Inter-Agency Relationship Matrix

fig 5

budget. In addition, adjunct services that support the concept of the campus as a "people-oriented" activity center are appropriate. It is expected that the shared facilities and services discussed in this section, and perhaps others not identified in this report, would be phased into the project as specific needs are defined and funding secured. It is recognized that as the campus grows, many of the common facilities must grow in size and sophistication. More detailed discussions of these facilities and services are found in Appendix 4.

Investigation should be made of possible program coordination with agencies not physically included in the campus, in funding, staffing, and operation of these shared facilities (see Section 4.3.3). Operation of shared facilities by the campus itself; through concession contracts or by specific agencies, is contingent on ownership, management, and financing decisions (see Section 2.5) and the selection of one of the planning strategies discussed in Section 3.

2.4.1 Pedestrian Zone. A landscaped pedestrian area should like the various agencies and provide a variety of opportunities for individual and group activities in all weather conditions (see Section A4.1).

2.4.2 Playground Area. To provide healthful activity for children at the campus, a playground should be developed that offers activities for a broad range of ages and interests (see Section A4.4.1).

- 2.4.3 Day Care Center. A supervised program for infants and pre-school children for both custodial and child development programs is proposed for inclusion in the campus (see Section A4.4.2).
- 2.4.4 People Spaces. Areas outside the pedestrian traffic flow are to be developed as areas for people to wait and entertain themselves with varying degrees of privacy and shelter from the elements (see Section A4.4.3).
- 2.4.5 Assembly Spaces. A major assembly space that can be subdivided to form meeting areas of several different sizes as required by the campus agencies should be provided (see Section A4.5).
- 2.4.6 Food Service and Dining Facilities. Food service for employees and visitors to the campus should be provided. Compact meals should be served in a pleasant dining area and "fast-food" service should also be available (see Section A4.6).
- 2.4.7 Employee Lounge. A space where employees of all agencies can relax, enjoy refreshments, and interact socially, away from the work environment, should be a part of the campus facilities (see Section A4.7).
- 2.4.8 Parking. The clustering of agencies on single site should allow some reduction of parking areas required; these should be in specific vehicular zones segregated from pedestrian areas (see Section A4.2).
- 2.4.9 Maintenance. Shared facilities and individual agency facilities must be served and maintained. The ownership-management-financing decisions

(see Section 2.5) will determine the manner in which these services are provided, and the nature of facilities required (see Section A4.8).

2.4.10 Storage. Central storage for equipment and supplies should be provided for the campus as a whole, beyond storage required for individual agencies (see Section A4.9).

2.5 Ownership-Management-Financing (O-M-F) Models

Of prime importance among considerations affecting the development of the proposed campus are those of ownership, management, and financing (O-M-F). Although not as visible and tangible as the effects of considerations having impacts on the physical design of the campus, they are, never-the-less, of equal importance to the successful achievement of campus aims.

Common assumptions underly all of the O-M-F models discussed, such as: the hospital and physicians building, both county-owned, will retain essentially the same status with modifications as necessary to accommodate participation in common and shared facility ownership, management, and financing operations; that the number of agencies participating in the campus may increase or decrease; and that future expansion of individual agencies is likely and must be planned for during the initial planning process.

Several O-M-F models of the campus's structure have been identified:

1. County Owns/Tenants Lease,



2. Eleemosynary (non-profit) Corporation Owns/Tenants Lease,
3. For-Profit Investor Owns/Tenants Lease,
4. Combination Ownership/Tenants Lease, and
5. Condominium.

A discussion of each model with respect to ownership, management, and financing considerations follows:

2.5.1 COUNTY OWNS/TENANTS LEASE

General Description

Ownership

County owns land and facilities with tenant agencies occupying individual units under lease arrangement; common facilities and communal spaces shared by all with expenses for upkeep and operation prorated among all agencies. Facility developed by county and leased to tenants or bought from developer and leased to tenants; development staged over time as tenants are able to make occupancy commitments.

Management

Two levels of management concerns: 1) individual agency responsibility for internal operational management factors, and 2) combined agency responsibility for management of common or shared facilities (assembly space, daycare facilities, food service, etc.) through an agency representative's council, association, or board.

Financing

Campus development financed as part of county's capital improvement program and budgeting process through a variety of sources including:

revenue and general obligation bonds, revenue sharing, federal and state grants and loans, capital contributions, endowments, revenues from liquidation of obsolete facilities being replaced, and surplus revenues generated from various revenue-producing activities involved in the campus's operation.

Advantages

- Land proposed for campus's location is already owned by county, eliminating need for further land purchases.
- Existing facilities presently located on site (Williamsburg County Memorial Hospital and a physicians' office building) are county owned, allowing for expansion of development under the present ownership pattern.
- Public, non-profit status of facility allows for maximum use of federal/state grants and loan programs not otherwise available.
- Sharing of responsibility for management of common facilities allows each agency to participate in scheduling and operational decisions.
- County-owned land and services can serve as in-kind or matching contribution in federal/state grant and fund seeking activities for project development.

Disadvantages

- Requires careful consideration of operational economics and county financial capability for funding competing county operations in order to avoid revenue-expenditure imbalances.

- County's ability to support debt, based on taxable resources and revenue expectations, may be so strained by project that ability to respond to other financial needs (e.g., losses due to natural disasters) may be limited.

Recommendations

The characteristics of this campus O-M-F model indicate a strong likelihood that it would be suitable for the campus's development. The existing apparatus for county government could incorporate the project as an element of its on-going capital programming process, thereby eliminating the need for creating additional organizational structures. Present county ownership of land and existing facilities, its ability to adjust revenue and shift resources as needed, and capability of tapping the widest range of resources make this alternative highly feasible as a development model.

2.5.2 ELEMOSYNARY (NON-PROFIT) CORPORATION OWNS/TENANTS LEASE

General Description

Ownership

Eleemosynary corporation with board of directors either owns land and facilities in fee simple and rents to tenants, or leasehold arrangement with county maintaining land ownership, corporation owning improvements, and tenants lease. Ownership of existing facilities remain under present arrangement; alterations as required to participate in common facilities O-M-F arrangements.

Management

Similar to County Owns/Tenants Lease model; individual agencies responsible for internal management concerns and combined agency responsibility for shared facilities through a council, association, or board.

Financing

Funding sources include: Federal and state grant and loan programs; tax deductible contributions in the form of real estate, money or other property; endowments and fund raising drives.

Advantages

- Relieves county government of responsibility for campus development and operation.
- Generates more concern for success or failure of project because of local participation in corporation and publicity generated through fund-raising activities.
- Maintains eligibility for federal/state grants and loan programs.
- Relieves individual organization members of liability in legal proceedings against corporation if situation arises.

Disadvantages

- Requires dedicated organization nucleus and knowledgeable board of directors to insure proper management of corporate affairs.
- Size of project involves risks requiring specialized management expertise to insure proper operation.

Recommendations

This organizational model is structurally sound but requires a high degree of expertise and community interest to accomplish aims. However, based on the record of Williamsburg County in areas related to health services, it is possible that this development model might well be suited to development needs of the Human Resources Campus.

2.5.3 FOR-PROFIT INVESTOR OWNS/TENANTS LEASE

General Description

Ownership

For-Profit investor group owns facilities and leases to agency tenants; group might be a public or private corporation, partnership, or some form of real estate investment trust. Land may be either leased or purchased from county. Existing on-site facilities (the hospital and physicians office building) to remain in county ownership with new facilities owned by investor group. The investor group either buys developer-built facilities or develops facilities itself to tenant specifications. Common facilities are managed by tenant association, council, or board, or managed by investor through professional management arrangement.

Management

Internal agency operation is managed by individual agencies; common facilities operation is shared by agencies with maintenance and property management provided through investor-arranged services.

Financing

Investor resources are used to buy, or build facilities with development financing through financing institutions (mortgage banks, savings and loan associations, commercial banks, life insurance companies, etc.); return on investment is through lease arrangements and possibly proceeds from on-site commercial food service operations.

Advantages

- Relieves county or non-profit corporation of facility development and ownership responsibility.
- Not dependent upon federal grant and loan programs which contain "red tape" obstacles and are subject to change or discontinuation during project development period.
- Provides relatively stable source of investment returns with long term tenancy virtually assured.

Disadvantages

- Inability to make use of as wide a range of financing sources as public or non-profit development models, because of ineligibility for federal facility construction grants.
- Likelihood of higher lease costs to tenants due to non-subsidized development and ownership costs.
- Less community involvement and consequently less sense of responsibility for realization of campus plan.
- Lack of alternative financial resources, such as available to county government, to offset possible revenue fluctuations.

- Complex arrangement between public and private sector necessary for common facilities ownership and management operations.

Recommendations

Campus development under this model is potentially facilitated because of independence from effects of changes in governmental grant programs; cost to individual agencies may be higher than in public or non-profit corporation ownership. There is no inherent reason why this model would not be suitable if balance can be obtained between investor's desire to secure adequate return on investment and agencies' need to secure adequate quarters at reasonable rental rates. These rates are directly dependent upon debt service amounts necessary to amortize development costs and to allow adequate return to investors.

2.5.4 COMBINATION OWNERSHIP/TENANTS LEASE

General Description

Ownership

Campus facilities owned by a combination of organizations: county, non-profit corporation, and for-profit investors, ownership combination either predetermined or evolves as campus develops over time, with timing largely dependent upon when agencies can receive authority to make occupancy commitment; tenants lease from owners of specific units built to agency specifications; common or shared facilities preferably owned by county with agency, council or association responsible for scheduling and management activities.

Management

Owner or owner's representative manages individually owned property; leasing agency manages own internal operation and shares management responsibility for common facilities through an agency, council or association functioning as a county organization.

Financing

Facilities developed according to individual agency's occupancy commitment timetable by developer-seller or developer-owner using funding sources suitable to development organizational structure.

Advantages

- Allows multiple sources of financing for development according to developer organization type; variety of development organizations participating eliminates responsibility for development of entire campus by a single organization.
- Simplifies staging of development by eliminating need to identify beforehand specific developer organization type for each unit of the campus complex.

Disadvantages

- Strong commitment to implementation of overall development plan is necessary to insure that proper guidance is available to each developer in contributing to final objectives of campus concept.
- Facility management organization necessarily complex because of variety of ownership structures involved.

- Community support and sense of responsibility for development of campus diminishes by impersonal nature of multi-organization O-M-F model.

- Series of financing sources must be sold on validity of campus concept because of long-term development process involved and variety of funding sources necessary in multi-organization O-M-F model.

Recommendations

This model allows the greatest flexibility in seeking financing sources but requires greater coordination of management activities. It is also attractive because of the diffused responsibility for development of individual units. If strong commitment to implementing the development plan is insured so that the overall concept of the campus is not distorted by individual development concepts during the long-term time frame necessary for campus completion, this O-M-F could be the most suitable for the development of the Human Resources Campus.

2.5.5 CONDOMINIUM

General Description

Ownership.

Units in campus complex individually owned (i.e.: by county, eleemosynary corporation, profit-seeking investors, etc.) with common or shared facilities jointly owned and operated by board of directors; campus consists of 3 ownership elements: 1) condominium unit owned in fee simple, 2) limited common areas shared by some but not all units, and 3) common



areas ownership shared by all with undivided title interests; unit owners or representatives are members of an owners association administered by annually elected board of directors which is empowered to manage and contract management services.

Management

Individual units managed by owner or owner's representative (agency occupying unit); common facilities managed by owner's association through board of directors.

Financing

Under this O-M-F model, campus could be developed as single complex and individual units leased to occupying agency, or it could be developed incrementally as agencies are able to make occupancy commitments; common facilities might be built in entirety or also developed incrementally with staged expansion possible as each agency makes occupancy commitment. Development-financing sources depend upon options chosen, i.e., private profit-seeking investor using conventional financing; county government with public revenue, federal grants and loans; and non-profit corporation through gifts, endowments, shares, and fund-raising drives; or combination of organizations using combination of financing sources.

Advantages

- Allows individual unit owner or owner's representative autonomy in decision making affecting their unit.

- Responsibility for ~~common~~ areas shared among unit owners and/or owner's representatives: limited common area responsibility shared only by agencies sharing use and all owners responsible for common areas shared by all,

Financing under for campus development can be divided in a number of ways depending upon development organization option chosen.

Agency interaction encouraged through representation on board of directors.

- Savings to individual condominium owner in common areas through possession of fractional undivided interests in common elements and no financial liability for limited common area if use not required.

Disadvantages

- Condominium is a relatively untested O-M-F approach to non-profit, public agency project, changes in state's legislation may be necessary to allow use.
- If multiple developers involved and development staged over a long time frame, adherence to development plan will be difficult.

Recommendations

This model has strengths that may not be possible with other methods such as division of complex into three types of space ownership: individual, limited common, and common. Ideal situation would be for each agency to own its unit but probably is not possible under existing circumstances. This deficiency can probably be adequately overcome by

contractual agreement between unit owner and leasing agency allowing agency to be owner's official representative in campus management and operation activities.

2.5.6 SUMMARY

The combination of possibilities for ownership, management, and financing are numerous. Careful investigation of the most cost- and operationally-effective method is warranted before decisions are made as to what course of action to pursue. Ideally that model, providing the greatest cost-benefit ratio in optimizing health and social service delivery systems for the benefit of all the users of the campus should be chosen, but political and financial realities may dictate compromises which, if the impacts are not carefully considered, may make it extremely difficult to realize the aims of the campus.

Further efforts in devising a strategy for the development of the campus should include an investigation of all possible funding sources. Among those having possible applicability to one or another of the development models are: financial institutions (i.e.: mortgage bankers, life insurance companies, savings and loan associations, mutual savings banks, and commercial banks); federal programs (i.e.: HEW, HUD, FHA, FmHA, EDA, and BOR); local government sources (i.e.: taxes, appropriation, general obligation and revenue bonds, revenue sharing funds, and borrowed capital); and other sources such as: investor resources, solicitations, private endowments, foundation grants and gifts, and

corporate gifts. Developer economic considerations would, of course, differ depending on the characteristics of the developer and those funding sources applicable to the project component being considered.

Other factors closely related to financing are development packaging and phasing. Conceivably the campus could be developed as a single package by securing early occupancy commitments for all participating agencies or delaying development until such time as all commitments are secured. This technique has certain advantages such as: insuring against last minute withdrawals, and allowing greater negotiating leverage in approaching possible financiers. A disadvantage of this approach is the requirement, possibly, for large "front money" outlays.

A second and more likely possibility is that phasing of the campus development will have to be staged over time in acknowledgement of the difficulties involved in securing agency occupancy commitments. This implies that a variety of financing and development mechanisms will be used because of changes over time in developer and funding source capabilities. In any case, viability of the overall Human Resources Campus concept will depend upon securing agency occupancy commitments as soon as circumstances will permit. This will enable planning for incorporation of the necessary facilities in the development plan to be done with the degree of assurance necessary for realizing the successful accomplishment of the campus's objectives.

2.6 Summary

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The area which the proposed Human Resources Campus will serve is a predominately low-income, rural county. The site selected for the campus development is of sufficient size for the complex and includes the existing facilities of two agencies essential to the campus concept and is reasonably accessible. The services to be provided at the campus range from treatment of acute illness to counseling on family finances. Existing facilities of agencies not on the proposed site are inadequate as permanent locations for the services. The included agencies all have relatively strong interrelationships and will share a variety of common facilities. The campus will be funded and operated through one or a combination of five basic ownership/management/financing options.

This section addresses the four site development strategy alternatives. The aims of the development are described, followed by a brief explanation of the "strategy approach." Finally, the four alternatives will be introduced and then discussed in detail (subsections 3.4 - 3.7).

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It is important at this point to reiterate that the campus concept has been accepted as a sound physical planning principle throughout the study. The proposals, therefore, take the form of alternative strategies which may be pursued in order that physical development achieve the aims of the campus concept. From the alternatives presented, the campus planners may select the strategy which is the most feasible and more detailed physical development planning and design can follow.

3.1 Aims

The statement of aims is a listing of intentions that form the basis for the four strategies. The aims, therefore, are that which the campus concept, the strategies, and ultimately the development plan are to achieve.

The listing follows a general order of importance to the overall concept. This ordering provides a means for weighing the merits and deficiencies of each alternative strategy and helps to eliminate possible contradictions in the plans which tend to arise when one aim is taken into account to the detriment of another.

The aims of the campus concept are as follows:

(A) The Pedestrian Street. This involves the organization of all

facilities along a pedestrian street or walkway in order to segregate people from auto traffic, provide a human focus, and allow for comfortable landscaped areas for interaction and movement (see Section 2.4 and Appendix 4.1).

- (B) Shared Facilities (food services and dining, assembly, day care, employee lounge, etc.). It is essential that the common facilities described in Section 2.4 and Appendix 4 relate to all the campus activities and services. These facilities should be located with convenient access in mind.
- (C) Expansion. Careful attention to the potential for expansion of each individual agency is essential. This will ensure that future growth of each agency may proceed in an orderly fashion.
- (D) Let-Off Points. A minimal number of transportation system let-off points is desirable in order to avoid confusion in getting to the proper agency and to allow convenient access to all campus activities. This should relate to common facilities.
- (E) Landscaping. Careful attention should be given to the landscaping of the campus to ensure that people spaces are adequately shaded, existing wooded areas are optimally utilized, and parking areas are designed with trees to eliminate intensive heat generation and unpleasant appearance.
- (F) Future Development. Provision for further extensions of campus activities should be planned. It is quite possible that new agencies will seek locations on the campus, and these should be

able to plug into the pedestrian street without disrupting the campus concept.

- (G) Construction/Logistics. Construction of new facilities should not prohibit the on-going operation of existing facilities. Alternative servicing and access should be planned to avoid disruptions in operation.
- (H) Playground. The purpose of the playground is to allow clients to leave their children in a supervised play area while they are seeking services. It should be easily accessible from all facilities and be visible from the pedestrian mall (see Section 2.4.2 and Appendix 4.4.1).
- (I) Emergency Vehicle Access. Clear passage through the hospital propylaeum must be maintained. If the development plan or alternative strategy alters the existing access pattern, a new and equally suitable pattern must be provided.
- (J) People Areas. Comfortable settings for waiting, interaction, and resting should be designed as part of the pedestrian street (see Section 2.4.4 and Appendix A4.4).
- (K) Covered Walkways. To allow uninterrupted use of the campus during inclement weather, covered walkways should be incorporated in the general site planning. This cover would also serve as a unifying architectural element (see Appendix A4.1).
- (L) Access from Parking. Access roads should not cross the pedestrian route between parking areas and the pedestrian street for reasons of safety and ease.

- (M) Vehicular Circulation. It is essential to provide safe, controlled, and uncomplicated vehicular access and circulation on the site.
- (N) Development Staging. The organization and detailed design of the facilities should take into consideration the need for phasing or staging of development. This is necessary, in part, because of the possible delays in construction starts by each agency due to funding options. The development plan must ensure that a sense of completeness is achieved after each development stage.
- (O) Modification of Existing Buildings. Minimal modification of existing facilities should be encouraged by the development plan. This would include, not only buildings but also parking areas, tree cover, topography, entrance roads, etc.
- (P) Ease of Servicing. Easy servicing (deliveries, custodial service, outreach programs, etc.) is essential to the successful operation of the campus activities. General servicing should be accomplished from the parking areas, while emergency servicing could be accommodated along the pedestrian street.
- (Q) Parking Nodes. Dispersed parking areas of less than 85 spaces should be incorporated in any scheme. The "sea-of-cars" effect of most parking lots should be avoided; forty cars per lot maximum is recommended.
- (R) Visual Screening at Hospital Service. Due to the nature of the service activity at the hospital, a visual screen should be provided to obscure its view.



(5) Response to Environmental Conditions. Although this will be dis- 45
cussed in Section 4, it is necessary to state that the campus as
a whole and the agency facilities individually should respect
local environmental conditions such as climate, topography, etc..

3.2 Program of Elements

The following is a listing of the major elements of the proposed campus:

existing facilities:
 County Hospital
 Physicians Office Building

new facilities: (For more specific information see Appendix 3)

Dept. of Social Services (DSS)	17,700 sq. ft.
Health Department (HD)	7,600 sq. ft.
Community Mental Health (MH)	4,600 sq. ft.
Vocational Rehabilitation (VR)	2,300 sq. ft.
Alcohol and Drug Abuse (A/DA)	2,100 sq. ft.
Total	34,300 sq. ft.

common facilities: (For more specific information see Appendix 4)

Concessions	3,600 sq. ft.
Assembly	3,600 sq. ft.
Day Care	2,000 sq. ft.
Central Stores	1,000 sq. ft.
Playground	-----
Total	10,200 sq. ft.

*parking:

New	
DSS	85 spaces
HD	38 spaces
MH	25 spaces
VR	14 spaces
A/DA	10 spaces

Existing	
Hospital	140 spaces
Office	68 spaces

Total 380 spaces

other:

Pedestrian Street }
 People Spaces } Size and character varies with strategies

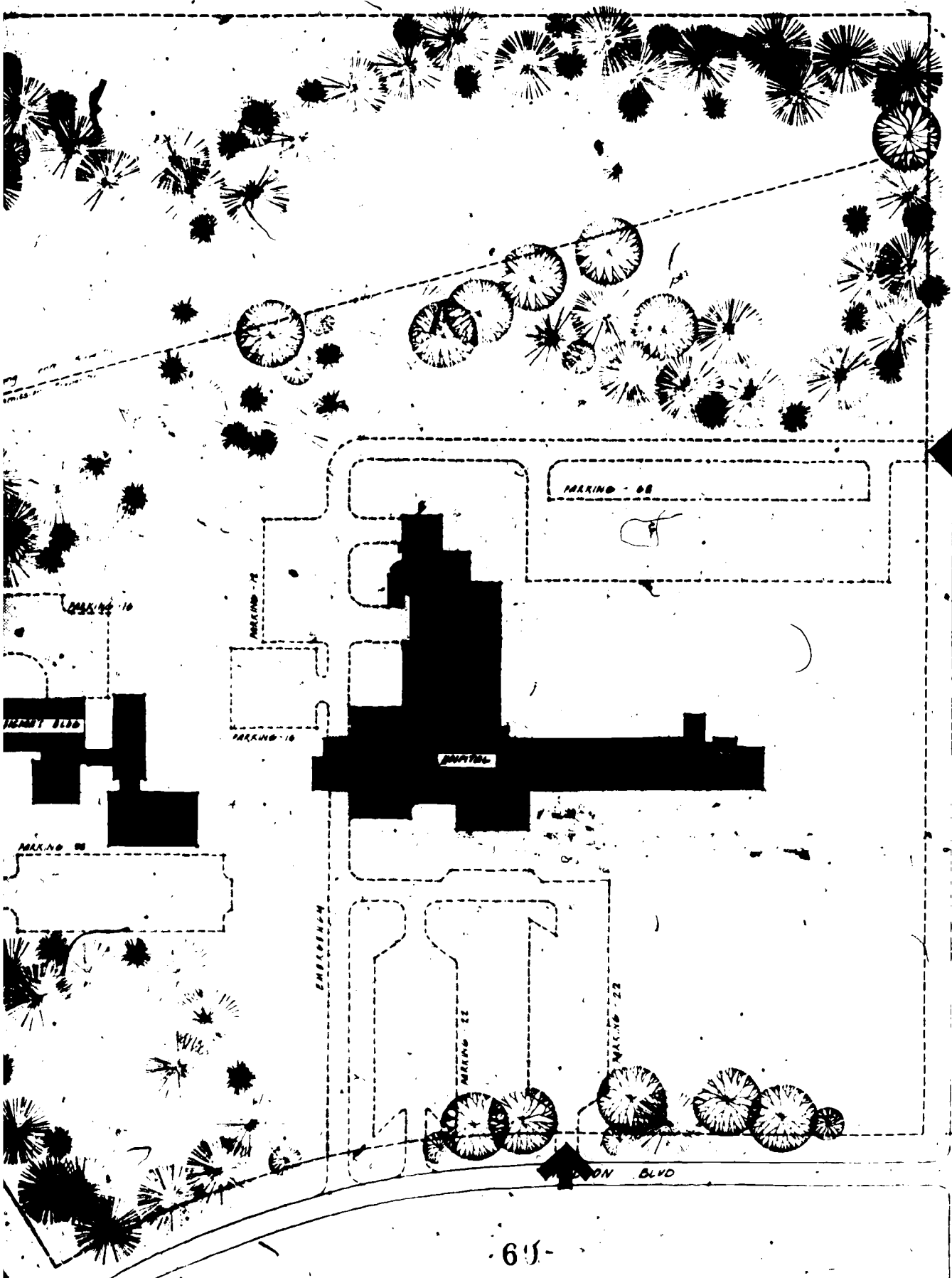
*based on 200 sq. ft./car from Kingstree Zoning Ordinance, 1974.





