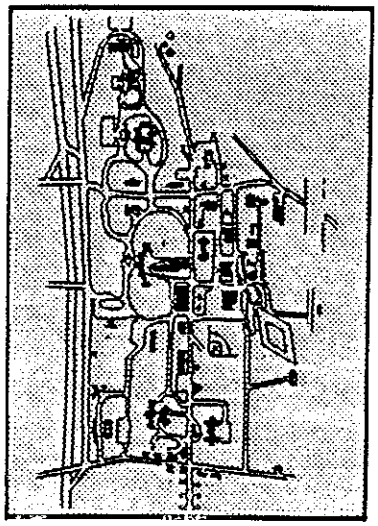
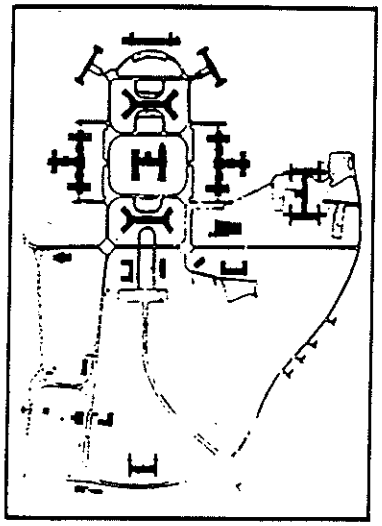
# Long Range Planning Study for the Facilities of the Department of Mental Health

# CONNECTICUT VALLEY HOSPITAL

## Task 11 Report: Campus Master Plan





October, 1990

*Prepared by:*

Lozano, White and Associates, Inc.
Architecture, Urban Design, City Planning
6 Bennett Street, Cambridge MA 02138

*Prepared for:*

State of Connecticut
Office of Policy and Management
Department of Mental Health
Department of Public Works

# Credits

## State of Connecticut

**Department of Mental Health**
90 Washington Street
Hartford CT 06106

Michael F. Hogan, Ph.D., Commissioner
Deborah J. Carr, Deputy Commissioner
Wayne F. Dailey, Ph.D., Deputy Commissioner
Michael Lucas III, Chief of Engineering Services, 1/90 to Present
James W. Martin, Chief of Engineering Services, to 10/89
Gerald Croog, Director of Program Development

**Office of Policy and Management**
80 Washington Street
Hartford CT 06106

Anthony V. Milano, Secretary

*Comprehensive Planning Division*
Joan Maloney, Under Secretary, 10/89 to Present
Horace H. Brown, Under Secretary, 10/87 to 10/89
Richard N. Symonds, Jr., Assistant Director
Linda G. Hothan, Planning Analyst Supervisor, Study Coordinator, and Contract Manager

*Budget and Financial Management*
Marianne J. Melchionde, Fiscal and Program Policy Section, Director
Lorraine C. Brodeur, Senior Budget Specialist
Judith H. Dowd, Budget Specialist

**Department of Public Works**
State Office Building - Room 425
165 Capitol Avenue
Hartford CT 06106

Donald Cassin, Commissioner
Richard J. Tedder, Director, Management and Financial Services

## Acknowledgements

The consultants thank the Study Steering Committee for their dedication to this project. The consultants also extend their gratitude to the following individuals who gave of their time and insight:

Dennis Angelini, Superintendent, Fairfield Hills Hospital
Garrell Mullaney, Superintendent, Norwich Hospital
Carl Cappello, Superintendent, Connecticut Valley Hospital

Jessica Wolf, Regional Director, Region I
John Simsarian, Regional Director, Region II
Virginia Bainbridge, Region III
Peter Johnson, Regional Director, Region V

Additionally, the staff at three hospitals are to be congratulated for their patience in providing "guided tours" to the consultants on numerous occassions. Finally, the Consultants extend their gratitude to all the individuals and organizations which participated in the study.

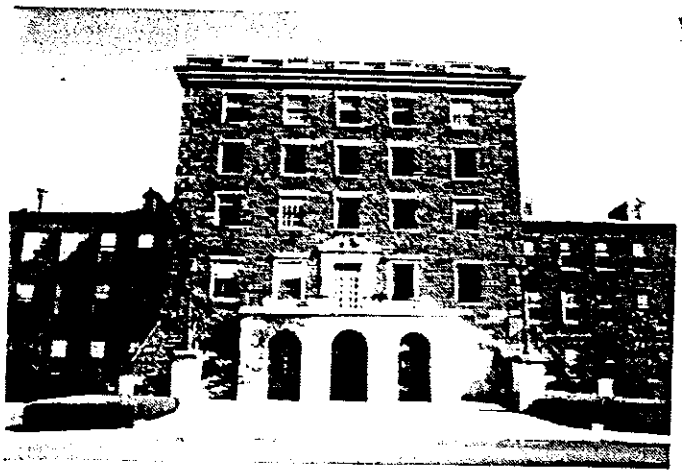
## Consultant

**Lozano, White and Associates, Inc.**
6 Bennett Street
Cambridge MA 02138

Eduardo E. Lozano, Ph.D., Principal-in-Charge
Roberta Leary, Project Manager
Daphne Politis, Principal Planner
Emilio Arango, Assistant Planner, Graphics
Anna Abengowe, Graphics
Mary Ladd, Editing

Lindsay (Peter) White, Construction Specialist
Raul Ontano, Building Inventory
Gene Bunnell, Planner

**Shooshanian Engineering Associates, Inc.**
Steve Bosland, Project Manager



*entrance to Shew Hall*
*Connecticut Valley Hospital*

*"It should never be forgotten that the buildings, and all their surroundings, are designed and furnished for the patients. The study and thought brought to bear upon their planning and execution is to be directed to the patients' needs. For them primarily, and not for the public or the officers, are all the special arrangements, internal and external, - the comfortable and convenient quarters, the various appliances, the sanitary provisions, the cheerful aspect, the fine views, and the ornamental grounds."*

from a speech given by Dr. H.B. Wilbur, representing the Committee on Public Buildings for the Dependent Classes, at a conference held in September of 1877.

# Executive Summary

This document summarizes the results of an extensive study of the three psychiatric hospitals operated by the Connecticut Department of Mental Health (DMH): Fairfield Hills Hospital, Norwich Hospital, and Connecticut Valley Hospital. This report, the final of nine task documents, presents the Long Range Plan for Connecticut Valley Hospital. Plans for Fairfield Hills and Norwich Hospitals are presented in companion documents. The study was conducted under contract to the Office of Policy and Management and in association with the Department of Mental Health and the Department of Public Works.

## A. Purpose of the Study

The goal of the Long Range Planning Study for the Facilities of the Department of Mental Health was to develop long range facility plans for mental health inpatient care, focussed in the three hospitals which are the subject of the study, and to integrate program and facilities planning.

When originally designed, the State hospitals were self-contained institutions that provided long term care for most of the mentally ill who were under the State's care. At their peak capacity, the hospitals accommodated approximately 3,500 patients each. Since then, significant changes have occurred in philosophies of care, treatment modalities, and the roles that the hospitals play in the delivery of mental health services. Now, and increasingly in the future, the hospitals are but one component of a system of care which includes a wide range of community-based programs. Modern mental health care is based on the goal that each patient will be treated in the least restrictive setting possible, with increasing emphasis on providing treatment settings in the clients' home communities.

In addition, the major patient care buildings at the hospitals are between 30 and 50 years old. These facilities were built in a time of inexpensive energy, and for a kind of care which is today considered custodial. Therefore, long range facilities planning is a necessity.

In the future, as community services continue to be developed, the primary role of the State hospitals will be to provide high acuity inpatient care. Hospital services will include acute, short term care for a small census of patients in need of psychiatric stabilization. Stabilization will occur over a relatively brief stay. Treatment programs which include the

physical environment, will be designed to provide "state of the art" psychiatric care. Long term care will continue to be provided for an interim period until an adequate number of community services are developed. It is anticipated that only a very small number of patients will need indefinite hospitalization once a more complete system of care is developed.

In summary, the State psychiatric hospitals provide three basic services: 1) Evaluation and Brief Treatment, 2) Intermediate Treatment, and 3) Long Term Care. The ultimate goal of DMH is that, over time, the hospitals will emphasize acute care in the form of Evaluation and Brief Treatment and Intermediate Treatment. Patients requiring Long Term Care will mostly be transferred to community-based facilities, more appropriate for their treatment.

Long range plans were developed to accommodate these and other programmatic needs of the Department of Mental Health. Recommendations focus on developing modernized, improved, consolidated, and more efficient facilities at each of the three hospitals, which are the subject of this study.

Recommendations were also made for the utilization of those properties which, as a result of consolidating facilities, will be in excess of DMH needs in the future. These excess properties have the potential to meet a number of important public needs. Certain reuses could benefit DMH patients and staff. Existing buildings could be occupied by other State agencies in need of space more quickly, and sometimes more economically, than space obtained through new construction or lease. The properties are also important in terms of their local context, offering possibilities for housing, employment, and open space conservation. Introducing non-DMH reuses on the campuses, while continuing to provide patient care to DMH clients, poses certain risks which should not be overlooked.

Therefore, reuse recommendations should be implemented with care. The hospital campuses were established to serve and benefit persons with mental illness, and will continue to play an important role in the State's mental health system - as centers of specialized, intensive acute care. Providing quality mental health care should continue to be the priority function of the campuses, and the reuse of excess facilities should not conflict with this function. Reuse criteria were developed as part of this study in order to guide the selection of reuse options and to ensure their compatibility with the functions of a modern psychiatric hospital.

Additionally, it was recommended that excess property at the campuses not be sold, but instead, the State retain title of all the land and allow use of the buildings and land for extended lease periods. The value of these campuses is in large part due to the size of the properties, the large variety of facilities, and the availability of utilities. While the State could realize revenue from the sale of campus properties, the potential to generate income is minimal compared to the Department of Mental Health's budget needs. The maximum potential income from the sale of parcels, as based on the recommendations for reuse for all three hospitals, was estimated to be approximately 9% of DMH's budget for Fiscal Year 1991 (capital and operating budget). In summary, to dispose of the properties on any large scale basis would result in the permanent loss of irreplaceable State resources, at a price far below what it would cost the State to acquire such properties in the future.

## B. Overview of the Study Process

The purpose of this Long Range Planning Study for the Facilities of the Department of Mental Health (DMH) is two-fold:

1) to develop a facility plan for each campus which is consistent with program goals of the Department and which increases facility efficiency and quality, and
2) to develop a master plan of each campus to guide reuse planning for those buildings and lands which, as a result of consolidating DMH facilities, will be in excess of the Department's needs in the future.

The study proceeded toward fulfilling this purpose by following a series of steps as described in the next section. These steps resulted in:

1) the selection of a Preferred Option for the future consolidated DMH facilities, and
2) a series of recommendations regarding reuse of the buildings and lands in excess of DMH needs, as based on the requirements of the Preferred Option.

Together, these elements form the Campus Master Plan.

The methodology used to develop the options involved three basic steps. First, the needs of DMH - that is, the programs to be operated at the three campuses - were defined, and translated into spatial requirements. Second, the existing facilities at the campuses were analyzed to determine their suitability for various types of uses. Third, buildings determined to be suitable for DMH use were grouped in various combinations, or options, which together met programmatic, capacity, and other requirements.

Campus master plans were developed in order to guide facility development and use over a twenty- year time period. The master plans are not intended to be taken as a detailed "blueprint" for the future of the DMH campus facilities, but instead provide a vision of the most desired future uses of the facilities, and an outline of steps to achieve these ends. Thus, the plans provide a logical framework with which to guide current and future change and investment.

The products of the study provide a database of information regarding existing conditions and recommendations, and a strategic framework, both for consolidating DMH facilities and for reuse planning. See Appendix A of this document for a list of study products.

## C. Summary of Methodology

### 1. DMH Facility Plan

The first part of the study focused on the DMH facility of the future. The DMH programmatic goals were translated into space requirements and then applied to the development of options for the future consolidated DMH facilities. The existing DMH facilities were evaluated as to their suitability to accommodate these changes, given the new philosophy of care, reduced inpatient populations, and the different role the hospitals will play in the future. Four options representing all feasible alternatives were developed for buildings and grounds at each hospital. Options were evaluated against previously defined criteria which incorporated DMH and campus planning goals. Two options were selected as best meeting these criteria. These two selected options were then reevaluated and ranked as the Preferred and Secondary Options. The Preferred Option was further refined and described in detail in Task 6 of the study.

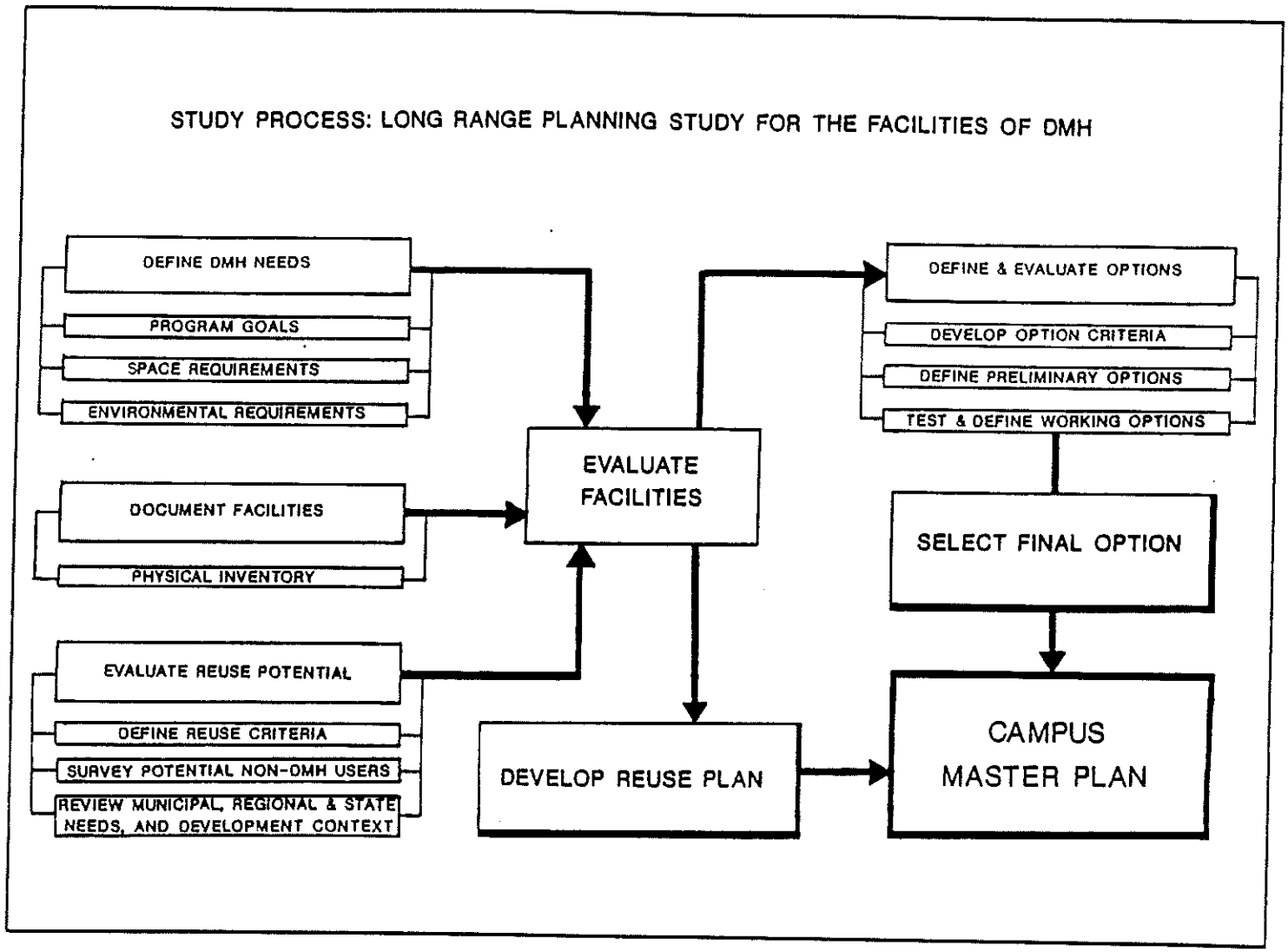
Because the goal is to phase out Long Term Care from the hospital setting, different levels of investment for the renovation of existing facilities are proposed. For those facilities which accommodate the eventual core services of the hospital, the highest levels of investment are proposed in order to create a state of the art environment. In the meantime, it is recommended that lower levels of renovations be applied to buildings which will eventually be phased out of use.

A major strategic challenge in this Study was to balance a clear planning process within an environment of considerable uncertainty.

### 2. Campus Reuse Strategy

The second part of the study was to identify the reuse potential of those properties which, based on the premises of the Preferred Option, will be in excess of DMH future needs. This part of the study was comprised of three main activities: 1) a series of "criteria for reuse" was developed, defining DMH and State interests, in order to provide guidelines for choosing potential reuse options; 2) a survey of potential non-DMH users was conducted to determine how other State needs could be met by utilizing space at the campuses; and 3) a review of municipal, regional, and State plans and an analysis of the local development context was conducted in order to ensure that recommendations both fulfilled public needs and were feasible, given demographic and market trends.

Those buildings and lands which were determined to be in excess of DMH future needs were then analyzed in terms of their potential for reuse. Reuse options were evaluated according to the previously developed reuse criteria, and recommendations for reuse were subsequently developed. The recommendations identify desirable options for both land and vacant building reuse, and attempt to integrate State and community needs with facility possibilities.


STUDY PROCESS: LONG RANGE PLANNING STUDY FOR THE FACILITIES OF DMH
DEFINE DMH NEEDS
PROGRAM GOALS
SPACE REQUIREMENTS
ENVIRONMENTAL REQUIREMENTS
DOCUMENT FACILITIES
PHYSICAL INVENTORY
EVALUATE REUSE POTENTIAL
DEFINE REUSE CRITERIA
SURVEY POTENTIAL NON-DMH USERS
REVIEW MUNICIPAL, REGIONAL & STATE NEEDS, AND DEVELOPMENT CONTEXT
EVALUATE FACILITIES
DEVELOP REUSE PLAN
DEFINE & EVALUATE OPTIONS
DEVELOP OPTION CRITERIA
DEFINE PRELIMINARY OPTIONS
TEST & DEFINE WORKING OPTIONS
SELECT FINAL OPTION
CAMPUS MASTER PLAN

## D. Summary of Major Findings

Major study findings regarding the three DMH campuses are summarized below and on the accompanying chart. These findings are reflected in the recommendations contained in the next section.

The three campuses contain extensive amounts of buildings and land; each facility is comprised of over one million square feet of building space and between approximately 800 and 1,200 acres of grounds.

- DMH is currently the major user of space at the three campuses, occupying:
  - 73 percent of the total space at Fairfield Hills Hospital,
  - 54 percent of the total at Norwich Hospital, and
  - 54 percent of total space at Connecticut Valley Hospital.
- Users other than DMH currently occupy space at each campus, ranging from:
  - 21 percent of total at Fairfield Hills Hospital,
  - 17 percent of total space at Norwich Hospital, and
  - 29 percent of total at Connecticut Valley Hospital.
- Significant capital investment in facilities at the three campuses will be required to achieve the quality of space required by DMH in the future.
- In the future, DMH will require only about half the space it currently uses at each campus. Significant additional amounts of space will therefore, be available for reuse by entitities other than DMH.

## Table A: Comparison of Existing and Proposed DMH Facilities

| | | Fairfield Hills Hospital | Norwich Hospital | Connecticut Valley Hospital | Total |
|---|---|---|---|---|---|
| *Existing* | Total Existing Area (square feet) (1) | 1,544,950 | 1,399,219 | 1,189,795 | 4,133,964 |
| | Space Currently Utilized by DMH (square feet) (2) | 1,124,248 | 759,260 | 645,106 | 2,528,614 |
| | Space Currently Occupied by Non-DMH User(s) (square feet) (3) | 328,146 | 231,443 | 350,519 | 910,108 |
| | Space Currently Vacant (square feet) | 92,556 | 408,516 | 194,170 | 695,242 |
| *Proposed (Preferred Option)* * | Proposed Area (square feet) (4) | 571,458 | 387,025 | 352,332 | 1,310,815 |
| | Estimated Construction Cost (5) | $43,473,421 | $35,209,694 | $37,729,431 | $116,412,546 |
| | Number of Beds (6) | 440 | 440 | 380 | 1,260 |
| | Cost Per Bed | $98,803 | $80,022 | $99,288 | $92,391 |

* Preferred Option chosen from a series of options developed for the future modernized and consolidated DMH facilities.

(1) Total square footage of all major buildings, excluding cottages and small farm structures.

(2) Excludes vacant buildings and those occupied by non-DMH users.

(3) Uses include active uses, as well as storage. Figure does not include space used by non-DMH users located in buildings whose primary occupant is DMH.

(4) Total proposed area includes storage and reserve space.

(5) The Fairfield Hills estimate includes 40 beds at a new community mental health center (with additional space for outpatient services). The Connecticut Valley Hospital estimate includes on 20-bed ward as an additional floor to the existing Connecticut Mental Health Center. Cost estimates are in May 1989 dollars and do not include design fees or contingencies.

(6) This figure includes the number of beds estimated to meet DMH future needs, plus an additional ward (20 beds) provided at each hospital as a "swing ward", to be used as needed.

# E. Recommendations for Connecticut Valley Hospital

## 1. Recommendations for a Modernized, Consolidated DMH Facility

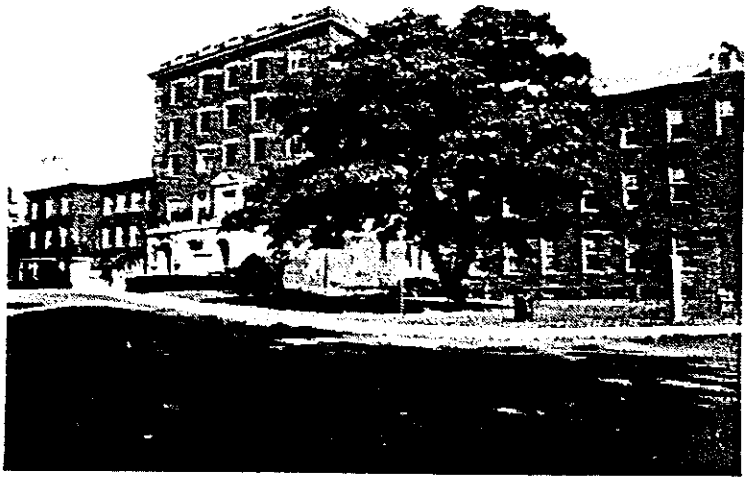
**The Preferred Option In Brief:** The Preferred Option proposes that the original historic core of the campus be reclaimed, and developed as the core treatment facility for the future. This approach capitalizes on the associated amenities of this advantageous site, preserving the traditions and heritage of the original hospital. This option creates the opportunity to continue a strong DMH presence on the campus, and consolidates human services facilities in one concentrated area of the property.

The key buildings proposed for the core DMH hospital are Shew/Beers/Dix and Battell; the existing addition to Woodward ("new Woodward") will be used during the transitional phase, until Long Term Care patients are transferred to community- based facilities.

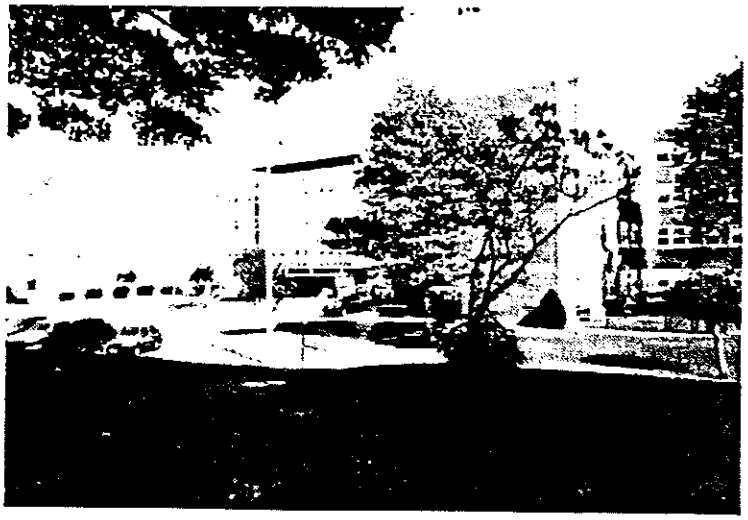
The historically significant and physically connected cluster of Page, Noble, and Stanley, along with the newer Haviland and School buildings, are reserved for shared use by DMH, non-DMH users of the campus, and the community at large. It is recommended that the School building, currently utilized as a Day Care Center, continue to accommodate this use. It is proposed that Stanley, the smallest building in the historic cluster, be converted to a Museum of Mental Health. Haviland may be used by DMH in the transitional phase for training events and reserve space, but may also be available in the future for shared use amongst other campus users and the community at large. For the grand historic buildings of Page and Noble, it is recommended that DMH manage the buildings, but that the buildings be used by the public at large. Potential uses for these buildings include an auditorium, banquet hall, conference center, recreation center, theater, etc.

The existing maintenance cluster is recommended for continued use by DMH, because of its proximity both to the consolidated hospital and to Whiting Forensic Institute, which is also managed by DMH.

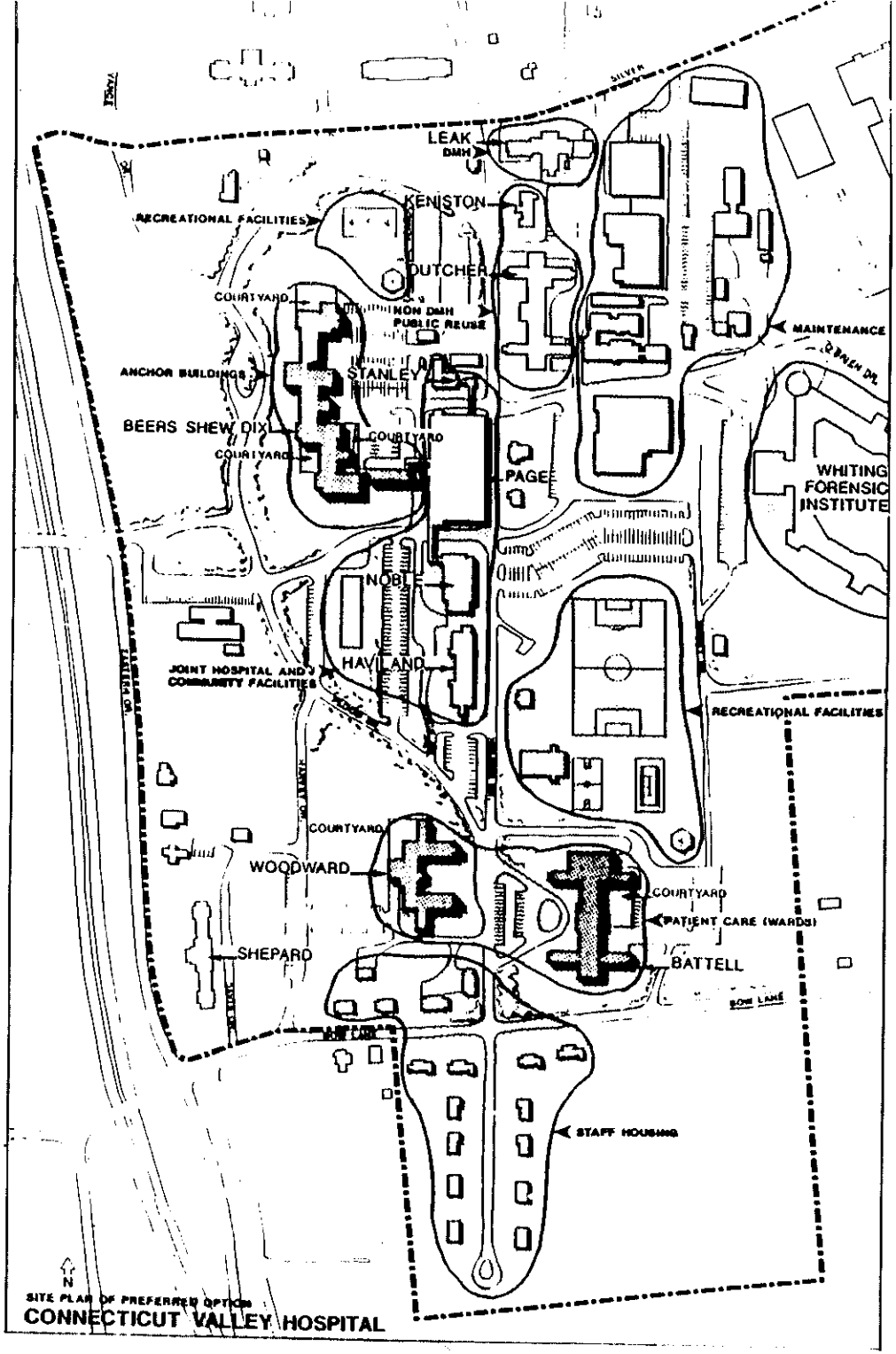
As part of the Preferred Option, it is also recommended that a new floor be constructed as an addition to the existing Connecticut Mental Health Center (CMHC) in New Haven. Twenty beds currently at CVH should be transferred to the CMHC to provide acute care for individuals in the Greater New Haven area. CMHC is located more conveniently to this area than CVH.