EXISTING SITE

TREN ROAD



65-

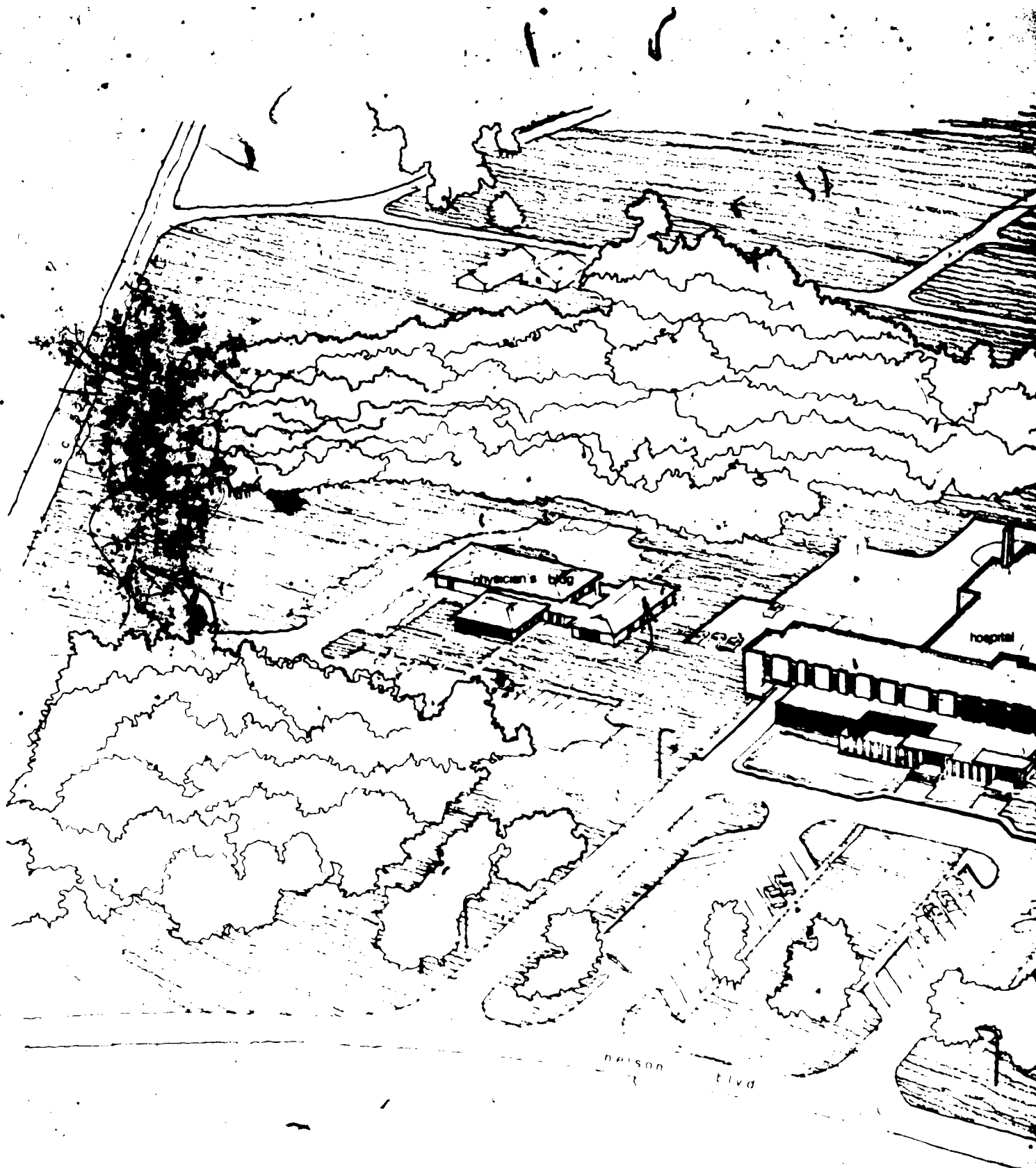
3.3 Strategy Approach

47

Within the framework of the overall planning approach, there exist several alternative proposals. These proposals or strategies are so called because they represent statements of possibilities -- conceptual models -- as opposed to a development plan which implies a physical planning solution. Strategies are plans of action or statements of policy that are the basis of the subsequent development plan.

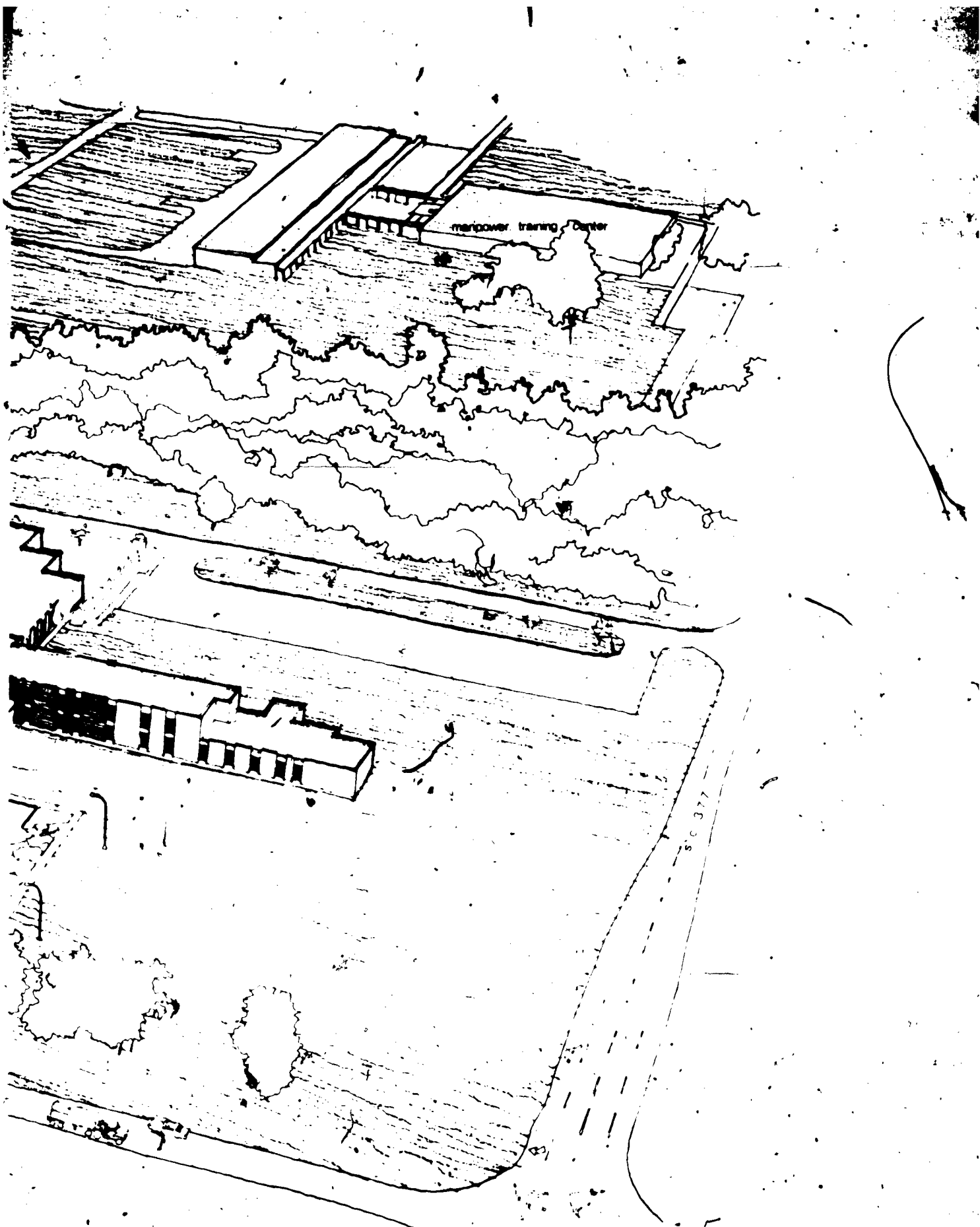
Alternate Strategies. The proposals are presented as alternative strategies for several reasons. First, it was not within the scope of this study to prepare a development plan but instead to chart a course of action and to identify the alternatives available. Second, inherent in the advantage of using strategies in lieu of development plans is the degree of flexibility allowed within the framework of the campus concept. The four options presented make it possible for the Regional Health Commission, or a yet to be designated committee, to adopt that possibility which best suits ownership/management arrangements and funding possibilities. Strategy decisions in a proposal respond to the criteria established in the statement of aims and determine how some of these aims can be realized.

The format for the presentation of the four strategies includes a general description, characteristics, deficiencies, and major design guidelines. The latter is relatively comprehensive to ensure that the direction of the strategy is retained.



AREA SKETCH

Figure 7



3.4 Alternate A - Linear Pedestrian Strategy 51

3.4.1 General Description. The primary distinction of this strategy is the location of the new facilities along a pedestrian way at the north side of the existing facilities. This pedestrian street is arranged linearly, with an essentially east-west orientation, connecting the hospital with the office building (see Figures 9 and 10).

3.4.2 Characteristics

- No need for additional land acquisition
- Good relationship with existing facilities
- Well defined let-off point
- Clarity of organization
- Ease of expansion, future development, and staged development
- Unencumbered passage from car to pedestrian areas
- Does not interfere with hospital servicing
- Preserves stand of trees along south side of site
- Future expansion plans for existing facilities are unaffected
- Playground well-located

3.4.3 Deficiencies

- Poor vehicular circulation
- Creates view of roof tops from hospital upper floors
- Construction logistics difficult
- Requires rather extensive modification of existing parking areas and access roads

3.4.4 Guidelines (These guidelines are germane to this particular alternative only.)

- Maintain openness of plan

Allow for generous openings along the pedestrian street particularly at the playground area. This spatial openness should be achieved by manipulating the buildings along the street. While it is necessary to provide this open feeling, a sense of security and relaxation in the designated pedestrian areas should be retained.

- Massing of DSS and HD should not compete with hospital

While it is important to integrate the hospital with the campus, the DSS and HD should not by virtue of the design unnecessarily challenge the hospital's dominance.

- Allow paved turn-around at ambulance propylaeum

A minimum of 50 feet diameter turn-around must be provided in the pedestrian area to allow for instances of extreme emergency where several ambulances are making consecutive stops at the hospital. Routine traffic would be required to back out of the propylaeum.

- Courts at Mental Health, Alcohol and Drug Abuse, and Vocational Rehabilitation should be provided.

Provide enclosed courts at the Mental Health, Alcohol and Drug Abuse, and Vocational Rehabilitation agencies. The courts should serve as an adjunct space for therapy sessions at the MH and A/DA agencies, and as part of the outlook for the offices at VR. Walls should be high enough to provide visual privacy and situated to allow as much

acoustical privacy as possible; adequate area for planting should be allowed within the courts.

- Concessions area should have an outdoor seating area.

Provide outdoor seating immediately adjacent to the eating area equal to 20% of the indoor seating capacity. This area can be either a part of the pedestrian area or situated between the office and concessions buildings, away from the primary circulation areas.

- Assembly space should have secure access from parking.

The assembly area requires provision for 20% adjacent parking spaces. A relatively secure transition is important for night use.

3.4.5 The following general requirements are explained in the statement of aims:

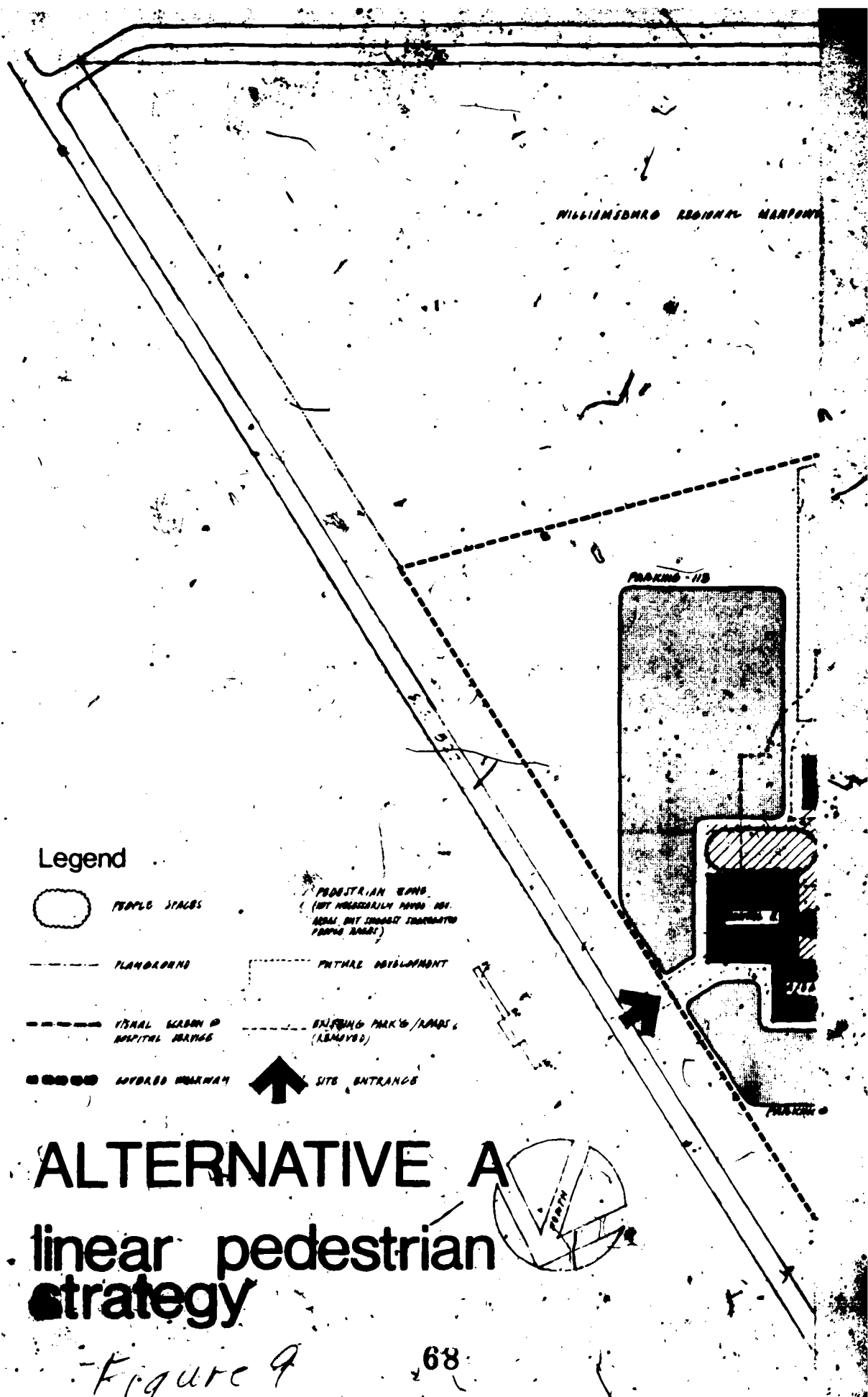
- Adequate landscaping
- Playground
- Emergency access
- People spaces
- Covered walkways
- Servicing
- Parking
- Pedestrian street
- Common facilities
- Agency expansion
- Future development
- Transportation de-embarkation
- Staging of facility development

Satisfaction - of - Aims Matrix



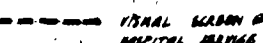


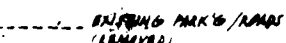


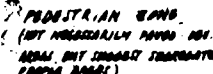
	A	B	C	D
	lin ped	ped	dispersed	detached
1 Pedestrian Street				
a. avoid ped/veh conflict	+			
b. comfort - landscaping	+			
c. interaction	+			
d. focus	+			
2 Common Facilities				
a. relate to all activities	+			
b. convenient location	+			
3 Agency Expansion				
a. adequate land	0			
b. non-disruptive	0			
4 Let-off Points				
a. centrally located	0			
b. minimal number	+			
5 Landscaping				
a. shade on walkway	+			
b. protection of existing vegetation	+			
c. visual break in parking lot	+			
6 Future Development				
a. campus extensions	+			
b. ease	+			
c. retention of concept	+			
7 Construction Logistics				
a. minimum effect on operations	0			
b. alternate service possibilities	0			
8 Playground				
a. convenient, relate to all facilities	0			
b. view from pedestrian mall	0			
c. allow clients to leave children	0			
9 Emergency Vehicle Access				
a. maintain propylaeum access	0			
b. attention to entry/exit	0			
c. shield noise view	0			
10 People Spaces				
a. seating for waiting, visiting, etc.	0			
b. shaded tree cover	0			

+ Good
 0 Satisfactory
 0 Poor

fig 8



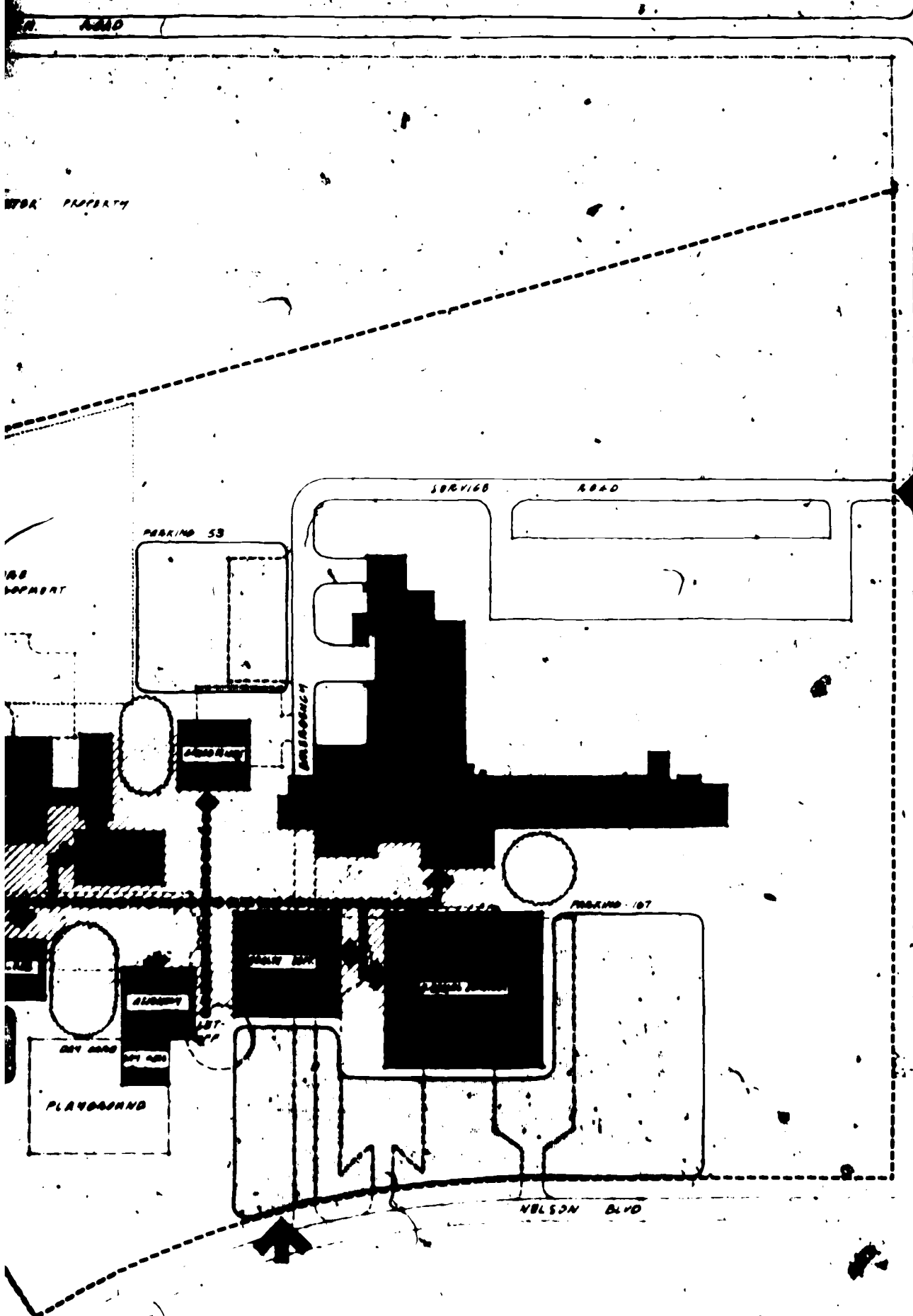
Legend

-  PEOPLE SPACES
-  LANDSCAPE
-  VISUAL BARRIER OF HOSPITAL BARRIERS
-  HYDRAS HOUSING
-  POTENTIAL DEVELOPMENT
-  EXISTING PARKS / AREAS (REMOVE)
-  SITE ENTRANCE
- 
-  PEDESTRIAN WAY (NOT NECESSARILY PAVED OR ADA COMPLIANT THROUGH PEOPLE SPACE)

ALTERNATIVE A
 linear pedestrian
 strategy



Figure 9



		A lin ped	B ped	C dispersed	D detached
11	Covered Walkways				
	a. allow uninterrupted movement	0			
	b. incorporated in development	+			
	c. coordinating element	+			
12	Access from Parking Areas				
	a. avoid crossing access roads	+			
	b. direct	+			
13	Vehicular Circulation				
	a. controlled (speed, etc.)	0			
	b. short lengths	0			
	c. uncomplicated	0			
14	Staging				
	a. accommodate unknown phasing	0			
	b. infrastructure development	0			
	c. avoid sense of "incompleteness"	0			
15	Modification to Existing Buildings				
	a. kept to a minimum	0			
	b. access to pedestrian street	+			
	c. modifications to parking areas	0			
16	Ease of Servicing				
	a. access points	0			
	b. parking area access	0			
	c. screening (visual)	+			
17	Parking Nodes				
	a. dispersed areas (85 spaces max.)	+			
	b. near to buildings	+			
18	Visual Screening at Hospital Service				
	a. incorporated with other development	0			
	b. avoid overlooking service yard	0			
19	Response to Environmental Conditions				
		+			

+ Good
 0 Satisfactory
 0 Poor



ALTER



NATIVE A - linear pedestrian strategy

3.5 Alternate B - Pedestrian Strategy

58

3.5.1 General Description. This particular pedestrian scheme is similar to alternate A but is located in the northeast quadrant of the site. This location allows a more effective on-site vehicular circulation (see Figures 12 & 13).

3.5.2 Characteristics

- No need for additional land acquisition
- Strong pedestrian scheme
- Good relationship with existing facilities
- Good vehicular circulation
- Future expansion plans for existing facilities unaffected

3.5.3 Deficiencies

- Future development and agency expansion difficult
- Some parking has to be located on periphery of ring road
- Playground location inadequate
- Emergency vehicle entrance obstructed

3.5.4 Guidelines

- Let-off point

Allow sufficient area for the transportation system mini-bus to maneuver without backing out.

- Concessions area. (See Alternate A, Section 3.4.4).

- Vehicular Circulation

Provide sufficient controls to minimize pedestrian-vehicular conflict at crossings.

- Landscaping

Particular attention to landscaping of parking areas and the areas immediately behind the agency buildings is necessary due to the limited availability of land within the ring road. (Also, see statement of aims for landscaping requirements, Section 3.1).