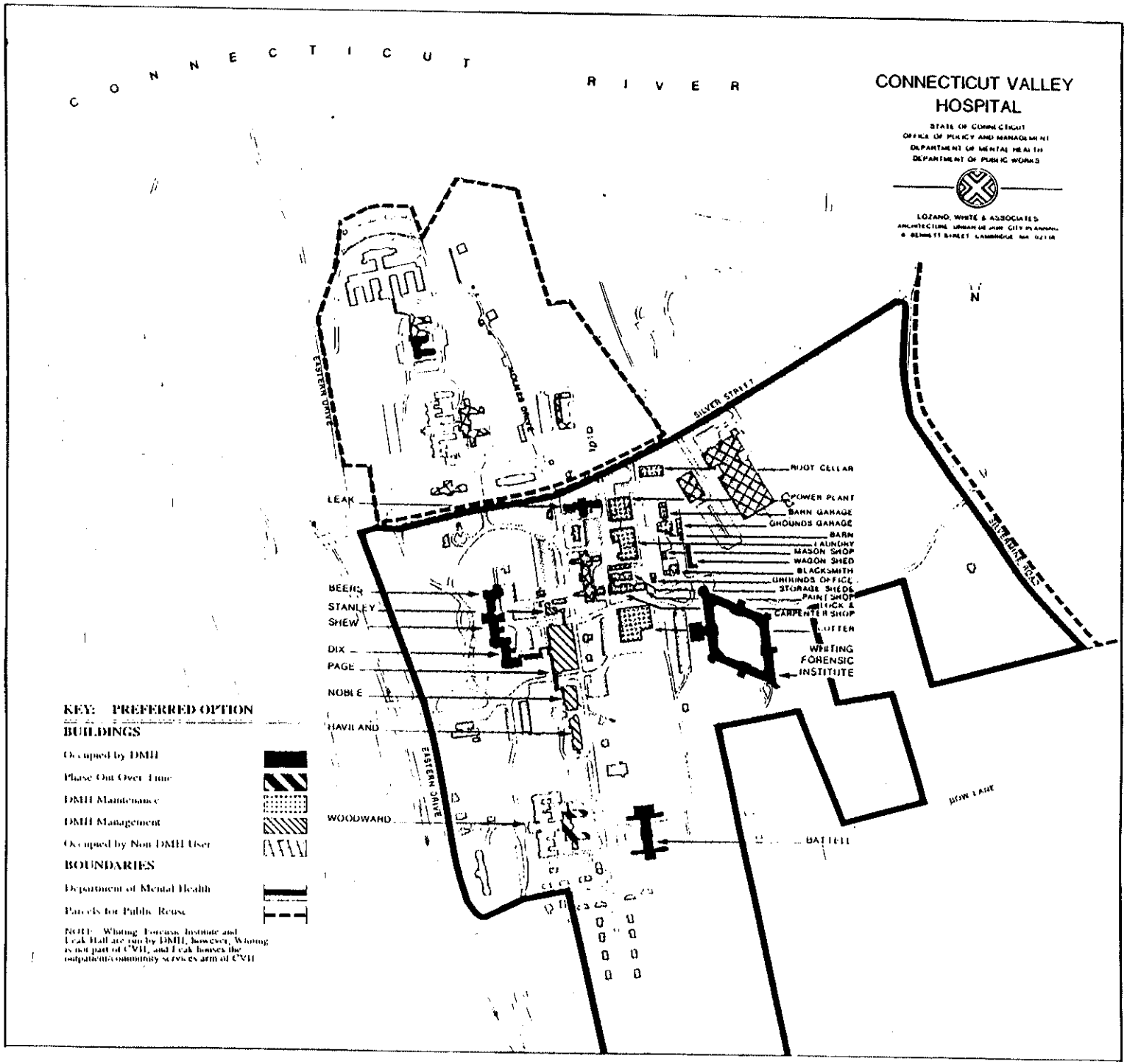


*Beers/Shew/Dix Hall(s)*
*Connecticut Valley Hospital*



*Battell Hall*
*Connecticut Valley Hospital*


LEAK
DMH
KENISTON
RECREATIONAL FACILITIES
DUTCHER
COURTYARD
NON DMH PUBLIC REUSE
MAINTENANCE
ANCHOR BUILDINGS
STANLEY
BEERS SHEW DIX
COURTYARD
COURTYARD
PAGE
WHITING FORENSIC INSTITUTE
NOBLE
HAVILAND
JOINT HOSPITAL AND COMMUNITY FACILITIES
RECREATIONAL FACILITIES
COURTYARD
WOODWARD
COURTYARD
PATIENT CARE (WARDS)
SHEPARD
BATTELL
STAFF HOUSING
N
SITE PLAN OF PREFERRED OPTION
CONNECTICUT VALLEY HOSPITAL


CONNECTICUT RIVER
CONNECTICUT VALLEY HOSPITAL
STATE OF CONNECTICUT
OFFICE OF POLICY AND MANAGEMENT
DEPARTMENT OF MENTAL HEALTH
DEPARTMENT OF PUBLIC WORKS
LOZANO, WHITE & ASSOCIATES
ARCHITECTURE URBAN DESIGN CITY PLANNING
9 BENNETT STREET CAMBRIDGE MA 02138
N
SILVER STREET
EASTERN DRIVE
ROOT CELLAR
POWER PLANT
BARN GARAGE
GROUNDS GARAGE
BARN
LAUNDRY
MASON SHOP
WAGON SHED
BLACKSMITH
UNKINDS OFFICE
STORAGE SHEDS
PAINT SHOP
BRICK &
CARPENTER SHOP
COTTER
WHITING FORENSIC INSTITUTE
LEAK
BEERS
STANLEY
SHEW
DIX
PAGE
NOBLE
HAVILAND
WOODWARD
BATTELL
BOW LANE
KEY: PREFERRED OPTION
BUILDINGS
Occupied by DMH
Phase Out Over Time
DMH Maintenance
DMH Management
Occupied by Non DMH User
BOUNDARIES
Department of Mental Health
Parcels for Public Reuse
NOTE: Whiting Forensic Institute and Leak Hall are run by DMH, however, Whiting is not part of CVH, and Leak houses the outpatient/community services arm of CVH

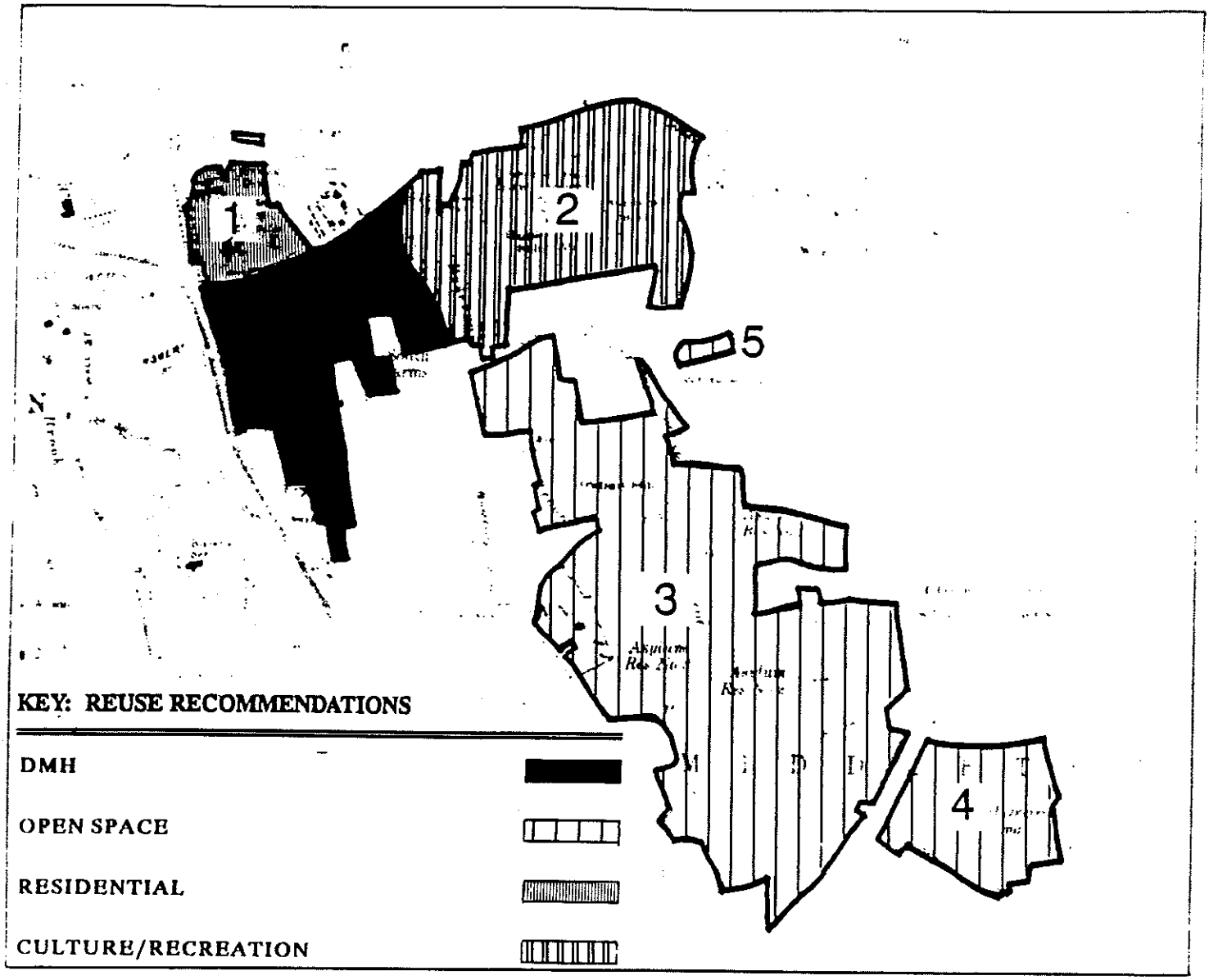
## 2. Recommendations For Reuse of Property in Excess of DMH Future Needs

**Recommended Reuse In Brief:** The primary result of this part of the Study was a set of recommendations identifying the reuse program that best fits the interests of the Department of Mental Health, the State and the local community. These interests were defined in terms of criteria for reuse. They are described in the report and can be summarized as being those which are compatible with the functioning of the psychiatric hospitals and are consistent with municipal, regional, and State goals.

The following reuses are recommended for the properties which, according to the premises of the Preferred Option, will be in excess of DMH future needs:

- Approximately 50 acres (Parcel 1) are recommended for residential use. The parcel designated as most appropriate for housing is the most dramatic site on the campus; its riverfrontage and hilltop location make for a potentially attractive and unique residential environment. A certain percentage of housing developed on this parcel should be set aside for former DMH clients. A planned approach to developing this parcel in conjunction with the City of Middletown and other State and regional officials is key. This approach must recognize that treatment facilities in this parcel (i.e. Merritt Hall) will continue to be needed for an indefinite period on time.
- Approximately 300 acres (Parcel 2) are recommended for reuse for cultural and recreational activities, including possible development of a museum of the history of the State of Connecticut.
- Approximately 665 acres (Parcels 3, 4, and 5) are recommended for preservation of open space. These parcels contain a number of reservoirs which provide the hospital with its water and represent a potential water source for the region. Additionally, they are adjacent to several existing nature conservancies, State forests, and other dedicated open spaces. Preserving these CVH campus parcels as open space would result in protecting the water supply and providing a significant expanse of continuous open space for the enjoyment of Connecticut residents and visitors.

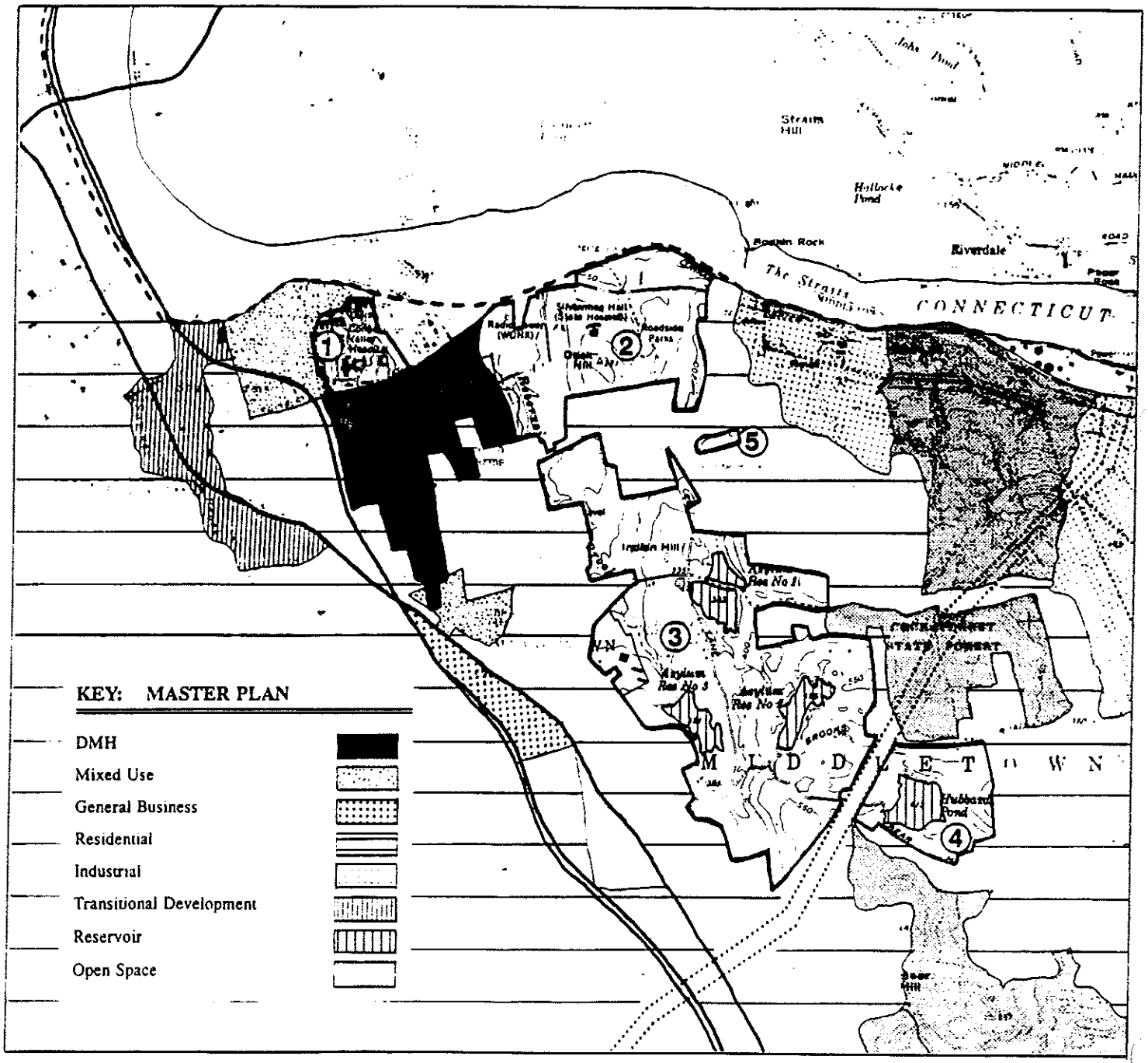
CONNECTICUT VALLEY HOSPITAL



## 3. Campus Master Plan

The following is a graphic representation of the recommendations which comprise the campus master plan. Chapter 5 of this document, which presents the master plan, provides specific recommendations for the utilization of each of the buildings on the campus. These include recommendations for mothballing and demolition of vacant buildings, and historic preservation of architecturally and/or historically significant buildings. Recommendations for "next steps" are provided both for the phasing of renovations of the consolidated DMH facility and for the implementation of reuse recommendations.

CONNECTICUT VALLEY HOSPITAL



# Table of Contents

# Introduction


## A. Purpose

This document summarizes the results of an extensive study of the three psychiatric hospitals in the State of Connecticut: Fairfield Hills, Norwich and Connecticut Valley Hospitals. This report was prepared as the final report of the Long Range Planning Study for the Facilities of the Department of Mental Health, and was conducted under contract to the Office of Policy and Management (OPM), and in association with the Department of Mental Health (DMH) and the Department of Public Works (DPW). This document summarizes the study and presents recommendations for Connecticut Valley Hospital; recommendations for Norwich and Fairfield Hills Hospitals are presented in companion documents.

Over the past few decades, mental health care has undergone a number of significant changes including changes in philosophies of care, radical changes in the larger health care system, changing treatment modalities, and related reductions in the patient population at DMH hospitals. Additionally, facilities currently used by DMH are generally 30-50 years old, and constructed in an era of ample energy and custodial care. Facilities must be radically altered to improve their quality and efficiency. The existing DMH facilities must be adapted to meet the demands of an evolving new role for the State hospitals within the context of a restructured mental health care system. Specifically, the goal of the Long Range Planning Study for the Facilities of the Department of Mental Health is to develop long range master plans or campus plans for the three hospitals.

The goals of the campus master plan are to provide guidelines for:

- consolidating the DMH facilities, converting them into modern and efficient psychiatric hospitals which will serve the needs of Connecticut well into the next century,
- reusing the properties which will be in excess of DMH future needs in such a way as to allow local, regional, and State needs to be met while respecting, and potentially benefiting DMH interests

A third related goal is that of integrating the campus with the surrounding community, thereby reducing the isolation and stigma traditionally associated with the property.

The campus master plan has numerous functions, including the following:

- to provide a flexible framework for decision-making
- to provide rational guidelines to direct future change
- to facilitate the optimization and efficient utilization of facilities
- to protect the interests of DMH as well as those of the State
- to direct capital expenditures towards programmatic needs

Campus plans were developed in order to guide facility development and use, over a twenty- year time period. The master plans are not intended to be taken as a detailed "blueprint" for the future of the DMH campus facilities, but instead provide a vision of the most desired future uses of the facilities, and an outline of steps to achieve these ends. Thus, the plans provide a logical framework with which to guide current and future change and investment.

Although this is a study of facilities, the initial analysis went far beyond fitting patients into buildings, services and users were carefully defined and conceived of in the context of the wider mental health system. Every option - including that of completely new facilities in different locations - was considered. The resulting proposals represent the most effective, desirable, and cost efficient alternative; they have been derived after conducting a thorough analysis of both local and system-wide conditions, and following an extensive process of developing and comparing options. Furthermore, the proposed plans are intended to be concepts, a vision of the future to be attained gradually within the recommended guidelines. They are not meant to be detailed architectural solutions, although they may be used as a guide during the design stage of implementation.

Existing facilities at the hospitals no longer meet DMH needs for a number of reasons. Significant changes in the philosophy of care, the regionalization of services, and the development of a community service system have had significant impact on the role of the hospitals. The three hospitals which are the subject of this study, were designed many years ago - two of them, almost a century ago. They were designed as self-contained institutions that provided long term care for most of the mentally ill who were under the State's care. The facilities were designed around a very different philosophy of care, that of providing custodial care. In the present, and increasingly in the future, the role of these State institutions will be that of stabilizing patients and preparing them for their return to community living. The physical environment of the existing facilities is not supportive of these therapeutic efforts and the goal of reintegrating patients into the community. The extreme lack of privacy for patients, the lack of spaces in which patients can be taught daily living skills, and the lack of comfortable and appropriate spaces in which patients can (re)learn how to interact with others, are just some examples of the deficiencies of the existing facilities. One of the main goals of this study is to ensure that DMH facilities are converted to environments appropriate for the role the State hospitals will play in the future. The recommendations for the renovation of existing buildings for the hospital of the future assume a total remodeling, which in no way resembles the facilities' present condition.

Another factor affecting the role of the hospitals now, and increasingly in the future, is that the hospitals are but one component of a system of care which includes a wide range of community-based programs. This system is predicated on treating each patient in the least restrictive setting possible, with increasing emphasis on providing treatment settings in the clients' home communities. This approach is consistent with trends across health care in general, in which hospital stays are briefer, and alternatives to hospitalization are emphasized.

In the future, as community services continue to be developed, the role of the State hospitals will be to provide acute inpatient services. Hospital services will emphasize acute, short term care for a small census of patients in need of psychiatric stabilization. Stabilization will typically occur over a relatively brief stay. Treatment programs which include the physical environment will be designed to provide state of the art psychiatric care. Long term care will continue to be provided for an interim period, until an adequate number of community services are developed.

The development of a community service system has also meant that a large number of patients previously cared for at the hospitals are now more appropriately served closer to their home communities. This, along with previous deinstitutionalization, has resulted in a dramatic decrease in the number of patients accommodated at the hospitals. This downward trend is expected to continue, as demonstrated by the accompanying chart (Table A). During the period of the "peak census" (1940-1955), the hospitals cared for approximately 3,500 patients each. Currently, each of the institutions houses approximately 450 patients; projections of future short term bed need are estimated between 380 and 440 (including a 20- bed "swing" or reserve ward) per hospital. If community services are fully developed in Connecticut, inpatient bed needs will be substantially lower.

## Table A. Hospital Inpatient Population

| | Fairfield Hills | Norwich | Connecticut Valley |
|---|---|---|---|
| Peak Patient Census (year) * | 4,200 (early 1950s) | 3,184 (1954) | 3,500 (early 1930s)<br>3,000 (late 1940s, early 1950s) |
| Current Patient Census ** | 460 | 450 | 450 |
| Projected Future Bed Need *** | 440 | 440 | 380 |

* The highest number of patients ever accommodated by the hospital.

** August, 1990 (approximate average over preceding 6 months)

*** Developed by DMH Central Office for facility planning purposes; including a 20-bed "swing ward" as reserve space if needed

Over the last few years, as a result of this dramatic decrease in the patient population, DMH has gradually reduced the amount of program space occupied on the campus, leaving a number of buildings vacant. This has resulted in an inefficient use of the existing facilities sometimes to the detriment of patients and staff. Additionally, there has been an encroachment of other, non-DMH users (for the most part other State agencies) into available buildings on the grounds.

The modernized, more efficient future DMH facility will require significantly less space than is currently occupied by the Department. This will result in an even larger number of vacant buildings. As DMH approaches a minority status on these campuses, there will be a need for criteria to guide the selection of future neighbors in order to protect DMH interests, as well as those of the State, to whom these properties ultimately belong.

Reuse planning for those buildings and lands which will be in excess of DMH future needs is an important component of the campus plan. These properties will no longer be needed by DMH as a result of modernizing and consolidating the DMH facility. First and foremost, recommendations for reuse will be in the interest of DMH clients for whom these properties were originally developed. Additionally, reuse strategies will focus on fulfilling municipal, regional, and State needs that are compatible with DMH needs. The campus was divided into "use zones" or "parcels", and specific recommendations for reuse were developed to provide a framework for future development. Lack of development (preserving open space) was a major objective of the recommendations.

The three DMH campuses are, collectively and individually, very important and beautiful State assets. The properties consist of a rich array of buildings, many of significant historic and/or architectural interest, which are prime real estate parcels, extensive usable land, and grand expanses of beautiful open land adjacent to nature conservancies or other preserved open land. It is very feasible to provide state of the art care to the mentally ill in modernized, consolidated facilities simultaneously meeting other public needs. In fact, new non-DMH uses can be introduced on the campus in such a way that they not only begin to "normalize" the activities located on the campus, but also provide direct benefits to patients, by providing housing, employment, and recreational opportunities.

Consistent with the purposes of the study enumerated above, was an additional goal: that of developing ways to "bring the community into the hospital," in order to reduce the isolation and stigma associated with these institutions. Although treatment of mental illness has improved significantly over the last few decades, the public's attitude towards mental illness has not. Therefore, an additional objective has been to identify uses that have the potential to "destigmatize" mental illness through contact with the community. This can be achieved by bringing the community to the hospital while simultaneously increasing the efficiency of facility utilization. Although the three hospitals are located no more than two miles from the center of a municipality, the hospital grounds, some 1,000 acres at each campus, serve to isolate the institutions by providing a large "green belt" buffer between the hospital and the surrounding community. Reuse recommendations attempt to fulfill the goal of increasing contact between the hospital and the community by recommending uses that act as an interface between the two. Some examples include recreational uses, cultural uses, residential uses, and employment opportunities which act to attract the general public to the campus property. By sharing facilities, and coming into closer contact with the hospital, residents of the surrounding communities will have the opportunity to enjoy the beautiful campus properties and possibly to develop a greater understanding of mental illness.

## B. Overview of the Study Process

The following is an overview of the study process of the Long Range Planning Study for the Facilities of the Department of Mental Health (DMH). The three hospitals -- Fairfield Hills, Norwich, and Connecticut Valley -- were studied simultaneously. The primary purpose of the study is two-fold:

1) to develop a facility plan for each campus which is consistent with program goals of the Department and which increases both efficiency and facility quality, and

2) to develop a master plan of each campus to guide reuse planning for those buildings and lands which, as a result of consolidating DMH facilities, will be in excess of the Department's needs in the future.

The study proceeded toward fulfilling this purpose by following a series of steps as depicted in the accompanying flow chart. These steps resulted in:

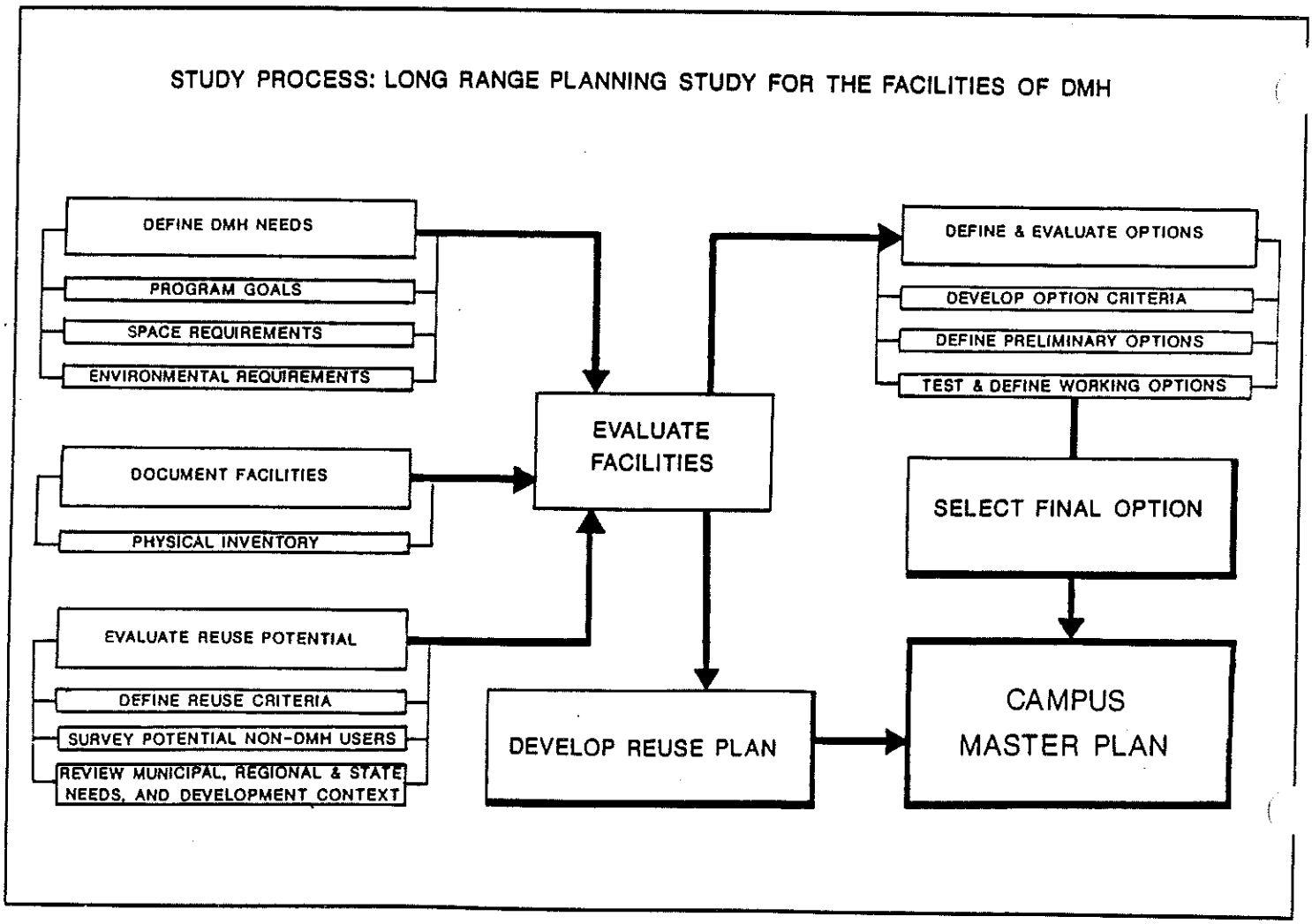
1) the selection of a Preferred Option for the future consolidated DMH facilities, and
2) a series of recommendations regarding reuse options for the buildings and lands in excess of DMH future needs, as based on the requirements of the Preferred Option.