3.5.5 The following requirements are explained in the statement of aims:

- Pedestrian street
- Common facilities
- Let-off points
- Construction logistics
- People spaces
- Covered walkways
- Vehicular circulation
- Servicing
- Visual screening

Satisfaction - of - Aims Matrix

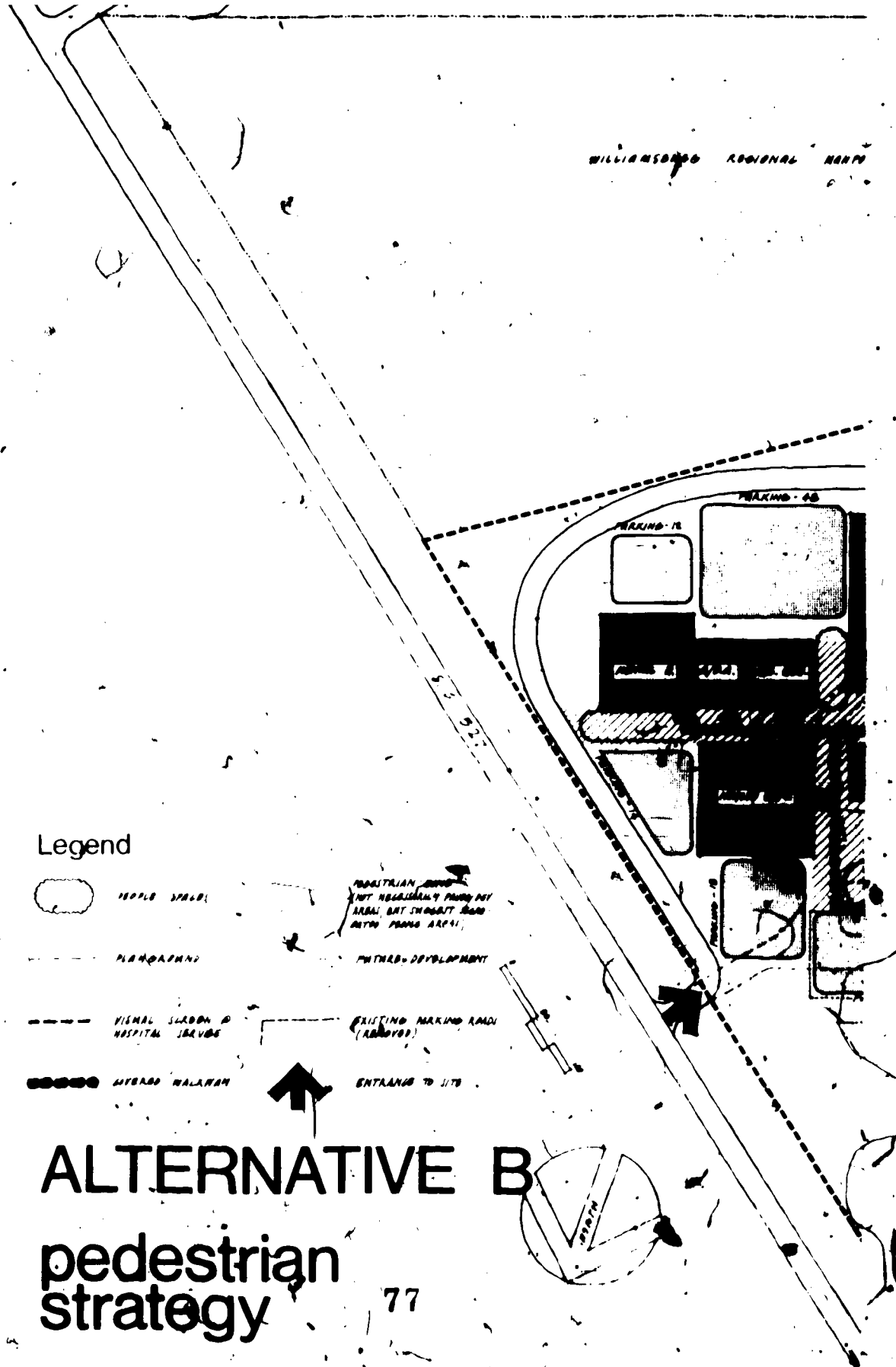
	A lin ped	B ped	C dispersed	D detached
1 Pedestrian Street				
a. avoid ped/veh conflict		+		
b. comfort - landscaping		+		
c. interaction		+		
d. focus		0		
2 Common Facilities				
a. relate to all activities		0		
b. convenient location		+		
3 Agency Expansion				
a. adequate land		0		
b. non-disruptive		0		
4 Let-off Points				
a. centrally located		0		
b. minimal number		+		
5 Landscaping				
a. shade on walkway		0		
b. protection of existing vegetation		0		
c. visual break in parking lot		0		
6 Future Development				
a. campus extensions		0		
b. ease		0		
c. retention of concept		0		
7 Construction Logistics				
a. minimum effect on operations		+		
b. alternate service possibilities		+		
8 Playground				
a. convenient relate to all facilities		0		
b. view from pedestrian mall		0		
c. allow clients to leave children		0		
9 Emergency Vehicle Access				
a. maintain propylaeum access		0		
b. attention to entry/exit		0		
c. shield noise view		0		
10 People Spaces				
a. seating for waiting, visiting, etc.		0		
b. shaded tree cover		0		

+ Good
 0 Satisfactory
 0 Poor

fig 11

	A lin ped	B ped	C dispersed	D detached
11 Covered Walkways				
a. allow uninterrupted movement		0		
b. incorporated in development		0		
c. coordinating element		0		
12 Access from Parking Areas				
a. avoid crossing access roads		0		
b. direct		0		
13 Vehicular Circulation				
a. controlled (speed, etc.)		0		
b. minimal lengths		0		
c. safe, uncomplicated		+		
14 Staging				
a. accommodate unknown phasing		0		
b. infrastructure development		0		
c. avoid sense of "incompleteness"		0		
15 Modification to Existing Buildings				
a. kept to a minimum		0		
b. access to pedestrian street		0		
c. modifications to parking areas		0		
16 Ease of Servicing				
a. access points		+		
b. parking area access		+		
c. screening (visual)				
17 Parking Nodes				
a. dispersed areas (85 spaces max.)		+		
b. near to buildings		0		
18 Visual Screening at Hospital Service				
a. incorporated with other development		+		
b. avoid overlooking service yard		0		
19 Response to Environmental Conditions				
		0		

- + Good
- 0 Satisfactory
- 0 Poor



Legend

- PEOPLE SPACE
- PARKING
- VISUAL SCREEN OF HOSPITAL DRIVE
- HYBRID WALKWAY
- PEDIESTRIAN SPACE (NOT NECESSARILY PAVED BY AREA, BUT THROUGH ROAD AUTO PARKING AREA)
- PARKING DEVELOPMENT
- EXISTING PARKING ROAD (ARROYO)
- ENTRANCE TO SITE

ALTERNATIVE B
pedestrian strategy

Figure 12

GPAD

PROPERTY

PARKING 86

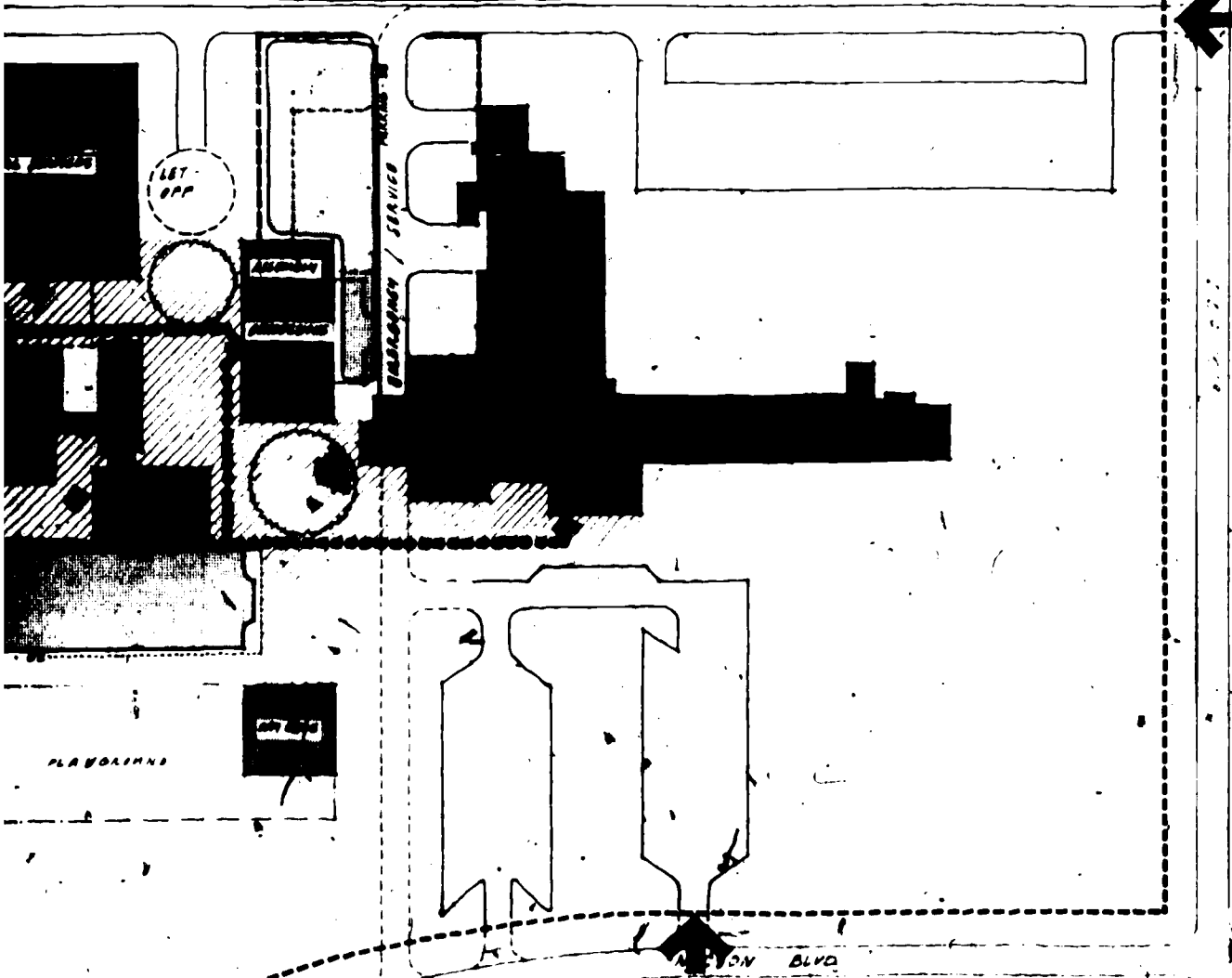




Figure 13.



ALTERNATIVE B - pedestrian strategy

3.6 Alternate C - Dispersed Strategy

64

3.6.1 General Description. This alternative involves the dispersal of the new facilities throughout the site thus minimizing the emphasis on a tight pedestrian organization. The dispersed strategy is one of two alternatives that involves acquiring a portion of the property on the periphery of the area occupied by the Williamsburg County Technical, Vocational, and Adult Education (TEC) Center (see Figures 15 and 16).

3.6.2 Characteristics

- Staging of development and agency expansion made easier
- Minimal modification of existing facilities
- Good vehicular circulation
- Common facilities relate well to all activities
- Playground well located
- Ease of servicing
- Clarity of organization
- No construction logistical problems

3.6.3 Deficiencies

- Pedestrian-vehicular conflict at intersection
- Emergency vehicle traffic conflict
- Dispersal of buildings dilutes pedestrian street concept

3.6.4 Guidelines

Landscaping

Effective landscaping is essential to minimize the effects of size disparity between agencies (See landscaping in Section 3.1).

- Pedestrian Crossing

Provide sufficient controls to minimize conflict at pedestrian-vehicular intersection.

- Concessions Area

Concessions area should have complementary outdoor seating immediately adjacent to the eating area for 20% of the indoor seating capacity.

This area can be either a part of the pedestrian area or situated between the office and concessions building away from the primary circulation areas.

- Pedestrian Spline

Develop spline with people spaces and extensive landscaping to minimize discomfort of long walk.

- Assembly Space

The assembly area requires provision for 20 adjacent parking spaces.

A relatively secure transition is important for night use.

- Covered Walkways

The design of the covered walkways demand sensitive handling to maintain a unified impression of the campus.

3.6.5 The following general requirements are explained in the statement of aims:

- Common facilities.
- Agency expansion
- Emergency vehicle access
- Covered walkways
- Access from parking areas
- Parking nodes
- Visual screening

Satisfaction - of - Aims Matrix

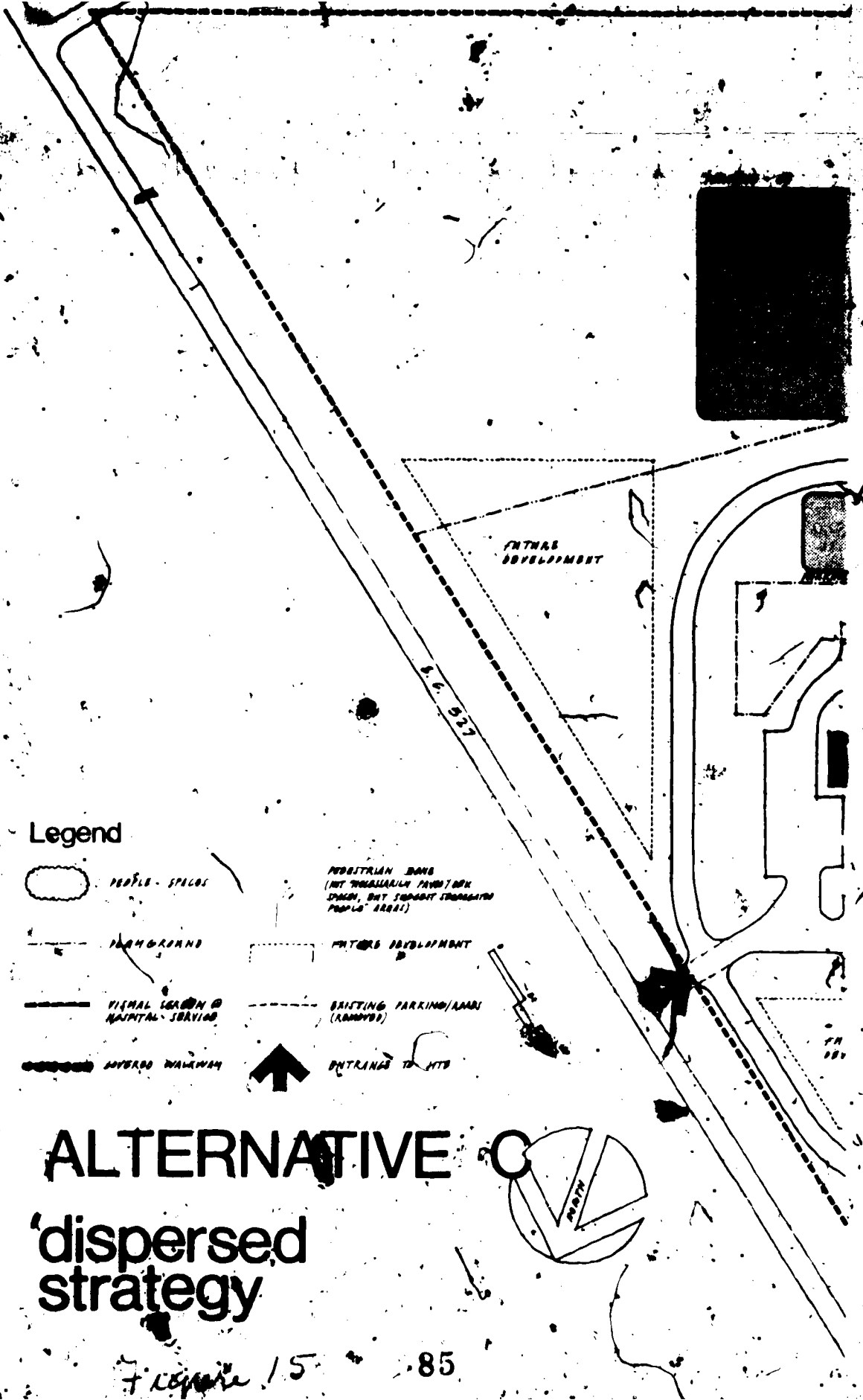
		A in ped	B ped	C dispersed	D detached
1	Pedestrian Street				
	a. avoid ped/veh conflict			0	
	b. comfort - landscaping			+	
	c. interaction			+	
	d. focus			+	
2	Common Facilities				
	a. relate to all activities			+	
	b. convenient location			+	
3	Agency Expansion				
	a. adequate land			+	
	b. non-disruptive			+	
4	Let-off Points				
	a. centrally located			+	
	b. minimal number			+	
5	Landscaping				
	a. shade on walkway			+	
	b. protection of existing vegetation			+	
	c. visual break in parking lot			+	
6	Future Development				
	a. campus extensions			+	
	b. ease			+	
	c. retention of concept			+	
7	Construction Logistics				
	a. minimum effect on operations			+	
	b. alternate service possibilities			+	
8	Playground				
	a. convenient relate to all facilities			+	
	b. view from pedestrian mall			+	
	c. allow clients to leave children			+	
9	Emergency Vehicle Access				
	a. maintain propylaeum access			+	
	b. attention to entry/exit			+	
	c. shield noise view			+	
10	People Spaces				
	a. seating for waiting, visiting, etc.			+	
	b. shaded tree cover			+	

+ Good
 0 Satisfactory
 0 Poor

fig. 14

		A lin ped	B ped	C dispersed	D detached
11	Covered Walkways				
	a. allow uninterrupted movement			+	
	b. incorporated in development			+	
	c. coordinating element			+	
12	Access from Parking Areas				
	a. avoid crossing access roads			0	
	b. direct			+	
13	Vehicular Circulation				
	a. controlled (speed, etc.)			+	
	b. minimal lengths			0	
	c. safe, uncomplicated			+	
14	Staging				
	a. accommodate unknown phasing			+	
	b. infrastructure development			+	
	c. avoid sense of "incompleteness"			+	
15	Modification to Existing Buildings				
	a. kept to a minimum			+	
	b. access to pedestrian street			0	
	c. modifications to parking areas			+	
16	Ease of Servicing				
	a. access points			+	
	b. parking area access			+	
	c. screening (visual)			+	
17	Parking Nodes				
	a. dispersed areas (85 spaces max.)			+	
	b. near to buildings			+	
18	Visual Screening at Hospital Service				
	a. incorporated with other development			0	
	b. avoid overlooking service yard			0	
19	Response to Environmental Conditions			0	

+ Good
 0 Satisfactory
 0 Poor



Legend

- PEOPLE SPACES
- PARKING
- VISUAL SCREEN @ HOSPITAL SERVICE
- PEDESTRIAN BANS (NOT NECESSARILY PAVED ORX SPACES, BUT SIGNIFY THROUGHOUT PEOPLE AREAS)
- FUTURE DEVELOPMENT
- EXISTING PARKING/AREA (RANDOM)
- ENTRANCE TO SITE
- AVOIDED WALKWAY

ALTERNATIVE C
'dispersed strategy'

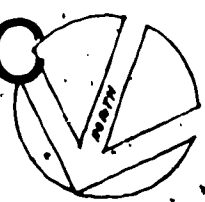


Figure 15 85

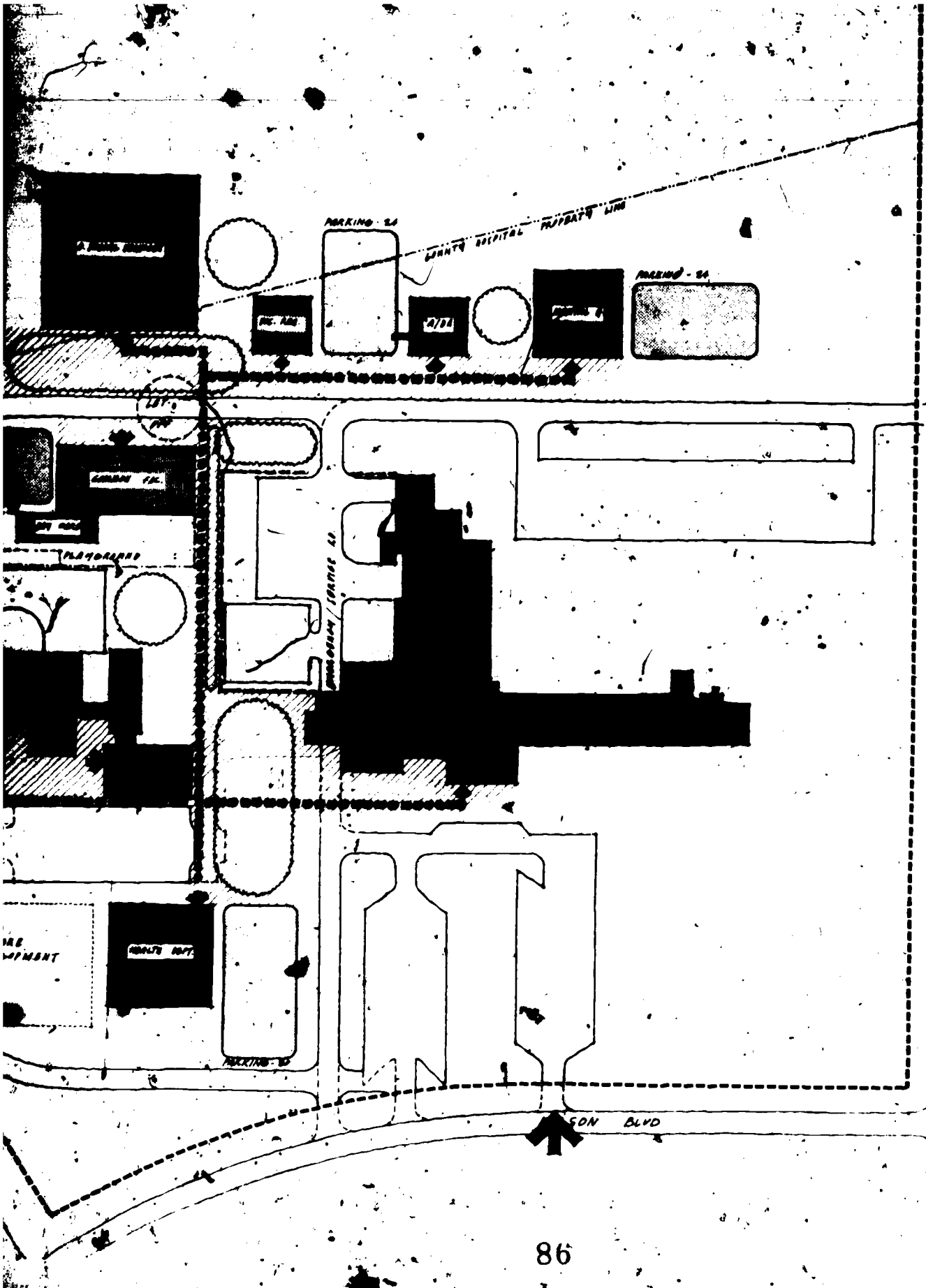
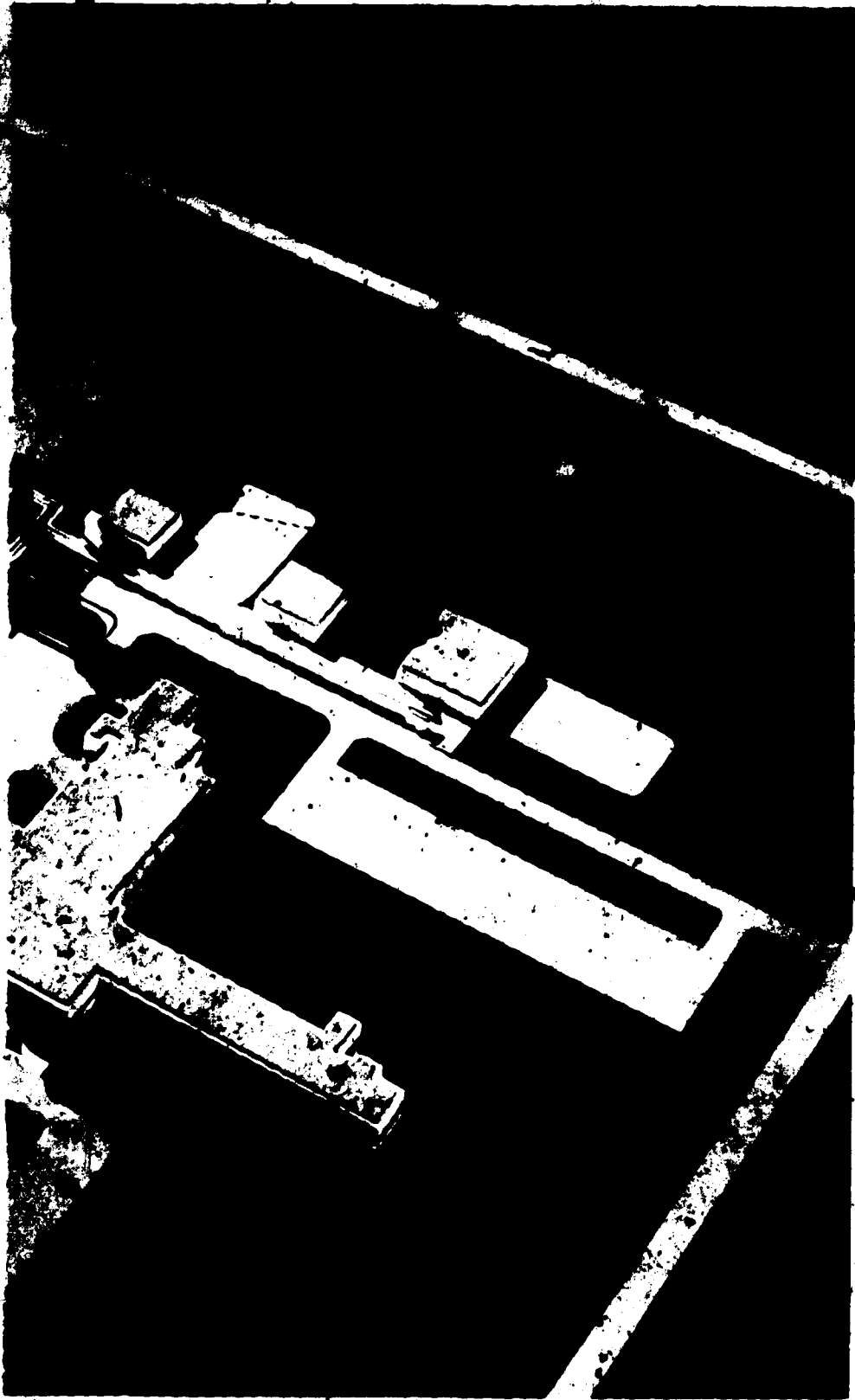




Figure 16

87

ALTE



ALTERNATIVE C - dispersed strategy

3.7 Alternate D - Detached Strategy

70

3.7.1 General Description. The detached approach is an organization of the new agencies that is self-contained and removed from the existing facilities but closely related to them. As in Alternate C it requires acquisition of a portion of the TEC Center's property, which in fact belongs to Williamsburg County (see Figures 18 and 19).