Together, these elements form the Campus Master Plan.

The products of the study provide a database of information regarding existing conditions and recommendations, and a strategic framework, both for consolidating DMH facilities and for reuse planning. See Appendix A of this report for a list of study products.

## C. Summary of Methodology

The methodology involved several steps as depicted in the accompanying flow chart. These are briefly described in the following pages.

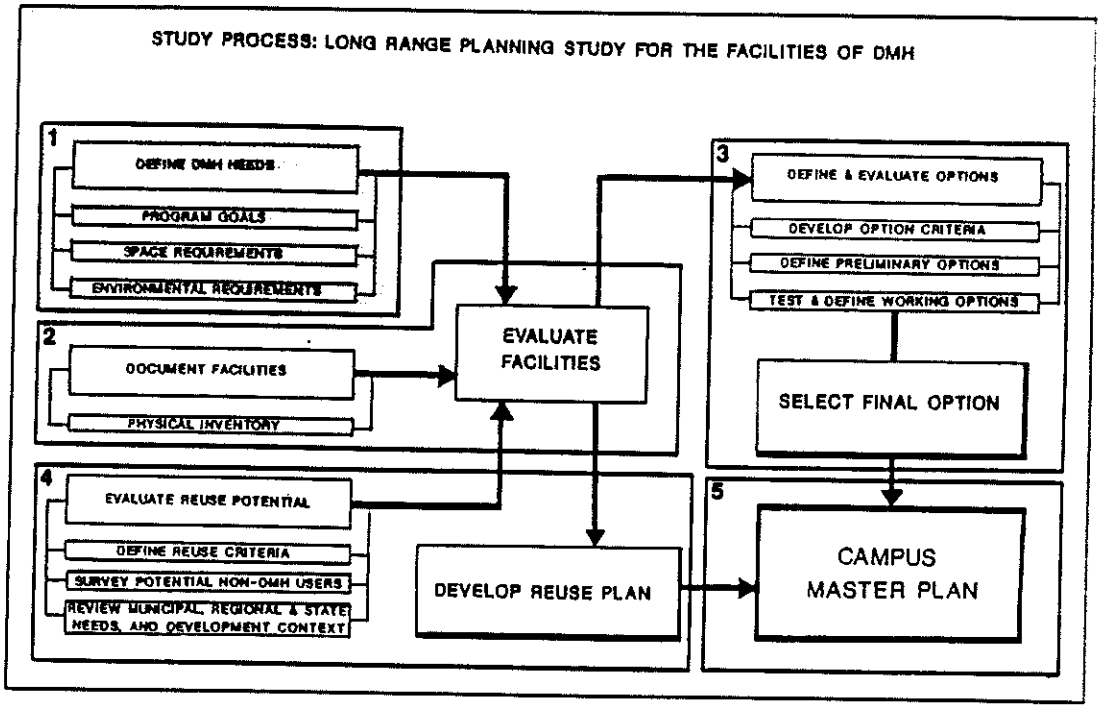


# CHAPTER 1: PLANNING CONTEXT

*"...the test... is not whether patients are being secured in locked buildings, but whether they are being given the benefit of care designed to improve their mental health."*

Wilhelmina Nolan, Director of Nursing Service, at a meeting with the Board of Directors, Fairfield Hills Hospital, 1947.

# Chapter 1: Planning Context




## Introduction

*The following chapter summarizes the planning context, the main assumptions and objectives set forth for this study. The formulation of study assumptions and objectives was completed under the direction of the three agencies involved in the study: the Department of Mental Health (DMH), the Office of Policy and Management (OPM), and the Department of Public Works (DPW). DMH policy assumptions were developed in conjunction with the DMH central office. The accompanying flow chart locates the chapter in the study process.*

*The chapter is divided into two main sections. The first describes the primary assumptions upon which the study was based and defines the future DMH programmatic needs. These are discussed under four headings: the State Mental Health Care System, Future Directions for the Three Campus Hospitals, Future Bed Need Projections, and Proposed Investment Strategy. The second section, Space and Environmental Requirements, sets forth a series of physical parameters which reflect future DMH programmatic needs.*

# Section 1.1. The State Mental Health Care System

Connecticut is New England's southernmost and second smallest state in area. With 5,009 square miles, and a population of approximately 3,200,000 persons, Connecticut is made up of 169 towns, including five major cities: Hartford, Bridgeport, New Haven, Stamford and Waterbury. In 1980, Connecticut ranked 25th in the nation in total population and 48th in land area, making it the fifth most densely populated state in the nation, with 80% of its population urban, and 20% rural. Connecticut has one of the fastest growing elderly populations in the country and, based on recent data, is the third highest state in the U.S. in terms of per capita utilization of inpatient psychiatric care.

## 1.1.1. Psychiatric Services in Connecticut

**The Mental Health System.** The Connecticut mental health system consists of a set of interrelated subsystems of both inpatient and community care. It includes State operated programs, programs supported by the State through grants, privately funded and operated programs (e.g. private psychiatric hospitals), services provided in health maintenance organizations and other managed care settings, and individual practices. The system includes a total of 35 inpatient care facilities, including State operated psychiatric hospitals, acute care general hospitals, and private psychiatric hospitals.

Within this system, the Connecticut Department of Mental Health (DMH) operates and/or funds a variety of programs at the State, regional, and local level. In general, the DMH system serves the neediest mentally ill individuals in the State, and acts as backup to private sector care.

DMH is statutorily charged with the care and treatment of mentally ill adults in both inpatient and community-based settings. The target population for its services emphasizes individuals who are poor, particularly:

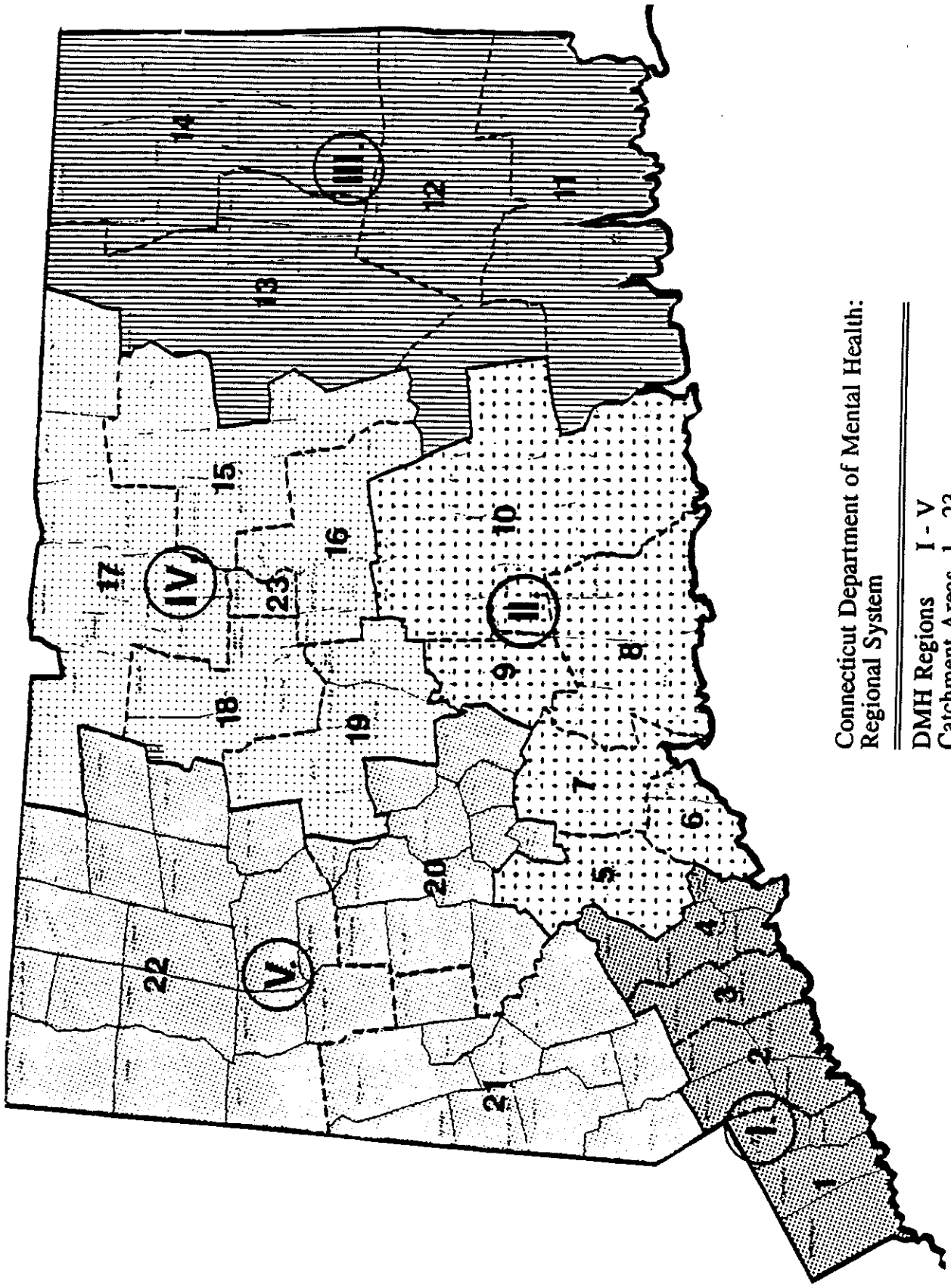
- persons at risk of hospitalization who are unable to obtain care in the private sector;
- individuals with prolonged mental illness and a history of psychiatric hospitalization who are medically indigent.

> *"DMH attaches a priority to the delivery of services to individuals with severe and disabling psychiatric conditions, who are poor, at risk of hospitalization, and those with a history of psychiatric hospitalizations".*[1]

**The State System.** Connecticut is divided into five mental health regions (see map entitled "Regional System"). This structure provides the context for the development, direction, and coordination of all State sponsored and operated mental health programs and services within the respective regions. The Regional Directors have supervisory responsibility for all department- operated facilities, except for the Department's statewide forensic program.

The regions are divided into 23 catchment areas which incorporate the State's 169 towns. Each region has a regional Mental Health Board and each catchment area has a Catchment Area Council with membership representing cities and towns. These advisory groups assist in planning and resource allocation decisions.

(1) "Governor's Blue Ribbon Task Force on Mental Health Policy", Interim Report, April, 1983.




Connecticut Department of Mental Health:
Regional System

DMH Regions I - V
Catchment Areas 1 - 23

The regional structure is designed to integrate all of the components of publicly funded mental health care into a single regional system and to supervise DMH operated facilities. Along with DMH operated facilities, services are funded through approximately 158 grants and contracts with community agencies. Community support and psychiatric services include crisis intervention, outpatient, residential, vocational, rehabilitation, partial hospitalization and an expanding case management program to provide coordination of services throughout the system.

## 1.1.2. Goals of the State Mental Health System

In 1983 the Governor's Blue Ribbon Task Force on Mental Health Policy made a series of recommendations which established the direction toward which the State's mental health system was to evolve. The following summarizes the general goals which DMH has set for the development of a comprehensive service system.[2]

- Development of a *balanced service system*, which provides cost-effective mental health in the most appropriate, and the least restrictive settings available;
- Provision of a *continuum of care* available to patients so that they may be returned to full and productive lives as soon as possible.
- *Expansion of cost-effective community services* in order to provide a complete array of services.
- *Integration of inpatient care* into the balanced service system.

The Department's strategy to achieve these goals emphasizes local development of a **managed service system** of community-based programs, with available and integrated inpatient services. The Department intends that local managed service systems:

- offer clients clear access to a full array of coordinated services
- be accountable for services
- adequately provide for a diverse set of individual needs.

In the past, delivery of mental health services depended almost exclusively on hospital based care at one of the State's psychiatric hospitals. In FY83, inpatient care consumed 77% of the DMH budget, and community services were negligible. In Connecticut, as elsewhere in the U.S., the mental health system has undergone major changes in recent years. Among the most significant of these changes has been the expansion of community-based mental health care. Consistent with the goals stated above, the State of Connecticut has been expanding services in less restrictive settings, designing treatment programs for shorter lengths of stay, and providing a range of outpatient services. From 1984 to 1988, Connecticut expanded community services dramatically – although there are still major gaps in the system. This growth enabled reductions of inpatient care. By FY91, inpatient care consumed 51% of the DMH budget. DMH intends to continue this development until a fully mature managed service delivery system is in place.

(2) "Governor's Blue Ribbon Task Force on Mental Health Policy." Interim Report. April, 1983, p. 8.

### 1.1.3. Inpatient Care in the Managed Service System

The fourth system-wide goal deals with integrating inpatient care, more specifically, state hospital inpatient care, into the balanced service system. Inpatient care is the focus of this study. Psychiatric inpatient services provide:

> *"a structured setting within which therapeutic interventions are possible for disturbed individuals whose illness precludes ambulatory treatment... Hospitalization may be considered for an individual in the face of difficult diagnostic questions, when it is necessary to give specialized treatment, and when it is necessary to protect the patient and society from the effects of the illness."*[3]

Specifically, the Long Range Planning Study focuses on the roles of three major DMH facilities: Connecticut Valley Hospital, Norwich Hospital, and Fairfield Hills Hospital. These hospitals provide the bulk of inpatient care in DMH, and are among other DMH facilities, including four community mental health centers (the Connecticut Mental Health Center, the Greater Bridgeport Community Mental Health Center, the Capitol Region Mental Health Center, and the F.S. Dubois Center); Cedarcrest Regional Hospital (a regional inpatient facility); and Whiting Forensic Institute for the mentally ill offender.

DMH intends that the future primary role of these hospitals will be to provide specialized psychiatric inpatient services. The hospitals, however, will have a second role as well. Although community services are increasing, they are not yet adequate to meet demand. Therefore, some individuals who could be discharged to less restrictive care settings if they exist, must be accommodated in State inpatient facilities. Despite recent progress in building community services, Connecticut's levels of State psychiatric inpatient care are the highest in New England. Thus, for some time, the three hospitals must continue to provide some facilities for patients who could be better served by community-based programs. This is a balancing act requiring moderate cost for interim improvement of facilities which should not be needed in the long run.

(3) "Five Years of Progress: Accomplishments in the Mental Health System 1981 - 1986". Connecticut DMH, p. 8.

# Section 1.2 Future Directions for the Three DMH Campus Hospitals

> *"The Community Mental Health Centers Act of 1963 signaled the official opening of the era of community care of the mentally ill. This 'bold new approach' accelerated deinstitutionalization of mentally disabled persons. Before deinstitutionalization, most individuals with chronic disorders were admitted to State hospitals, where they generally remained for life. They constituted an essentially static population pool that changed primarily as the result of new admissions and deaths. Providing care was relatively simple because virtually all services were within a single physical setting and under a single authority."* [4]

As previously discussed, mental health services are no longer provided under one roof but through a complex system of community based and hospital based care. The ultimate role of the State's hospitals will be to provide care only for those patients for whom hospitalization is essential. These patients will be fewer in number and their stays in the hospital will generally extend for weeks or months rather than years.

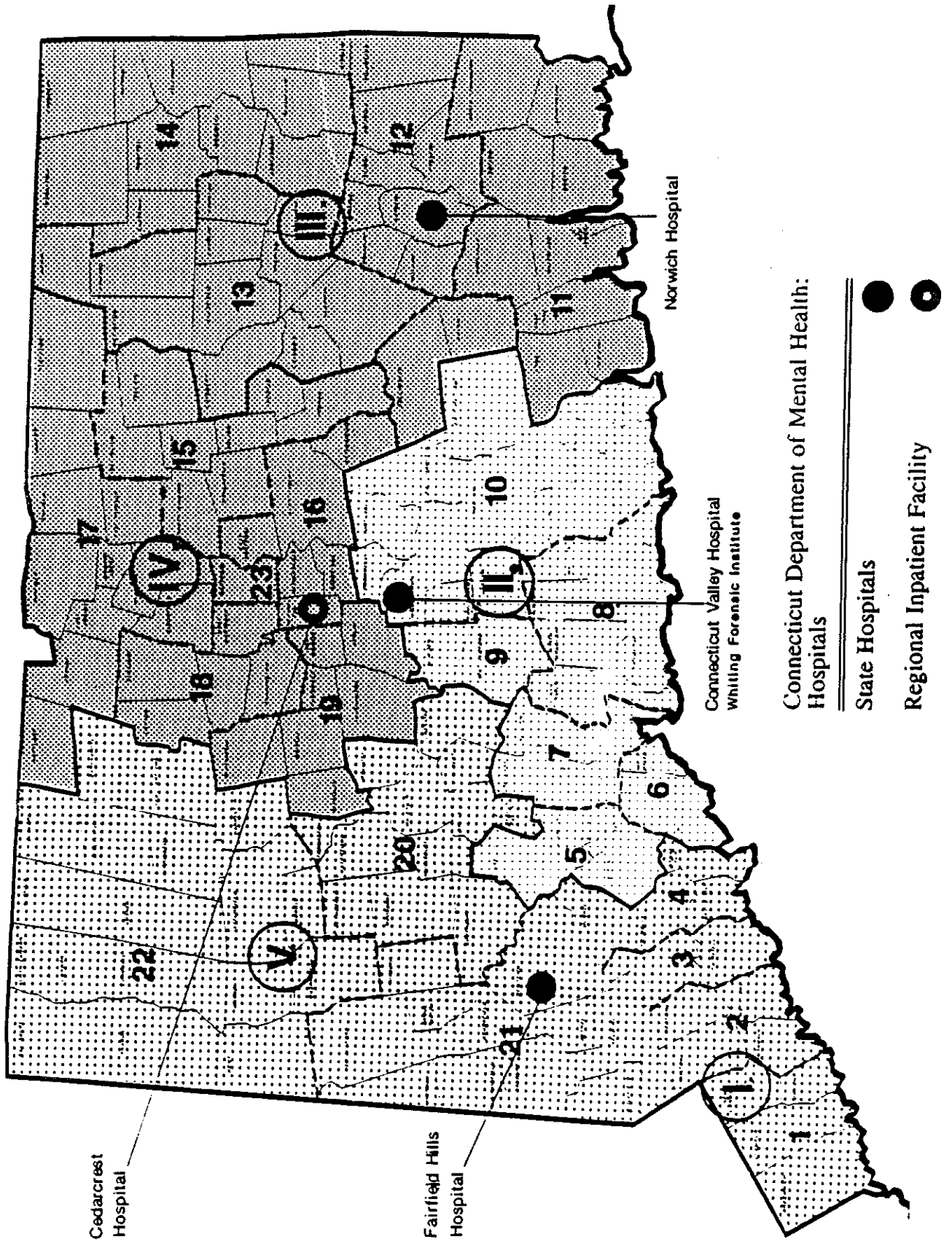
## 1.2.1. Future Role for the State Psychiatric Hospitals

The three large State psychiatric hospitals in Connecticut are: Fairfield Hills Hospital in Newtown; Norwich Hospital in Norwich; and Connecticut Valley Hospital in Middletown (see accompanying map). These State hospitals are campus-type, self-contained facilities, with numerous buildings and extensive acreage. These hospitals once comprised the entire DMH system of mental health care, each containing approximately 3,500 patients. Over the past thirty years, the number of patients in these institutions has decreased from a total of over 10,000 to approximately 1,500 in 1988. New treatment modalities, a philosophy of care favoring less restrictive settings, and the development of community-based mental health programs have been responsible for the decrease.

In the future, the hospitals will play a more focused and specific role within a managed service system. This future role is comparable to the role of a general hospital or medical center in the larger health care system. The hospital is a resource for expert diagnosis and intense stabilization. Most extended recuperation and recovery takes place outside the hospital. Reliance on the State hospitals for long term treatment of the mentally ill should decrease as managed service systems develop. For the immediate future, there will remain a group of patients for whom there is no appropriate community service available. Hospitals will therefore provide "back up" to community services, a role that is expected to diminish over time.

The desired role of the hospital is to provide high intensity and generally short term treatment for individuals who are unable to obtain private care, who are a danger to themselves or others and/or gravely disabled as a result of a psychiatric disorder. This role is consistent with the goal of decreasing inappropriate hospitalization, especially for long-term care, while simultaneously providing appropriate hospital-based care in "state of the art" psychiatric hospitals for acutely ill patients for whom hospitalization is timely, necessary, appropriate, and helpful.

(4) "Governor's Blue Ribbon Task Force on Mental Health Policy." Interim Report. April 1983, pp. III-7.


Connecticut Department of Mental Health:
Hospitals
State Hospitals
Regional Inpatient Facility
Norwich Hospital
Connecticut Valley Hospital
Whiting Forensic Institute
Cedarcrest Hospital
Fairfield Hills Hospital
I
II
III
IV
V
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

## 1.2.2. Programmatic Goals for the State Psychiatric Hospitals

The State psychiatric hospitals, which are the subject of this study, will be changing in the future. The future role of the hospitals will be to provide three basic services: 1) Evaluation and Brief Treatment (EBT), 2) Intermediate Treatment (IT), and 3) Long Term Care (LTC). Additionally, each hospital will provide accommodations for patients in need of medical psychiatric services as part of the EBT services. Generally, Evaluation and Brief Treatment services emphasize intensive diagnosis and evaluation, and initiation of various therapies with the goal of stabilizing symptoms of mental illness. Intermediate Treatment (which may last for weeks, or may even extend to periods of many months) will emphasize alternative therapies for individuals whose symptoms are not quickly stabilized, and who remain so disorganized or at-risk that their treatment in community settings remains impractical. Long Term Care refers to the maintenance and rehabilitation of people whose predominant needs are long-term in nature, such as learning community living skills. Current psychiatric thinking emphasizes that virtually all individuals with these needs profit most from community treatment -- which may be quite intensive. The ultimate goal of the DMH is that eventually the hospitals will only provide Evaluation and Brief Treatment and Intermediate Treatment services of variable duration. Long term stabilized patients will eventually be transferred to more appropriate and generally less costly community settings.

**"State of the Art" Care.** As noted above, the primary role of the hospital will be to provide services to patients who require hospitalization due to their state of acute mental illness. For patients in need of medical stabilization, DMH intends to secure the best possible environments for the most needed type of treatment, in a "state of the art" hospital. Again, this type of inpatient care is analagous to that provided by modern medical centers.

The provision of "state of the art" care is dependent upon a number of factors ranging from staffing patterns, to quality assurance reviews, to contemporary treatment modalities. Psychiatric care will be provided in a safe and therapeutic environment; the living environment, particularly the ward, will be conceived of as an integral part of therapy. Since Evaluation and Brief Treatment and Intermediate Treatment are the treatment priorities which will comprise the eventual core hospital, and since the hospitals were not designed to provide such services, renovations to these areas are likely to require the highest level of funding.

**Long Term Care.** As previously noted, the Department's goal with regard to Long Term Care patients is to develop appropriate, structured community support alternatives. However, in the interim period until adequate community services are developed, hospital facilities will be modestly improved to accommodate them and to facilitate their rehabilitation and discharge. These patients will require rehabilitation services since they are disabled by their mental illness and are in need of learning or relearning activities of daily living. Therefore, existing rehabilitation facilities will be preserved and, if necessary, improved.

## Three Basic Goals

DMH's three basic programmatic goals for the State mental health hospitals are:

- To provide short-term *"state of the art" psychiatric care* in a psychologically safe and therapeutic environment. In providing this care, to be referred to as *"Evaluation and Brief Treatment"*, the living environment, particularly the ward, will be considered an integral part of therapy. Psychiatric stabilization will be the first treatment priority.
- To provide *intermediate level treatment* for patients with moderate to high degrees of psychoses. Patient stays will be variable, generally measured in a few weeks to a few months. Treatment will be primarily medically oriented; some rehabilitative service will also be provided.
- To provide *long term care* for low functioning patients for whom community placement is appropriate, but currently unavailable. The hospital's role in providing such care will be as "back up" to the State mental health system, and should be largely phased out as preferable alternatives are developed.

### 1.2.3. Treatment Services

The hospitals will provide three basic services to meet the three programmatic goals as outlined:

1. **Evaluation and Brief Treatment (E.B.T.):** E.B.T. consists of intensive, medically based diagnosis, evaluation and management of patients in acute episodes of mental illness. Treatment is short-term -- generally with a maximum stay of 30 days -- and primarily consists of medication, and supportive therapies with a goal of stabilization. If initial attempts at stabilization are not successful, and further attempts are required, patients may be transferred to an Intermediate Treatment (I.T.) ward. The acute care setting should provide a safe and secure environment for stabilizing patients in crisis. Wards should be self-contained and somewhat separate from the treatment settings of the other patients. Patients in need of Evaluation and Brief Treatment will spend most of their day on the ward, where their behavior will be monitored by staff and treatment will primarily consist of medication.

2. **Intermediate Treatment (I.T.):** I.T. wards will provide intensive treatment for periods of, generally, a few weeks to a few months. Patients to receive Intermediate Treatment will have continuing high levels of symptomatology and variable levels of disability. These patients will need continued intensive medical management, as well as training for social and daily living activities. They will be prepared for community living.

3. **Long Term Care (L.T.C.):** Long Term Care services are for people with significant degrees of disability, whose major needs are for rehabilitation. The majority of patients in Long Term Care have functional impairments, and most are older in age with chronic symptomatology, most often accompanied by high levels of disability. The treatment milieu for Long Term Care should differ from acute care settings. There should be a priority on homelike environments. Ideally, these patients should not be in the hospital at all and the goal for the future is to find appropriate placements for them in the community.

# Section 1.3. Future Bed Need Projections

Projections of future bed need were developed for the three types of services defined above. Bed need projections refer to the number of patients to be accommodated at the hospitals over the next twenty years. The bed need projections are used to determine the number of wards per hospital, based on a consensus that the best care is delivered when no ward has more than 20 beds, and therefore, the estimated bed numbers were rounded to multiples of numbers of beds per ward.

In making these projections, the DMH Central office anticipated that the long range focus of the hospitals will be to provide Evaluation and Brief Treatment Services as previously described. The Department also recognized that some patients requiring both Intermediate Treatment services as well as Long Term Care, will need to be accommodated by the hospitals, even over the long run. A more comprehensive description of the bed need methodology is provided in the *Task 1 Report* of the study.

## 1.3.1. Uncertainty

As previously noted, it is inevitable that there is uncertainty regarding the patient bed projections. The design of hospital facilities must thus proceed with some degree of flexibility within and among buildings. Not only is there uncertainty about the timing and funding of community mental health programs, but there are also unknowns about future advances in mental health care technology.

Nevertheless, several degrees of uncertainty can be isolated and incorporated into the planning process. The least uncertainty surrounds the projections for acute care (E.B.T.). Provision of such care is to be the hospital's core function, as part of the DMH managed service system. The number of beds needed to provide such care is relatively small and can be identified fairly accurately.

It is more difficult to predict the need for Intermediate Treatment (I.T.). New treatments (primarily medication) could be developed for patients currently unable to successfully respond to treatment, and population trends as well as trends in the larger health care system can affect the need for these services. I.T. programs are, however, a moderately high priority.

Even more uncertain are projections of the need for Long Term Care beds. While community based care is the goal of DMH, the extent to which such programs will be developed is difficult to predict, because it is dependent upon future funding and other unknown factors. Over the long term, these services should be provided in alternative settings.

## 1.3.2. Planning Assumptions

Taking the various levels of uncertainty into account, the following planning assumptions can be made:

- Evaluation and Brief Treatment (E.B.T.) *will* be provided by the hospitals for a small but defined number of patients. Facilities plans *must* meet these care needs.
- Intermediate Treatment (I.T.) will *likely* be provided by the hospitals. Facilities will probably be required for these needs.
- Long Term Care (L.T.C.) will certainly be provided by the hospitals, in the short term, but will probably not be provided in the long term. The primary uncertainty

is how long these services will need to be provided on an inpatient basis. Some facilities will be needed to accommodate these patients' needs at the hospitals, until adequate community-based facilities are developed.

The *most likely* scenario will be to develop the projected numbers of E.B.T. and I.T. beds. *Less likely*, but *ideal*, would be very substantial early development of community services, leading to a residual inpatient need for the projected number of E.B.T. beds alone. Also *less likely*, but highly *undesirable*, will be the total of projected E.B.T., I.T., and L.T.C. beds. Some expansion of community care is both desirable and likely over the next five to ten years.

Table 1-1 presents estimates of the number of beds projected to be needed at each of the hospitals in the future. The number of wards is based on the assumption that there will be twenty patients per ward. The number of wards are later used to estimate the required amount of square footage for each hospital.

## Table 1-1 Future Bed Need Projections

*Fairfield Hills Hospital*

| Type of Ward | Number of Patients | Number of Wards Needed |
|---|---|---|
| Evaluation & Brief Treatment | 120 | 6 |
| Intermediate Treatment | 180 | 9 |
| Long Term Care | 120 | 6 |
| Medical Psychiatric | 20 | 1 |
| **Total** | **440** | **22** |

*Norwich Hospital*

| Type Of Ward | Number of Patients | Number of Wards Needed |
|---|---|---|
| Evaluation & Brief Treatment | 100 | 5 |
| Intermediate Treatment | 200 | 10 |
| Long Term Care | 120 | 6 |
| Medical Psychiatric | 20 | 1 |
| **Total** | **440** | **22** |

*Connecticut Valley Hospital*

| Type Of Wards | Number of Patients | Number of Wards Needed |
|---|---|---|
| Evaluation & Brief Treatment | 80 | 4 |
| Intermediate Treatment | 200 | 10 |
| Long Term Care | 80 | 4 |
| Medical Psychiatric | 20 | 1 |
| **Total** | **380** | **19** |

Note: The number of Evaluation and Brief Treatment wards includes 20 beds as "swing" or reserve space.

# Section 1.4. Proposed Investment Strategy

The services and care that will be provided in the future to patients at the hospital, together with needs of the projected numbers of patients, constitute the Program of Services to be accommodated at the State hospitals. DMH's objective is that these services and care be provided at the highest level for core patients which will be those patients suffering from acute episodes of mental illness and will be treated in Evaluation and Brief Treatment settings. It is also DMH's objective that all other patients be treated in the community. However, until suitable community placements are available to all those for whom this is appropriate, Intermediate and Long Term Care must also be accommodated at the State hospitals.

As previously discussed, major investments will be needed to create the environment required to deliver the future inpatient services which DMH desires to provide. At the same time, the hospital now cares for other long term patients – who should be in community settings – and not in hospital facilities. Given the degree of uncertainty inherent in the planning process, the following strategy is proposed:

- As a first step, humanize the environments for patients in Long Term Care at modest or no cost. High priority would be to implement measures to improve quality of life, making areas less institutional, and providing privacy.
- Devote significant resources to construction and/or renovation of environments in which the core inpatient evaluation and treatment services can be provided in first class, "state of the art" settings for Evaluation and Brief Treatment and Intermediate Treatment of patients requiring medical stabilization. These facilities will constitute the State hospital of the future. If possible, this program should be accommodated in a single building on each campus.
- Make no major investments in capital-intensive Long Term Care facilities (i.e. expensive recreational facilities) because these services should be provided in community settings. The patients for whom hospitalization is appropriate will be at the hospitals for very short periods of time and require medical stabilization rather than rehabilitation.

As indicated above, the actual renovation/investment plans should consider the facility options available on each campus. In particular, building configurations and costs should be considered in the final decision about renovation levels. Thus, if a prime/core building would accommodate a somewhat higher or lower level of beds than the clinical planning indicates, this fact should be considered.

# Section 1.5. Space and Environmental Requirements

As mentioned earlier, the provision of "state of the art" treatment, a major goal for the future DMH facilities, is dependent upon a number of factors ranging from staffing patterns, to quality assurance reviews, to contemporary treatment modalities. As the focus of this study is facilities planning, state of the art care was translated into physical terms. The patient care environment is to be conceived of as an integral part of therapy.

Space and environmental requirements were developed to evaluate the suitability of existing buildings at the campuses for use by DMH, and to subsequently develop options for future DMH facilities. Consistent with the purposes of this study, buildings were evaluated as to the availability of the required amount of space for housing DMH functions, and as to the suitability of the types of spaces vis-a-vis DMH's program requirements.

Program needs as defined in the first task of the study, and summarized in the previous section of this chapter, were translated into spatial requirements. These requirements include both quantitative and qualitative information. Space programs define the amount and type of space necessary to accommodate programmatic needs. Utilization needs (i.e. patient census and profiles), and functional programs (i.e: types of services and the way in which they will be provided) are translated into the types of spaces that are necessary and the amount of square footage needed to accommodate both persons and activities.

Programmatic goals are further translated into environmental requirements which describe the qualities of spaces. These include guidelines for providing the appropriate amount of space, scale, grouping of compatible uses, and other such characteristics.

These requirements then describe the quantities and qualities of space needed to provide the three types of patient care services defined in the program statement, and the associated support services necessary for the operation of the hospital. They are summarized in the following pages and are provided in full in the *Task 3 Report* of this study. Quantitative space requirements are provided for Connecticut Valley Hospital, which will be the focus of the remainder of the report. Environmental requirements are generalized for all three hospitals.

## 1.5.1. Environmental Requirements

An important step in specifying the physical needs of the hospital (e.g. building and land areas) is to define the environment that will be required in carrying out the hospitals' functional program. The hospitals' physical environment should be compatible with the philosophy of care to be provided; it should be adequate to support staff in their efforts to provide therapy, stabilize patient crises, and teach patients activities of daily living.

The environments in which patients eat, live, and sleep are part of treatment and rehabilitation. Patient wards, the heart of the hospital, should be humane, pleasant, safe, offer privacy, and facilitate patients' recovery from illness and the disability caused by their illness. The patient care environment should be one of a hospital, and the environment should be considered as an integral part of therapy, supporting the hospital's functions.

The following outlines a set of guidelines for a therapeutic and humane living environment for patients. These parameters will be the basis for recommendations for future

improvements to be made to the patients' living environments. The parameters also serve as the basis for the space program.

## A. Inpatient Wards

At present, patients spend the majority of their time on the wards for most of their stay at the hospital. Although the hospitals' goals include increasing patient access to other environments, especially for Intermediate and Long Term Care patients, the ward remains their primary living environment. The environment in which patients eat, live, and sleep should be considered as part of treatment and rehabilitation. Patient wards should at the very least be humane and facilitate patients' recovery from illness. Wards should be of human scale and provide some sense of privacy while taking safety and security issues into account.

Each ward should accommodate no more than 22 patients and no less than 16; the ideal ward population is 20 patients. Wards should be self-contained, with a minimum of shared spaces, and should provide single and double-room sleeping accommodations almost exclusively. Wards should accommodate a patient population of both genders, and therefore, provide adequate bathroom facilities to support this goal.

The ward environment should be designed to support the specific therapeutic functions of each particular service. However, the design parameters should not exclude the possibility of a particular ward being used for a service or population group other than that for which it was originally conceived. Therefore, the overall ward environment should allow for flexibility and should account for possible future change. The following general guidelines apply to each service:

- The environment of **Evaluation and Brief Treatment** wards should be a setting for medical treatment; they should be safe, psychologically comfortable, and facilitate patient stabilization and recovery. It is expected that EBT patients will spend most of the day on the ward under staff supervision.
- The environment of **Intermediate Treatment** wards should afford support, and encourage the (re)learning of social and other daily skills and activities. Rehabilitation facilities should be provided on the ward, within the patient care building, and in other locations, both on and off campus.
- The environment of **Long Term Care** wards should be comfortable and humane. This should be achieved at minimum cost, as eventually these patients will be transferred to community settings more appropriate to their needs. Major improvements should not be undertaken for these wards because they will only be used in the interim until community services become available. At that time, this service will be phased out. During this interim period, however, the main focus of Long Term Care wards should be the preparation of patients for community living.
- The environment for wards with a **geriatric** population should support all the activities that a ward with younger patients affords, with the following additional requirements:
    - all spaces must be handicap accessible
    - higher levels of staffing should be accommodated
    - a higher number of contiguous bathrooms are necessary
    - it is desirable that geriatric wards be located on the ground floor with access to secure outdoor areas, such as secure courtyards.

## B. Rehabilitation Services

The second DMH programmatic goal that affects facility planning and design is that of providing rehabilitation services in preparation for community living. Rehabilitation relates to programs, activities, and other measures used to reduce the extent of disability due to mental illness. Included in these are life activities such as self care, family relations, interpersonal relations, education, recreation, employment and vocational activities. In effect, rehabilitation constitutes the sum of activities which a patient undertakes during the day, and in the broadest sense, also includes the living environment which supports these activities.

Generally speaking, rehabilitation services will be directed in two ways, depending on the type of patient and medical priorities:

- **Stabilizing psychosis of acute patients** (the focus of the hospitals in the future). There will be minimal rehabilitation services and facilities provided to those patients suffering from acute illness (i.e. E.B.T. and high- functioning Intermediate patients). These patients are more in need of medical stabilization than they are of rehabilitation. They have a very short length of stay and must be closely monitored. They will spend most of their day on the ward and are under recovery from stress-related symptoms.
- **Rehabilitation of long-term patients** (interim population). The long term patients, although they eventually will be placed out of the hospital, are to receive a full program of rehabilitation. These patients have longer lengths of stay and are less able to cope with everyday life activities because of their illness or because of loss of skills. Mental illness has become a disability for them. Rehabilitation services will respond to the patients' specific disabilities and focus on teaching coping mechanisms.

### 1. Policy Assumptions

DMH policy assumptions regarding rehabilitation are as follows:

- Adults with psychiatric disabilities can lead productive lives and make significant contributions to the communities in which they live. They should be given the opportunity to do so.
- The mental health service system must provide consumers with choices regarding the services they utilize. Meaningful choice means that consumers are given viable alternatives based on accurate information regarding clinical services, housing, employment and social activities.

The organizing assumptions are that persons with psychiatric disabilities:

- have the potential to grow and develop
- have the capacity to (re)learn skills
- can assume increasing responsibility for their own lives
- should be encouraged to be involved in, and eventually assuming responsibility for, planning and implementation of all treatment/ rehabilitation interventions
- will require a variety of supports and services of varying intensity and duration in their respective communities

Relationships - how to form them, how to keep them, how to make them increasingly meaningful - are at the core of a psychosocial rehabilitation approach. The environment needs to be supportive of forming and retaining relationships.

## 2. Goals

More specifically, these principles imply the following goals for rehabilitation programs at the hospitals:

- **Accessibility.** Rehabilitation programs must be available to patients in all stages of their treatment. Whenever possible, patients should leave the ward, their building, and the hospital grounds for rehabilitation programs. However, for patients who are confined to campuses throughout the day, or for portions of the day, rehabilitation programs must be provided on DMH campuses. Such programs should be closely related to and coordinated with community programs.

- **Maximization of Choice.** In order to support choice for patients, they must have ready physical access to the variety of rehabilitation programs. In this way, patients can independently participate in choosing programs and go to them. Thus, access must meet appropriate security requirements.

- **Range of Rehabilitation and Treatment Alternatives.** A wide variety of program alternatives must be provided, including vocational training, living skills, education, leisure activities, exercise, recreation, and social activities. This includes providing work-oriented activities. Employment-related activities are therapeutic for patients- they help patients develop marketable skills, raise the patients' self esteem, and teach patients the responsibility of earning money, as well as providing them with the enjoyment of having money to spend.

- **Continuum of Spaces.** Each hospital needs to reconfigure both their indoor and outdoor spaces so that a continuum of options is provided from on the ward, to within the building, to immediately adjacent to the building, to the entire campus, to the community.

- **Consolidated Activities.** Creating centers of mixed use has long been an established maxim in city planning because mixed uses attract larger numbers of people. This renders such centers safe, provides weather protected environments for socializing, people-watching, and most of all, provides a range of accessible choices. Indoor activities should be consolidated at each hospital in a centrally located, mixed use area, comparable to an atrium in a modern hotel.

- **Developing Relationships.** In order to develop relationships, patients must live in an environment conducive to interaction, in small groups akin to the size of large families or households. In addition, they should have the opportunity to associate with people other than those with whom they live, such as other patients, people from the community, etc. This also implies the need for social centers on and off the campus grounds.

The following is a list of additional requirements, presented in the form of directives, and illustrative examples, for the patient environment in DMH facilities. More specific parameters are provided in the *Tasks 1 and 3 Reports* of this study.

## C. Patient Environment

1. *Include all the necessary spaces and facilities needed to accommodate programmatic functions.* An appropriate range of spaces where well-defined activities take place is necessary. Examples include providing:
   - staff offices, an interview room and a conference room on the ward
   - kitchenettes and laundry areas on wards for teaching daily living skills and facilitating patient independence
   - a variety of spaces of different sizes for group therapy, meeting, and visiting on or with direct access from wards
   - seclusion rooms and quiet or "time out" spaces on wards
   - single occupancy bedrooms to be used for patients in crisis
   - double occupancy bedrooms for patients to learn skills required for living with a roommate, their most likely living arrangement following discharge
   - satellite physical therapy spaces, easily accessible from wards, especially to geriatric patients
   - dining areas on the wards for patients in crisis, and for all other patients, within patient care buildings

2. *Provide spaces with a scale appropriate to the activities and functions accommodated.* Hospital environments should be of human, rather than inappropriately large and institutional scale, so that patients may receive more individualized care. Patients should feel the comfort level supported by the appropriately scaled spaces, in order to initiate human contact. All levels of spaces should be created at appropriate scale, from the scale of a room, to the scale of a cluster of rooms, to the scale of the ward itself. Examples include providing:
   - wards with no more than 20 patients
   - sleeping areas with no more than 4 patients in one space
   - a range of small-scale activity spaces on or in close proximity to wards

3. *Group compatible uses.* Hospital areas should be zoned so that compatible uses are grouped together. Examples include locating:
   - integrated program space with living space
   - noisy areas away from quiet areas
   - patient areas at some distance from maintenance and other "off limits" areas

4. *Provide for appropriate adjacencies and proximities.* Appropriate adjacencies and proximities facilitate efficient and organized administration of services. Examples include locating:
   - geriatric wards in close proximity to the medical clinic
   - Long Term Care patients in close proximity to rehabilitation facilities
   - general support space in relative proximity to administrative offices
   - the admissions suite in close proximity to Evaluation & Brief Treatment wards

5. *Provide a balance between privacy, safety and security.* Patients need to feel some degree of autonomy and privacy so that they can increase their sense of self esteem. Patient privacy must be accommodated while taking the patients' safety and security into account. Where the provision of privacy conflicts with the requirements of safety and security, the latter should prevail. However, every effort should be made to ensure that security not be provided at the cost of human dignity. Examples include providing:
   - semi-private space on wards, observable by staff, for patients visiting with their family and friends
   - privacy in bathrooms, while ensuring staff access to patients in case of emergency (for example by using devices such as "occupier indicators" as opposed to view panels)

- personal space in patient bedrooms for the display and storage of personal items and belongings, while ensuring that patients cannot hide dangerous objects.

6. *Provide adequate safety in all areas accessible to patients.* The hospital must be safe and secure for even the most destructive patient. Patients must be protected from their own potentially destructive behavior and from the destructive tendencies of other patients. All fixtures, furnishings, and fittings should be selected with regard to their potential as a suicide aid or weapon. Examples include ensuring that:
   - protruding objects such as pipes, door closers, or curtain rods are modified to reduce suicide risk
   - furniture is too heavy to be thrown
   - all glass and mirrors are shatterproof
   - velcro is used to hang curtains, art work, etc.
   - ceiling surfaces are smooth and secure - with no accessible hiding places behind ceiling panels
   - view panels are placed on bedroom doors to assist staff monitoring of patient activity
   - doors either open out into the corridor or have emergency release hinges so that patients cannot use furniture to barricade themselves in rooms

7. *Provide adequate security in all areas accessible to patients.* Patients may on occasion attempt to leave the hospital prior to discharge. The environment must protect them from themselves by incorporating the necessary security measures. Examples include providing:
   - operable windows which open no more than 4 inches
   - secure outdoor areas
   - locks on all doors

8. *Provide access to appropriate facilities.* Facilities must be accessible to the intended users. Examples include providing:
   - patient wards with access to the outdoors
   - complete handicap accessibility in all areas for geriatric patients
   - handicap accessibility throughout the facility for patients, staff, and visitors (including parking lots, corridors, bathrooms, etc.)

9. *Provide environmental cues for orientation.* One of the "side effects" of hospitalization is that patients are removed from everyday cues, aggravating their sense of disorientation and confusion. Cues which help to orient patients are desirable. Examples include providing:
   - access to the outdoors to help bring patients in contact with the natural cues as to the time of day, changing seasons, etc.
   - views to the outside wherever possible
   - clocks, calendars, and clear signage, placed in immediate view so that patients have access to information which orients them to time, day, month, and direction. This fosters a sense of independence as patients in less confused states of mind will not always have to ask staff for this information
   - clear and appropriately placed signage for visitor way-finding throughout the facility.

10. *Livability.* Patients spend significant parts of their days and nights in the hospital; the facility should be a comfortable and livable place. Examples include providing:
   - adequate artificial and natural lighting
   - adequate comfort levels (including air-conditioning, individual temperature controls, etc.)

- sound absorbent materials to avoid institutional echoes
- facilities which encourage good grooming and care of physical appearance (including non-distorting mirrors, warm lighting to enhance skin tone, beauty and barber shop, clothing shop, etc.)
- safe, attractive, and comfortable furniture
- soft finishes (including carpeting, upholstery, washable pastel colored paint for walls, etc.)

## D. Staff Environment

The hospital environment must be supportive of staff and their work. There should be adequate and appropriate space for staff work to be conducted. The environment should facilitate staff supervision of patients, since one of the staff's primary roles is that of monitoring patient activity. The staff environment should also be safe from potentially violent interactions with patients.

A quality hospital environment can be conducive to the recruitment and retention of qualified staff. Such an environment facilitates patient treatment, as staff performance is more effective with the appropriate environmental support. This in turn should help reduce patient agitation, increase staff satisfaction, and therefore, reduce staff turnover.

The following is a list of requirements, presented in the form of directives, for the staff environment in DMH facilities.

1. *Facilitate staff supervision of patient activity.* The environment should aid staff in one of their primary roles, that of monitoring patients. Optimum visibility of patient spaces from staff spaces and corridors should be a priority. Examples include providing:
   - nurses station with maximum sight lines to patient bedrooms, bathrooms, and activity spaces
   - view panels on bedroom doors
   - seclusion and single occupancy rooms in close proximity to nurses station for patients in crisis
   - secure outdoor areas with visual access from indoors

2. *Provide adequate range of spaces to accommodate staff activities.* Staff should have adequate space for direct care activities, as well as administrative duties. Examples include providing adequate space:
   - for staff meetings of different group sizes
   - for updating medical records, telephoning, etc.
   - for assisting patients engaging in daily life activities such as bathing, cooking, bed making, etc.
   - for preparing and dispensing medication, conducting examinations, laboratory testing, etc.

3. *Ensure staff safety from potential patient outbursts.* The spaces in which staff and patients interact must be designed with precautions for emergency situations. Examples include providing:
   - panic buttons in appropriate areas
   - two means of egress in interview rooms
   - enclosed spaces which are centrally located so that other staff can intervene when necessary
   - nurses stations which are semi-enclosed with counters

4. *Provide "staff only" space for relief.* Staff need to have backstage territory where they can take rest, leave the patient environment altogether, and revive their level of energy. Examples include providing:

- accessible staff lounges with space for snacking, storing personal belongings, and relaxing
- "staff only" bathrooms, not accessible to patients
- a "staff only" dining area for informal staff interaction

## 1.5.2. Space Requirements

The environmental requirements described above provide qualitative parameters for the future DMH facility. They also form the basis for the quantitative parameters which comprise the space program.

As previously mentioned, inpatient accommodations (the patient wards) constitute the heart of the hospital, both in terms of function and form. The ward, and the activities it must accommodate, is the primary space generator; it requires a larger amount of space than any other functional area of the hospital. Therefore, the number and type of patients to be accommodated at the hospital are the main determinants of the overall square footage required.

Table 1-2 presents estimates of the type and number of inpatient wards needed at Connecticut Valley Hospital, the focus of the remainder of this document. Each ward will accommodate no more than 20 patients.

## Table 1-2 Space Requirements per Ward: Connecticut Valley Hospital

| Type Of Ward | Number of Wards | Space Per Ward (nsf) | Approximate Square Feet Required (nsf) |
|---|---|---|---|
| Evaluation & Brief Treatment | 4 | 6,575 - 7,425 | 26,300 - 29,700 |
| Intermediate Treatment | 10 | 7,185 - 7,765 | 71,850 - 77,650 |
| Long Term Care | 4 | 7,485 - 7,985 | 29,940 - 31,940 |
| Medical Psychiatric | 1 | 7,325 - 7,905 | 7,325 - 7,905 |
| TOTAL | 19 | | 135,415 - 147,195 |

Notes:

1. The number of patients to be accommodated at Connecticut Valley Hospital was determined by DMH staff. The future bed need projections methodology is briefly described in the previous section of this chapter, and more fully in the *Task 1 Report* of the study.

2. An additional ward (20 beds) included in Evaluation and Brief Treatment, is provided at each hospital as a "swing ward" to be used as needed.

Table 1-3 summarizes the space requirements as developed in *the Task 3 Report* of this study. Square footage requirements are provided for both new construction and renovation. The gross square feet listed for each functional area are minimum requirements necessary to meet the goals of DMH for the future consolidated facilities. The square footage estimates were developed by incorporating the environmental guidelines described in the immediately preceding pages.

The primary functional areas of the hospital for which space requirements were developed are as follows:

- Inpatient Accommodations
- Clinical Services
- Administration
- Program Support
- General Support Space
- Building Support

Detailed descriptions of the requirements for these areas are provided in the*Task 3 Report* of the study.

# Table 1-3 Space Requirements: Connecticut Valley Hospital

| Functional Areas | | New Construction | Renovation |
|---|---|---|---|
| Inpatient Accomodations | Evaluation & Brief Treatment | (1.5)* 39,450 - 44,550 | (1.75) 46,025 - 51,975 |
| | Intermediate Treatment | (1.5) 107,775 - 116,475 | (1.75) 125,738 - 135,888 |
| | Long Term Care | (1.5) 44,910 - 47,910 | (1.75) 52,395 - 55,895 |
| | Medical Psychiatric | (1.5) 10,988 - 11,858 | (1.75) 12,819 - 13,834 |
| | **Sub-Total** | **203,123 - 220,793 gsf** | **236,977 - 257,592 gsf** |
| Clinical Services | Medical Clinic | (1.5) 6,465 | (1.75) 7,543 |
| | Admissions Clinic | (1.5) 2,648 | (1.75) 3,089 |
| | Rehabilitation Program | (1.5) 16,950 | (1.60) 19,775 |
| | **Sub-Total** | **26,063 gsf** | **30,407 gsf** |
| Administration | Hospital Management Team | (1.5) 6,090 - 6,615 | (1.5) 6,090 - 6,615 |
| | Personnel | (1.5) 1,785 | (1.5) 1,785 |
| | Business Office * | (1.5) 2,775 | (1.5) 2,775 |
| | Quality Assurance | (1.5) 2,250 | (1.5) 2,250 |
| | Staff Education & Devel. | (1.5) 4,958 | (1.5) 4,958 |
| | **Sub-Total** | **17,858 - 18,383 gsf** | **17,858 - 18,383 gsf** |
| Program Support | Medical Records | (1.5) 2,423 | (1.5) 2,423 |
| | Dietary | (1.5) 10,000 - 15,000 | (1.5) 10,000 - 15,000 |
| | Pharmacy | (1.5) 1,530 | (1.5) 1,530 |
| | Housekeeping | (1.4) 1,582 | (1.4) 1,582 |
| | Laundry | (1.4) 1,085 | (1.4) 1,085 |
| | **Sub-Total** | **16,620 - 21,620 gsf** | **16,620 - 21,620 gsf** |
| General Support Space | Sub-Total | (1.4) 4,123 gsf | (1.4) 4,123 gsf |
| Building Support | Sub-Total | (1.5) 7,483 gsf | (1.5) 7,483 gsf |
| **Total:** | | **275,270 - 298,465 gsf** | **313,468 - 339,608 gsf** |

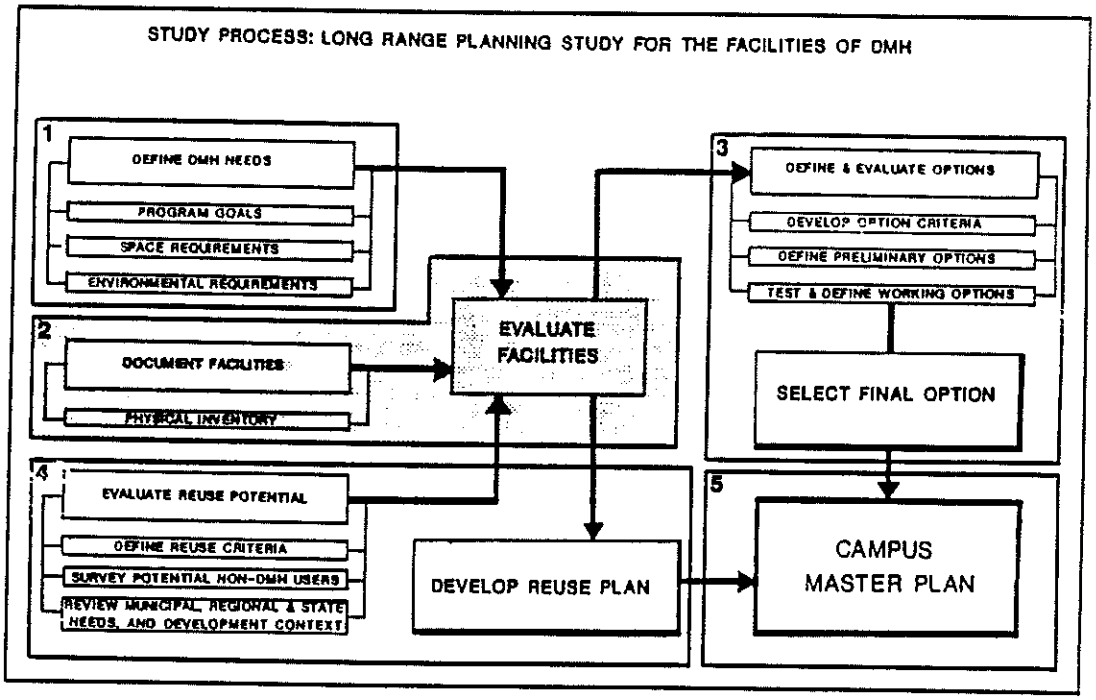
*( ) = net-to-gross conversion factor applied to obtain gross square footage which includes circulation, mechanical, and other "non-usable" space.

# CHAPTER 2: FACILITY CONTEXT

*"A hospital for the insane should have a cheerful and comfortable appearance, everything repulsive and prison-like should be carefully avoided. No one can tell how important this may prove in the treatment of patients nor what good effects may result from the first impressions thus made upon an invalid on reaching a hospital. Nor is the influence of these things on the friends and relatives of patients unimportant."*

Kirkbride, T. 1880, "On the Construction, Organization, and General Arrangements of Hospitals for the Insane", London.