3.7.2 Characteristics

- Staging of development and agency expansion easily facilitated
- Minimal modification of existing facilities
- Good vehicular circulation
- Common facilities relate well to all activities
- Clarity of organization
- No construction logistical problems
- Common facilities and let-off point relate well
- Strong pedestrian scheme
- Emergency vehicle access unaltered
- Ample people spaces

3.7.3 Efficiencies

- Orientation to rear of existing buildings

3.7.4 Guidelines

- Maintain Openness of Plan (See Alternate A, Section 3.4.4)
- Concessions Area (See Alternate A, Section 3.4.4)
- Assembly Space (See Alternate A, Section 3.4.4)

3.7.5 The following general requirements are explained in statement of aims:

- Pedestrian street
- Common facilities
- Landscaping
- Construction logistics
- Playground
- Covered walkways
- Vehicular circulation
- Visual screening

Satisfaction - of - Aims Matrix

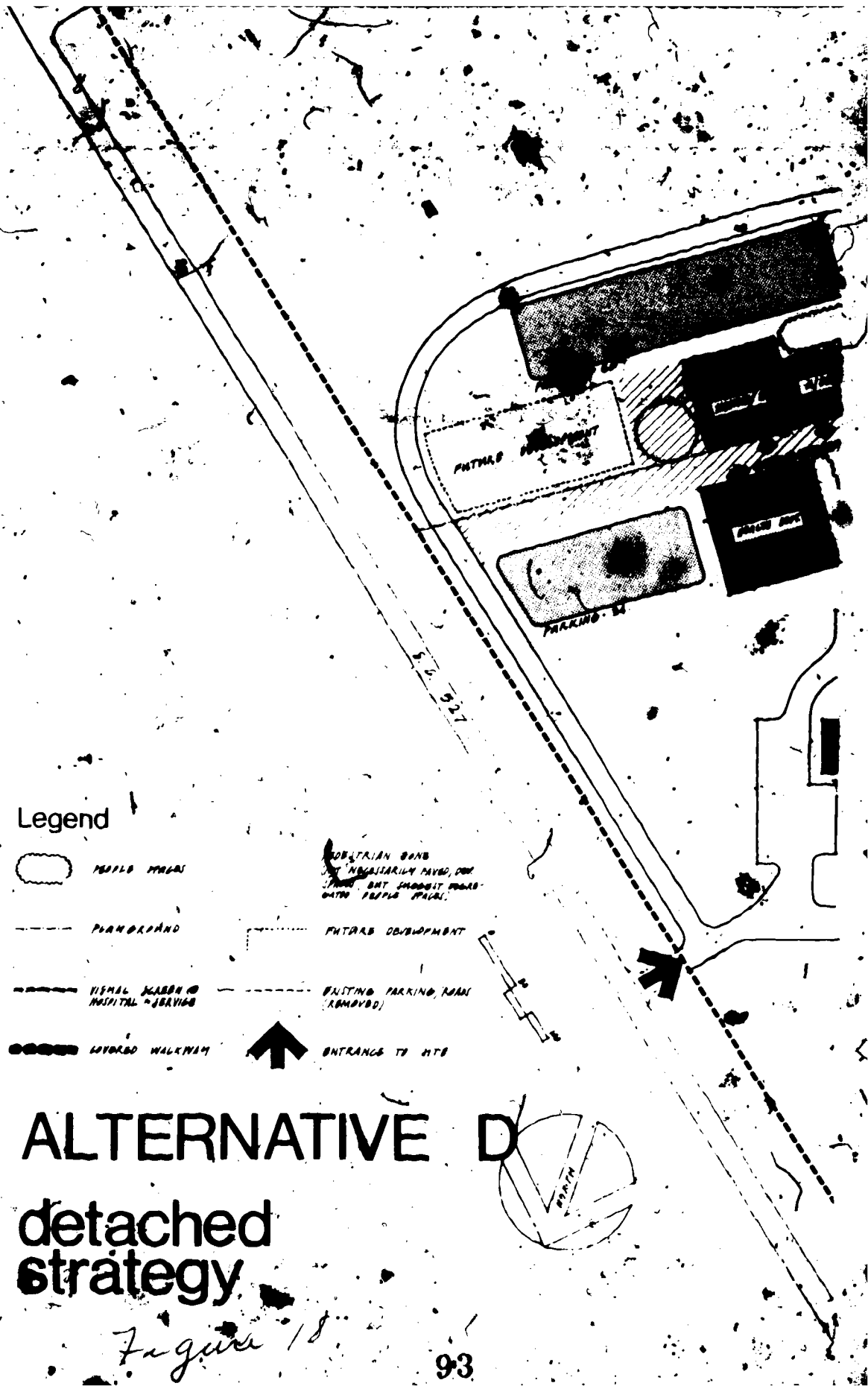
		A lin ped	B ped	C dispersed	D detached
1	Pedestrian Street				
	a. avoid ped/veh conflict				+
	b. comfort - landscaping				+
	c. interaction				+
	d. focus				+
2	Common Facilities				
	a. relate to all activities				+
	b. convenient location				+
3	Agency Expansion				
	a. adequate land				+
	b. non-disruptive				+
4	Let-off Points				
	a. centrally located				o
	b. minimal number				o
5	Landscaping				
	a. shade on walkway				+
	b. protection of existing vegetation				+
	c. visual break in parking lot				+
6	Future Development				
	a. campus extensions				+
	b. ease				+
	c. retention of concept				+
7	Construction Logistics				
	a. minimum effect on operations				
	b. alternate service possibilities				
8	Playground				
	a. convenient relate to all facilities				+
	b. view from pedestrian mall				+
	c. allow clients to leave children				+
9	Emergency Vehicle Access				
	a. maintain propylacem access				+
	b. attention to entry/exit				+
	c. shield noise view				+
10	People Spaces				
	a. seating for waiting, visiting, etc.				+
	b. shaded tree cover				+

- + Good
- o Satisfactory
- o Poor

fig 17

	A	B	C	D
	aligned	ped	dispersed	detached
11 Covered Walkways				
a. allow uninterrupted movement				+
b. incorporated in development				+
c. coordinating element				+
12 Access from Parking Areas				
a. avoid crossing access roads				+
b. direct				+
13 Vehicular Circulation				
a. controlled (speed, etc.)				+
b. minimal lengths				+
c. safe, uncomplicated				0
14 Staging				
a. accommodate unknown phasing				+
b. infrastructure development				+
c. avoid sense of "incompleteness"				+
15 Modification to Existing Buildings				
a. kept to a minimum				+
b. access to pedestrian street				0
c. modifications to parking areas				+
16 Ease of Servicing				
a. access points				0
b. parking area access				0
c. screening (visual)				0
17 Parking Nodes				
a. dispersed areas (85 spaces max.)				f
b. near to buildings				+
18 Visual Screening at Hospital Service				
a. incorporated with other development				+
b. avoid overlooking service yard				+
19 Response to Environmental Conditions				0

- + Good
- 0 Satisfactory
- 0 Poor

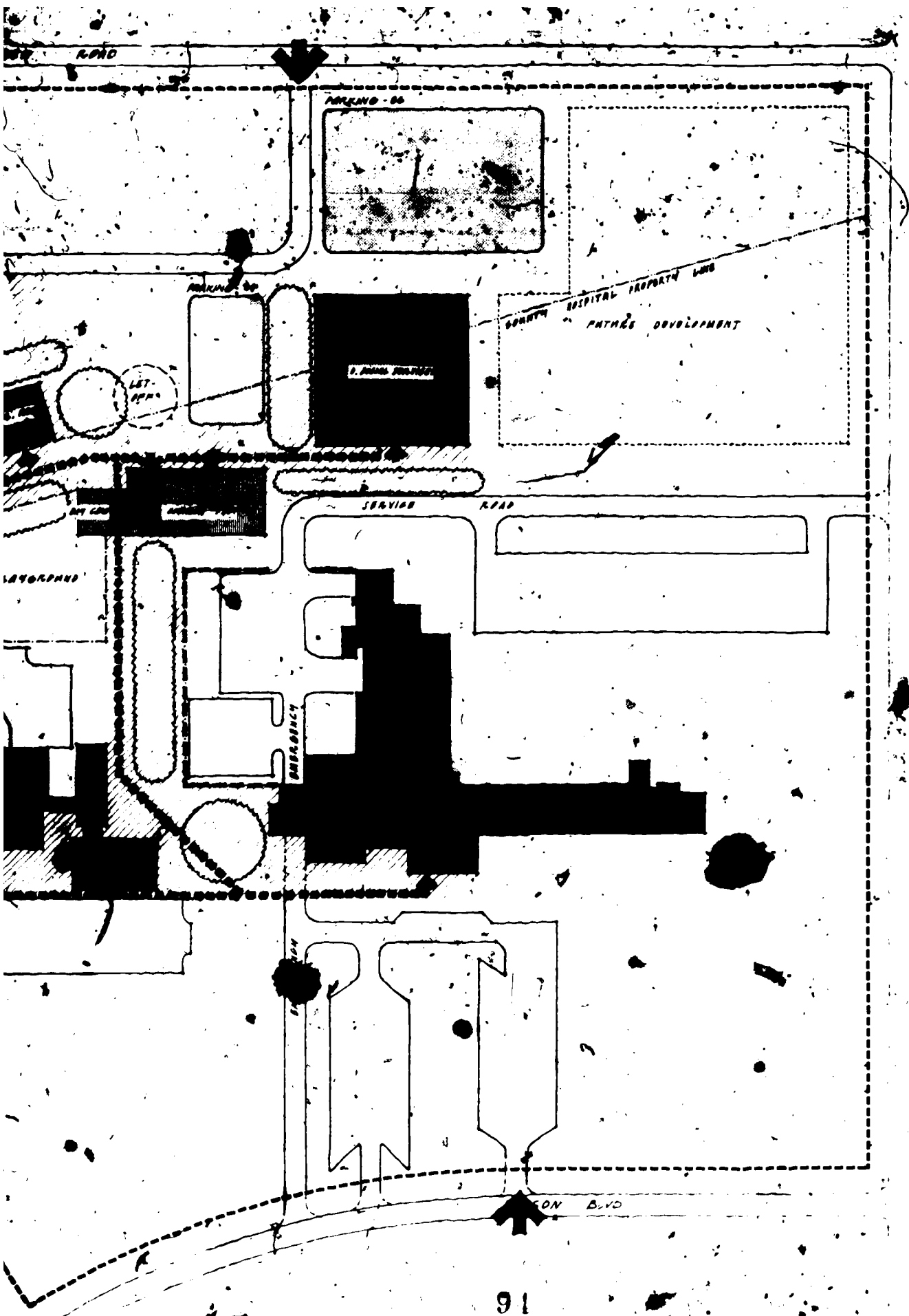


Legend

- PEOPLE SPACES
 - PLANNED
 - FUTURE DEVELOPMENT
 - EXISTING PARKING, SEAN (REMOVED)
 - HYDRANT WALKWAY
 - ENTRANCE TO HTS
- ROBUSTIAN BOND IS NECESSARILY PAID, BUT SHOULD BE ADDED INTO PEOPLE SPACES.

ALTERNATIVE D
detached strategy

Figure 18





95

AL

France 19



ALTERNATIVE D — detached strategy

3.8 Project Cost

78

The cost of the project will of course vary with the development strategy selected, with future changes in agency program and area requirements, and with the point in time at which construction contracts are negotiated for any given phase or component of the Campus.

In view of these variables it is not possible to make an accurate estimate of the final construction cost of the project at this time.

If built at today's costs and on the basis of area requirements established in this study the campus could be expected to cost in the range of two to two-and-a-half million dollars. This estimate is based on the cost per square foot of similar building types as given in the 1975 edition of Marshall Valuation Service, a construction cost estimating service widely used by architects and engineers for preliminary estimating purposes. The estimate also takes in consideration the cost of developing the grounds of the campus in line with the proposed strategies.

3.9 Summary

Choosing the strategies approach afforded the opportunity to analyze several different but plausible possibilities for a direction in the final development of the Human Resources Campus. The strategies offer broad-scope planning alternatives that allow flexibility in selecting that direction that best suits the program requirements.

4.1 Preferred Alternative

77

The statement of strategy preferences in this section is made on the basis of preliminary planning data only and should not eliminate any strategy from consideration on the basis of more detailed information.

As shown in the table of strategy satisfaction-of-aims (see Figure 20). Alternative "D" (detached strategy) most clearly achieves the campus aims while offering flexibility for future development and changes in program. Two factors that may preclude selection of this strategy as the basis of the final development plan would be: 1) the inability to acquire the required portion of the Williamsburg IEC Center property, or 2) soil conditions in the development area that would inflate the cost of construction beyond reason.

If strategy "D" should be eliminated for either of these reasons, Alternative "A" (linear pedestrian strategy) appears to offer the best arrangement that circumvents these problems.

4.2 Design Criteria

Detailed design criteria will be defined in the architectural programming phase of the project (recommended in Section 4.3.7). The criteria developed in this report and discussed in this section are general criteria that should assure an appropriate character to the complex.

Briefly stated, this character should be progressive, non-institutional and inviting -- providing psychological as well as physical comfort to the users.

Satisfaction - of - Aims Matrix (comparative analysis)

		A lin ped	B ped	C dispersed	D detached
1	Pedestrian Street				
	a. avoid ped/veh conflict	+	+	0	+
	b. comfort - landscaping	+	+	+	+
	c. interaction	+	+	+	+
	d. focus	+	0	+	+
2	Common Facilities				
	a. relate to all activities	+	0	+	+
	b. convenient location	+	+	+	+
3	Agency Expansion				
	a. adequate land	0	0	+	+
	b. non-disruptive	0	0	+	+
4	Let-off Points				
	a. centrally located	0	0	+	0
	b. minimal number	+	+	+	0
5	Landscaping				
	a. shade on walkway	+	0	+	+
	b. protection of existing vegetation	+	0	+	+
	c. visual break in parking lot	+	0	+	+
6	Future Development				
	a. campus extensions	+	0	+	+
	b. ease	+	0	+	+
	c. retention of concept	+	0	+	+
7	Construction Logistics				
	a. minimum effect on operations	0	+	+	+
	b. alternate service possibilities	0	+	+	+
8	Playground				
	a. convenient relate to all facilities	0	0	0	+
	b. view from pedestrian mall	0	0	+	+
	c. allow clients to leave children	0	0	+	+
9	Emergency Vehicle Access				
	a. maintain propylaeum access	0	0	0	+
	b. attention to entry/exit	0	0	0	+
	c. shield noise view	0	0	0	+
10	People Spaces				
	a. seating for waiting, visiting, etc.				+
	b. shaded tree cover				+

+ Good

0 Satisfactory

0 Poor

fig 20

	A lin ped	B ped	C dispersed	D detached
11 Covered Walkways				
a. allow uninterrupted movement	⊖	⊖	+	+
b. incorporated in development	+	⊖	+	+
c. coordinating element	+	⊖	+	+
12 Access from Parking Areas				
a. avoid crossing access roads	+	⊖	⊖	+
b. direct	+	⊖	+	+
13 Vehicular Circulation				
a. controlled (speed, etc.)	⊖	⊖	+	+
b. minimal lengths	⊖	⊖	⊖	+
c. safe, uncomplicated	0	+	+	⊖
14 Staging				
a. accommodate unknown phasing	⊖	⊖	+	+
b. infrastructure development	⊖	⊖	+	+
c. avoid sense of "incompleteness"	⊖	⊖	+	+
15 Modification to Existing Buildings				
a. kept to a minimum	⊖	⊖	+	+
b. access to pedestrian street	+	⊖	⊖	⊖
c. modifications to parking areas	⊖	⊖	+	+
16 Ease of Servicing				
a. access points	⊖	+	+	⊖
b. parking area access	⊖	+	+	⊖
c. screening (visual)	+	⊖	+	⊖
17 Parking Nodes				
a. dispersed areas (85 spaces max.)	+	+	+	+
b. near to buildings	+	⊖	+	+
18 Visual Screening at Hospital Service				
a. incorporated with other development	⊖	+	⊖	+
b. avoid overlooking service yard	⊖	⊖	⊖	+
19 Response to Environmental Conditions	+	⊖	⊖	⊖

+ Good
 ⊖ Satisfactory
 0 Poor

4.2.1 A visitor to the campus should be able to orient himself -- to locate individual agencies and adjunct services as independently as possible and at his own pace. The degree of illiteracy prevalent among clients of certain campus agencies, precludes depending on written language as the exclusive means of conveying information to campus users. Symbols, in the form of carefully developed graphic directories (perhaps in conjunction with simple written directives), considered placement of agencies within the campus, and sensitive architectural detailing (i.e., placement of windows so that characteristic activities can be seen from pedestrian areas) can be used to inform the visitor of locations, schedules, and services available. In addition, placement of a staffed common facility, such as the fast food service, close to, or visible from the points of arrival in the pedestrian zone of the campus, will allow this service to function as an effective, albeit unofficial, information center in circumstances where the above measures do not suffice.

4.2.2 The campus as a whole should have a strong identity. This implies a unification of the agencies both visually and functionally. Common facilities should be used as elements that bridge between the agencies, and the overall form that the campus takes should enhance the feeling of unity. The complex should function as a highly integrated whole, with free flow of clients and staff throughout.

4.2.3 Individual agencies should retain their identities. The facilities for each agency, and indeed for each major activity center of the campus,



should have a clear sense of place within the complex. This can be accomplished through an obvious logical order in the placement of facilities, correct and distinctive scale for each activity (enhanced by appropriate lighting, materials, and forms), and the use of landmark features such as outdoor spaces, sculptures, and features of the buildings, the plan, or the landscape.

4.2.4 The relationships between building interiors and exterior spaces should be exploited to add vitality to the pedestrian street, to assist user orientation, and to achieve a greater sense of space within the agencies. Agencies might be provided with private exterior courts where classes, meetings, or consultations could be conducted in suitable weather. Transition spaces between interior and exterior spaces should be developed. Natural light should be introduced in the building interiors and should be used imaginatively to reinforce form, to clarify space and location, and to reduce the need for artificial lighting.

4.2.5 Building systems and technologies should reflect the progressive, humanistic character of the campus. This applies to the choices of structural, mechanical and electrical systems and materials. The scale of elements, and the acoustic, visual and tactile characteristics must be considered. Compatible with program requirements, and with the climatic profile of the area, would be the inclusion of solar energy technology for primary heating and/or cooling of the buildings. As a collection of public buildings of particularly manageable scale, this

project would appear appropriate as a demonstration and evaluation vehicle for this technology.

Whether this specific commitment is realized or not, the designers of the campus should make the facilities as climatically responsive as possible, through an in-depth bioclimatic analysis and the application of the principals of climatic design. In this way, operating costs and overall life-cost of the campus may be significantly reduced.

4.3 Recommendations for Further Action

Throughout this report are found references to the need for further efforts or action in particular areas of concern beyond basic architectural services. In this section, these recommendations and others that contribute to the shaping of a successful project are discussed. These areas are:

- Ownership/management/financing
- Transportation
- Coordination with new campus agencies
- Soils
- Surrounding land use
- User needs
- Architectural programming
- Site planning
- Graphics
- Disposition of existing facilities

- Staff orientation
- Post design evaluation
- Educational programs

4.3.1 Ownership/management/financing. Various options for ownership, management, and financing are discussed in Section 2.5; the determination of which of these are most viable for the campus must be made and the programming and design shaped around the parameters that these choices dictate.

4.3.2 Transportation. Virtually all traffic to and from the campus will be vehicular; the traffic volumes of adjacent roads and highways will increase significantly as the campus is developed. Consequently, a thorough traffic study should be conducted in conjunction with further site planning, to evaluate the capacities and conditions of traffic arteries, adequacy of existing traffic controls, and possible hazards resulting from roadway and traffic patterns. In this way the negative impacts of the campus on the transportation network can be minimized, defined, and prepared for by the county road and the state highway departments.

The proposed low-cost public transportation system for the county (see Report on the Health Care Resources and the Health Planning Priorities of Williamsburg County, South Carolina, and the 1975 Grant Application to the South Carolina Board of Health and Environmental Control for the Health Care Extension Program) would play an important role in making

campus services accessible to the people of the county. This system should also strengthen the ties between the outlying areas of the county, the Human Resources Campus, and the town center, while the grouping of agencies at the campus and its proximity to the Manpower Training Center, should contribute to the feasibility of the transportation system.

4.3.3 Program Coordination. Coordination with non-campus agencies (those that are not proposed for inclusion as primary campus agencies) should be arranged to assist in funding, staffing, and operating of common facilities and adjunct services. For example, the County Recreation Department, Williamsburg TEC Center, Community Services Administration, (formerly OEO), etc., might be contacted in regard to joint programs at the campus. In this way the campus facilities will be used more efficiently, the citizens of the community will have improved services, and the campus will be reinforced as an activity center.

4.3.4 Soil Studies. The Kingstree Land Use Plan soils map indicate that portions of the campus site may present construction problems for some of the strategies shown (see Section 2.1.2 and Appendix 5). Further soils investigation should be made and the implications of the soil conditions evaluated before final strategy selection. We must emphasize that strategies proposed in this area offer many advantages that may more than balance the problems presented by the soil conditions. The required soils investigation should include test borings and evaluation by soils engineers. Consultations with architects, structural engineers, and drainage experts may also be required.

4.3.5 Surrounding Land Use. The site of the proposed Human Resources Campus is in Planning Area 1 of the Land Use Plan for Kingstree, South Carolina, 1974 edition (see Appendix 5). With the exception of a few small parcels to the north and east of the site across Highway 527 that are presently commercial, professional, and light industrial, the existing surrounding land uses are either "public" (the Manpower Training Center, Temporary Employment Security Commission Office, and vacant county land) or agricultural.

The Future Land Use Plan for Kingstree shows a phasing out of the light industrial area, with increased commercial development to the north and east, retention of the public use areas on the southeast, and protection of the agricultural areas to the south, southwest, and northwest. Implementation of this plan as proposed should not adversely affect the campus, however, the granting of variances from it must be taken with consideration for the role of the campus in the county; the maintenance of convenient access and egress for the campus (particularly for emergency vehicles), the degree of compatibility of the proposed uses with the existing uses to remain, and the impact on the patterns of the community.

4.3.6 User Needs. This planning report has proceeded on the basis of program information that contains no direct input from agency clients nor reflects any in-depth study of patterns within the community. For the development of planning strategies and recommendations, this information has been adequate. However, final architectural programming and the



development plan formation should reflect more sophisticated analysis. Time and motion studies, construction of user profiles, and client interviews should be undertaken to define client user-needs -- both psychological and physical. 86

4.3.7. Architectural Programming. The traditional provision of area requirements and relationships of spaces for buildings, or the furnishing of stock floor plans to the architects cannot be considered adequate programming. Much of the failure of existing architecture results from the lack of communication of pertinent factual and philosophical information between architect and client. The process required to generate a meaningful architectural program requires time and energy on the part of both client and architect and is often an intense and emotional experience; however, detailed design criteria cannot be defined much less satisfied without this close collaboration. This process must be an exchange of information -- not just from the client to the architect but also from the architect to the client; both must expect their processes to be scrutinized and both must expect their preconceptions to be challenged. The designs which result from this "dialogue programming" or "development programming" are demonstrably better for it and distinctive in the sense that they meet the unique requirements of the users.

4.3.8. Site Planning. Further site planning to translate the final selected strategy into a site development plan is required. The strategy must be viewed as giving direction to the implementation of the campus concept

on this site. This does not mean that elements shown in the strategy should not be rearranged if more detailed planning indicates advantages are to be gained. It is in this planning stage that deficiencies inherent to the selected strategy can be studied more thoroughly and measures taken to compensate for them or to minimize their effect.

4.3.9 Graphics. The graphics for all agencies, for the campus as a whole, and for all information connected with the campus should be designed and coordinated by graphic consultants.

4.3.10 Disposition of Existing Facilities. As discussed in Section 2.2.6, the facilities of the five agencies proposed for relocation on the campus are not adequate for continued use by these agencies. The suggestion of more appropriate uses for these buildings and sites will lend strength to the campus development plan. For some of the facilities (DSS and Voc Rehab) there are already preliminary plans for the razing of the buildings and use of the site. For the other three agencies and the Food Stamp Office of DSS, the possibilities are less clear. Each of these buildings should be surveyed to produce a detailed statement of its condition and a discussion of appropriate uses. If possible, these facilities should continue to serve the community.

4.3.11 Staff orientation should be provided prior to occupation of the complex (in the case of facilities existing on-site, this should be prior to the opening of the new facilities). This orientation is conducted to give the staff an understanding of the overall concept. This is an opportunity

for the designers to explain the manner in which they have visualized the operation of the complex and the ways in which their design responds to the program. In this way, agencies may take full advantage of the opportunities presented by the new facilities.

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- 4.3.12 Post-design evaluation is suggested to determine the success or failure of design methods in satisfying the needs of the campus. All too often, successful design solutions go unrecognized while unimaginative solutions or outright mistakes are repeated in subsequent projects patterned after facilities with similar programs. A post-design evaluation process encourages the adapting of truly successful design methods to succeeding projects and alerts administrators and design professionals alike to those design approaches which have been shown to be less than adequate. In addition, the evaluation points up ways that satisfactory solutions may be improved and can often identify the specific reasons that others have been unsuccessful. This information can become a part of subsequent design guidelines.

The evaluation process should be composed of three phases:

1. Before the project is occupied, a series of interviews should be conducted with staff and a selected cross-section of other users, to determine what their expectations are for the facility. Group sessions to develop interaction should also be conducted. This phase should precede staff orientation, (Section 4.3.11) so that problems pointed up in this process can be considered in the development of the orientation program.

- 2. Before the facility has been adapted in any way (after two to four months of operation) another [redacted] interviews and group sessions should be undertaken [redacted]
- 3. When the facilities and staff have adapted to one another (after three to five years) interviews and group interaction sessions should again be carried out.

The post-design evaluation should be conducted by a qualified professional design related group, other than the original design group and in no way connected with the agencies involved. A part of the overall evaluation process should also be a plan for the dissemination of information developed to those who might benefit from its application.