# Chapter 2: Facility Context: Connecticut Valley Hospital

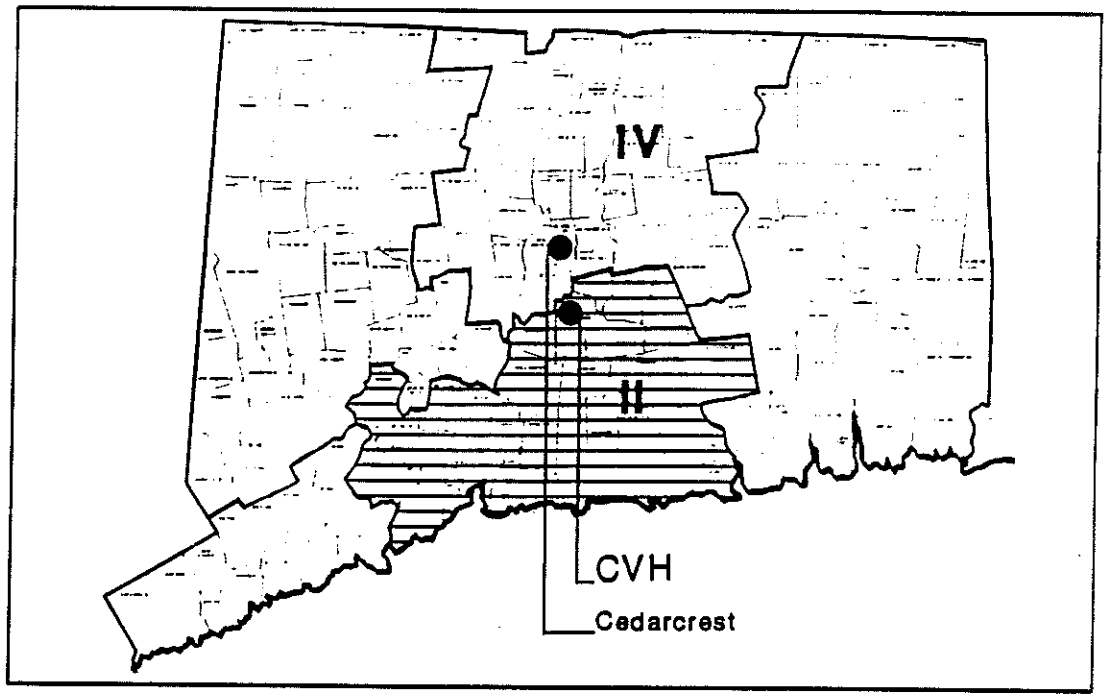



## Introduction

*The following chapter summarizes the results of an extensive process of evaluation of the DMH facilities which are the subject of this study. The facilities were evaluated as to their potential to fulfill the DMH programmatic goals, as described in the previous chapter. Additionally, the facilities were examined for their capacity for reuse of the properties and lands which will be in excess of DMH future needs; the results of this analysis are more fully discussed in Chapter 4 of this report. The flow chart above locates the chapter in the study process.*

*This chapter provides the facility context for Connecticut Valley Hospital, the focus of the remainder of this report. Companion documents describe Norwich and Fairfield Hills Hospitals. The chapter begins by describing the role of the hospital in the State mental health system, and is followed by a brief summary of the facility's existing utilization and conditions. Additional information regarding the facility evaluation is provided throughout the remainder of the report; more specific information may be found in Task 5.1 and 5.2 Reports of the study.*

# Section 2.1. The Hospital Service Area




Connecticut Valley Hospital (CVH), located in Middletown, Connecticut, is a State funded and administered 460-bed facility of the Department of Mental Health. It is the oldest public hospital in Connecticut, established in 1867. Presently, CVH is one of four hospitals on the 1,208 acre campus (CADAC's Dutcher Treatment Center, Whiting Forensic Institute, and Riverview Children's Hospital are the others).

Connecticut Valley Hospital provides in-patient psychiatric services to those patients, age 18 and older, who live in mental health Region II (See Map). The Hospital is also responsible for the longer term care (more than 60 days) of patients who reside in Catchment Area 19, located in Region IV.

The hospital's location, in the middle of the State and in close proximity to major population centers, is an asset in terms of its ability to serve patients in close connection to their communities. An improved environment will allow CVH to provide more successful treatment (i.e. shorter stays, reduced readmission) and a better quality of life both for patients and staff.

## 2.1.1. Region II

Region II consists of 35 towns and cities in south Central Connecticut, organized by DMH into six catchment areas. The two largest municipalities are New Haven and Hamden.

Characteristics of the region vary widely from urban to rural, and affluent to poor. New Haven is highly urbanized, has low per capita income levels, and high rates of poverty and unemployment; while towns in the lower portion of Middlesex County are predominantly rural.

### Catchment Areas

The Region is divided into six Catchment Areas, numbered 5 through 10.

Catchment Area 5, comprised of the towns of Ansonia, Derby, Oxford, Seymour and Shelton, is commonly referred to as the Lower Naugatuck Valley or, more simply, the Valley. Catchment Area 5 has the smallest population of any Catchment Area in Region II.

Catchment Area 6 is made up of Milford, Orange and West Haven.

Catchment Area 7 includes four cities and towns, Bethany, Hamden, New Haven, and Woodbridge, and is the most populated area in the Region. It is also an area of contrasts including both the Region's greatest area of poverty, as well as the Region's wealthiest community.

Catchment Area 9 is composed of the City of Meriden and the Town of Wallingford.

Catchment Area 10 is made up of fifteen cities and towns which comprise Middlesex County. It is the largest Catchment Area in the Region, whose northern half is referred to as the "Midstate Area" by planning agencies, and has relatively easy access to Greater Hartford. The southern lower half of the county, along with the non-region II towns of Lyme and East Lyme, is designated the "Connecticut River Estuary Area".

The Region is developing both its community services and its links with Connecticut Valley Hospital, in an effort to improve the coordination of services. River Valley Services, a component of CVH, has recently become operational and is responsible for providing and coordinating the continuum of clinical and support services in the Middlesex County area (Catchment Area 10). River Valley Services is currently located in Leak Hall on the campus of CVH until a more appropriate community based facility is available.

**Inpatient Services.** Inpatient services are provided to Catchment Area 7 (and on a limited basis to Catchment Areas 6 and 8) by Connecticut Mental Health Center, a facility with 43 acute care beds located in New Haven. CVH serves the entire region with inpatient acute and longer term care.

**Residential Services.** Currently there are nine levels of residential programs within Region II which range from least restrictive (i.e. independent living with mental health services) to most restrictive living (i.e. skilled nursing homes).

**Managed Service System.** Region II is striving to develop a managed service system comprised of regional and area systems of care. While gaps and inadequacies continue to exist, available community services have assisted in decreasing CVH admission rates and inpatient census. Increased funding to expand the existing community service system base would lead to further inpatient census reductions.

See *Task 1* of the study for a list of existing community services in Region II.

## 2.1.2. Relationship to Region II.

Several examples of the developing relationship between CVH and the regions follow.

**Community Liaison.** A Consultation Liaison Team has recently been established (FY1988), to facilitate linkages between the hospital and community services. This new linkage has been a significant force in facilitating a larger number of more appropriate community placements.

**Systemic Improvements.** In an effort to prepare patients for community placement, the hospital has reorganized units according to community placement needs of the patients and along catchment area boundaries. Community residential programs arrange their residential services according to the needs of clients in their catchment area by working with the inpatient units via the Consultation-Liaison Team in CVH. Within 48 hours of admission, 98% of target population patients admitted to the hospital from Region II have community based case managers assigned. These case managers work collaboratively with the patients and the hospital treatment teams to facilitate inpatient treatment and discharge planning. These links with the community facilitate both transition and placement into the community. With expanded community based funding and continued systems improvements, the hospital will be able to continue to reduce its census.

**Admission Rate at CVH.** Prior to 1987, the admission rate and average census of the hospital had not changed significantly for many years. However, since 1987, overall admissions have decreased from an average of 90 per month to 30 per month. Better hospital based screening, improved community services, and responsive community based general hospitals are expected to both decrease the number of patients on the waiting list to enter the hospital, as well as the number of admissions.

**Goals for the Future.** The hospital's primary goals for the future are: 1) to facilitate movement of patients out of the hospital to a less restrictive setting, 2) to avoid the trauma of unnecessary hospitalization, and 3) to improve the quality of care within the hospital. Progress has been made toward these objectives, as evidenced by the decreased admissions rate and hospital census.

# Section 2.2. Summary of Facility Evaluation

This section provides a brief summary of an extensive evaluation conducted of the existing conditions of facilities at Connecticut Valley Hospital. The campus is comprised of striking landscapes, grand historic buildings, and beautiful views. Many of the buildings are clustered in groups which supported the functioning of the original hospital when patients were separated into general categories of gender and ailment, one building for each category. Unfortunately, most of the buildings in their current condition, layout and finishes not withstanding, are not suited to the provision of modern psychiatric care. However, some of the buildings have the potential to be remodeled and converted into therapeutic environments supportive of efforts at stabilization and treatment. Other buildings, either because of their small size, deteriorated physical condition, or other insurmountable constraints, were determined to be inappropriate for use by DMH and an initial determination as to appropriate reuse was made. The following section briefly describes the building evaluation methodology followed by a summary of the facility evaluation of Connecticut Valley Hospital, the focus of the remainder of this document.

## 2.2.1. Overview of Facility Evaluation Methodology

Several steps were involved in the evaluation of the campus hospitals. First, an inventory was taken of existing facilities. In this inventory, buildings were described in terms of age, condition, location on the campus, layout, and other factors. The results of the inventory are contained in the three volume report, *Physical Inventory* (Task 5.1). This data provided the basis for subsequent analysis.

In order to facilitate the evaluation of some 150 individual buildings (approximately 50 buildings at each campus), a building classification system was developed. Buildings were then classified accordingly. This system defined four building "typologies" by common characteristics, such as age of construction, layout, general condition, and general adaptability to DMH program needs. A fifth building "type" was added to account for new construction. (See Table 2-1)

In order to conduct an evaluation of the existing buildings, building evaluation criteria related to the suitability of buildings for DMH use were defined. These criteria included building typology (as described immediately above), square footage, configuration, code compliance potential, a number of site characteristics, among other factors. Buildings were then evaluated according to these criteria. (See Table 2-2)

## 2.2.2. Campus Evaluation

The campus of Connecticut Valley Hospital (CVH), located in Middletown, Connecticut, in the middle part of the State as the name implies, is comprised of extensive lands, relatively large amounts of open space, a number of building types, and considerable building space. CVH was the first State operated hospital to be constructed for the mentally ill in Connecticut. It is the oldest of the three facilities studied and is comprised of some of the most impressive historic structures. The oldest building on the campus is Shew Hall, built in 1866, in French Second Empire Style. The original layout of Shew Hall reflected the Kirkbride plan of independent wards, each with its own facilities; however, the interior was later altered to reflect changes in the philosophy of care predominant in the late nineteenth century, and as a result, spaces are larger in order to accommodate the change to centralized facilities.

A number of buildings were added to the campus in the 1940's and 1950's, the most significant of which is Merritt Hall. Merritt, presently used as the main patient care

building, is a very large and very institutional structure; the scale, layout and finishes of the building are inappropriate in terms of DMH future programmatic needs.

## Table 2-1 Building Classification

**Building Typologies**

The following describes four general types of buildings represented at the three campuses. The typology is useful because each type is characterized by common elements including the degree to which the buildings can meet DMH program goals, cost of renovation, building condition, etc.

**Type I: Late nineteenth century buildings (only at CVH and NH):**

- aesthetically beautiful, architecturally significant
- generally do not meet codes
- difficult to adapt to DMH program
- generally, better for non-DMH reuse
- most on National Registry for Historic Buildings

**Type II: Early twentieth century buildings:**

- often linear and narrow in depth
- usually smaller scale than the other categories
- potential for code compliance
- generally, could be adapted to DMH programs

**Type III: Mid-twentieth century buildings:**

- large institutional, often self-sufficient units
- good plumbing, relative to other types
- generally, meet code
- generally, could be adapted to DMH programs

**Type IV: Staff dormitory buildings**

- small scale
- often linear, double barreled corridors
- often house common recreational facilities (in basement)
- reuse potential for specific DMH uses
- most often constructed during early to mid-twentieth century
- generally meet safety codes, but not J.C.A.H.

**New Construction:**

- provides opportunity to create ideal patient environment
- provides opportunity for ideal siting

# Table 2-2 Building Evaluation Criteria

The following defines the criteria used to evaluate the suitability of buildings for use by DMH.

**Building Suitability**

**Size :** square footage, number of stories

**Footprint:** area per floor

**Type:** I, II, III, IV, or exception; based on building typologies

**Condition:** evaluation based on age & condition of building (i.e. with particular attention to windows, roofs, and other elements which are expensive to replace)

**Configuration:** Structure, layout

**Elevators :** existence and number of elevators

**Plumbing:** existence and condition of bathrooms and kitchens, fixture types, etc.

**Potential for Code Compliance:** capacity for code compliance

**Access:** ease/difficulty of access by patients, staff, visitors, existence of service access

**Site Amenities:** quality and amount of adjacent open space, parking, views

**Cluster characteristics:** proximity to other usable buildings whether part of a natural cluster, potential for separation from remainder of campus, orientation

**Current use(s)/user(s):** uses and users of building presently and/or in the near future

**Building Evaluation**

**Suitability for Current Use:** degree to which building is suitable (acceptable, moderately acceptable, not acceptable)

**Campus Reusability:** if DMH were to use the building, degree to which remainder of campus remains potentially usable with viable parcels & clusters, including reasonable shared or separate access

The hospital was originally designed to accommodate the needs of DMH exclusively. However, over the last few years, as the number of patients have decreased, the hospital has vacated some of the buildings which it no longer needed. As indicated by the accompanying chart (Table 2-3), a significant number of these buildings are currently occupied by non-DMH users and a substantial amount of square footage is vacant.

## Table 2-3 Existing Utilization: Connecticut Valley Hospital

| | |
|---|---|
| DMH (1) | 645,106 sf |
| Non-DMH Users (2) | 350,519 sf |
| Vacant | 194,170 sf |
| Total (gross area) | 1,189,795 |

Notes:

(1) Excludes vacant buildings and those occupied by non-DMH users and includes buildings only partially used by DMH.

(2) Uses include active uses as well as storage. Figure does not include space used by non-DMH users located in buildings whose primary occupant is DMH.

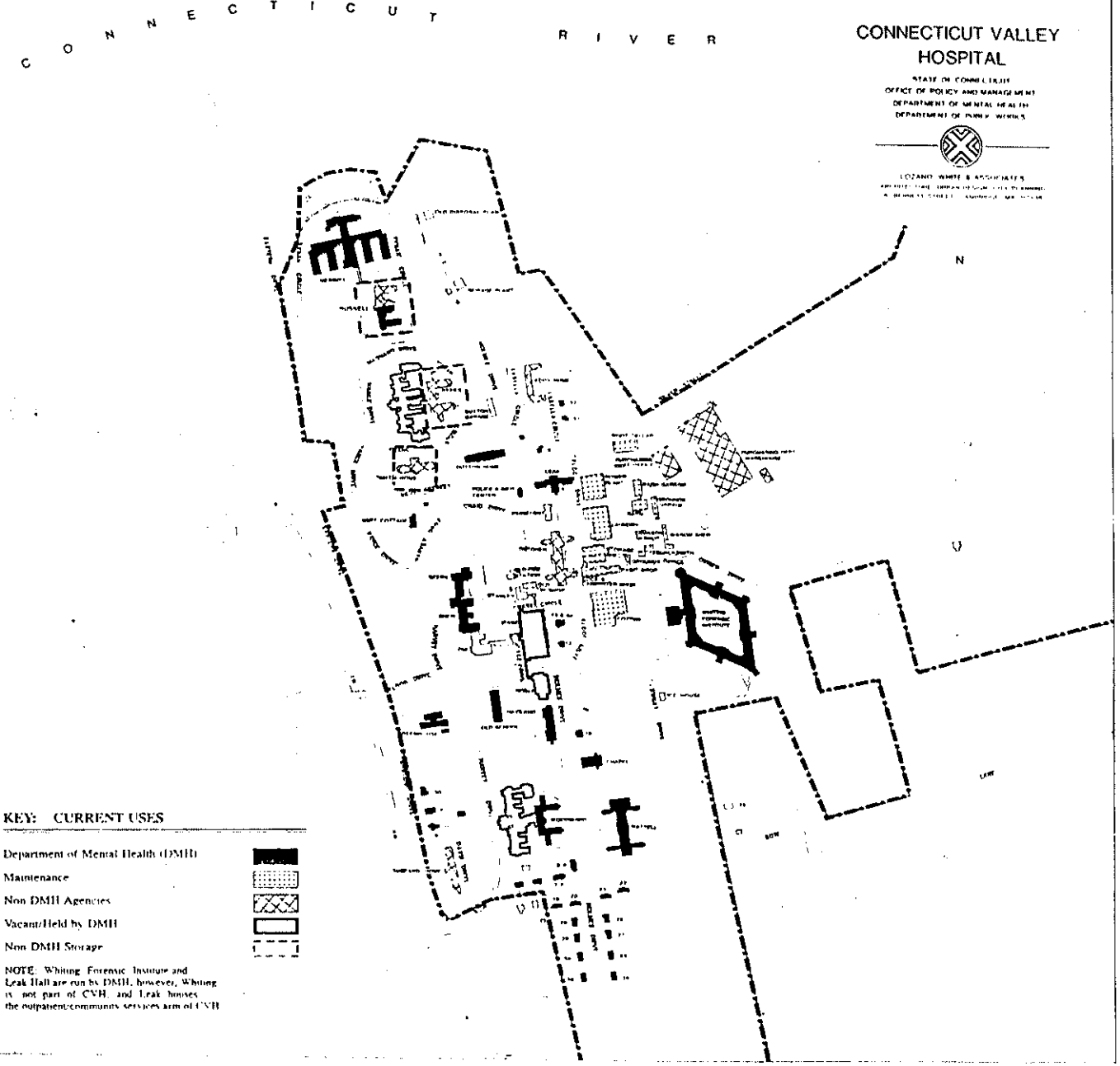
The central geographic location of Connecticut Valley Hospital within the State has made it an appealing site for locating public and non-public uses. Over time, the coherence of the property has been affected by a series of incremental decisions approving a number of permanent and temporary non-DMH uses. The introduction of non-DMH uses has resulted in a particularly fragmented allocation of property and buildings, as DMH facilities have consolidated within major buildings at opposite ends of the campus, with vacant and unused buildings and property in between.

Outright transfers of land and buildings from DMH to non-DMH State agencies or other entities have been more common at CVH than at Fairfield Hills and Norwich Hospitals. A total of approximately 128 acres of land have been transferred from DMH to five different State agencies and to one private entity (a radio station). Further, 20,954 square feet of buildings space has been permanently transferred.

In addition to these outright transfers of land and buildings, use of other significant portions of CVH by non-DMH agencies is covered by a number of use agreements. Under such agreements, a total of 201,000 square feet of space in various buildings is actively used by four different agencies on the CVH campus for storage of records and equipment.

Finally, thirty-seven acres of farm land are leased by a private nursery.

Although there is potential for the campus to be integrated into the surrounding community and to introduce compatible reuses to the campus, reuse of excess buildings thus far has been characterized by ad hoc decision-making. Therefore, as it is expected that additional buildings will be vacated in the future due to further reductions in the projected patient population, a rational reuse strategy is necessary to guide future reuse of these excess facilities.






## Existing Conditions

**Location:** Middletown, Connecticut

**Acreage:** 1,708 acres

**Buildings and Grounds:**

| | |
|---|---|
| 243 acres: | DMH main campus buildings and related grounds |
| 60 acres: | Riverview Children's Hospital |
| 2 acres: | Whitney Forensic Institute |
| 464 acres: | (38% of total) reservoirs or designated watershed land |
| 439 acres: | (36% of total) open tillable or wooded land |
| **1,208 acres** | **Total Land Area** |

The campus's general topography is hilly, characterized by large, open expanses of lawn and thickly wooded tracts of land, and by watershed lands. Portions of the property overlook the Connecticut River enjoying spectacular views.

There are approximately 118 structures on the campus, built between 1867 and the late 1950's. Of these buildings, 16 can be termed major buildings (that is, buildings other than sheds, barns and similar structures). The major buildings include five built in the late 19th century, three in the early 20th century, and five during the mid-20th century.

Nine of the major buildings are currently used by DMH for patient care, administration, support services, and related hospital functions. Five major buildings are currently occupied by non-DMH agencies and two buildings are currently vacant. Currently, in addition to DMH, there are three other institutions on the campus; these are Whiting Forensic Institute (DMH), DCYS' Riverview Children's Hospital, and CADAC's Chemical Dependency Program. Other non-DMH users include the Department of Correction, and a shelter run by the City of Middletown.

The campus does not contain a single, unified cluster or core. Instead, the buildings form several smaller complexes. One is in the northern part of the campus, and consists of a diverse group of buildings including Merritt Hall, Russell and Weeks. A second complex is a grouping of historic buildings forming a coherent architectural cluster, which includes Shew, Beers, Dix, Noble, and Page Halls. A third smaller complex consists of Battell and Woodward Halls.

### 2.2.3. Building Evaluation

Overall, the buildings currently occupied by DMH at Connecticut Valley Hospital are in fair to good condition. As indicated earlier, a significant number of buildings are occupied by non-DMH users, who for the most part are other State agencies, and a smaller number of buildings are vacant. The great majority of existing buildings do not meet the requirements for DMH patient care facilities as summarized in Chapter 1 of this document, and described in full in the *Task 3 Report* of the study. Extensive renovation and remodeling is required in order to convert the buildings to environments which are suitable for the provision of state of the art psychiatric care.

Applying the building typology previously outlined in Table 2-1, the buildings at Connecticut Valley Hospital are classified as follows:

## Table 2-4 Classification of Buildings by Type

| Type I | Type II | Type III | Type IV |
|---|---|---|---|
| Stanley Hall | Russell Hall | Old School | Eddy Home |
| Woodward Hall (old) | Shepard Home | Battell Hall | Dutton Home |
| Smith Home | Weeks Hall (new) | Haviland Hall | |
| Shew Hall | Woodward Hall (new) | Merritt Hall | |
| Beers Hall | | Dutcher Hall | |
| Dix Hall | | Leak Hall | |
| Noble Hall | | | |
| Page Hall | | | |
| Keniston Hall | | | |
| Weeks Hall (old) | | | |

As indicated in Table 2-4, the majority of the buildings currently utilized by DMH for patient care are Type III, that is, constructed in the mid-twentieth century. Connecticut Valley Hospital was the first State hospital to be constructed for the care of the mentally ill in Connecticut; for this reason, many of the buildings are very old, constructed at the turn of the century, and are in poor condition. Patients are accommodated in buildings constructed more recently - during the 1940's and the 1950's - which are in fair to good condition. Nevertheless, the buildings were designed for a philosophy based on providing custodial care - very different from the philosophy of care increasingly becoming the focus of the hospital - to support therapeutic activities and preparation for community living. Additionally, at the time of the hospital's construction, the State hospital played a different role, that of housing all mentally ill people under the State's care. Now, and increasingly in the future, the hospital will be targeted to specific patient groups requiring specialized care. For these reasons, the existing buildings would require significant remodeling if they are to be used to accommodate future DMH needs.

The following is a summary of general deficiencies of buildings currently utilized by DMH. The primary focus of the comments is on patient care areas. Inadequacies also exist in staff areas; these are alluded to, although they are not described in detail.

The size of the wards varies among the buildings. In some cases, wards contain up to 30 patients, more beds than is generally agreed advisable. Large wards are not therapeutic environments and make it difficult for staff to provide adequate individual attention to patients. In order for staff to supervise such large numbers of patients effectively, regimentation is required. Such measures are contrary to efforts to facilitate the patients' sense of independence. Additionally, larger patient groupings increase noise and stress, and decrease individuality of treatment.

Wards are not only too large; in many cases, the spaces are undefined. One example of these undefined spaces is the lack of privacy in the sleeping areas. This situation creates an institutional atmosphere more supportive of providing custodial care than of the goals of stabilizing and preparing patients for their return to community living. Such large group dormitories would not be acceptable under current hospital construction standards.

Additional problems in most wards are due to the inappropriate scale of spaces. The wards were designed so that the only "activity space" is the 'day room'. This is a very large, undefined space where a number of often incompatible activities occur simultaneously. In contrast, spaces and rooms in "normal" environments are legible; that is, they afford users an understanding of the activities that are expected to take place there. In the day room, however, already disoriented patients, often confined to the ward for extended periods of time, are confronted with an inappropriately large and undefined space in which to spend most of their day. Further, the day room lacks the sense of privacy and intimacy required for initiation of interpersonal contact.

Furthermore, the current ward layout causes problems for both staff and other patients when a patient "acts out." For example, there are no rooms where a patients can be calmed in privacy. Instead, staff must often calm patients in front of other patients who are sitting, eating, etc. nearby. Seclusion rooms for the observation of agitated patients are not adequate. Additional problems include inadequate corridor widths and excessive distances between patient sleeping areas and nurses stations.

Other problems stem from the lack of an appropriate range of available spaces. For example, currently some wards are segregated by gender, largely because of existing plumbing facilities, not because of therapeutic goals. Additionally, the lack of small-scale dining areas results in patients being taken to central cafeterias in large numbers; this is not supportive of efforts towards the preparation for community living. Patients unable to leave the ward must eat in the multi-purpose day room.

Currently, ward spaces have numerous potentially dangerous elements. These include screws which are not tamper-proof, mirrors which are not shatterproof, and closet rods which do not breakaway under the weight of individuals attempting to hurt himself/herself. Additionally, many buildings have ceiling tiles which are removable behind which patients can hide potentially dangerous objects, and even worse, attempt suicide from the pipes located above the tiled ceiling.

Additionally, the hospital environment does not adequately support staff activities. Currently, most staff do not have access to offices, meeting spaces and lounges from the ward. Administrative offices, and in some instances, clinical offices, are located at some distance from patient care areas. Furthermore, administrative offices are generally distant from clinical staff offices, resulting in limited opportunities for clinical staff to interact wit' administrative staff, and distancing hospital leadership from patient care.

The following chart (Table 2-5) summarizes the evaluation of buildings for their current use; building suitability is rated as acceptable, moderately acceptable, or not acceptable.

## Table 2-5 Evaluation Of Building Suitability For Current Use

| Building Name | Building Area (sf) | Current Use | Building Suitability (1) | User(s) if not DMH |
|---|---|---|---|---|
| Shew Hall | 41,700 | administrative offices | A | |
| Beers Hall | 40,275 | offices, admission | A | |
| Dix Hall | 88,790 | storage | N/A | Middlesex Community College |
| Leak Hall | 21,775 | program offices - River Valley Services | M | |
| Russell Hall | 54,368 | storage; some space used by DMH | M | DAS (storage), DMV (storage), Dept. of Ed. (storage), Attorney General, Red Cross (storage) |
| Dutcher Hall | 81,090 | patient care | A | CADAC |
| Weeks Hall (new) | 45,212 | storage | N/A | Dept. of Motor Vehicles |
| Weeks Hall (old) | 73,512 | * | N/A | |
| Woodward Hall (new) | 45,212 | patient care | M | |
| Woodward Hall (old) | 79,964 | * | N/A | |
| Battell Hall | 126,356 | patient care | M | |
| Haviland Hall | 25,029 | patient store; storage; training center | A | |
| Merritt Hall | 182,400 | patient care | M | |
| Smith Home | 27,756 | storage | N/A | Dept. of Higher Ed. (storage) |
| Page Hall | 11,570 | storage | N/A | |
| Noble Hall | 21,600 | * | N/A | |
| Shepard Home | 26,016 | shelter | A | City of Middletown |
| Keniston Hall | 6,054 | * | N/A | |
| Dutton Home | 26,000 | outpatient care - River Valley Services | A | |
| Eddy Home | 27,287 | DWI Program | A | DOC |
| Chapel | 13,080 | chapel | A | |
| Old School | 8,480 | staff education; day care | A | |
| Cotter | 30,500 | maintenance; fire; post office | A | |
| Stanley | 11,570 | * | N/A | |
| Police Information Center | 800 | credit union | A | |

| Building Name | Building Area (sf) | Current Use | Building Suitability (1) | User(s) if not DMH |
|---|---|---|---|---|
| Fire Station | 2,392 | storage | N/A | |
| Greenhouse | 8,400 | plant cult. | A | |
| Cottage 12 | 1,680 | patient care | A | |
| Barn | 9,600 | vehicle storage | M | |
| Grounds Garage | 3,360 | vehicle storage | A | |
| Blacksmith Shop | 1,682 | storage | N/A | |
| Grounds Office | 2,088 | office | A | |
| Carpenter/Sheds | 10,296 | building materials | A | |
| Paint Shop | 4,592 | equipment repair | A | |
| Mason Shop | 2,500 | equipment storage | A | |
| Dutton Garage | 2,450 | staff vehicles | A | |
| Tin Shop | 1,470 | * | N/A | |
| Superintendent Cottage | 5,400 | residential | A | |
| Root Cellar | 6,400 | storage | N/A | |
| Lock/Carpenter | 11,089 | equipment repair | A | |

(1) Building Suitability is rated: acceptable (A), moderately acceptable (M), not acceptable (N), in terms of current use. N/A = not applicable.

* Vacant

There were seven main steps involved in the Study. The following briefly describes each.

1. **Definition of DMH Program**

First, the future needs of DMH were defined in the form of a "Functional Program." This step in the planning process was critical to the success of the project because the "Functional Program" was the basis for all subsequent steps. An important aspect of the program definition was the identification of sources of uncertainty regarding future conditions. In this way, "buffers" could be built into the plans in order to account for uncertainty and accommodate the need for flexibility and change.

2. **Development of Space and Environmental Requirements**

Next, DMH program goals were translated into a "space program". Space and environmental requirements were developed working both with health care industry standards and with extensive input on the part of hospital staff. These were applied to evaluate the suitability of existing buildings and to subsequently develop options for future consolidated DMH facilities.

3. **Facility Evaluation**

Several steps were involved in the evaluation of the existing conditions of the campuses. First, an inventory was taken of the existing facilities. A thorough diagnosis of each building was performed and documented in the *Task 5.1 Report* of the Study; buildings were described in terms of the age of construction, condition, location on the campus, and numerous other factors. To facilitate the evaluation of some 150 buildings at the three campuses, a building classification system was developed, and buildings were classified accordingly. This system defined four categories by common characteristics, such as age of construction, adaptability to DMH program needs, potential to meet codes, etc. A fifth building "type" was added to account for new construction. This system aided in developing cost estimates for the renovation of buildings.

The maintenance and utilities structures were also examined independently for suitability, and in consideration of the fact that DMH will be a minority user on these campuses. Study limitations did not allow for a complete analysis of alternative management strategies for utilities and maintenance services to a future campus with mixed uses and users. Instead, it is recommended that this issue be evaluated further (see "Next Steps", Chapter 5 of this document).

4. **Option Definition**

Finally, four options representing all realistic alternatives were developed for the utilization of buildings and grounds by DMH at each of the campus hospitals. Options represented groupings of buildings and associated grounds which could accommodate the programmatic needs of DMH for its campus hospitals. These options were evaluated against a set of previously established criteria which defined DMH goals and campus planning objectives. Options were further refined and ranked according to the degree to which they met the criteria; feasibility and cost effectiveness were also considered. The Preferred Option was then developed further.

5. **Cost Estimation**

Cost estimates were developed for each of the options developed for the future DMH facilities, and were more specifically analyzed for the Preferred Options. In general, the strategy for renovation planning involved development of a first class, modern psychiatric hospital facility for the "core building" which is anticipated to serve DMH needs well into the next century. This total renovation strategy will yield a facility virtually equivalent to new construction, comparable in quality to new general hospital psychiatric units or the new State hospital recently constructed in the State of New Hampshire. Since anticipated needs over the next 3 to 10 years require more space, a less expensive renovation strategy is

proposed for interim facilities, which will house patients whose care should ultimately be provided in community facilities.

All cost estimates provided in this document are capital costs only (excluding design fees or contingencies) and are order of magnitude costs. That is, they were developed for the purpose of comparing options and should be used for budgeting purposes only. More specific cost information will become available at later stages of implementation when design and construction documents are prepared.

## 6. Reuse Strategy

Parallel efforts focused on developing a reuse strategy for those buildings and lands which will be in excess of DMH future needs based on the premises of the Preferred Option. This part of the study was comprised of three main activities: 1.) a series of "criteria for reuse" was developed, defining DMH and State interests, in order to provide guidelines for choosing potential reuse options, 2.) a survey was conducted of potential non-DMH users to determine how other State needs could be met by utilizing space at the campuses, and 3.) a review of municipal, regional, and State plans and an analysis of the local development context was conducted in order to ensure that recommendations both fulfilled public needs and were feasible, given demographic and market trends.

Those buildings and lands which were determined to be in excess of DMH future needs were then grouped into parcels following topographical features and other existing conditions. These zones, or parcels, were then analyzed in terms of their potential for reuse. Reuse options were next evaluated according to the previously developed reuse criteria, and recommendations for reuse were subsequently developed.

## 7. Campus Master Plan

The study culminated in a campus plan which presented a master plan for the entire campus, encompassing both the Preferred Option for the future consolidated DMH facility and reuse recommendations for those buildings and lands which, based on the premises of the Preferred Option, will be in excess of DMH future needs. The campus master plan presents recommendations for the future utilization of all buildings and lands currently within campus boundaries.

As previously mentioned, the campuses are comprised of numerous grand, older buildings, the majority of which are listed on the State and/or National Registry for Historic Places. These buildings are, for the most part, beautiful and meaningful; they are impressive and of architectural significance, as well as being symbolic, in that they embody the history of the philosophy of care of the mentally ill. Unfortunately, it is not feasible for the State to expend funds to preserve all the buildings; they are too numerous and many of them are in a serious state of disrepair. Therefore, a set of guidelines was developed as part of the campus master plan, to provide a framework within which historic preservation may be approached on a rational basis. Although a number of individual buildings may be considered as possessing architectural and/or historical significance, in general, it is the clustering of such buildings which is visually most impressive, and which most accurately symbolizes the history of the hospital. Therefore, the campus master plan identifies the primary cluster of buildings in each campus - primary in terms of both architectural and historical significance - and proposes that they be preserved indefinitely. A variety of strategies are proposed for the other buildings depending on their physical condition, and/or architectural, historical, or functional value.

# D. The Planning Process

## 1. Participation

The Consultants, working with the three agencies, DMH, OPM, and DPW, designed a methodology for the planning process which would allow for input at every stage. The study was undertaken with very active and consistent participation of the three agencies involved - DMH, OPM, and DPW. Department of Mental Health leadership staff identified the policy directions for the study, based on the Department's State Plan and other materials. These directions formed the foundations upon which the study was conducted. From the initial stages of the study through to its conclusion, there has been significant participation on the part of many other individuals and groups of individuals; these include DMH hospital staff and administration, DMH regional administrators, municipal officials, mental health advisory groups, residents of the municipalities in which hospitals are located, and patients and their families. This input has guided the analysis and shaped the recommendations throughout the planning process.

## 2. Uncertainty

The campus plans are based on a twenty-year implementation period. By definition, the future is difficult to predict. Because of the degree of uncertainty inherent in long range health planning, a great deal of flexibility has been built into the process, the ability to duplicate it, and the recommendations themselves. The *Task 10 Report* of this study outlines a series of guidelines for updating and revising the facilities plans.

There is no certain method, for example, to predict future "bed need". Current health policy explicitly emphasizes the provision of care in the least restrictive setting appropriate for the patients' level of functioning, and that this care be provided in the patients' home communities. However, the development of community-based services is dependent upon a number of factors, including future funding of these programs, and therefore, is difficult to predict. Whether or not community services are developed greatly affects both the role and the capacities of the hospitals. Many of the patients currently accommodated at the hospitals would be more appropriately treated in smaller-scale, less restrictive settings located closer to their families and friends. However, if funding is not forthcoming, they will need to be accommodated, at least in the short term, at the hospitals. Campus plans may need to be revised to reflect these conditions.

In addition to uncertainties regarding future funding of community services, philosophies regarding psychiatric care, medical technology and management procedures are constantly evolving. Additionally, population demographics will change, as will the availability of mental health care in the private sector. Facilities should be designed to be effective and efficient in supporting both current and future activities. Thus, the design of the hospital facilities must proceed with some degree of flexibility.

## 3. Flexibility

Flexibility has been built into the facility plan at both the overall facility scale as well as at the scale of the single building. The options have been developed so that they are flexible - if necessary, elements of one option may be combined with those of another. At the smaller scale (a single building), an attempt was made to account for future change in the allocation of floor by floor uses. Reserve space has been programmed for expansion and other changes in the provision of services. In general, single purpose buildings and spaces were avoided; instead, an attempt was made to program for spaces and buildings that can accommodate multiple uses, either concurrently, or at different times.

In addition to uncertainties surrounding the development of the future DMH facilities, factors affecting the reuse of excess properties are also difficult to predict. The timing of

reuse is dependent upon a number of factors outside the control of the State. It is for this reason that the recommended reuse strategies are presented in a flexible manner such that they are in fact, concept guidelines, with room for flexible choices.

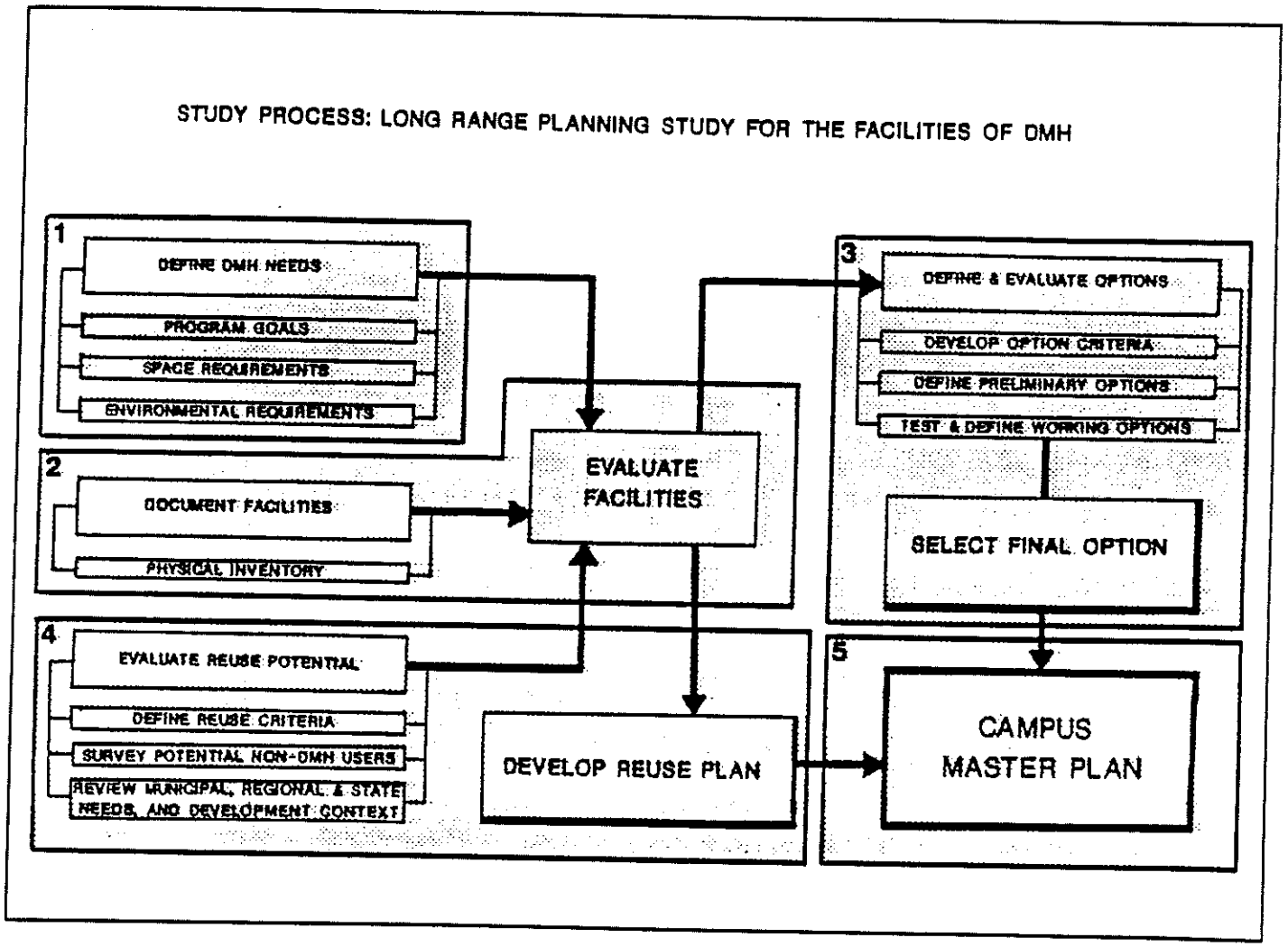
Although the planning process was designed to evaluate DMH facilities and develop plans to meet the programmatic requirements of DMH, the same process may in fact be adapted and applied to determine the needs of other State agencies.

## 4. Study Recommendations Effect on Immediate Future

As previously mentioned, the purpose of the campus master plan is to provide a framework for decision-making. This framework is intended to guide decisions from the moment the plan is completed and accepted, until it is fully implemented. It is intended to provide guidance in making any decisions that will affect the facility on a campus-wide scale. Therefore, the plan is a dynamic one that is effective immediately. Any actions with regard to utilization of the campus, whether on a small or large scale, should be reviewed for their consistency and compatibility with the overall goals and specific guidelines set forth by the plan. Specific projects planned for the near future should be reviewed for compliance with the plan. On-going projects should also be evaluated. For example, if plans exist for immediate improvements to a particular building which, according to the plan, is recommended for a user other than DMH, the cost-efficiency of renovating the building with DMH funds should be evaluated. Or, if plans exist for a building identified in the plan for continued use by DMH, improvements might best be delayed until the time when total remodeling of the building can be scheduled. On the other hand, if the reason for the improvement involves safety issues or other extraordinary needs of the Department, it may be necessary to adjust the master plan and do whatever is required to protect public safety and/or enhance patient comfort.

## E. Organization of the Report

The accompanying diagram relates the study process to the organization of this report. Each numbered box in the flow chart represents a chapter in the report; the number on the box corresponds to the chapter number.



The report is organized in the following manner:

The *Introduction* defines the purpose of the study and provides an overview of the study process.

**Chapter 1** provides an overview of the *Planning Context* and DMH program goals. It describes the future role of the campus hospitals within the State mental health system, provides projections of the future client population, and recommends an investment strategy. DMH program goals are translated into space and environmental requirements which define the physical parameters of the future facilities.

**Chapter 2** provides the *Facility Context*, describing the specific role the hospital plays in the State mental health system and the utilization and evaluation of the existing facility.

**Chapter 3,** presents the *DMH Facility Plan.* Four campus options are presented for the future DMH facility, and the Preferred and Secondary Options are defined. The methodology applied in developing the options is also described.

**Chapter 4,** presents the *Campus Reuse Strategy*, providing recommendations for the future reuse of those portions of the campus which will be in excess of DMH future needs. The methodology applied in formulating these recommendations is also described.

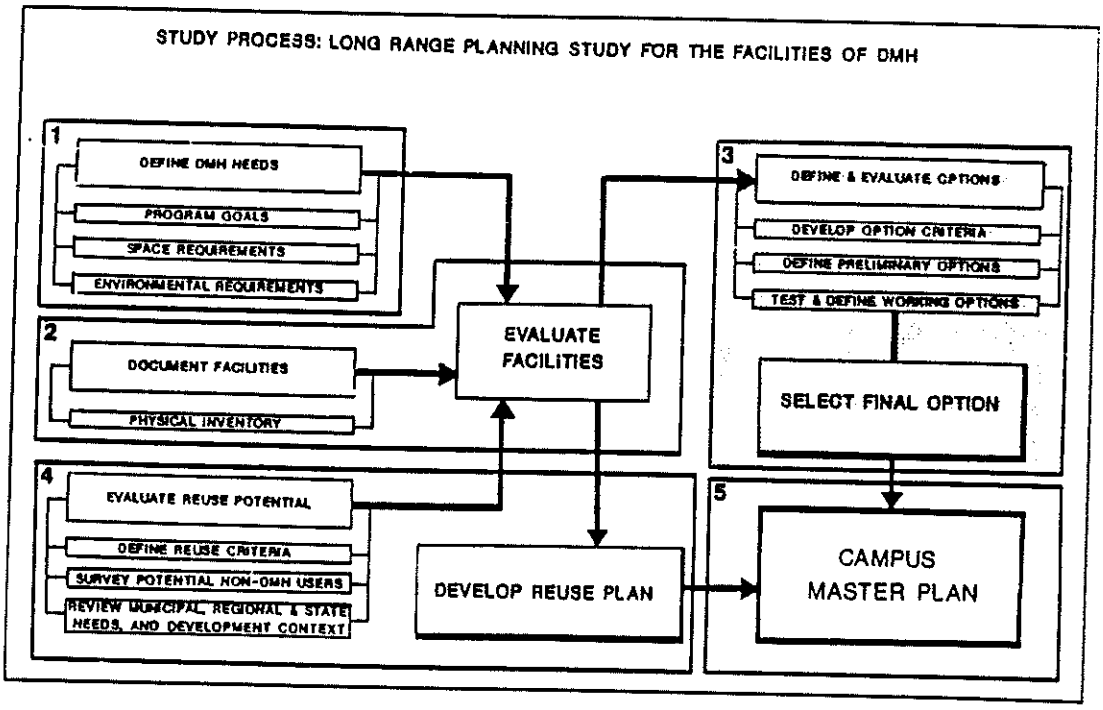
**Chapter 5,** combines the DMH facility plan and the campus reuse strategy to form the *Campus Master Plan*, providing recommendations for the campus as a whole.

# CHAPTER 3: FACILITY PLAN

*"The dining room should constitute the heart of any institution ... It should be managed as the most vital spot in the organization - the point where the personal influence of the Superintendent could be most effectively applied, and the center from which helpful influence would naturally radiate into the wards, cheering, stimulating, and toning up the whole institution. With such ends in view, the dining room should be light and airy, and should be made attractive by a profusion of growing plants, palms, ferns and flowers against the wall and about the tables."*

Dr. Charles Page, the third Superintendent of Connecticut Valley Hospital, 1898.

# Chapter 3: DMH Facility Plan




## Introduction

*This chapter presents the Long Term Facility Plan for Connecticut Valley Hospital. As discussed in the previous chapters, due to changes in the role of the hospital in the State's mental health system, in the future, DMH will require significantly less space on the campus than that which it currently occupies. This part of the study focused on defining the buildings and land which will best meet DMH future needs. The DMH Facility Plan was developed by following the upper most tier of the study process, as depicted in the accompanying flow chart. This chapter summarizes the series of options developed for the consolidation of the future DMH facility on the campus of Connecticut Valley Hospital, and describes the selected option in detail.*

*The options constitute various combinations of buildings - some existing, some to be constructed. In accordance with the primary purpose of this Study, which is to make program and facilities planning consistent, the options have been designed to accommodate the future programmatic needs of the Department of Mental Health for campus hospital facilities.*

## Purpose

The purpose of this part of the study was to develop a facility plan for the consolidation of DMH facilities which would fulfill DMH program requirements for the future hospital and meet campus planning goals regarding the juxstaposition of compatible uses, buffers, and open space, the clustering of buildings, and other factors. Four options were developed for the utilization of buildings and grounds at the hospital. Each of the options were evaluated against previously defined criteria, included in this chapter, which incorporate DMH and campus planning goals. Two options were selected as meeting these criteria. These two options were further refined, reevaluated and then ranked as "Preferred" and "Secondary" options.

The options presented herein represent all those options identified by the Consultant which appear to meet certain specified requirements. No options were eliminated from consideration by the Consultant.

The options presented in this chapter reflect only future uses by DMH, and thus do not constitute reuse plans for the entire campus. The campus contains building space considerably in excess of the requirements of DMH; in time, the presence of non-DMH users will become increasingly significant on the campus. Reuse recommendations for those portions of the campus which will be in excess of DMH future needs are provided in Chapter 4 of this report. Campus-wide plans, combining both the DMH facility plan and the reuse plan for excess campus properties, are presented in Chapter 5.

## Organization of this Chapter

This chapter presents the four originally developed options, and related construction cost estimates, for the consolidation of the future DMH facility at Connecticut Valley Hospital. The Preferred and Secondary options are subsequently described. For a more detailed description of the development of the four original options, see *Task 5.3* of this study. For more specific information regarding the Preferred and Secondary options, see *Task 6* of this study.

# Section 3.1 Methodology

The methodology used to develop the options involved three basic steps: First, the needs of DMH - that is, the programs to be operated at the three campuses - were defined, and translated into spatial requirements. Second, the existing facilities at the campuses were documented and analyzed to determine their suitability for various types of uses. Third, buildings determined to be suitable for DMH use were grouped in various combinations, or options, which together met programmatic, capacity, and other requirements. These steps are described more fully below.

## 3.1.1 Definition of DMH needs

The DMH program to be accommodated at the three campuses forms the basis for option development, since it is the purpose of this study to make program and facility planning consistent. The DMH program was summarized in Chapter 1. In particular, the program calls for provision of Evaluation and Brief Treatment, Intermediate Treatment, and Long Term Care services at the hospitals, and estimates the numbers of beds that will be needed for each type of service.

Program needs were then translated into spatial requirements. These requirements included quantities and qualities of space needed to provide the three types of patient care services named above, and the associated support services necessary for the operation of the hospital. Space programs were developed by translating the DMH functional program, described above, into space requirements. This process of translation was supplemented by:

- observation of existing DMH facilities
- conducting interviews with DMH administrators and hospital staff
- review of industry standards and relevant codes
- comparison of precedents, (e.g. other model facilities)

The resultant space requirements are summarized in Chapter 1 of this document, and presented in full in the report, *Space Requirements for DMH Psychiatric Hospitals* (Task 3).

## 3.1.2. Evaluation of Facilities

As previously described in Chapter 2, several steps were involved in the evaluation of existing facilities; these are reviewed below. First, an inventory was taken of existing facilities. In this inventory, buildings were described in terms of age, condition, location on the campus, layout, and other factors. The results of the inventory are contained in the three volume report, *Physical Inventory* (Task 5.1). This data provided the basis for subsequent analysis.

In order to facilitate the evaluation of some 150 individual buildings (approximately 50 buildings at each campus), a building classification system was developed. Buildings were then classified accordingly. This system defined four building "typologies" by common characteristics, such as age of construction, layout, general condition, and general adaptability to DMH program needs. A fifth building "type" was added to account for new construction. (SeeTable 2-1, Chapter 2, for a more detailed description of the typology).

The five building types are listed below:

Type I: late nineteenth century buildings (at CVH and NH only)
Type II: early twentieth century buildings:
Type III: mid-twentieth century buildings:
Type IV: staff dormitory buildings
Type V: New Construction

In order to conduct an evaluation of the existing buildings, building evaluation criteria related to the suitability of buildings for DMH use were defined. These criteria included building typology (as described immediately above), square footage, configuration, code compliance potential, a number of site characteristics, among other factors. Buildings were then evaluated according to these criteria. (See Table 2-2, Chapter 2 for a more detailed description.)

### 3.1.3 Definition of Options

The first step in the development of options for the future use of campus buildings by DMH was to specify certain requirements or criteria, which any option would have to fulfill. These requirements, set forth as Criteria for Campus Options (see Table 3-1) included building suitability (as determined in the previous step), adequacy of square footage to accommodate the requirements of the program (as determined in the *Task 3 Report* of this study), accessibility, appropriate proximities and a number of other factors relating both to the individual buildings involved in an option, and to the cluster they form together.

Based on these criteria, a first cut at option definition was made. Buildings were grouped so that the general sizes and functional suitability of the individual buildings comprising the group were adequate to meet program requirements, and so that the characteristics of the group formed by the buildings were consistent with campus planning goals as defined in the Criteria for Campus Options.

These preliminary options were then tested to determine if specific programs could be accommodated appropriately within the buildings, and if the groups formed by the buildings were consistent with the Criteria for Campus Options. Where possible, the floor plans for the individual buildings were examined so that elements such as required ward size was compared with actual floor capacities to determine if, for example, wards or groups of wards could be accommodated intact. Each group of buildings was also examined in terms of the group's potential to meet other Criteria for Campus Options, such as the proximity to open space for recreation, the reuse potential of the remaining campus if a particular group of buildings were to be occupied by DMH, and the other criteria listed in Table 3-1.

As a result of this further examination of the preliminary grouping of buildings, the options were refined into the set of Working Options presented herein. The options were evaluated against both the campus planning criteria and specific DMH programmatic goals; two of the four options were selected as best meeting these goals. The two options were further defined, reevaluated, and then ranked as "Preferred" and "Secondary." The Preferred Option was then refined.

## Table 3-1 Criteria For Campus Options

The following criteria were used to develop and evaluate the campus options .

**Building Suitability:** adequacy of square footage and suitability for proposed use

**Access:** easy and separable access from remainder of campus

**Open Space Availability:** adequacy of amount and type of open space adjacent to building cluster

**Proximity of Buffer Space:** distance and orientation of available and appropriate buffer space

**Proximities and Adjacencies:** appropriateness of location of individual buildings with respect to one another

**Reuse potential of Campus:** Integrity of remaining buildings and clusters with respect to reuse potential

**Implementation Phasing:** potential for efficient phasedown

**Proximity to Maintenance Cluster:** proximity to maintenance cluster

**Relative Capital Cost:** relative cost of construction

### 3.1.4. Construction Cost Estimates

Construction cost estimates were developed for each of the options and are included in the report. Cost estimates for the options were made by applying per square foot cost estimates to each of the buildings to be used. These per square foot estimates reflected three factors, each of which will be described briefly below, and more fully in the presentation of the options.

- Type of building
- Level of improvement to be achieved
- Type of space to be developed

**Type of Building:** A system of general typologies was developed (previously described), in which the existing approximately 150 hospital buildings were classified. These typologies include factors which directly affect renovation cost, such as date of construction and associated conditions, potential to meet code, building configuration, and other common elements which characterize the buildings. The classification system is presented in Table 2-1, (Chapter 2). The hospital buildings were then classified according to this system. New construction constitutes an additional typology.

**Level of improvement to be achieved:** Three levels of improvement were specified: Level 1 (achievement of minimum code compliance); Level 2 (environmental improvements in addition to minimal code compliance); and Level 3 ("state-of-the-art" improvements). These improvement levels are further described in the presentation of the cost estimates.

**Type of Space to be provided:** Two types of spaces were defined: those governed by J.C.A.H.O. accreditation requirements (Type A), and those not so governed (Type B). These types are further described in the sections describing the cost estimates.

Per square foot cost estimates were then developed for each building type, by level of improvement and type of space. These estimates appear as Table 3-2.

Finally, estimates of the construction costs of the four options were obtained by applying the per square foot cost estimates to each of the buildings under consideration for use.

## Table 3-2 Recommended Average Building Costs*

| Building Type | Level of Improvement | Space Type: Type A | Space Type: Type B |
|---|---|---|---|
| I. Late 19th c. | 1. Minimum | $50. | $40. |
| | 2. Intermediate | 95. | 75. |
| | 3. Maximum | 140. | 105. |
| II. Early 20th c. | 1. Minimum | 40. | 30. |
| | 2. Intermediate | 85. | 65. |
| | 3. Maximum | 115. | 90. |
| III. Mid 20th c. | 1. Minimum | 30. | 25. |
| | 2. Intermediate | 70. | 50. |
| | 3. Maximum | 95. | 70. |
| IV. Staff Dormitories | 1. Minimum | 40. | 25. |
| | 2. Intermediate | 80. | 60. |
| | 3. Maximum | 95. | 80. |
| V. New Construction | 1. Minimum | | |
| | 2. Intermediate | | |
| | 3. Maximum | 155. | 105. |

* Cost estimates are for budget purposes. They were developed by A.M. Fogarty & Assoc., Inc., Cost Estimators. Costs are construction costs, in May 1989 dollars, and do not include design fees or contingencies.

# Section 3.2. Working Options

## 3.2.1. The Options In Brief

Four options were developed for DMH utilization of the buildings by DMH at Connecticut Valley Hospital. The options were developed to meet previously defined criteria. In each option core hospital functions are housed in an "anchor building" and the remaining functions accommodated in surrounding buildings.

Two of the options include a new building. One utilizes the historic core, and in two of the options, the largest building, constructed in the 1950's, is utilized. In one option, this building is the anchor building; and in the other, it is to be phased out over time.

**The Preferred Option** reclaims the original historic core of the campus, including the associated amenities of this advantageous site, preserving the traditions, heritage, and integrity of the original hospital. This option creates the opportunity to continue a strong DMH presence on the campus and consolidates inpatient facilities in one concentrated area of the property.

The key buildings proposed for use by DMH in the Preferred Option are Shew/Beers/Dix, and Battell; the existing addition to Woodward ("Woodward new") will be used during the transitional phase. The Preferred Option includes Page, Noble, and Stanley, for which no renovation is recommended at the present time. These buildings are to be managed by DMH and renovated at a later date to house activities that may be of interest to both DMH and the community at large.