4.3.13 Educational Program. One approach to the entertainment of those who must wait at the campus is to provide educational programs for their use. These may be graphic displays in public areas, actual program presentations to groups by speakers and/or through audio visual media (slides, diagrams, T.V., video beam, and puppet shows), or individual audio-video booths. These programs may be periodic or on-going and may be designed to inform the public about agency programs and community activities in addition to providing basic educational materials. The educational programs might operate in some of the more active waiting areas or on occasion in the assembly areas of the campus.



4.4 Summary

90

In this section recommendations were made based on conclusions reached during the development of the report. These deal with the preferred alternative, various campus design criteria to be considered, and suggestions and recommendations for further study in various areas of concern to the overall campus concept.

The preferred alternative in the opinion of the report authors was alternative strategy D, given resolution of potential problems concerning unfavorable soil conditions and land transfer difficulties. Alternative strategy A was the authors' second choice.

Among the design criteria felt to be important were: ease of orientation for visitors, achievement of a strong campus identity, retention of individual agency identities, proper exploitation of the relationship of building interiors and exterior spaces, and the need for reflecting the progressive humanistic character of the campus through building systems and technologies employed in its development.

Those areas in which recommendations for further study were made included: ownership, management, finance, transportation, coordination among campus agencies, soils, surrounding land use, user needs, architectural programming, site planning, graphics, disposition of existing facilities, staff orientation, post design evaluation, and educational programs.

4.5 Afterword

91

As stated in the preface, the purpose of this report is to assist the citizens of Williamsburg County in their efforts to develop a Human Resources Campus composed of the county's primary health care and social service agencies.

In developing the report an attempt has been made to address as many initial planning considerations involved in a project of this nature as feasible. While providing factual information on existing and projected conditions relating to health and social services in the county, the report also seeks to increase awareness of less obvious considerations felt to be of critical importance to the campus concept and to identify additional activities that must be accomplished before its successful completion.

The need for improved conditions in health care and social services in Williamsburg County is unquestioned. The realization of these improvements through a Human Resources Campus can be accomplished with dedicated participation on the part of the health care and social service systems at all levels and of the citizens to which the benefits of its achievement will accrue.

Appendix 1: Methodology

A1.1 Study Procedure

a2

Following an agreement on January 8, 1975, to provide the requested assistance, a data gathering process was begun. During the first week in March, interviews with local representatives of the agencies, local government officials, and city and county planning commission chairpersons were conducted as a first stage in the data gathering process. Initial contact with the Waccamaw Regional Planning and Development Council (WRPDC) was also made to seek cooperation in conducting this study.

Concurrent with these activities, a literature search for projects of a similar nature was made, preliminary contacts with potential consultant and resource persons were initiated, and pertinent studies, proposals, regulations, facilities plans and site plans were studied.

On March 17, a joint meeting of Kingstree City and Williamsburg County planning commission was held to discuss the campus concept and to elicit comments from this group concerning the project and its implications. Reactions to the proposal were predominately favorable and the concept was endorsed.

Following this meeting, joint work sessions were held on March 26 and 27 with WRPDC planners. The method of conducting the study was formulated and a questionnaire devised to gather preliminary planning data from the health and social service agencies involved (see Appendix A1.2).

A second joint planning commission meeting was held on April 21 at which time results of the questionnaires were discussed and a preliminary analysis of the site's capacity to contain the proposed campus was presented. This analysis did not rule out the feasibility of the project.

On May 4, arrangements were made for architectural consulting services to assist in the campus program development process. These services were to include assistance in agency analysis, development of alternative development strategies, and general design guidelines, production of models and sketches of alternative development strategies, and assistance in preparation of the final report.

A May 21 meeting was held to provide an update on study activities and to explain the data collection and analysis processes. Immediately following this meeting, questionnaires designed to obtain specific pre-architectural planning and programming information (see Appendix A1.3) were administered in interviews with agency directors.

On June 9 a meeting of agency representatives, including district and state level personnel, was held and data analysis was presented. Also discussed at this meeting were questions relating to campus image, philosophy of operation, shared facilities, and ownership, management, and financing considerations.

Information from this meeting was used in the planning process to develop preliminary plans and a presentation of these plans was made

to essentially the same group at a June 30 meeting. The basic outline of the final report was also presented. Following this meeting, the final report and models of the proposed alternative development strategies were completed.

a4

A1.2 Pre-planning Information Survey Questionnaire

Note: questionnaire format shown has been compressed to save space.

The purpose of this survey is to gather information from the proposed occupant agencies included in the "campus" concept to facilitate decision making in the program development stage. It is not intended to gather detailed design requirements which can more appropriately be determined through facility standards research but to address basic considerations affecting the overall concept of operation of the Williamsburg County Human Resources Campus (WCHRC) and to determine areas of additional exploration.

1. Agency name:
2. In addition to the existing Williamsburg County Memorial Hospital and Physicians Office Building, which of the following agencies proposed for inclusion in the WCHRC do you feel are appropriate (a), or nonappropriate (na)? (give reasons)

Department of Public Health:

Department of Social Services:

Community Mental Health Center:

Vocational Rehabilitation Agency:

Alcohol and Drug Abuse:

Employment Securities Commission:

- a5
3. In addition to the foregoing proposed agencies, what others do you think should be considered for inclusion in the WCHRC?
 4. What in your opinion are the advantages and disadvantages of the inclusion of your agency in the proposed WCHRC?
 5. Who, if anyone, above the local level should be contacted for additional decision-making inputs affecting the possibility of your agency relocating to the proposed WCHRC?
 6. Please give a general description of the services provided by your agency or a reference to written sources from which this information may be obtained.
 7. Suggest, if possible sources of information on facility design requirements for your agency (i.e. space, circulation, and service requirements, etc.).
 8. Please provide the following information about your agency:
 - a. Present number of employees and projected plans for increase or decrease forecasted
 - b. Present client case load (give unit of measure, i.e., per day, month, etc.)
 - c. What characterization, if any, serves to describe the clientele served by your agency?
 - d. Agency time schedule of operation
 - e. Does your agency have satellite locations? If so, how many and where are they located?
 - f. Roughly what proportion of the clientele served by your local office are located within the immediate Kingstree area?

- 9. Please describe any unique or atypical planning or design requirements of your agency's facilities.
- 10. Please discuss any additional considerations with respect to your agency or the overall project concept and development you feel have been overlooked or not included in the foregoing discussion.

A1.3 Pre-Architectural Planning and Programming Survey Questionnaire

Note: questionnaire format shown has been compressed to save space.

Agency:

Interviewee:

- 1. Introduction Summary
 - a. Organization/User Goals:
- 2. User (Client):
 - a. Age Range:
 - b. Mobility:
 - c. Educational Level:
 - d. Self Concepts (Attitude, etc.):
 - e. Activity Sequence:
 - f. Degree of Urgency (emergency situations?, etc.):

g. Scheduled/Unscheduled appointments:

h. Duration of visits:

i. Familiarity with facilities and staff (repeats?):

j. Likelihood of use of other facilities in same visit:

k. Fluctuation of load:

l. Number of users:

m. User needs (facility requirements, anonymity, etc.):

3. User (Staff)

a. Administrative structure (official - personnel diagram)

b. Administrative structure (actual - derivation [success]?)

c. Major departmental divisions:

d. Relationships within and between divisions:

e. Hierarchy of employees:

f. Task responsibility - administrative client oriented

Administrative:

Client:

g. Personnel education levels:

h. Overlap with other agencies < existing potential

i. Formality/informity (attitude of operation-need honest response):

4. Function:

a. Goals (overall agency goals and individual department goals or sub-goals):

b. Operational sequence < linear interaction (Activity sequence)

c. Systems of information movement:

Points of origin

Frequency/pattern

Peak loads

Degree of urgency

Role in overall operation

Public/private

Form (size-weight, etc.)

Operations performed on (handling, etc.)

Special considerations

Storage implications

d. Systems of material movement:

Points of origin

Frequency/pattern

Peak/loads

Degree of urgency.

Role in overall practice

Public/private

Form (size-weight, etc.)

Operations performed on (handling, etc.)

Special considerations

Storage implications

e. Work nodes (work stations):

Types:

Number:

Relationship (visual, functional, etc.):

People at stations:

Number

Types

Tasks performed:

Nature

Time

f. Area Requirements (furniture, accessories, etc., where applicable):

g. Security required:

h. Spaces

a. Types:

b. Number of each space:

c. Functions*(indicate those which are not obvious):

d. Population ^{constant} _{transient} profile of population flow:

Peak loads

Time spaces used

e. Area requirements:

f. Activity Sequence:

g. Relationship spaces/activities:

h. Special consideration (equipment, utilities, materials):

i. Overlap with other agencies < ^{existing} _{potential}

j. Quality of services:

k. Security required:

6. General

a. How agency can be best improved (administrative -- physical implication):

b. Growth:

Increased lead on present responsibility

Additional responsibilities

Phasing

a11

- c. Change (technology, concept, etc.) (flexibility):
- d. Existing facilities (rent or state owned, condition, size, location, etc.):
- e. Direct use to specific research:

7 Programs:

- a. Explain various programs:
- b. Priorities:
- c. Times (seasonal, day/night, etc.):
- d. Unusual requirements (i.e., simulations programs) (How programs affect physical facilities):

Appendix 2: Geographical and Demographic Description of Williamsburg County

The source of the information in this section was a geographical and demographic description of Williamsburg County prepared in the Spring of 1974 by Mr. Roger Stiles, Director of the Office of Concerted Services in Training and Education at the Williamsburg Regional Manpower Training Center for inclusion in a report: Report on Health Care Resources and the Health Planning Priorities of Williamsburg County, South Carolina, by Williamsburg County Community Health Consultant, Foster Young, Jr., M.D. Those portions applicable to this study were abstracted and included in this appendix.

GEOGRAPHIC AND DEMOGRAPHIC DESCRIPTION OF WILLIAMSBURG COUNTY

Williamsburg County is located in the southeastern section of South Carolina. It is a part of the Waccamaw Region, which includes Georgetown and Horry counties. The county is located in the lower part of the state or the coastal plains region of South Carolina, some thirty to forty miles inland from the Atlantic Ocean. The county ranks seventh in size with a land area of 935 square miles. The county's boundaries are formed to the South by the Santee River, to the West by a line ten to fifteen miles West and parallel to U. S. Highway 52, to the North by a line some five to ten miles North and parallel to S. C. Highway 512 and to the East along S. C. Highways 41 and 22.

Williamsburg County lies in the "Flatlands" part of the Atlantic Coastal Plains Region. The elevation of Williamsburg County varies from 15 feet to 94 feet above sea level, with the terrain being flat to undulating. Consisting of some 595,840 acres, the land surface is level to slightly rolling, and is broken by many streams and swamps. The swamps merge into wide flats broken only by slight elevations and large bays, in which many smaller streams head.

Williamsburg County has an abundance of both surface and ground water. This resource is not necessarily unlimited and its wise use is essential to the long term development of the area. Surface water supplies within the County consist of Black River, Black Mingo Creek, Turkey Creek, Santee River, and numerous small creeks, branches, and bay areas. Ground water throughout the County is abundant and close to the surface.

The climate in Williamsburg County is temperate with rainfall throughout the year. The yearly average humidity is 51%. The winds generally blow from a southwestern direction during the fall and winter. The summers are quite warm and humid with a number of days when the temperature is in excess of 100 degrees. The winters are not usually severe, due in part, to the maritime influence. The temperature drops low sometimes but not for long periods. The chart below gives some indication of the climate factors in Williamsburg County.

Mean annual temperature	64.6 degrees
Mean maximum temperature	76.5 degrees
Mean minimum temperature	52.7 degrees
Twelve-month average relative Humidity, daily range:	
1:00 a.m. EST	82%
7:00 a.m. EST	84%
1:00 p.m. EST	51%
7:00 p.m. EST	67%
Prevailing wind direction	NE-SW
Mean annual precipitation	48.14 inches
Mean wind speed	8.1 mph
Average length of growing season	234 days

In relation to population and business centers of the state, the county is located as follows: a15

<u>CENTER</u>	<u>APPROXIMATE MILEAGE FROM KINGSTREE</u>
Charleston	72 miles
Columbia	82 miles
Florence	38 miles
Georgetown	41 miles
Greenville	183 miles
Myrtle Beach	72 miles
Atlanta, Ga.	298 miles
Augusta, Ga.	139 miles
Charlotte, N. C.	144 miles
Savannah, Ga.	177 miles
Wilmington, N. C.	145 miles

POPULATION

The population of Williamsburg County, according to the 1970 census, is 34,243. This gives the county a population density of 36.6 persons per square mile. Of the total population, 3,429 are considered urban and 30,814 rural, or 10% urban and 90% rural. Of the 30,814 rural residents, approximately 19,708 are rural non-farm and approximately 11,106 are rural farm. Of the 34,243 persons residing in Williamsburg County 20,867 or 60.94% are non-white and 13,356 or 39.06% are white.

The 1970 population of the Williamsburg County shows a decrease of 16.3% from the population of 40,932 in 1960. The percent of change in the urban population from 1960 to 1970 was a decrease of 12.1% from 3,902 to 3,429 and in the rural population there was a decrease of 16.8% from 37,030 to 30,814.

WILLIAMSBURG COUNTY POPULATION BY RACE

<u>Year</u>	<u>White</u>	<u>Non-White</u>
1820	2,795	5,921
1840	3,327	7,000
1860	5,187	10,302
1880	7,758	16,352
1900	11,818	19,867
1910	14,411	23,215
1920	13,084	25,452
1930	11,572	23,341
1940	13,742	27,267
1950	14,172	29,638
1960	13,716	27,216
1970	13,356	20,867

The urban/rural characteristics show the county has begun a slight shift from rural to urban. The shift can be explained by a decrease in small farms and the locating of new industries in the county. The urban/rural percent of the population over the past twenty years is shown below.

	1950	1960	1970
Total Population	43,807	40,932	34,203
Urban	3,664	3,902	3,389
Percent of Total	8.4	9.5	10.3
Rural	40,143	37,030	30,814
Percent of Total	91.6	90.5	89.7

The South Carolina division of research and statistical services estimated the population of Williamsburg County to have been 34,500 in early July 1972. As the population change makes its upturn, the urban/rural ratio is expected to level off at never more than 20%/80%, if that great.

LABOR AND ECONOMY

Historically the economy of Williamsburg County has been centered around agriculture. Today the county is still a rural agriculturally oriented county. However, there has begun within the past few years a shift away from the predominance of agriculture in the economy. Presently the shift is small, but with advances in education and technical training, the shift should grow and become wide spread.

According to the estimates of the South Carolina Employment Security Commission the civilian work load in Williamsburg County in 1972 was 12,250. Of this number, 850 or 6.97% were unemployed while 11,400 or 93.06% were employed in either farm or non-farm jobs. Of the 11,400 employed persons 6,100 (53.5%) were employed in non-farm wage and salary jobs and 5,300 (46.5%) employed in farm jobs. Of the 6,100 persons employed in non-farm wage and salary jobs, 1,850 or 30.3% were employed in manufacturing.

The non-farming section of the economy is expected to continue to rise and dominate the economy of the county as manufacturing increases its percentage of the labor force, and farm employment decreases its percentage of the labor force.

Although agriculture has been and still is the major factor in the county's economy, it accounts for a decreasing percentage of the employed work force. As small farms are disappearing or consolidating into larger farms, due to advances in automation and mechanization, the number of workers on farms is decreasing.

GOVERNMENT

Williamsburg County is divided into five districts with an elected commissioner from each district. The chairman of the board of commissioners is the county supervisor. The supervisor is elected at large and with the commissioners has jurisdiction over public roads, highways, bridges, fences, matters relating to disbursement of public funds, and matters necessary for internal improvements. Both the supervisor and commissioners serve four year terms.

KINGSTREE

Kingstree is the largest town in Williamsburg County, and is the county seat. Kingstree has a population of 3,381. Kingstree has a council-manager form of municipal government. The mayor is elected for a two-year term, and the six councilmen are elected for two-year concurrent terms. The council appoints the city manager.

Appendix 3: Agency Analyses

This appendix is intended to supplement Section 2.2 in defining the relationship of new agencies to the campus adjunct services, to the other campus agencies, to public areas, and to service areas. Short term expansion is also predicted for each agency. The information presented here should help administrators and design professionals in the further development and implementation of the campus plan.

A3.1 Department of Social Services (DSS) a20

This is a multi-programmed agency of assistance and service to relieve economic needs and strengthen family life. There are two basic divisions of DSS: 1) the Food Stamp Program, and 2) Welfare Programs.

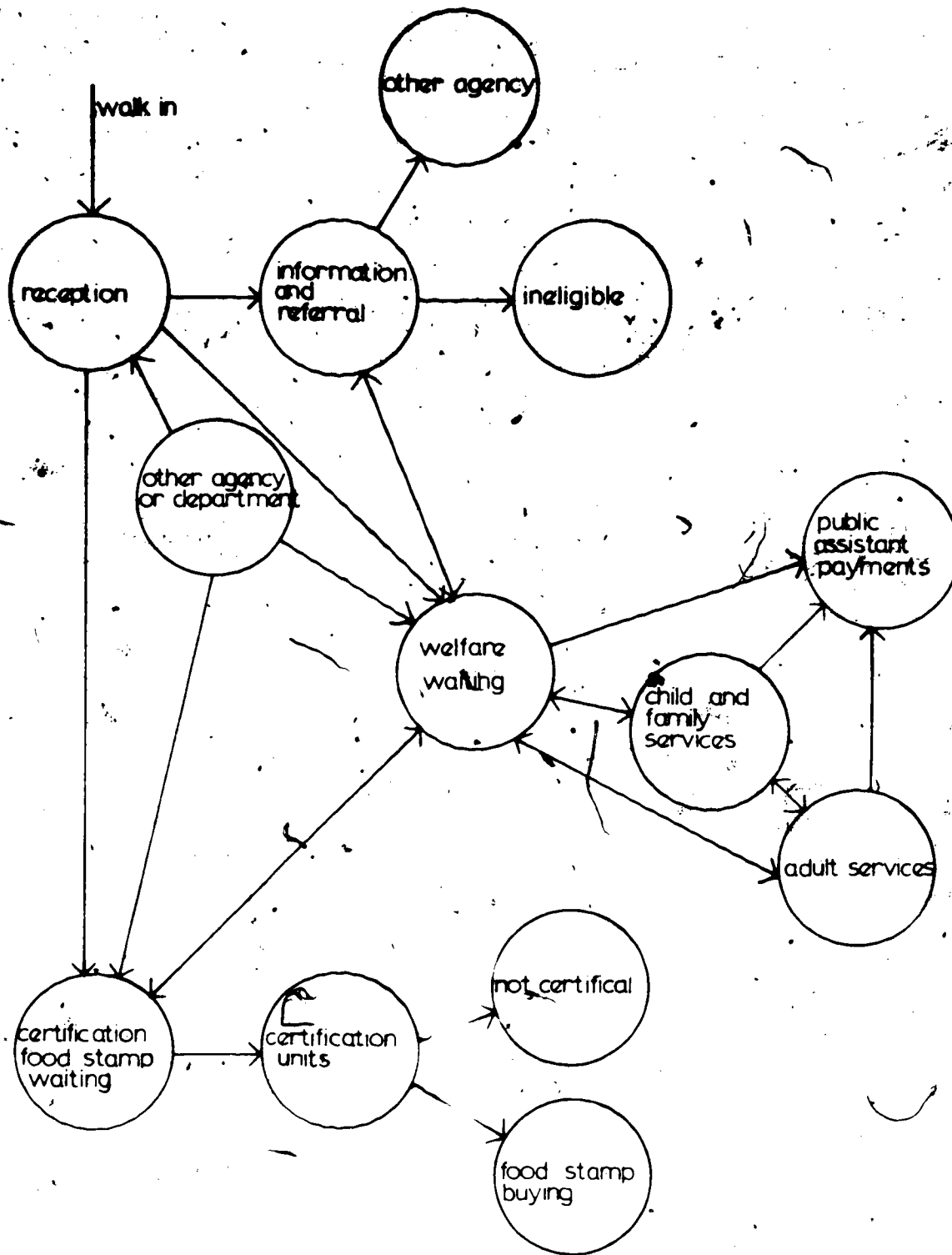
The Food Stamp Program provides certification of applicants and food stamp issuance. This division of DSS operates three satellite offices in the county for weekly certification and issuance.

The Welfare Program is subdivided into two divisions: 1) Public Assistance Program; and 2) Service Programs. The Public Assistance Program provides categorical financial aid for Aid to Families with Dependent Children, General Assistance, and Medical Assistance Only.

The Service Program administers social programs and makes eligibility recommendations for Public Assistance payments. The Service Program is divided into Child and Family Services (Public Assistance, Adoptive Services, Foster Home Licensing and Placements, Protective Services, Counseling, Work Incentive Program, Licensing and Supervision of Day Care Facilities, Studies for State Institutions and referrals to other programs or agencies) and Adult Services (Public Assistance, Counseling, Protective Services, Studies for State Institutions, referrals and other programs or agencies).

DSS currently has 56 full-time employees and operates from 8:30 a.m. to 5:00 p.m., Monday through Friday. DSS employees spend significant amounts of time in the "field". Case workers may spend as much as 50 percent of their time away from the office.

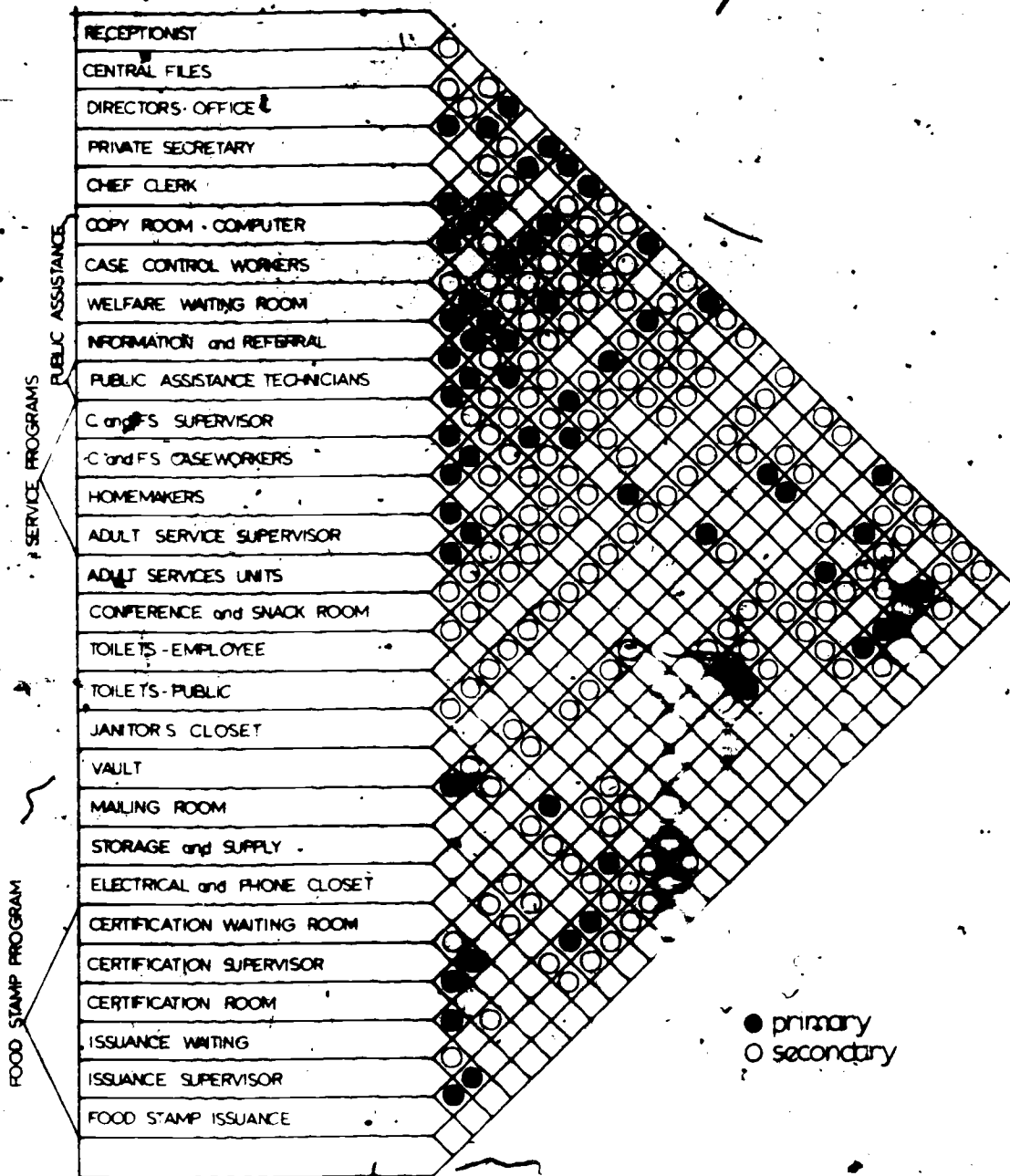
The DSS program is presently operating from two separate locations. The Welfare Program is located at 115 Short Street in a county-owned frame building that is in particular need of replacement. The building is badly deteriorated, infested with rodents and insects, and has no central heat or air conditioning. Public circulation areas double as file rooms and the building provides no secured areas. An average of 75 clients per day are processed through the program. The Food Stamp Program is located at Tomlinson School, an old secondary school that is in serious disrepair. The building suffers from repeated vandalism and theft and was not designed for the services it now houses. The Kingstree offices presently process from 75 to 100 clients per day in the Food Stamp program. The two sections of DSS would be in a single facility on the campus. Expansion of the DSS is based on the agency's pattern of growth and agency square footage allowance per employee (see Section A3.1.1).