**The Secondary Option** proposes that DMH occupy a new building, and house Long Term Care patients in Battell until they are transferred to community-based facilities.

This option uses the southern portion of the campus for DMH. The option centers around a new building, with its own identity on the campus, turning its back to the old campus. New construction provides the opportunity to create a state of the art environment for both patients and staff.

## 3.2.2. Assumptions Used In Developing Options

The following assumptions were used in developing the options:

**Phases.** The options must accommodate DMH needs during three phases:

*1. Phase I:* construction and renovation phase: Building utilization during this phase has been determined only for the Preferred Option and is described in Chapter 5 of this document in the section entitled "Next Steps".

*2. Phase II:* the hospital in transition. During this phase, buildings will accommodate Evaluation and Brief Treatment, Intermediate Treatment, and Long Term Care patients as well as administrative and support services.

*3. Phase III:* the eventual "core" hospital, the hospital in the future. Buildings at the hospital will accommodate Evaluation and Brief Treatment and Intermediate Treatment patients. Buildings accommodating Long Term Care patients will be gradually phased out as these patients are transferred to community-based facilities. Asterisks (*) adjacent to building names (in the Option descriptions) indicate buildings proposed for interim use - those designated to accommodate Long Term Care patients, until they are phased out of the hospital to be cared for in the community.

**Space Requirements.** Space requirements are those defined in *Space Requirements for DMH Psychiatric Hospital*, Task 3 of this study.

**Swing Ward.** An additional ward (20 beds), not included in the bed need projections as initially developed by DMH, is provided at each hospital as a "swing ward", to be used as needed. The "extra" ward is provided in the Evaluation and Brief Treatment service, as this will be the main focus of the future hospital.

**Maintenance Cluster.** In developing the initial options, it was assumed that building support functions currently housed in the maintenance cluster would continue to be accommodated there. This assumption was reevaluated once the preferred option was selected, and is discussed in the description of the Preferred and Secondary Options.

**Cost Comparisons.** Cost estimates include capital costs only. Estimates were developed for comparative purposes only and are intended to provide order of magnitude costs. All costs are in May 1989 dollars. Off-setting costs, such as revenues, increased efficiency, etc. are not included. Operating cost savings and/or potential revenues generated from the reuse of excess properties, have not been calculated. Additionally, architect, engineering, and Department of Public Works fees and contingencies have not been included either.

# Section 3.3. Description of Options

The following section presents a summary of the four options developed for future DMH utilization of buildings and grounds at Connecticut Valley Hospital.

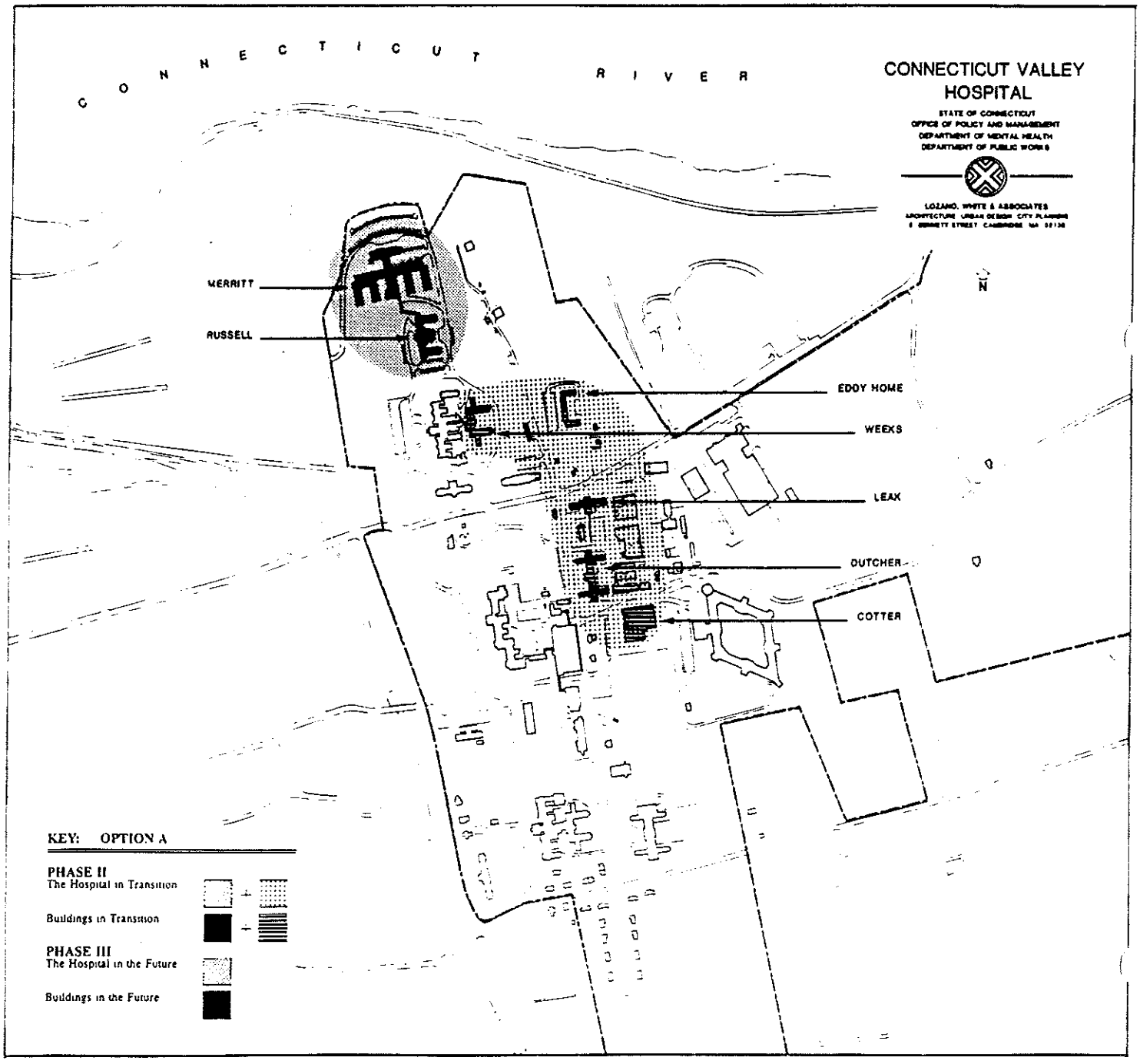
Each option is described in terms of: concept, construction cost estimate, and a list of advantages and disadvantages. Additionally, each option is described graphically. Buildings are differentiated in terms of phasing. That is, those buildings which are proposed for the future hospital core are represented in black; those buildings proposed for use during the interim period are represented by black and white stripes. The hospital in transition, (Phase II), is comprised of both interim and core buildings, while the hospital in the future, (Phase III), is comprised only of the proposed core buildings. This is based on the previously described assumption that the interim buildings will be phased out once appropriate community-based placements are made for patients requiring Long Term Care.

## 3.3.1. Option A

**Total Estimated Construction Cost :** $38,006,040

**Concept:**

The core hospital is primarily concentrated in the main 1950's building of the campus, Merritt. Attainment of a state of the art patient care environment in this building is extremely difficult, if not impossible. Additionally, DMH use of this part of the campus precludes redevelopment of this site which may have the highest redevelopment potential of any parcel on the campus. Long Term Care is dispersed in a number of buildings to be phased out eventually.



# Option A

**Buildings Proposed for Use by DMH**

**Anchor Building:** Merritt

**Supplemental Buildings:**

| | | |
|---|---|---|
| Russell | Leak Hall* | Weeks (new portion) |
| Dutcher Hall | Eddy Home * | Cotter Hall * |

## Advantages

Concentrates eventual core hospital in two buildings, Merritt and Russell, which promotes operating efficiency.

Uses Merritt Hall which if not occupied by DMH, would be difficult to be used by other users.

Follows a natural boundary in the long run, created by Magnano Drive and Tynan Circle, forming a well-defined cluster.

Leaves viable portions of the campus for reuse.

Provides opportunity to create separate access to DMH portion of the campus.

Allows for a gradual phasing out of Long Term Care patients by dispersing them in a number of buildings.

Provides access to adjacent open space and pleasant views.

Is least costly of the four options in terms of construction costs.

## Disadvantages

Potential to create desired patient care environment (as defined in *Task 3 Report*) within reasonable construction cost limits is difficult, if not impossible.

Does not project a positive image of the institution to outsiders because of size and appearance of Merritt.

Occupies prime site overlooking the river, which has the most potential for private development.

Requires relocation of DOC from Eddy, which may add to the project cost.

Is not adjacent to maintenance cluster in the long run.

Causes inefficiencies and duplication of some potentially shared facilities and services by dispersing long term care patients in a number of buildings.

Requires relocation of CADAC from Dutcher, which may add to the associated project costs.

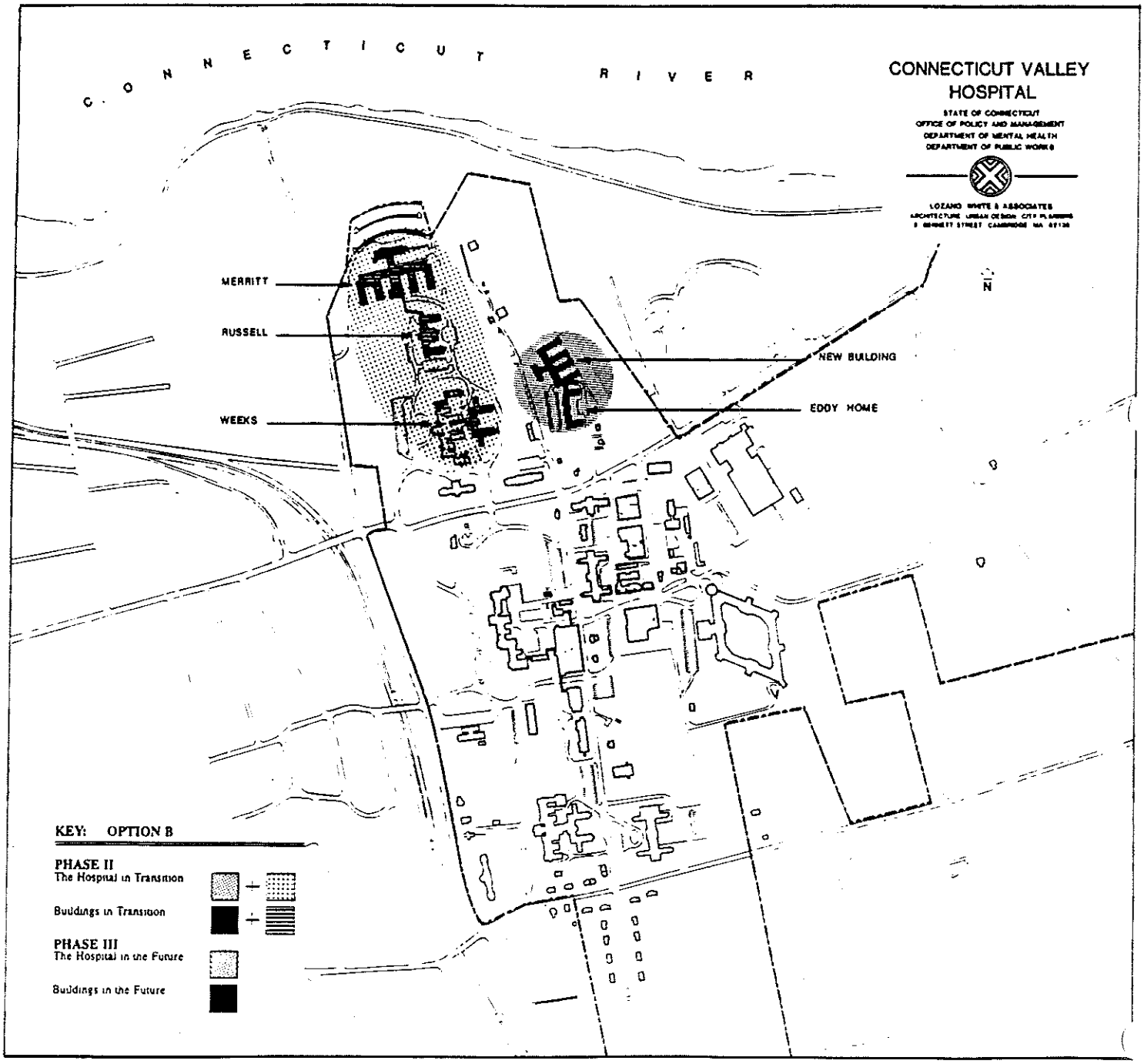
**Recommendation:** Option A is not recommended.

* To be phased out.

## 3.3.2. Option B

**Total Estimated Construction Cost:** $59,871,616

**Concept:** Concentrates the hospital in a new building in the northern portion of the campus. All of Long Term Care patients are accommodated in the hospital's largest building, Merritt, the adjoining Russell, and the new portion of Weeks Hall. These patient care areas will eventually be phased out, and the parcel on which these buildings are located will then be available for reuse; this site seems to have the highest redevelopment potential.



# Option B

**Buildings Proposed for Use by DMH:**

**Anchor Building:** New Building

**Supplemental Buildings:** Eddy Merritt* Russell* Weeks (new)

## Advantages:

Provides the opportunity to create a state of the art environment without the constraints of using existing buildings

Allows hilltop site to be available for private reuse once long term patient care areas are phased out

Creates opportunity for separate access to the eventual hospital core, when long term care patients are phased out

Consolidates institutions to the east of Holmes Drive, allowing for reuse of the remaining portions of the campus

Is located adjacent to open space

Locates eventual core hospital adjacent to maintenance cluster

## Disadvantages:

Uses Merritt for Long Term Care, a difficult building to phase down gradually because of its size

Requires relocation of DOC from Eddy, which may add to the project cost

Is most costly option in terms of construction costs

**Recommendation:** Option B is not recommended.

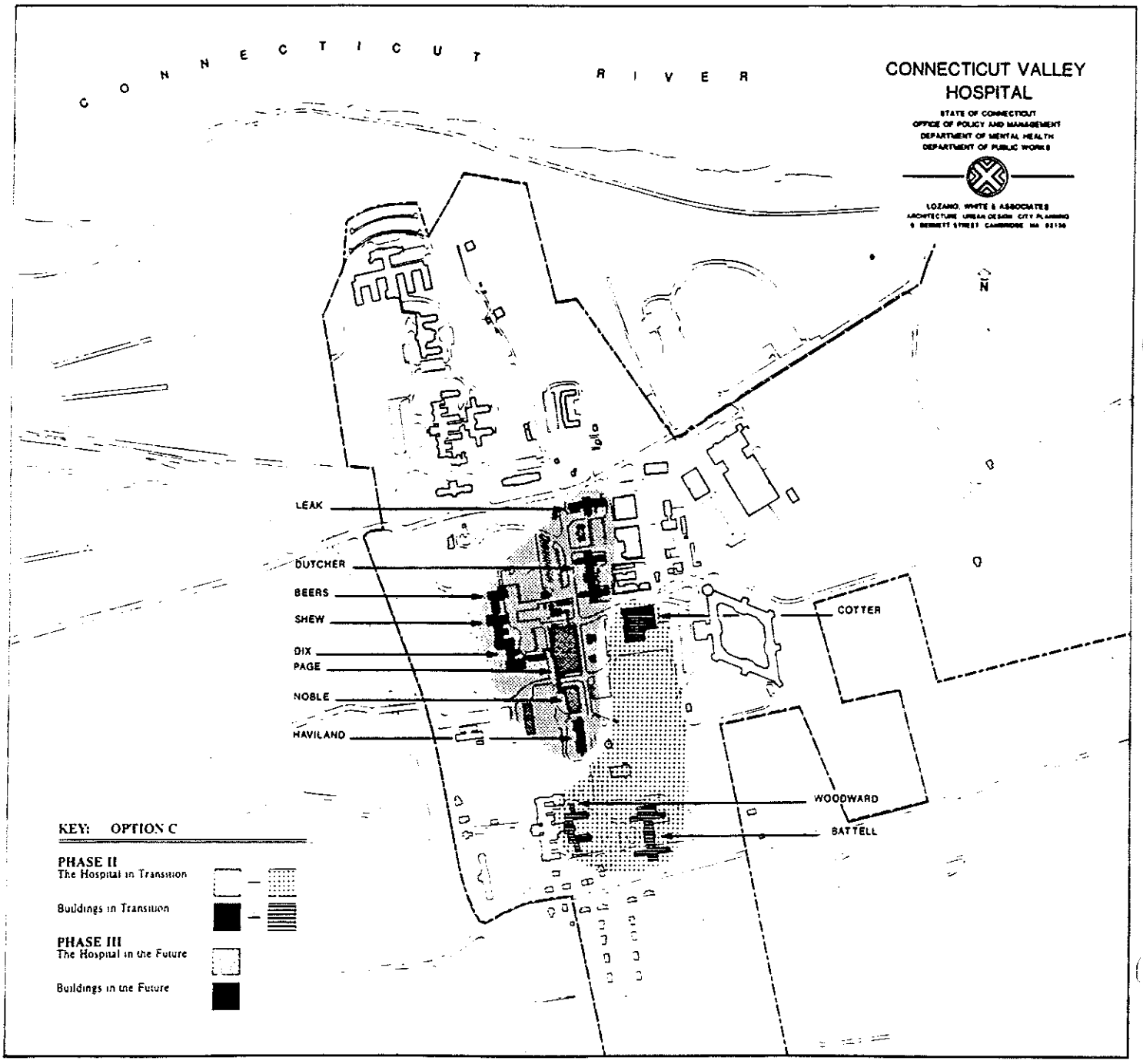
* To be phased out

## 3.3.3. Option C

**Total Estimated Construction Cost:** $47,922,743

**Concept:**

The hospital reclaims the original historic core of the campus, including the associated amenities of this site, preserving the traditions, heritage, and integrity of the original hospital, and creating a strong DMH presence on the campus. Consolidates the institutions in one concentrated area of the campus. Long Term Care is dispersed in a number of surrounding buildings, to be eventually phased out. DMH maintains management of two unique historical buildings on the campus to be used as potential points of interface between DMH and the community at large.



# Option C

**Buildings Proposed for Use by DMH:**

**Anchor Building:** Shew/Beers/Dix

**Supplemental Buildings:** Dutcher, Haviland, Battell*, Woodward(new)*, Cotter*, Leak

## Advantages:

Concentrates patient care functions of eventual hospital core in four buildings, Shew/Dix/Beers, Dutcher, Haviland, and Leak creating the opportunity for small-scale patient care environments

Allows northern portion of campus to be reused - Silver Street being the hard boundary - and frees up hilltop site for redevelopment

Preserves traditions, heritage, and amenities of original hospital; maintains original integrity of campus; and creates a strong DMH presence

Presents a positive image to outsiders

Is adjacent to the maintenance cluster

Is second to least costly of the options in terms of construction costs

Facilitates the adaptive reuse of Page and Noble Halls and their use by CVH

## Disadvantages:

Uses historic cluster which has potential for reuse by another user with more resources for preservation of the historic buildings than DMH

Creates inefficiencies by decentralizing services and facilities and locating them in a number of buildings

Requires relocation of CADAC from Dutcher, and River Valley Services from Leak, which may add to the associated project costs

**Recommendation:** A variation of Option C is recommended as the Preferred Option.

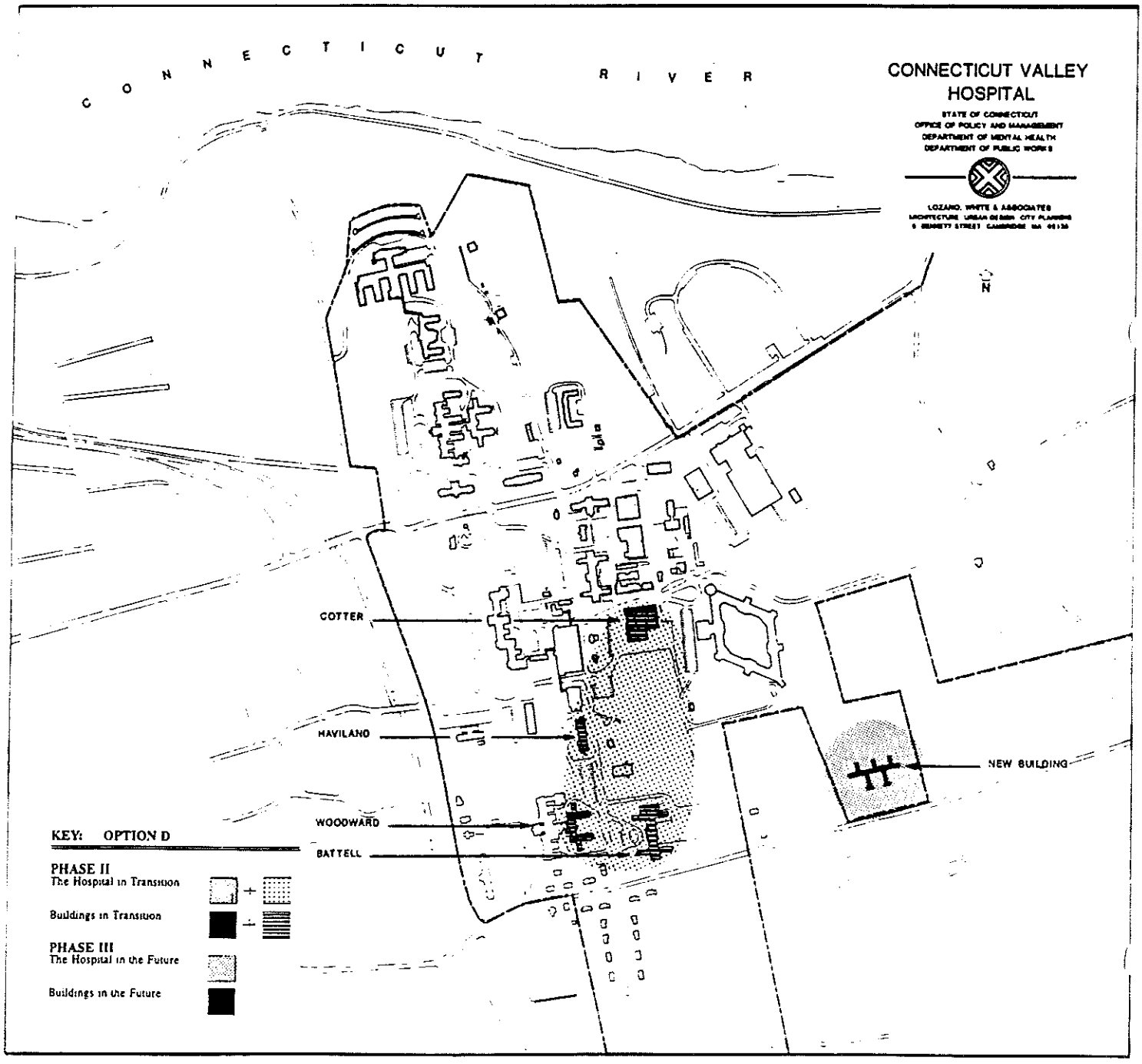
* To be phased out.

## 3.3.4. Option D

**Total Estimated Construction Cost:** $54,228,056

**Concept:**

This option uses the southern portion of the campus for DMH. It incorporates a new building with its own identity, distinct from the existing campus. Long Term Care is dispersed among a number of surrounding buildings. Choices for siting of the new building are limited, as is the opportunity for immediately adjacent open space for recreation. Constructing a new building provides the opportunity to create a state of the art patient care environment.



# Option D

**Buildings Proposed for Use by DMH:**

**Anchor Building:** New Building

**Supplemental Buildings:** Haviland* Battell *
Woodward(new)* Cotter *

## Advantages

Provides the opportunity to create a state of the art environment without the constraints of using existing buildings

Provides the opportunity to site eventual core hospital in such a way so as to become completely separate from the main campus

Allows both hilltop site (Merritt area) and historic cluster, and eventually all the existing buildings on the campus, to be available for redevelopment by other users

Is adjacent to open space

Allows for a somewhat gradual phasing out of Long Term Care patients by accommodating them in more than one building.

## Disadvantages

Is located at some distance from maintenance cluster

Weakens DMH's presence on the campus

Is second most costly option in terms of construction costs

Is immediately adjacent to surrounding property not currently owned by CVH and may create difficulties in defining boundaries.

**Recommendation:** A variation of Option D is recommended as the Secondary Option.

* To be phased out

# Section 3.4. Option Refinement

## 3.4.1. Preferred And Secondary Options

The following section is a presentation of the two options which - when evaluated against the previously established criteria described in the introduction to this report - most fulfilled DMH programmatic needs and campus planning goals. These two options were refined and evaluated, and ranked as Preferred and Secondary Options. The two options were further refined to reflect revised assumptions about projected bed numbers and space requirements.

### Process of Option Refinement

As previously described, four options for the future utilization of buildings by DMH were developed for each of the three campuses. The options were developed to meet previously defined criteria and were based on a number of assumptions generated over the course of the study. Two of these assumptions, the number of beds to be accommodated at each hospital and the amount of square footage necessary to accommodate the future DMH hospitals, were updated and revised after the initial options had been developed.

The selected options were redeveloped under the revised assumptions described below, which resulted in slightly lower construction costs than initially estimated.

*1. The number of beds to be accommodated at each hospital was reduced.* Projections of bed numbers were originally developed based on admissions patterns; however, the actual number of patients at each of the hospitals was reduced between the time the campus planning study was initiated and the preliminary options developed. Therefore, the number of beds each hospital is expected to accommodate in the future was reduced to reflect this actual reduction in the patient population currently housed at the hospitals.

*2. The number of square feet required to house patients, staff, and hospital functions was increased.* Square footage requirements and goals for specific environmental qualities for DMH facilities were developed based on the assumptions set forth in the beginning of the campus planning study and described in the "Functional Program Statement" (summarized in Chapter 1). They were based on conclusions drawn from observing the existing conditions at the DMH facilities, interviews with administrators and staff, on a review of standards and codes, and accreditation requirements. The space program and square footage requirements were then presented to staff at each of the hospitals where their input was requested. The increased square footage requirements reflected in the Preferred and Secondary Options is a result of incorporating that input into the space program.

An additional factor reflected in the revised campus plans furthers the goal of providing some needed acute inpatient care by expanding existing DMH community mental health centers. The campus master plans incorporate the goal of the Department of Mental Health to develop a managed service system with emphasis on services in the community. The development of available beds in Community Mental Health Centers (CMHCs) would create the capacity to provide services in a local setting that are linked to a variety of other support services within the managed service system.

At Connecticut Valley Hospital, 20 beds are to be reduced from the hospital's bed complement and are to be accommodated by adding a floor to the existing structure at the Connecticut Mental Health Center (CMHC), located in New Haven. The CMHC is

geographically closer to much of Region II than is Connecticut Valley Hospital. At Fairfield Hills Hospital, this goal is achieved by recommending further reduction in the number of beds at the hospital, and the construction of a new facility for the Dubois Center to incorporate the balance of these beds (40); the new CMHC will also accommodate a number of outpatient services currently provided or to be provided by Dubois.

Please note that the revisions described above are reflected only in the Preferred and Secondary Options. As a result of these revised assumptions, construction cost estimates were reduced in each case. A comparison of the preliminary and revised estimates follows.