CLIENT ACTIVITY DIAGRAM

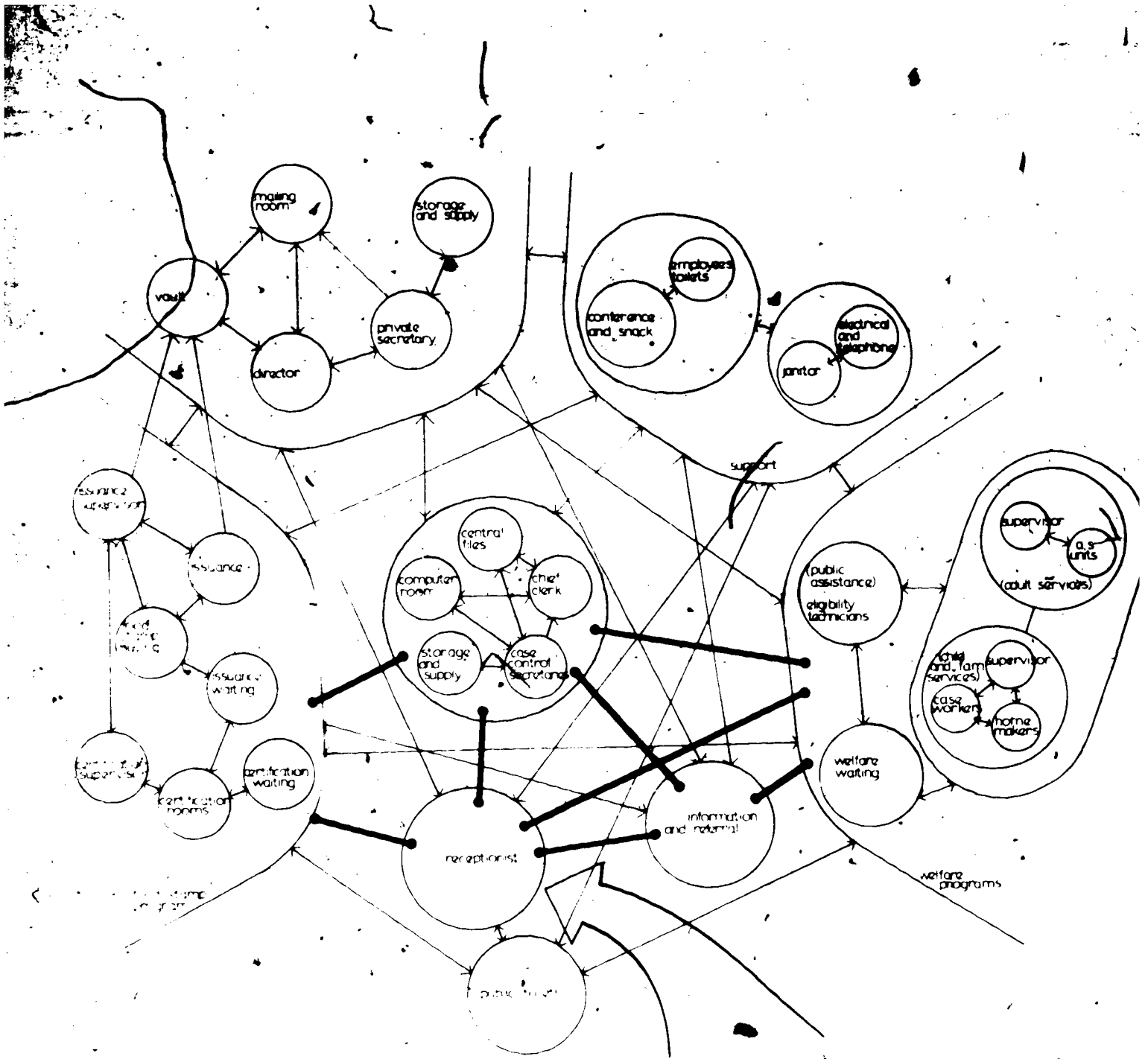
Department of Social Services

fig 21



FUNCTIONAL RELATIONSHIP MATRIX

Department of Social Services



FUNCTIONAL RELATIONSHIP DIAGRAM

Department of Social Services

fig 23

A3.1.1 Department of Social Services - Projected Area Requirements

The projected area requirements for DSS were not done on the basis of individual area requirements for individual spaces, but on a projected employee population and an area of 210 square feet per employee as recommended by the State Agency Facilities Planner (see Figure 4).

Total 17,700 sq. ft.

A3.2 Williamsburg County Health Department a26 (HD)

This agency operates five centers. Four are outlying centers operated three days or less per week. The other, the central office, operating on a full business week 8:30 a.m. to 5:00 p.m., Monday through Friday, is the center proposed to be included in the Human Resources Campus.

The Health Department offers four basic services: 1) Clinical Services (Maternal and Child Care, Crippled Children's Program, Early and Periodic Screening, Diagnosis and Treatment, Immunization, Tuberculosis Detection and Follow-up, Venereal Disease Control, and Family Planning); 2) Environmental Services (Environmental and Sanitation Control); 3) Home Health Services (information and health care for homebound persons; and 4) Vital Statistics (maintenance and recording of all county vital statistics.)

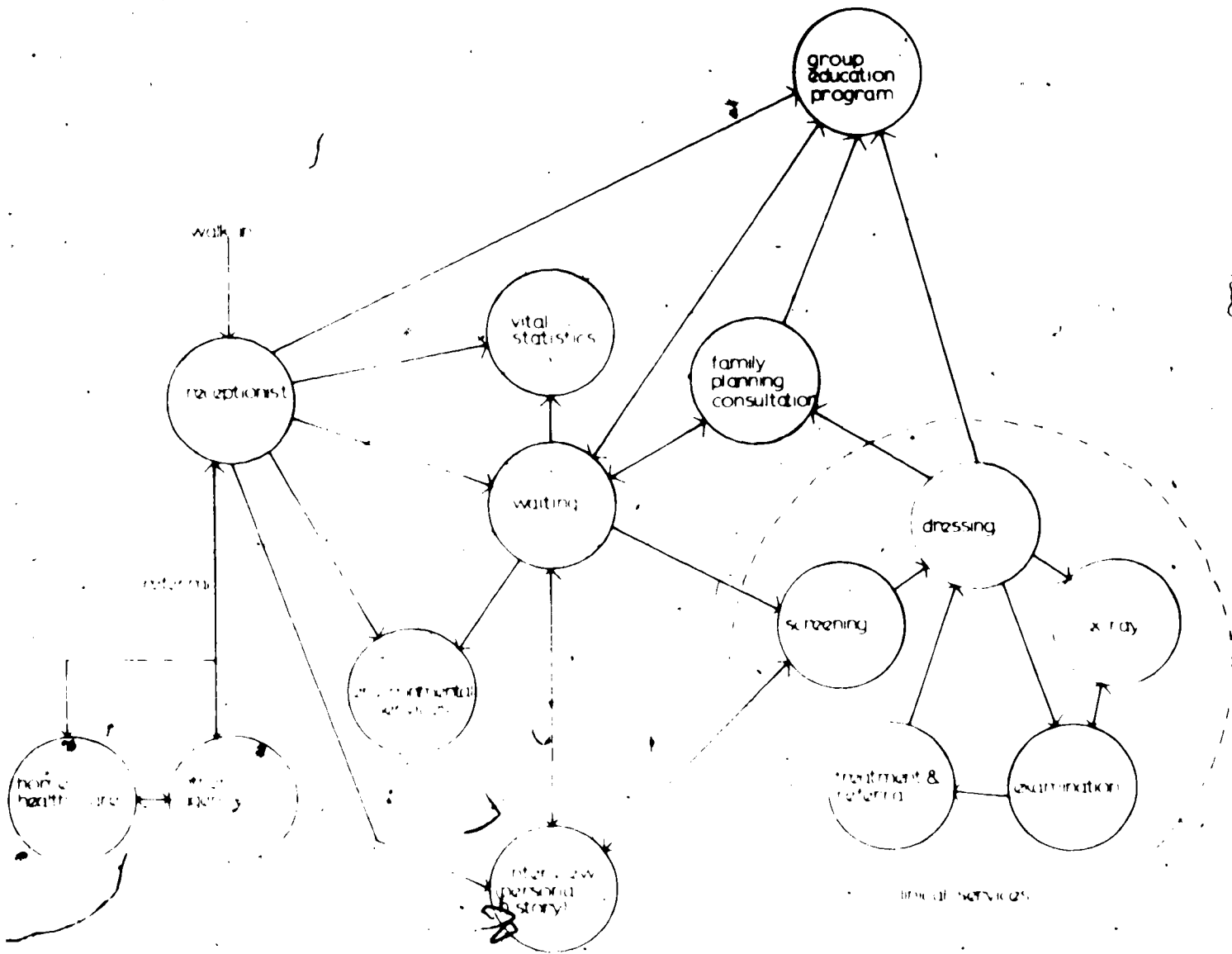
The Health Department's apparent direction of future growth is toward increased clinical services.

Administratively, the Health Department is adapting to a District Concept in which this center will maintain its autonomy but will work more closely with the District Office in Conway. The Staff Physician at the county level will probably be phased out, and there will be increased contracting with private physicians for services.

The current staff of the Health Department is 18 full-time employees, plus four district personnel on a periodic basis.

The present facilities, located on Brooks Street Extension, are particularly inadequate. Requests for funds for design and construction of a new facility for the County Health Department have already been submitted to the State. If the campus concept is adopted, the Health Department is likely to be the first of the new agencies to locate on the site. a27

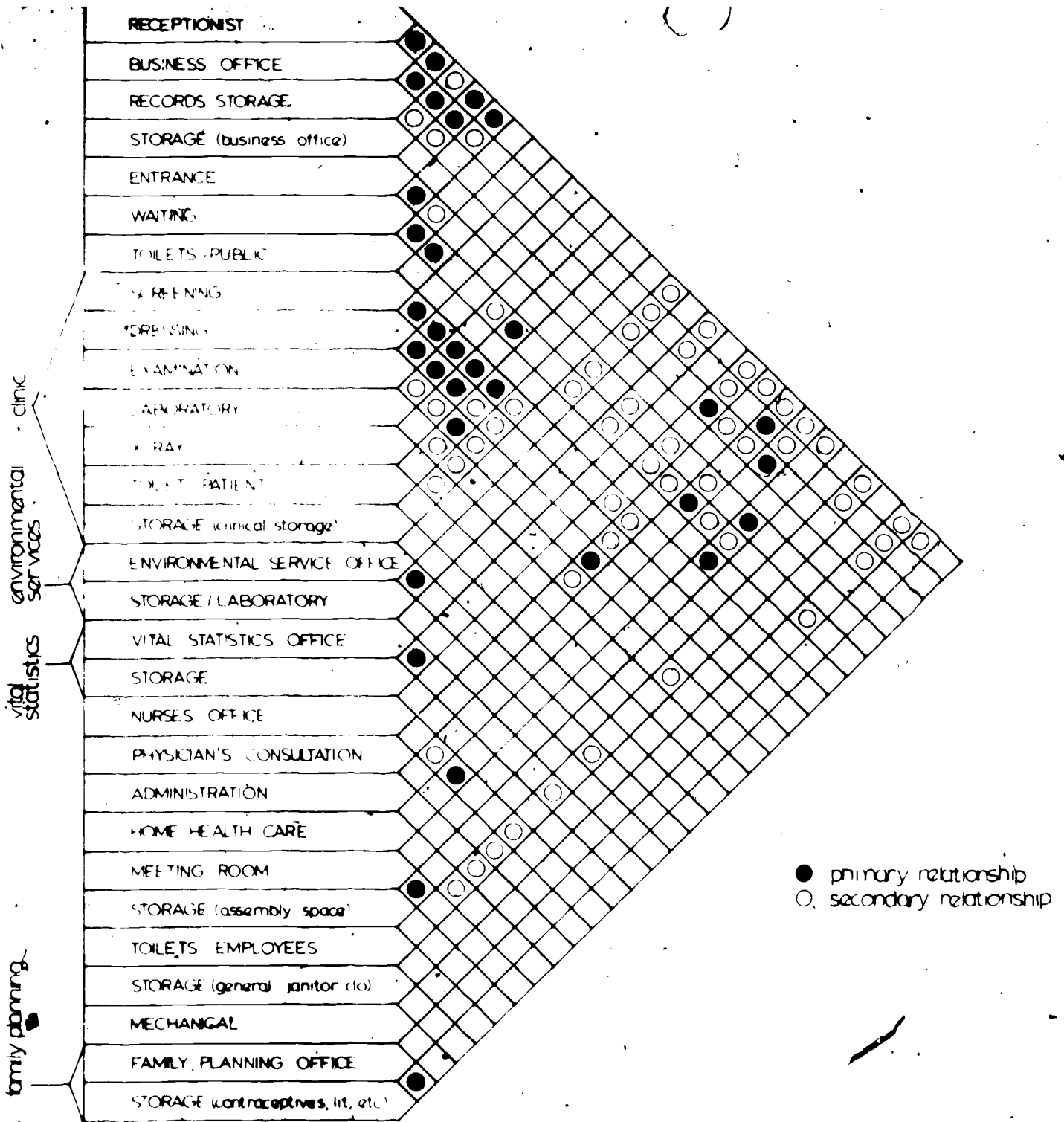
The number of users of the Health Department services at the central office is generally 50 to 60 per day. Using a projected daily client load of 60 persons for clinical services, it is anticipated that four examining rooms will be adequate in the immediate future for the Health Department. This translates to a facility of approximately 7,600 square feet (see Section A3.2.1).



CLIENT ACTIVITY DIAGRAM

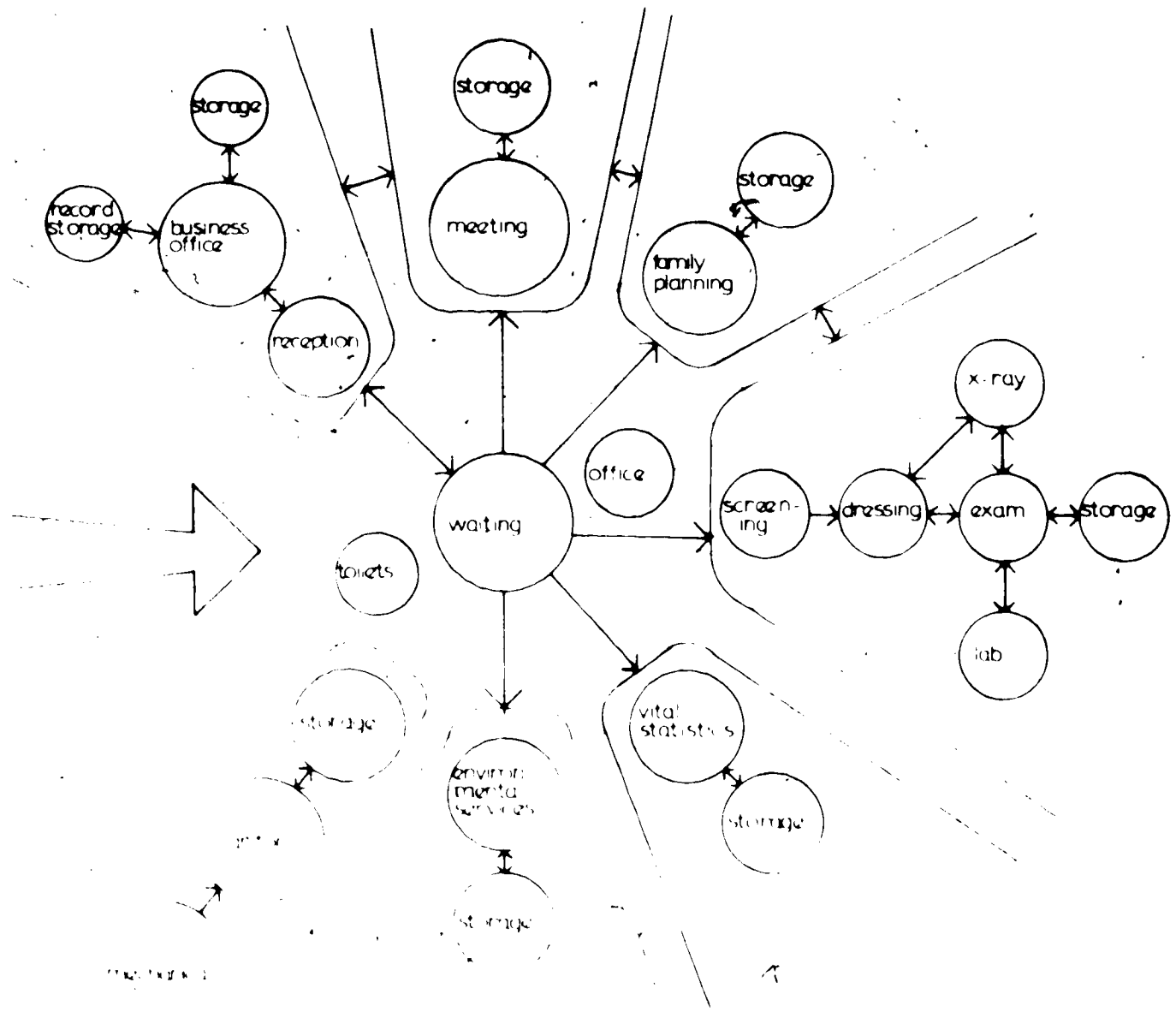
Health Department

fig 24



FUNCTIONAL RELATIONSHIP MATRIX

Health Department



FUNCTIONAL DIAGRAM Health Department

fig 26

A3.2.1 Health Department - Projected Area Requirements

receptionist	80 sq. ft.
business office	360 sq. ft.
records storage	100 sq. ft.
storage (business office)	50 sq. ft.
entrance:	
waiting	360 sq. ft.
toilets (public)	400 sq. ft.
screening	40 sq. ft.
dressing	240 sq. ft.
examination	400 sq. ft.
laboratory	150 sq. ft.
x-ray	200 sq. ft.
toilet (patient)	50 sq. ft.
storage (clinical storage)	100 sq. ft.
environmental services office	100 sq. ft.
storage/laboratory	75 sq. ft.
vital statistics office	175 sq. ft.
storage	100 sq. ft.
nurses' office	480 sq. ft.
physician's consultation	75 sq. ft.
administration	150 sq. ft.
home health care	640 sq. ft.
meeting room	550 sq. ft.
storage (assembly space)	50 sq. ft.
toilets (employees)	120 sq. ft.
storage (general-janitors closet)	25 sq. ft.
mechanical	1268 sq. ft.
family planning office	100 sq. ft.
storage (contraceptives, literature, etc.)	100 sq. ft.
circulation	1056 sq. ft.
Total	7600 sq. ft.



A3.3 Williamsburg County Mental Health Department (MH)

a32

This is one of three county centers in Waccamaw District. This agency attempts to meet the mental health needs of the community through 1) direct services within the clinic by way of therapy (individual, group, family, marital, etc.), 2) information and referral services, and 3) after care and rehabilitative services for patients returning to the community from state, federal, and private psychiatric hospitals.

The staff of the Mental Health Commission is three full-time employees, three part-time employees, plus five periodic staff members who rotate amongst the three offices in the district. The agency operates from 8:30 until 5:30, Monday through Friday.

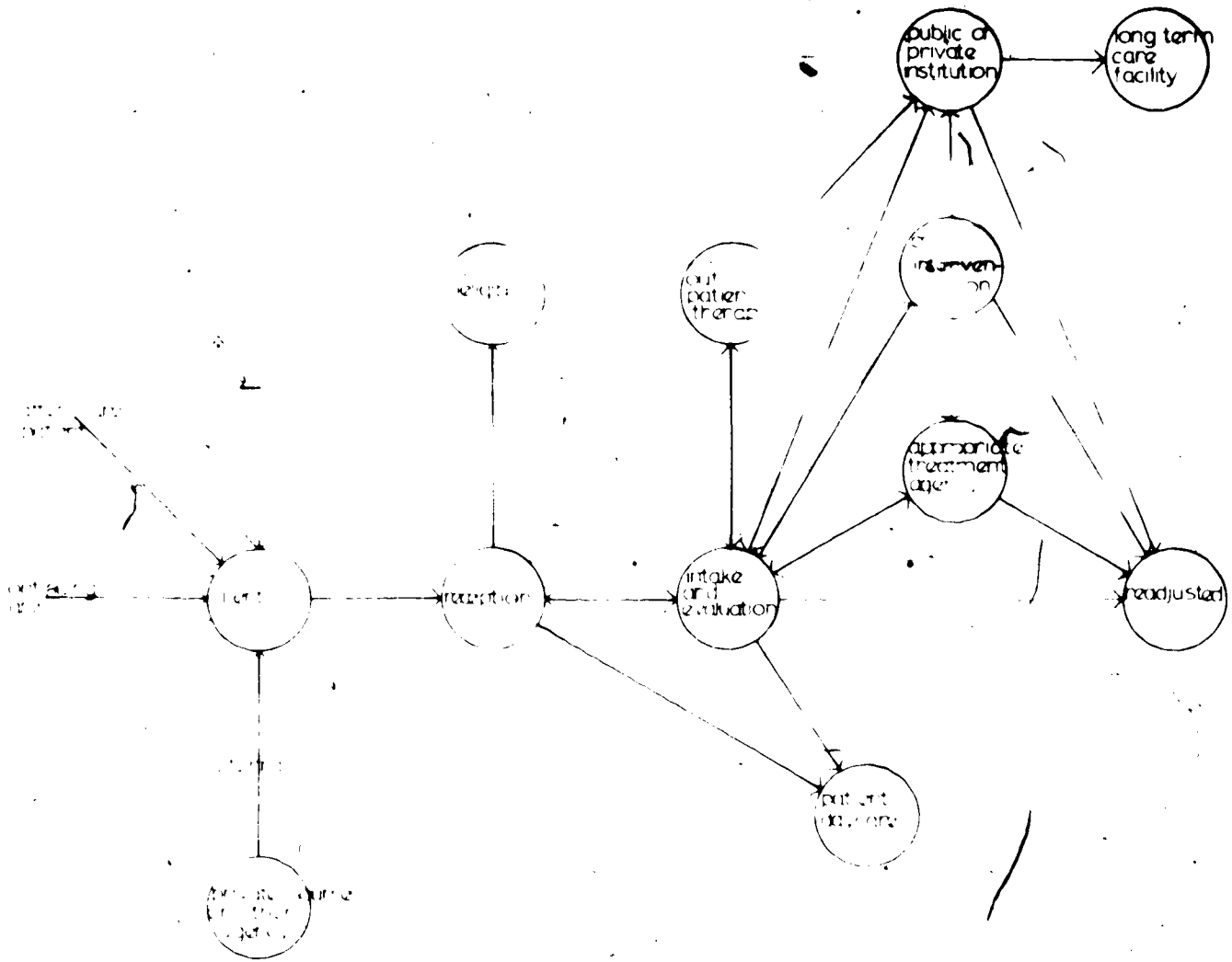
The present facilities are located at 209 North Academy Street in Kingstree and occupy a converted single-family residence. The amount of space is adequate for consultation purposes (three to five clients per day), but there is no area suitable for conducting the day care program for patients seeking to adjust to their release into the community from psychiatric hospitals (fifty clients twice monthly) and their facilities offer little opportunity for future growth of the agency. It has been shown and discussed by health facilities planners and architects Kaplan and McLaughlin in an article, "Adventures in Architectural Services on the Frontiers of Change," (Architectural Record, March 1970, p. 117) that "Architectural design can and does enter into the treatment milieu. . . the mentally ill respond positively and in

a33

an unusually structured way to innovative complex-architecture."

Thus facility can hardly be said to take full advantage of the aspect of its function.

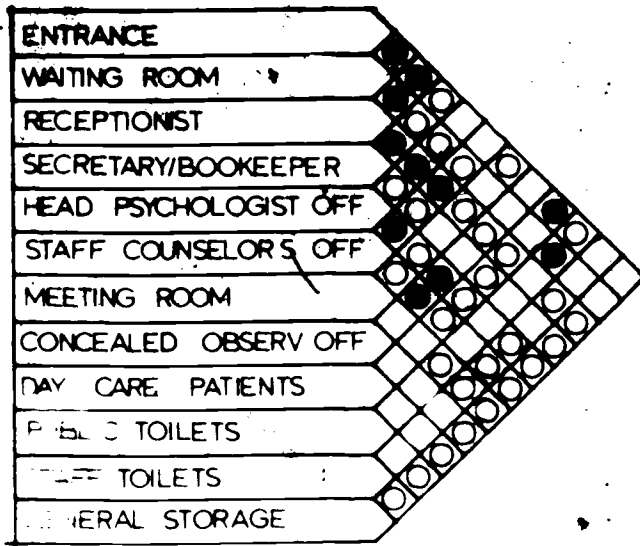
The Director of the Mental Health Commission has estimated that the agency will expand to a maximum of 13 full-time employees. This is translated to approximately 4,600 square feet for planning purposes (see Section A3.3.1).



CLIENT ACTIVITY DIAGRAM

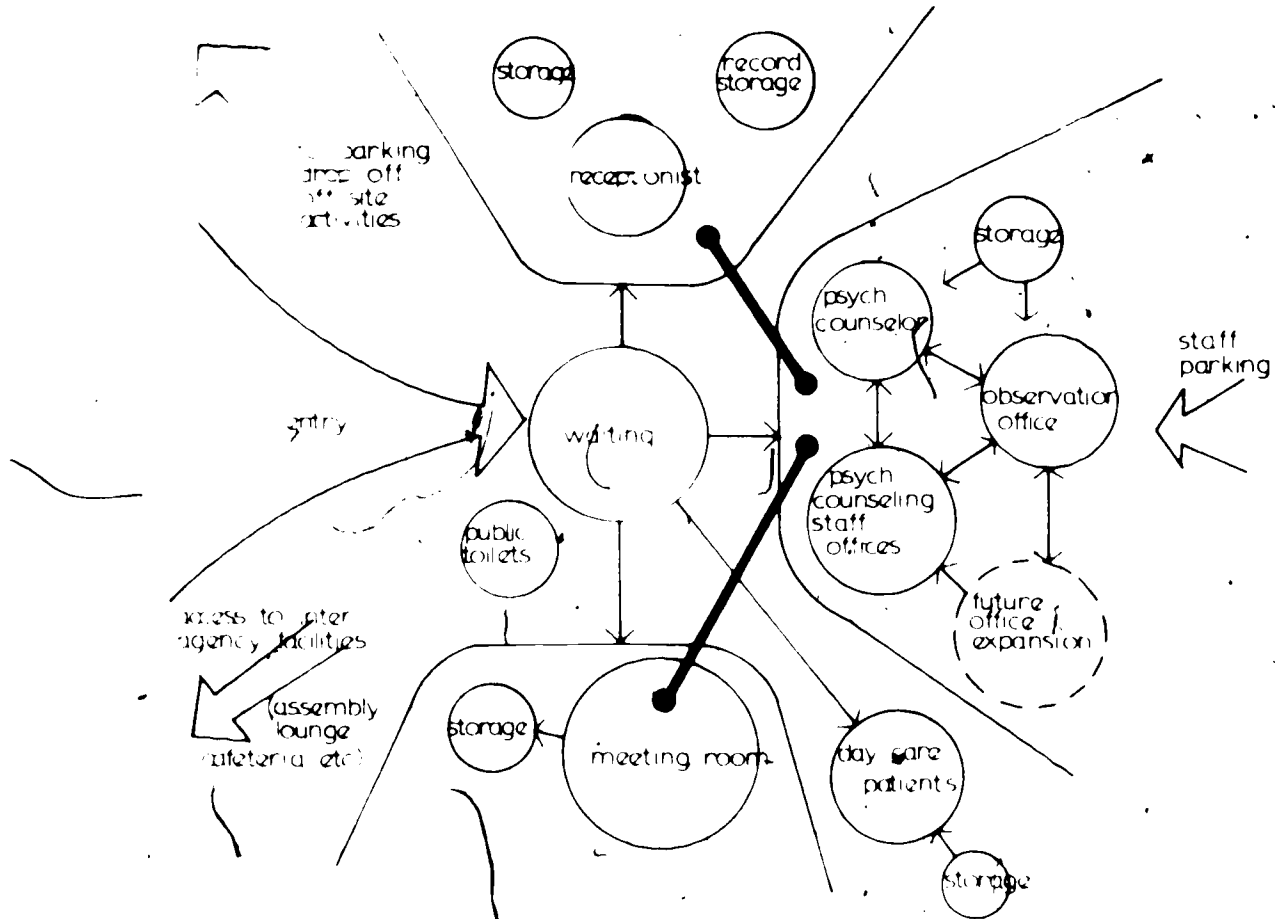
Mental Health

fig 27



● primary
○ secondary

FUNCTIONAL RELATIONSHIP MATRIX



FUNCTIONAL DIAGRAM Mental Health

A3.3.1 MENTAL HEALTH - Projected Area Requirements

entrance:

waiting room	200 sq. ft.
receptionist	80 sq. ft.
secretary/bookkeeper	80 sq. ft.
head psychologist's office	200 sq. ft.
staff counselor's office	125 sq. ft.
8 offices @ 125 sq. ft.	1000 sq. ft.
meeting room	280 sq. ft.
concealed observation	20 sq. ft.
day care patients	750 sq. ft.
public toilets	300 sq. ft.
staff toilets	120 sq. ft.
general storage	30 sq. ft.
circulation	637 sq. ft.
mechanical	764 sq. ft.

Total 4586 sq. ft.



A3.4 Williamsburg County Commission on Alcohol and Drug Abuse (A/DA) a37

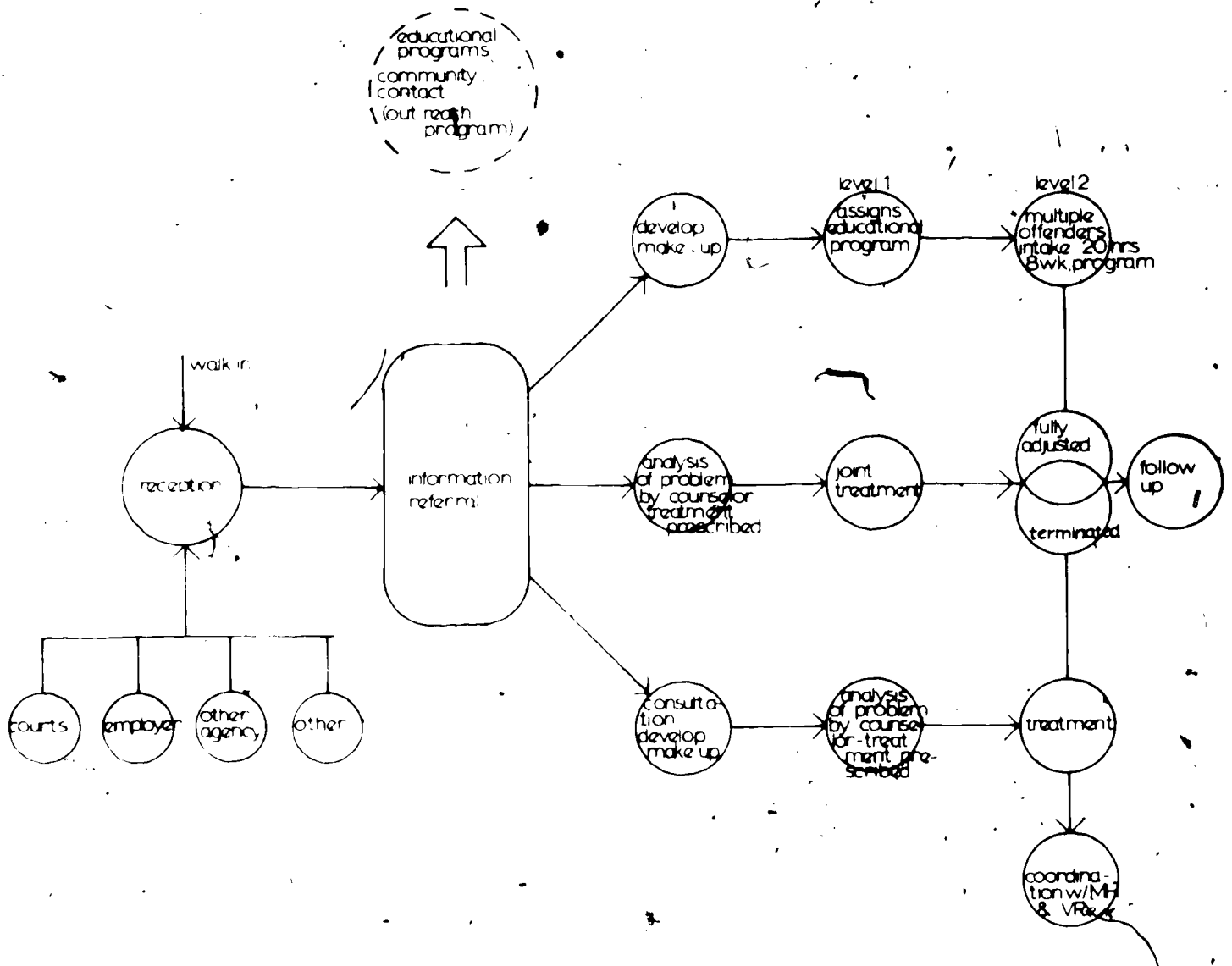
A new service for this county, this agency provides individual and family counseling for alcohol and drug related problems as well as follow-up counseling for clients. This agency provides assistance in finding treatment, conducts educational programs to promote responsible use of alcohol and drugs, coordinates with business and industry to reduce alcohol and drug abuse in industry, and assists law enforcement through the Alcohol Safety Action Program (ASAP) to reduce drinking and driving.

The present staff is four full-time employees, plus three part-time ASAP instructors. The offices are located at 217 East Brooks Street in Kingstree. The office is a temporary mobile classroom unit (1000 square feet). The location is unsatisfactory from the point of view of accessibility to clients, agency interaction and visibility. The office operates from 8:30 a.m. to 5:00 p.m., Monday through Friday, also conducts evening classes, and deals with emergencies as they arise. The average case load is presently three to five clients for personal consultation per day, with groups up to 20 for educational programs. At present this agency has a maximum daily user population of 32 persons.

The case load is expected to increase significantly as the community learns of the service, particularly if the agency is located in a more active pedestrian area. The agency staff is not expected to expand until this need is demonstrated. For purposes of this pre-

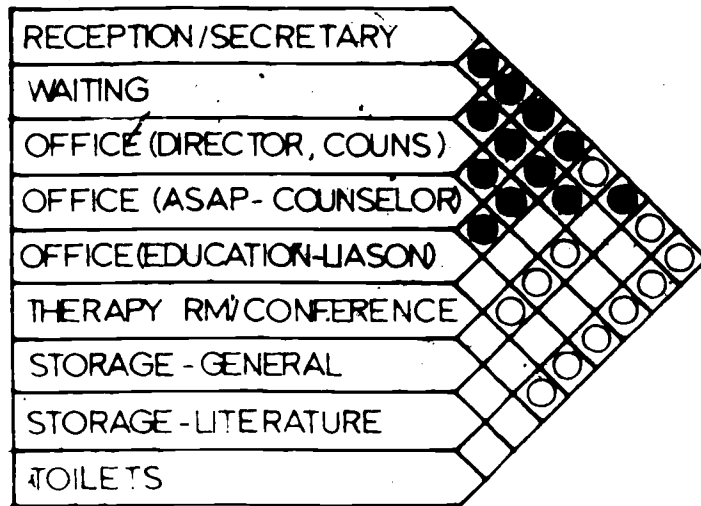
a38

liminary plan, the staff is maintained at its present level, but sufficient space is provided so that all programs can be housed in the new 2,300 square foot facility (see Section A3.4.1).



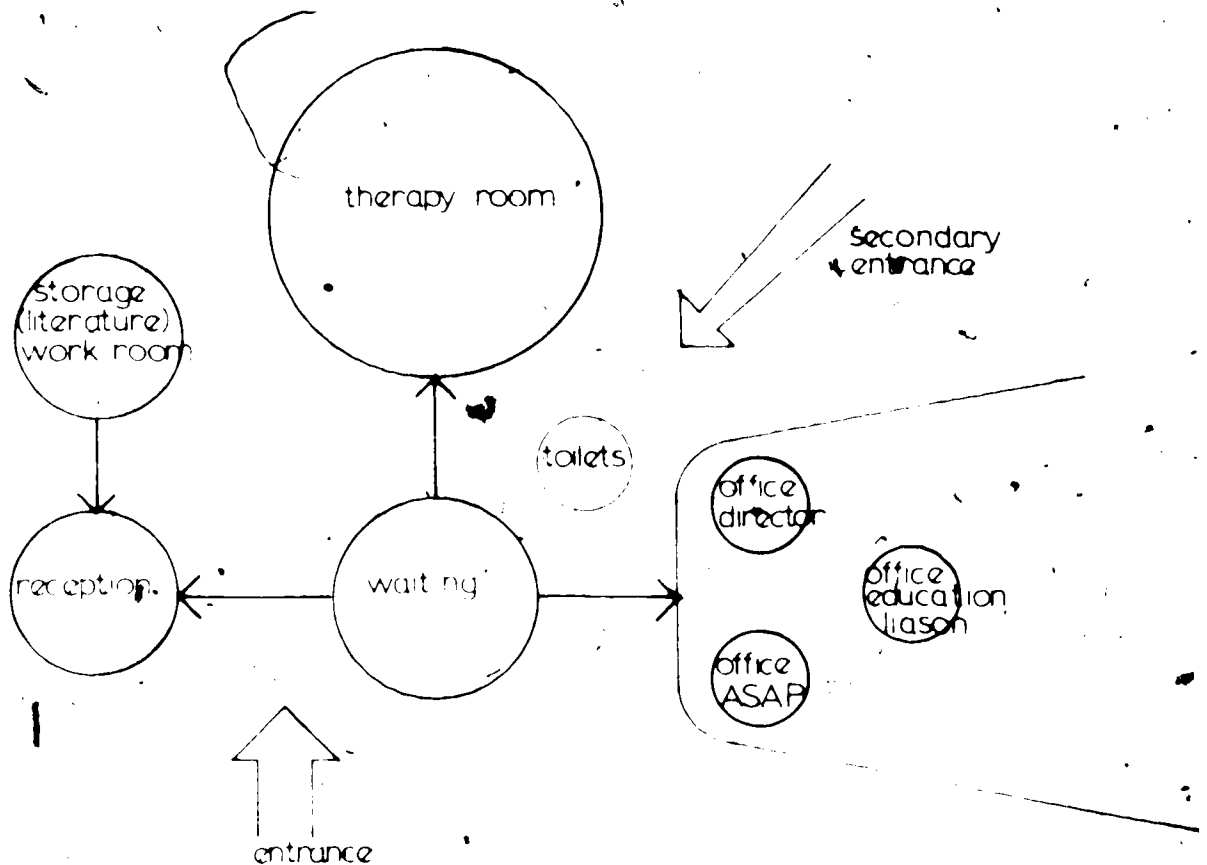
CLIENT ACTIVITY DIAGRAM
Alcohol and Drug Abuse

fig 29



● primary
○ secondary

FUNCTIONAL RELATIONSHIP MATRIX



FUNCTIONAL DIAGRAM Alcohol and Drug Abuse

fig 30.

A3.4.1 ALCOHOL AND DRUG ABUSE - Projected Area Requirements

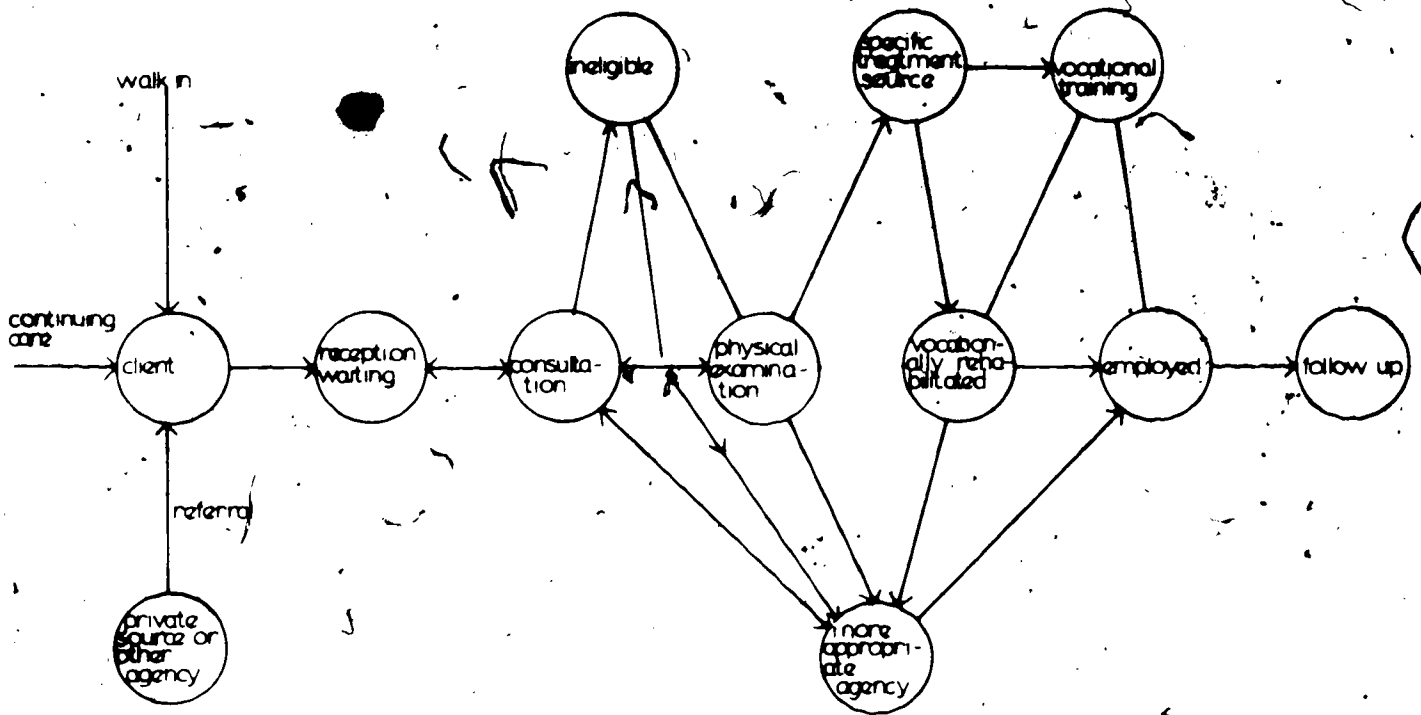
receptionist	80 sq. ft.
waiting	200 sq. ft.
office (director-counselor)	200 sq. ft.
office (ASAP-counselor)	200 sq. ft.
office (education-liaison)	150 sq. ft.
1 extra office	150 sq. ft.
therapy room/conference	300 sq. ft.
storage (general)	100 sq. ft.
storage (literature)	100 sq. ft.
toilets	120 sq. ft.
circulation	320 sq. ft.
mechanical	384 sq. ft.

Total 2300 sq. ft.

A3.5 Williamsburg County Vocational Rehabilitation (VR) - 42

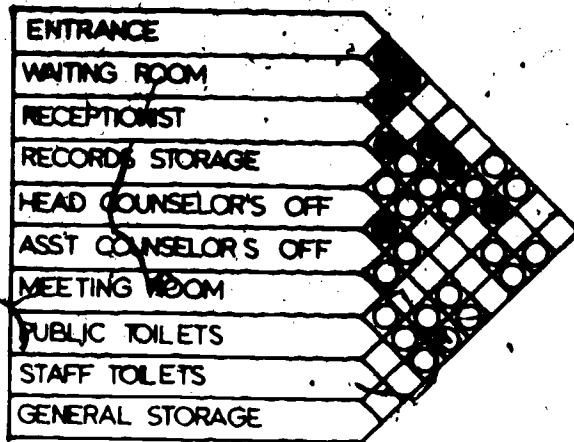
This agency has the sole purpose of restoring individuals who qualify for benefits to productive employment. Vocational Rehabilitation provides initial screening for applicants, arranges for medical exams and diagnosis with contracted physicians, prescribes treatment plans, arranges contract services to rehabilitate clients, secures job placements, and performs follow-up counseling and evaluation.

Currently there are four full-time employees on the county staff of Vocational Rehabilitation. Three of these work out of the office located at 117 South Jackson Street in a county-owned frame building, shared with the county tax assessor. The fourth staff member operates a separate Vocational Rehabilitation office located in the Manpower Training Center. It is anticipated that this office will remain in its present location. The agency also uses county Health Department satellite centers to reach outlying areas of the county for screening purposes. Vocational Rehabilitation has a strong working relationship to all of the proposed campus agencies. The office is open from 8:30 a.m. to 5:00 p.m., Monday through Friday, and services 5 to 15 clients per day (see Section A3.5.1).



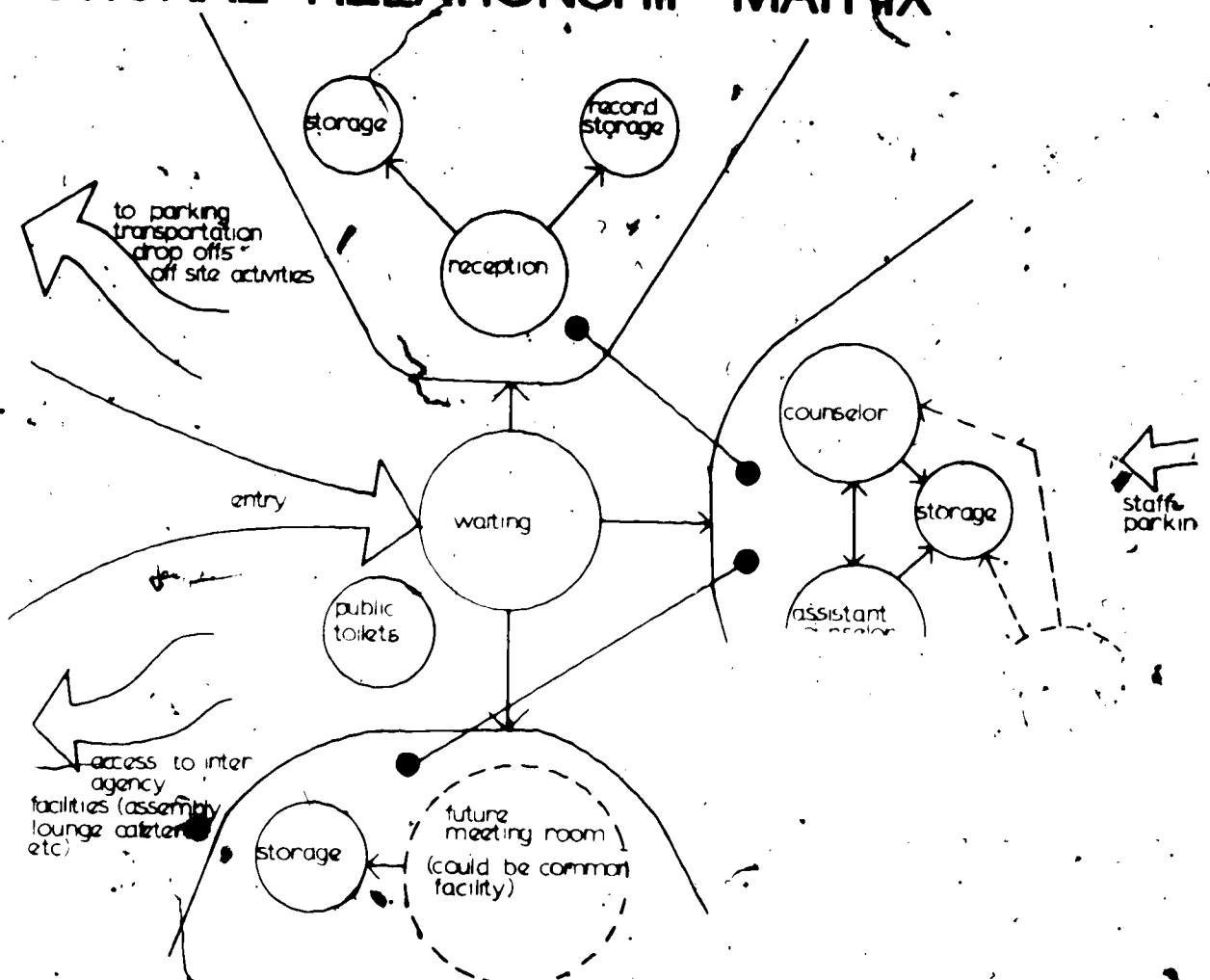
CLIENT ACTIVITY DIAGRAM

Vocational Rehabilitation



● primary
○ secondary

FUNCTIONAL RELATIONSHIP MATRIX



FUNCTIONAL DIAGRAM Vocational Rehabilitation

fig 32

A3.5.1 VOCATIONAL REHABILITATION - Projected Area Requirements

entrance:

waiting room	100 sq. ft.
receptionist	80 sq. ft.
records storage	80 sq. ft.
head counselor's office	200 sq. ft.
assistant counselor's office	200 sq. ft.
extra office for additional counselor	200 sq. ft.
public toilets	200 sq. ft.
staff toilets	120 sq. ft.
general storage	250 sq. ft.
circulation	286 sq. ft.
mechanical	343 sq. ft.

Total 2060 sq. ft.



Appendix 4: Common Facilities and Adjunct Services

The discussions of common facilities which follow are intended to supplement section 2.4 and, by providing more specific design guidelines, to further assist design professionals in developing the campus plan.

A4.1 The Pedestrian Zone

a48

The campus agencies should be linked by a pedestrian zone, segregated from vehicular traffic. This zone should consist of areas for the flow of pedestrian traffic between agencies and adjunct services, and of a variety of pedestrian activity areas.

The pedestrian routes that link the agencies should offer routes of continuous shelter from rain and summer sun, and optional courses that afford partial shade or full exposure. Lateral screening from blowing rains or winter winds may be required at exposed sections of these routes.

Activity spaces for pedestrians should range in size from relatively private spaces for individuals to assembly spaces for large groups. These activity areas are more fully discussed in Section A4.4 of this report.

The pedestrian routes and activity spaces should combine to form a pedestrian zone of great vitality, in which diverse activities from individual contemplation to community festivities, may occur. The relationship of this area with the spaces in which agencies and common services are housed, and the landscaping of the area should reinforce this zone as a pleasant place for people.

A4.2 Parking

Parking lot areas shown in the planning strategies are based on zoning requirements for public buildings (1/200 square feet) and are computed

a49

for the predicted expansion of each of the agencies without adjustment for overlap of clientele amongst agencies. This has been an intentional presentation of the "worst-possible-case." To assure ample room for expansion and flexibility for deviation from predicted patterns of growth. The campus plan should make possible reduction of this gross parking area as should implementation of the proposed county-wide transportation system.

Parking areas should be planned with generous planting strips and should be landscaped to reduce summer heat impacts and to provide visual screening. The areas of individual lots should be limited in size to avoid large expanses of pavement. Employee parking should occur in separate lots from public parking and segregation of traffic to respective lots should be effected as soon after entering the site as possible.

A 4.3 Information Center

Orientation of users within the campus, information concerning transportation system and community events schedules and assistance in locating activity centers outside of the campus, might be provided at the information center. Initially a simple graphic directory should suffice, however, as the campus grows more sophisticated approaches such as audio-visual systems and/or a staffed center may be appropriate. As the initial direct contact point with the public, the information center should be used to reinforce the informal but functional atmosphere of the campus and to encourage interaction with the community.

A4.4 Daytime Visitor Accommodations

a50

A large portion of the users of the proposed campus do not have access to private transportation. These people must accept arrival and departure times that frequently do not coincide with appointment times or with the length of time required to complete their business at the campus. An extreme, but not uncommon example is that of users who arrive in the early morning and do not leave until evening, even though their actual contact with the agency may require only a few minutes. Even for those who can arrange travel that can be scheduled to their specific needs, the duration of a visit to an agency may extend to several hours. As one of the purposes of the campus is to allow the use of several agencies in one trip to their common site, this length of time could conceivably be even greater.

The programs and services offered by the various agencies proposed to be included in the campus are such that clients and patients will often be accompanied on their visit to the campus by friends and relatives of all ages. In addition it is difficult to assess the number of county residents who do not avail themselves of services because of the difficulty or expense of arranging care for children, or adults, for whom they are responsible.

It is proposed, therefore, that various facilities be included in the campus to accommodate those who must wait for transportation, for services, or for those using services of campus agencies. In this way the agencies themselves may function more efficiently, clients will

be freed of considerable concern, and the time now spent idly by those forced to wait can become a positive experience.

A4.4.1 Playground Area

There is already a need, on the part of the hospital and the physicians' offices, to have a playground area for children. It is apparent that such a facility could serve users of other agencies as well.

The playground should be well drained and should offer a variety of playing surfaces. The design of this area and its equipment should be provided by a qualified architect, landscape architect, or other design professional. Based on the estimated population of the campus, 150 square feet per child of outdoor area should be provided plus approximately 20 square feet per child of semi-sheltered area. This total area should be divided into action areas, passive areas, social areas, and nature areas. These may overlap, with social and nature areas integrated into both action and passive areas. Three times as much area for active play as for passive play is an accepted rule-of-thumb for subdivision of the playground. The design should consider a range of age groups, for example, observation areas should allow a range of independence for children of various ages.

Equipment for the playground area, or materials from which such equipment is made, need not be expensive. Items of non-commercial value can be used imaginatively to create effective play equipment. In any case, the design or selection of equipment should be done with

consideration for safety, use of muscle groups, activity sequences, difficulty hierarchies, age-group scales, and basic child psychology.

AA.4.2 Day Care Center

A supervised program for infants and pre-school children is proposed as an extension of, and supplement to agency services. The facility could operate as a simple custodial center or be developed as a complete early childhood development center. The custodial service alone would be an important adjunct to the traditional campus programs.

This center might work in conjunction with the Health Department to provide early medical and nutritional screening. The program could conceivably expand to incorporate educational programs and provide daily care for children of working mothers or those seeking an education as well as the more transient visitors to the site.

The size of the center is dependent on the number of children who use the center, the nature of the programs offered, and the length of time that a child will be using the center on a given day. There is a wealth of literature available to assist in the design of a day care center; a most helpful source is Patterns for Designing Children's Centers, a report from Educational Facilities Laboratories.

The day care center should be located close to the playground area, away from vehicular traffic, and convenient to the drop-off area and public areas of the campus.

A4.4.3 People Waiting Areas

In addition to waiting areas within the agencies themselves, the public, pedestrian areas of the campus should provide "people spaces" for users to wait outside the flow of traffic. These may be as simple as a series of spaces with benches and landscaping to provide passive outdoor waiting areas, or may be more highly developed to include games or audio-visual programs for groups or individuals. It is important in the design and placement of these areas, whatever the approach, that hierarchies of public to private, active to passive, social to solitary atmospheres be created. Actual proximity to traffic areas and activity centers, use of physical barriers and psychological distance, arrangement of furniture or objects within the spaces, definition of scale, choice of materials, shelter, lighting, etc. can all be used to accomplish this range of environments, allowing the user to choose a place that suits his character and mood.

A4.5 Assembly

An assembly space that provides seating for 80 to 100 persons is needed by the campus agencies. This area will allow assembly of the full projected staff of the largest agency expected to locate on the site. It will also complement the existing hospital conference room (25 seats) and the Manpower Training Center Auditorium (148 seats). This should be a multi-use space that can be subdivided to form two to four meeting rooms for smaller groups. The facility should be available for public use by organizations within the community, when not reserved for agency functions.



The assembly area should be designed for both focused and centered group activities and should have storage space adjacent to it. The storage space for this area should provide secured storage for each agency as well as generous general storage. Both the full assembly space and its subdivisions should be planned for the use of a variety of audio-visual systems.

The assembly space should be located central to all agencies, close to the drop-off point, adjacent to the pedestrian zone, and with access to vehicular service.

A4.6 Food Service

Distances to existing restaurants, the duration of lunch hours and break periods for public employees, the large proportion of rural poor among the users, and the concept of the campus as an activity center of the community suggest that food service facilities to provide both snack foods and meals should be a part of the campus.

A4.6.1 Existing Service

The existing hospital food service provides excellent meals in quantities sufficient for present patient and staff needs; expansion plans for the hospital include food service expansion phased to continue to meet these needs of the hospital. However, the hospital food service is not adequate for visitors, nor is it deemed desirable to develop food service capacities within the hospital to meet the needs of the entire campus on a permanent basis; as facilities common to all agencies of

the campus should be discouraged from strong identification with or control by a single agency.

A4.6.2 Dining Facilities

To accommodate campus employees and agency-related users, the dining area sized to serve an estimated campus population of 1,600 (excludes hospital staff and patients) should be provided. In addition, it is appropriate that this dining facility function as a restaurant, open to the general public, thereby working in conjunction with assembly areas, to reinforce the ties between the campus and the community at large and making more efficient use of dining facilities, food preparation facilities, parking areas, and the pedestrian areas of the campus. It would be in character with the campus concept to include a portion of this dining area as an outdoor area extending into the pedestrian areas of the campus.

A4.6.3 Fast Food Service

As a convenience both to employees and the public, fast food service should be provided for those with limited time and/or financial resources. It is important that inexpensive nutritious foods should be available through this service. Vending machines or a staffed fountain and grill would be appropriate, the latter becoming more important as the campus grows. This service should relate to the common pedestrian area and also be convenient to assembly areas and to the various agencies.



A4.7 Employee Lounge

d56

The need for an employee lounge for the campus was identified by several agency directors. This facility, while providing a break area for employees, would promote interagency communication resulting in greater understanding, coordination of programs and the influencing of policies of the agencies. This lounge should be central to all agencies, and provide a relaxed atmosphere removed from public view and access. Fast food service should be available either directly into the lounge or in close proximity to it. This space should also have a close relationship to the pedestrian zone of the campus.

A4.8 Maintenance

Maintenance of common facilities on the campus will require either a permanent maintenance staff or a contracted maintenance service. Maintenance of individual agencies might be provided as contract with the campus maintenance staff or with its contracted maintenance service or by agency funded personnel. At any rate, maintenance of the physical plant of the campus -- grounds, buildings, equipment, etc. -- will be more efficient and less expensive if there is coordination of materials and products used throughout the campus. This will require design coordination so that expendable items are of the same type throughout, items that require periodic replacement or repair are coordinated, and maintenance equipment is not duplicated.

A4.9 Central Stores

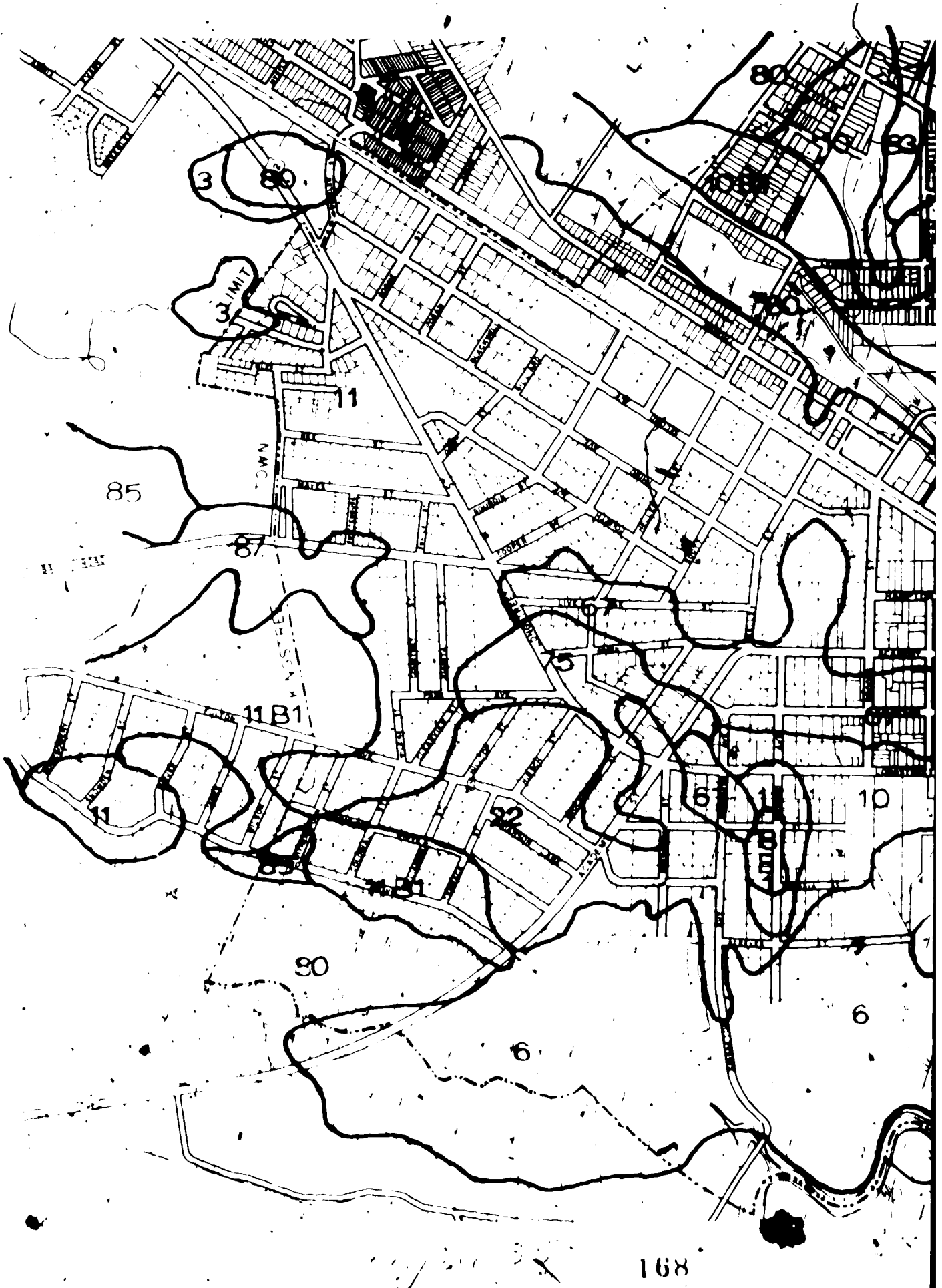
a57

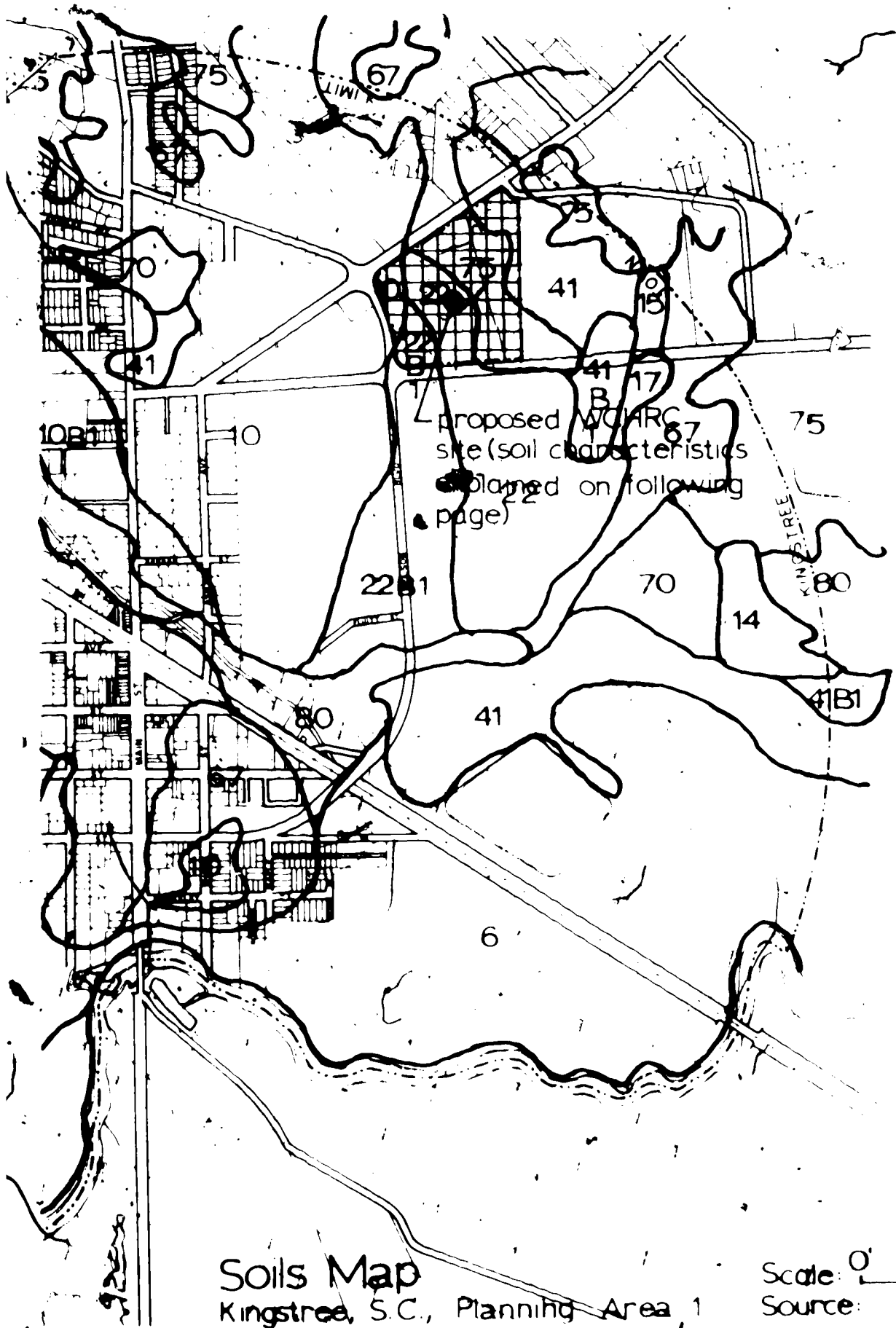
In conjunction with the maintenance service for campus, storage area must be provided for stock items for repair and replacement, expendable supplies, and maintenance equipment and supplies. It is conceivable that ordering of certain materials might also be centralized for all of the agencies, gaining bulk ordering advantage and thus savings for all involved. The central stores should be conveniently located to service areas and accessible to all agencies.

A4.10 Mechanical Systems

The cost of heating, cooling, and ventilation is a substantial expense in initial building costs and in subsequent operation and maintenance cost considerations. Mechanical system investigation should include possibilities such as: a central system serving the entire campus, unit systems for each facility on the campus, or a combination of the two whereby some facilities would have their own systems and others would be grouped to share a central system. The arrangement selected depends upon a number of factors such as: ownership, management and financing decisions; potential flexibility of existing systems for the hospital and physicians office building; development phasing; advances in mechanical systems technology affecting future feasibility of incorporating energy sources such as solar energy; and the future availability and cost of various energy producing fuels.

Appendix 5: Kingstree Existing and Future
Land Use Plans and Soils Map





Soils Map
Kingstree, S.C., Planning Area 1

Scale: 0' 500' 1000'
Source: WRPDC



KINGSTREE AREA, WILLIAMSBURG COUNTY, S. C.

****SELECTED PROPERTIES, LIMITATION, AND FEATURES OF SOILS**

Map No.	Soil Series Slope Range	Estimated Engineering Properties			Degree of Soil Limitations and Major Features			
		Depth of Sample (inches)	Unified	Permeability in/hr	***Site For Dwellings and Light Indust.	Play-Grounds	Depth to Seasonal High Water Table (ft)	Depth to Hard Rock (ft)
41	Marlboro* 0-6%	0-9	SM, ML, ML-CL	2.0-0.6	Moderate unified soil group	0-2% slopes Slight 2-6% slopes Moderate-slope	6+	Rock free
		9-60 60-72	CL, CH CL, CH, MH	.60-2.0 .60-2.0				
10	Norfolk* 0-10%	0-17	SM	2.0-6.0	0-6% slopes Slight 6-10% slopes Moderate-slope	0-2% slopes Slight 2-6% slopes Moderate-slope 6-10% slopes Severe slope	6+	Rock free
		17-82	SC	.60-2.0				
22 22B1	Orangeburg* 0-15%	0-7	SM	2.0-6.0	6-10% slopes Moderate-slope 10-15% slopes severe slope	2-6% slopes Moderate slopes 6-15% slopes severe slope	6+	Rock free
		7-12	SM	2.0-6.0				
		12-64	CL, SC	.60-2.0				
75	Coxville* 0-2%	0-11 11-80	SM-SC, SM, ML, ML-CL CL, CH	.60-2.0	Severe-wetness flooding	Severe-wetness flooding	0-1	Rock free

*From coordinated interpretations of soil series U.S.D.A. Soil Conservation Service.

**Complete soils descriptions found in Kingstree Land Use Plan (see References section).

***Information also assumed applicable to WCHRC Project.

Appendix 6: References

REFERENCES

a66

1. Abramson, Paul, Schools for Early Childhood, New York: Educational Facilities Laboratories Inc., 1970.
2. ATA Journal, "When Programming Is Design," April, 1973.
3. American Hospital Association, Model Rural Health Programs, Chicago: 1971.
4. American Medical Association, Health Care Delivery in Rural Areas, Chicago: 1972.
5. American Medical Association, Community Health Delivery Programs, Report of the Committee on Community Health Care, Chicago: American Medical Association, 1972.
6. American Medical Association, "Rural Health Is a Community Affair," taped proceedings, 27th National Conference on Rural Health.
7. Architectural Record, "Kaplan and McLaughlin Practice," March, 1970.
8. Architectural Record, "Hospitals," September, 1973.
9. Aycock, E. Kenneth, Meeting the Health Problems of Today. South Carolina State Board of Health (now Department of Health and Environmental Control), June, 1972.
10. Bible, Bond L., "Overview-Rural Health Care -- 1975," Paper presented at the Southern Regional Extension Community Resource Development Committee Meeting, Myrtle Beach, S. C., June, 1975.
11. Clurman, David, The Business Condominium. New York: John Wiley & Sons, 1973.
12. Davis, Solomon, "An Evaluation of Theoretical Approach to Interagency Coordination and Cooperation: The need for Change and Genuine Commitment," prepared for the Office of the State Auditor Columbia, S. C., April, 1974.
13. Douglass, H. Robert, "Health Care: The Fastest Growing Industry," Progressive Architecture, July, 1972, pp. 52-53 and 90-92.
14. Educational Facilities Laboratories, Inc., and Experimental Schools. Places and Things for Experimental Schools, United States Office of Education, Department of Health, Education and Welfare, 1972.

- a67
16. Tolson, Harry A., Financing Real Estate Development, New Jersey: Aloray Publisher, 1974.
 16. Governor's Special Project on Medical Education and the Provision of Health Services in South Carolina, Reports of the Task Forces on Undergraduate Medical Education: Graduate Medical Education: Health Extension Services: Emergency Medical Services: Administrative and Financial Mechanisms, June, 1973.
 17. Hanford, Lloyd D., Sr., Analysis and Management of Investment Property, Chicago: Institute of Real Estate Management, 1970.
 18. L&C&M Associates, Preliminary Land Development Plan, for the Waccamaw Regional Planning and Development Council, Georgetown, S. C., June 1972.
 19. L&C&M Associates; Planning and Development Consultants. Population and Economy Waccamaw Region, South Carolina, prepared for the Waccamaw Regional Planning and Development Council, Georgetown, S. C., April, 1972.
 20. Marshall Valuation Service, Los Angeles, Marshall and Swift Publishing Company, 1975.
 21. McCutchen, J. Hugh, A Brief Background Report on Williamsburg County, February, 1974.
 22. "Medical Facilities," Architectural Record, February, 1975, p. 117.
 23. Meshenberg, Michael J., Health Planning and the Environment: A Preventive Focus, Chicago, American Society of Planning Officials, March, 1974.
 24. Office of Health Affairs and the Engineering Branch, Procurement Division, Office of Economic Opportunity (now Community Services Administration) Guide Lines for the Development of Space Allocations for Neighborhood Health Centers, Washington, D. C., 1970.
 25. Olgyay, Victor, Design with Climate, New Jersey, Princeton University Press 1963.
 26. Osmon, Fred Linn, Patterns for Designing Children's Centers, New York, Educational Facilities Laboratories, 1971.
 27. Roemer, Milton I., "Health Needs and Services of the Rural Poor," a paper delivered at the 1st National Conference on Rural America, Washington, D. C., 1975.

28. Roy, William K., "Federal Health Policies in Rural Areas," excerpt from testimony, 1st National Conference on Rural America, Washington, D. C. 1975.
29. S. C. Department of Health and Environmental Control, Directory of Personal Health Services in South Carolina, 1975, compiled by S. C. State Office of Comprehensive Health Planning, Columbia, S. C., 1975.
30. S. C. Department of Health and Environmental Control, South Carolina State Plan for Construction and Modernization of Hospital and Related Facilities (Hill-Burton Program), Columbia, S. C., 1973.
31. Stern, Joanne B., "The Health Maintenance Organization Act and The Prospects for the Poor and Medically Underserved," 1st National Conference on Rural American, Washington, D. C., 1975.
32. Technology Assessment Group, Program of Policy Studies in Science and Technology, George Washington University, Washington, D. C., Revitalization of Small Communities: Transportation Options, for the U. S. Department of Transportation, Office of University Research, Washington, D. C., May, 1974.
33. "The Hospital-Affiliated Medical Office Building," Architectural Record, February, 1975, pp. 53-57.
34. U. S. Department of Health, Education and Welfare, HEW Programs for Rural America, Washington, D. C., U. S. Government Printing Office, February, 1975.
35. U. S. Department of Health, Education and Welfare, Minimum Requirements of Construction and Equipment for Hospital and Medical Facilities, Washington, D. C., U. S. Government Printing Office, 1974.
36. U. S. Department of Agriculture, Soil Conservation Service, Feasibility Study of Requirements for Main Drainage Canals, Under Sponsorship of Williamsburg County Board of Commissioners and Williamsburg Soil and Water Conservation District, July 1972.
37. Waccamaw Regional Planning and Development Commission, Land Use Plan Kingstree, South Carolina, for Department of HUD, Columbia, S. C., June 1974.

30. Waccamaw Regional Planning and Development Commission, The Waccamaw Overall Economic Development Program, December, 1970.
31. Waccamaw Regional Planning and Development Council, Zoning Ordinance, Kingstree, S. C., sponsored by Department of Housing and Urban Development, Columbia, S. C., June 1974.
4. Waccamaw Regional Planning and Development Commission, Positive Action Program for the Waccamaw Regional Planning and Development Commission; prepared for the Economic Development Administration, February, 1972.
41. Waccamaw Regional Planning and Development Commission, Williamsburg County Community Facilities Plan, sponsored by U. S. Department of HUD, May, 1974.
42. Waccamaw Regional Planning and Development Council, 5-year Capital Improvement Program and Capital Budget for Williamsburg County, for Department of HUD, Columbia, S. C., February, 1974.
43. Wheeler, L. Todd, Hospital Design and Function, New York: McGraw-Hill Book Company, 1964.
44. Williamsburg County Industrial Development Board and South Carolina State Development Board, The Doors Are Open in Williamsburg County, 1972.
45. Williamsburg County Planning and Coordination Consortium, "Grant Application Submitted to the South Carolina Board of Health and Environmental Control. Under the Policies and Guidelines of the Health Care Extension Program," January 10, 1975.

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