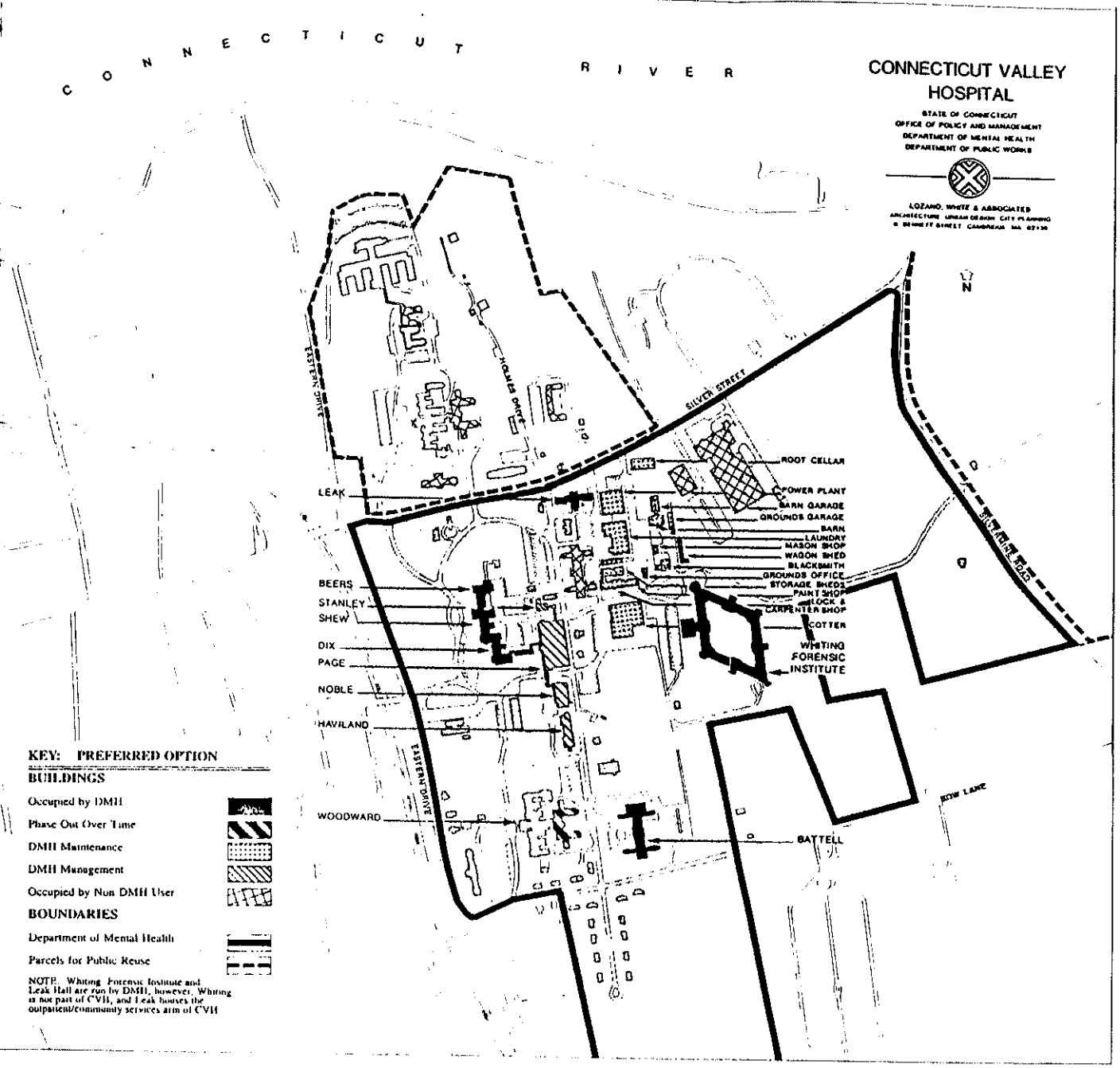
## Connecticut Valley Hospital

| | Preliminary Estimate | Revised Estimate |
|---|---|---|
| **Preferred Option** | $47,922,743 | $37,729,431 |
| **Secondary Option** | $54,228,056 | $50,044,114 |

**Notes:**

1. Construction cost estimates are for budget purposes. They are in May 1989 dollars, and do not include design fees or contingencies.

2. Costs given in the revised estimate include the cost of constructing an additional floor to the existing Connecticut Mental Health Center (CMHC), located in New Haven, to accommodate one ward (20 beds) for Evaluation and Brief Treatment. In estimating the total cost, these twenty (20) beds are removed from buildings on the Connecticut Valley Hospital grounds, thereby requiring the renovation of 360 beds at the hospital. Together with the new addition to the CMHC, a total of 380 beds are provided (including a 20-bed "swing ward").




**Preferred Option:** (Revised Option C):

**Buildings Proposed for Use for Patient Care By DMH:**
Shew/Beers/Dix Woodward(new)* Battell

| Beds** | Estimated Construction Cost |
|---|---|
| 360 beds at CVH | $36,179,431 |
| +20 beds at CMHC | $1,550,000 |
| 380 | $37,729,431 |

* Phase out over time

** Total number of beds needed has been revised to reflect reduction in number since initiation of this study and since original options were developed. An additional 20 bed "swing ward" is also provided.

**Concept.** The Preferred Option reclaims the original historic core of the campus, including the associated amenities of this advantageous site, preserving the traditions, heritage, and integrity of the original hospital. This option creates the opportunity to continue a strong DMH presence on the campus and consolidates State institutions in one concentrated area.

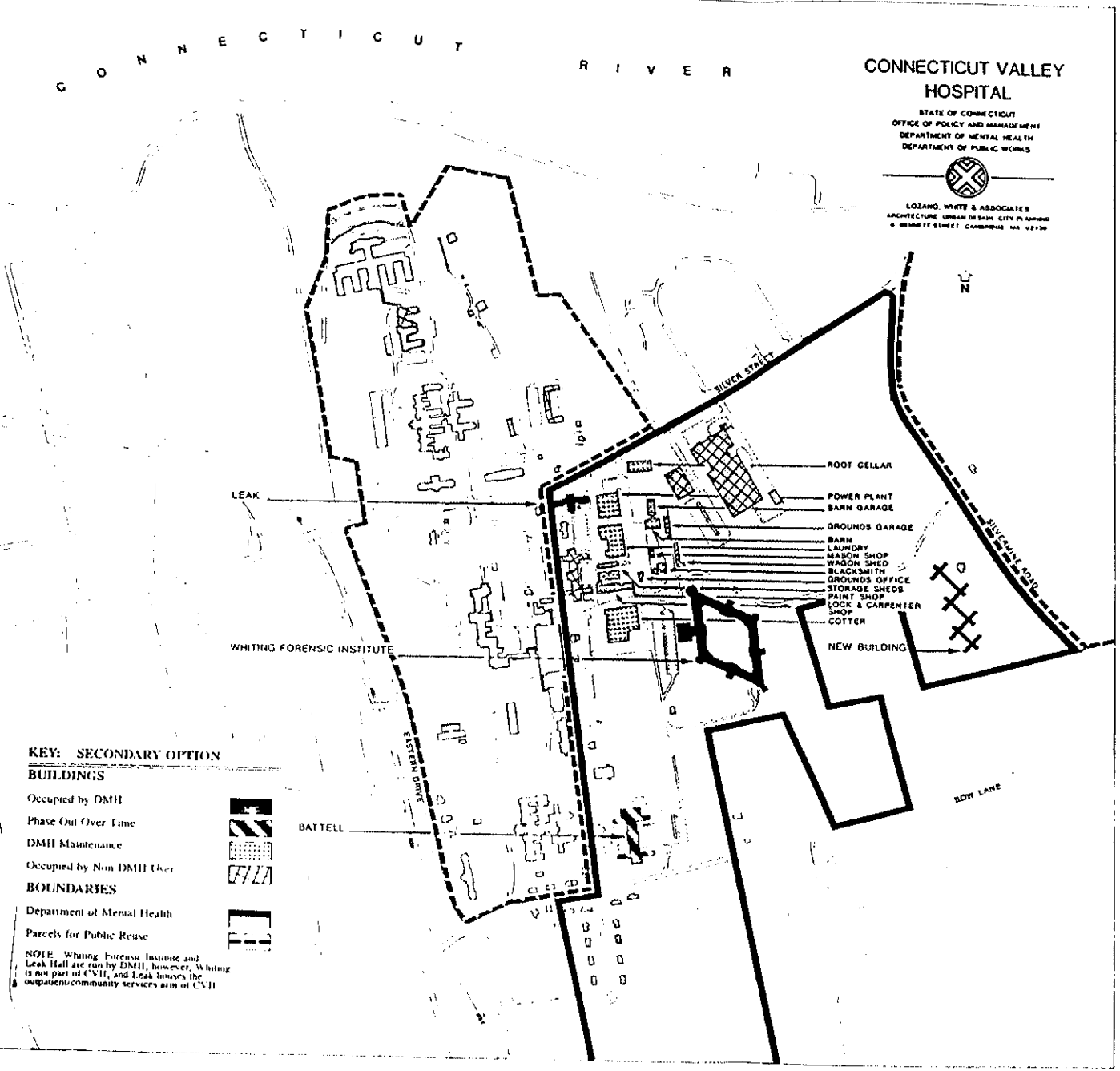
**Buildings.** The key buildings proposed for use by DMH in the Preferred Option are Shew/Beers/Dix and Battell; the existing addition to Woodward ("Woodward new") will be used during the transitional phase. The Preferred Option includes the buildings of Page, Noble, and Stanley for which no renovation is recommended at the present time. These buildings are to be managed by DMH and to be renovated at a later date to house activities that may be of interest to both DMH and the community at large. Some potential uses include an auditorium, banquet hall, recreation center, health spa, theater, conference center, and a museum of mental health in Stanley. Joint financing for the renovation between DMH and the municipality of Middletown may be possible, making these buildings a point of interface between DMH and the community.

It is also recommended that DMH retain a large number of the staff housing and other cottages, for continued use by DMH staff and for potential future use by DMH clients.

The existing maintenance cluster is recommended for continued use by DMH, because of its proximity both to the consolidated hospital and to Whiting Forensic Institute, which is also managed by DMH.

As part of the Preferred Option, it is also recommended that an additional floor be added to the existing Connecticut Mental Health Center (CMHC) in New Haven. Twenty beds currently accommodated at the hospital should be transferred to the CMHC to provide for short term acute care of patients closer to their home communities.

NOTE: As a result of changes in the program described in the "option refinement process" in this section's introduction, Option C was revised to reflect a reduction in the number of required beds, resulting in a need for fewer buildings.




**Secondary Option:** (Revised Option D):

**Buildings Proposed For Use for Patient Care By DMH:**

New Building Battell*

| Beds | **Estimated Construction Cost |
|---|---|
| 360 beds at CVH | $18,494,114 |
| +20 beds at CMHC | $1,550,000 |
| 380 | $50,044,114 |

* Phase out over time

**Total number of beds needed has been revised to reflect reduction in number since initiation of this study and since original options were developed. An additional 20 bed "swing ward" is also provided

**Concept.** This option uses the southern portion of the campus for DMH. The option centers around a new building, with its own identity on the campus, turning its back to the old campus. New construction provides the opportunity to create a state of the art environment for both patients and staff. While the Preferred Option retains a significant DMH presence on the old campus, this option proposes an opposite approach, that of utilizing a new portion of the campus, and creating a new identity for DMH. The new building is sited so that it may have completely separate access from the remainder of the campus.

**Buildings.** The Secondary Option proposes that DMH occupy a new building, and house Long Term Care patients in Battell until they are transferred to community based facilities. During the time which DMH will require the use of Battell to accommodate Long Term Care patients, the "campus" of DMH, the new building and Battell, will be somewhat loose and ill defined. However, once Long Term Care patients are transferred to community based facilities, and DMH occupies only the new building, the DMH facility will be cohesive and well defined.

As in the Preferred Option, it is recommended that DMH retain a large number of the staff housing and other cottages, for continued use by DMH staff and for potential future use by DMH clients.

The existing maintenance cluster is recommended for continued use by DMH, both because of its proximity to the consolidated hospital and to Whiting Forensic Institute which is also managed by DMH.

As part of the Secondary Option, it is also recommended that an additional floor be added to the existing Connecticut Mental Health Center (CMHC) in New Haven. Twenty beds currently accommodated at the hospital should be transferred to the CMHC to provide for short term acute care of patients closer to their home community.

NOTE: As a result of changes in the program described in the "option refinement process" in this section's introduction, Option D was revised to reflect a reduction in the number of required beds, resulting in a need for fewer buildings. Additionally, the site of the new building was changed (as compared to Option D) in order to improve access to outdoor space.

## Table 3-3 Comparison of Construction Costs: Preferred and Secondary Options

| | Number of Beds | Total Cost | Cost per Bed |
|---|---|---|---|
| Preferred Option | 360 beds at CVH | $36,179,431 | |
| | ±20 beds at CMHC | 1,550,000 | |
| | 380 beds | $37,729,431 | $99,288 |
| Secondard Option | 360 beds at CVH | $48,494,114 | |
| | ±20 beds at CMHC | 1,550,000 | |
| | 380 beds | $50,044,114 | $131,695 |

Notes:

1. CVH = Connecticut Valley Hospital

2. CMHC = Connecticut Mental Health Center, located in New Haven

3. An additional 20 beds are included at Connecticut Valley Hospital as a "swing ward" to be used as needed.

# Section 3.5. Cost Estimating Methodology

Construction cost estimates were developed for each of the options included in this report. Detailed cost information is provided in the following pages only for the Preferred and Secondary Options. Additional cost information for the original options may be found in the *Task 5.3 Report* of this study.

Cost estimates were made by applying dollars per square foot estimates to each of the buildings proposed for use by DMH. These per square foot estimates reflect three factors -- building typologies, level of improvement, and space type -- each of which are described below.

## 3.5.1. Building Typologies

A system of general typologies was developed in which the existing approximately 150 buildings were classified. These typologies include factors which directly affect renovation cost, such as date of construction and associated condition of the building, potential to meet code, building configuration, and other common elements which characterize the buildings. The following describes the general types of buildings represented at the three campuses.

**Type I: Late Nineteenth Century Buildings (only at CVH and NH):**

- aesthetically beautiful, architecturally significant
- generally do not meet codes
- generally difficult to adapt to DMH program
- generally, if in disrepair, better for non-DMH reuse
- most listed on National Registry for Historic Places

**Type II: Early Twentieth Century Buildings:**

- often linear and narrow in depth
- usually smaller scale than the other categories
- potential for code compliance
- generally, could be adapted to DMH programs
- most listed on State or National Registry for Historic Places

**Type III: Mid-twentieth Century Buildings:**

- large institutional, often self-sufficient units
- good plumbing, relative to other types
- generally, meet code
- generally, could be adapted to DMH programs

**Type IV: Staff Dormitory Buildings**

- small scale
- often linear, double barreled corridors
- often house common recreational facilities (in basement)
- reuse potential for specific DMH uses
- most often constructed during early and mid-twentieth century
- generally meet safety codes, but not J.C.A.H.O.

**Type V: New Construction:**

- provides opportunity to create ideal patient environment
- provides opportunity for ideal siting

## 3.5.2. Level Of Improvement

Three levels of improvement were specified in order to differentiate levels of investment according to whether a particular building is renovated for a permanent or a transitional use, a patient care versus a non-patient care use, etc.

The three levels of improvement of existing buildings are listed below:

- Level 1: Minimum: Basic Life Safety
- Level 2: Intermediate: Environmental Improvements
- Level 3: State of the Art: Environmental Quality

**Level 1: "Minimum: Basic Life Safety"**

Minimum level improvements will include only those needed to comply with applicable codes, including, but not limited to:

- NFPA Life Safety Codes (National Fire Protection Association)
- FSES (Fire Safety Evaluation System)
- JCAHO guidelines (Joint Commission on Accreditation of Health Care Organizations)
- HCFA standards
- Barrier-Free Codes

Improvements would include such items as rated doors, automatic doors, sprinklers, and fire alarms. Level 1 will not be applied to patient care buildings.

**Level 2: "Intermediate: Environmental Improvements"**

Level 2 improvements will be applied to those buildings to be used only temporarily and where the intent is to improve the environment while minimizing long term capital investments. Level 2 improvements are above those needed to comply with applicable codes and are intended to provide a higher level of environmental quality than Level 1 improvements.

Improvements include:

- new or extensively renovated electrical wiring
- heating, ventilation and basic air conditioning (fan coil without air distribution)
- necessary plumbing and reorganization of existing bathrooms, sprinklers
- some (up to 40 percent) partition reconfiguration (not floor-to-ceiling partitions)
- repair of existing windows and new storm windows
- wall insulation, interior furnishings and miscellaneous repairs
- exterior deferred maintenance and elevator repairs
- painting and carpeting

**Level 3: "State of the Art: Environmental Quality"**

Level 3 improvements will be applied to buildings or areas of buildings that DMH plans to occupy for the long term and where a state of the art facility and a high level of environmental quality are desirable.

Improvements would include:

- new finishes (painting, carpeting, window coverings - i.e.: curtains/drapes)
- new electrical wiring and lighting fixtures
- new heating, ventilation and air conditioning
- new plumbing and renovation of bathrooms to achieve dispersed private units
- sprinklers
- reconfiguration of up to 80 percent of new partitions, achieving programmatic needs

- new windows; development of bay windows in selected areas
- wall insulation; quality interior furnishings and needed repairs
- exterior deferred maintenance; elevator repairs
- completion of required new construction (such as completion of a partial floor, new stair tower,
- new greenhouse wing, etc.

### 3.5.3. Application Of Levels Of Improvement

*Level 1* was not applied to any buildings proposed for use by DMH in the campus options developed.

*Level 2* was chosen for Long Term Care wards and all other functional areas listed below:

- Long Term Care Wards
- Satellite pharmacies related to Long Term Care wards
- Rehabilitation program space if related to Long Term Care wards
- Program Support and General Support

*Level 3* was applied to all proposed new construction and to renovation, all inpatient wards, medical clinics, and admissions suites, with the exception of Long Term Care wards.

- All new construction
- If renovation:
  - Evaluation & Brief Treatment wards
  - Intermediate Treatment wards
  - Medical Psychiatric wards
  - Clinical Space (Medical Clinic and Admissions Suite)

### 3.5.4. Type Of Space

Types of spaces to be provided have been grossly divided into those spaces whose physical environment is governed by J.C.A.H.O. requirements, and those which are not:

- Type A: J.C.A.H.O. (e.g. wards, medical, clinic, etc.)
- Type B: non-J.C.A.H.O. (e.g. administrative offices)

Type A spaces are those which require a more expensive physical environment relative to other spaces because of having to meet additional codes such as J.C.A.H.O. and/or have special medical or plumbing requirements. Examples include all inpatient areas, Medical Records, Housekeeping, General Support Space, and Building Support areas. Type B spaces are those requiring a less expensive physical environment, such as Administration.

Per square foot cost estimates for combinations of all three factors - building type, level of improvement, and space type - follows and is presented as Table 3-4.

## Table 3-4 Recommended Average Building Costs*

| Building Type | Level of Improvement | Space Type: Type A | Space Type: Type B |
|---|---|---|---|
| I. Late 19th c. | 1. Minimum | $50. | $40. |
| | 2. Intermediate | 95. | 75. |
| | 3. Maximum | 140. | 105. |
| II. Early 20th c. | 1. Minimum | 40. | 30. |
| | 2. Intermediate | 85. | 65. |
| | 3. Maximum | 115. | 90. |
| III. Mid 20th c. | 1. Minimum | 30. | 25. |
| | 2. Intermediate | 70. | 50. |
| | 3. Maximum | 95. | 70. |
| IV. Staff Dormitories | 1. Minimum | 40. | 25. |
| | 2. Intermediate | 80. | 60. |
| | 3. Maximum | 95. | 80. |
| V. New Construction | 1. Minimum | | |
| | 2. Intermediate | | |
| | 3. Maximum | 155. | 105. |

* Cost estimates are for budget purposes. They were developed by A.M. Fogarty & Assoc., Inc., Cost Estimators. Costs are construction costs, in May 1989 dollars, and do not include design fees or contingencies.

# Section 3.6 Cost Estimates

The following section presents construction cost estimates for the Preferred and Secondary Options.

**Abbreviations:**

A list of abbreviations and terms used in the costing charts which follow, is provided below.

| | |
|---|---|
| **EBT:** | Evaluation and Brief Treatment ward |
| **IT:** | Intermediate Treatment ward |
| **LTC:** | Long Term Care ward |
| **MED PSYCH:** | Medical Psychiatric ward |
| **RESERVE:** | Space reserved for future use; no renovation is recommended at this time |
| **SATELLITE PHARMACY:** | An ancillary pharmacy provided wherever possible in buildings other than the anchor building, where the main pharmacy is usually located. |
| **STORAGE:** | Provided wherever possible, usually in basement areas. |

| | TOTAL BEDS * | TOTAL COST |
|---|---|---|
| CVH | 360 | $36,179,431 |
| CMHC | 20 | $1,550,000 |
| TOTAL | 380 | $37,729,431 |

SUMMARY OF ESTIMATED CONSTRUCTION COSTS

PREFERRED OPTION

Total bed number includes 360 beds, estimated as needed to meet DMH future needs, plus an additional 20 beds provided as a "swing ward", to be used as needed.

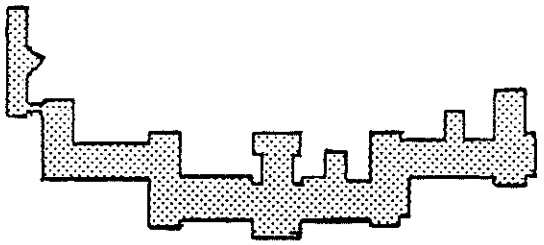
| DMH BUILDINGS | COST ($) RENOVATION | NEW CONSTRUCTION | TOTALS |
|---|---|---|---|
| Shew, Beers, Dix | $21,787,395 | | |
| Battell | $9,672,980 | | |
| Woodward | -- | | |
| Subtotal: | $31,460,375 | $0 | $31,460,375 |
| Site Improvements (15%) | | | $4,719,056 |
| Subtotal: | | | $36,179,431 |
| Plus: 1 Ward @ Conn. Mental Health Center | | $1,550,000 | |
| TOTAL: | | | $37,729,431 |

NOTES:

1. Cost estimates are in May, 1989 dollars and do not include design fees or contingencies.

2. As part of the Preferred Option, it is recommended that one 20-bed Evaluation and Brief Treatment (EBT) ward be located at the existing Connecticut Mental Health Center (CMHC). These patients currently accommodated at the hospital should be transferred to the CMHC so that they may be treated closer to their home community. The cost estimate includes this new ward as an additional floor to the CMHC.

Floor by floor cost estimates for each building included in the Preferred Option follow.



CONNECTICUT VALLEY HOSPITAL

PREFERRED OPTION
BUILDING: Shew, Beers, Dix

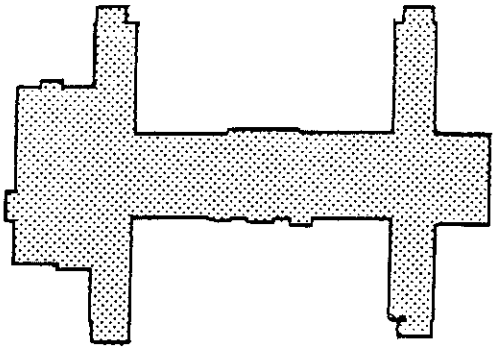
SHEW,BEERS, DIX

| TOTAL AREA (gsf) | TOTAL COST | TOTAL BEDS |
|---|---|---|
| 170,765 | $21,787,395 | 160 |

| FLOOR # | BUILDING TYPE | TOTAL SF (PROPOSED REN.) | PROPOSED USE | LEVEL OF IMPROVEMENT | COST PER Sq. FOOT | TOTAL COST |
|---|---|---|---|---|---|---|
| 5 | I | 6,950 | Storage | --- | --- | --- |
| 4 | I | 32,763 (32,763) | 2 IT (A) REHAB | 3 | $140 | $4,586,820 |
| 3 | I | 32,763 (32,763) | 2 IT (A) REHAB | 3 | $140 | $4,586,820 |
| 2 | I | 32,763 (32,763) | 1 Med Psy. Med Clinic 1 EBT (A) | 3 | $140 | $4,586,820 |
| 1 | I | 32,763 (32,763) | 2 EBT Admiss. Lobby Admin. | 3 | $140 | $4,586,820 |
| BASEMENT | I | 32,763 (32,763) | Admin. Prog Supp Gen. Supp. Storage | 3 | $105 | $3,440,115 |
| BLDG. TOTAL | | 170,765 | | | | |
| TOTAL RENOV. | | 163,815 | | | | $21,787,395 |

CONNECTICUT VALLEY HOSPITAL

PREFERRED OPTION
BUILDING: Battell

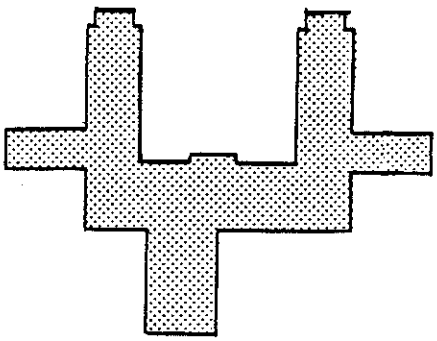


BATTELL

| TOTAL AREA (gsf) | TOTAL COST | TOTAL BEDS |
|---|---|---|
| 126,355 | $9,672,980 | 160 |

| FLOOR # | BUILDING TYPE | TOTAL SF (PROPOSED REN.) | PROPOSED USE | LEVEL OF IMPROVEMENT | COST PER Sq. FOOT | TOTAL COST |
|---|---|---|---|---|---|---|
| 4 | III | 25,271 (25,271) | 2 IT (A) | 3 | $95 | $2,440,745 |
| 3 | III | 25,271 (25,271) | 2 IT (A) | 3 | $95 | $2,440,745 |
| 2 | III | 25,271 (25,271) | 2 IT (A) | 3 | $95 | $2,440,745 |
| 1 | III | 25,271 (25,271) | 2 LTC (A) | 3 | $95 | $2,440,745 |
| BASEMENT | III | 25,271 (1,000) *(24,271) | SAT. PHAR STORAGE (B) | 3 --- | $70 --- | $70,000 |
| BLDG. TOTAL | | 126,355 | | | | |
| TOTAL RENOV. | | 102,084 | | | | $9,672,980 |

COMMENTS: * Storage will not be renovated.



CONNECTICUT VALLEY HOSPITAL

PREFERRED OPTION
BUILDING: Woodward

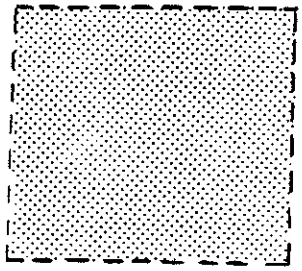
| TOTAL AREA (gsf) | TOTAL COST | TOTAL BEDS |
|---|---|---|
| 45,212 | $0 | 40 |

| FLOOR # | BUILDING TYPE | TOTAL SF (PROPOSED REN.) | PROPOSED USE | LEVEL OF IMPROVEMENT | COST PER Sq. FOOT | TOTAL COST |
|---|---|---|---|---|---|---|
| 2 | II | 16,425 | 1 LTC REHAB | -- | -- | -- |
| 1 | II | 16,425 | 1 LTC SAT PHAR REHAB | -- | -- | -- |
| BASEMENT | II | 12,362 | Storage | --- | --- | --- |
| BLDG. TOTAL | | 45,212 | | | | |
| TOTAL RENOV. | | | | | | $0 |

NOTE: Space to be used for short transitional period; no renovation necessary.

CONNECTICUT VALLEY HOSPITAL

PREFERRED OPTION
BUILDING: Additional Floor to Connecticut Mental Health Center (CMHC)



Additional Floor to CMHC

| TOTAL AREA (gsf) | TOTAL COST | TOTAL BEDS |
|---|---|---|
| 10,000 | $1,550,00 | 20 |

| FLOOR # | BUILDING TYPE | TOTAL SF (PROPOSED NEW CONSTRUCTION) | PROPOSED USE | LEVEL OF IMPROVEMENT | COST PER Sq. FOOT | TOTAL COST |
|---|---|---|---|---|---|---|
| | | 10,000 | 1 EBT (A) | 3 | $155 | $1,550,000 |
| BLDG. TOTAL | | 10,000 | | | | $1,550,000 |

| | TOTAL BEDS * | TOTAL COST |
|---|---|---|
| CVH | 360 | $48,494,114 |
| CMHC | 20 | $1,550,000 |
| TOTAL | 380 | $50,044,114 |

SUMMARY OF ESTIMATED CONSTRUCTION COSTS

SECONDARY OPTION

Total bed number includes 360 beds, estimated as needed to meet DMH future needs, plus an additional 20 beds provided as a "swing ward", to be used as needed.

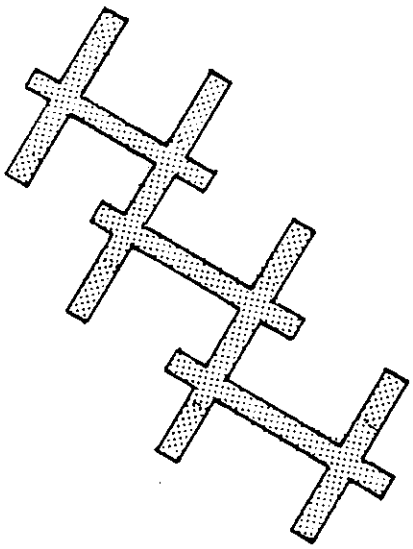
| DMH BUILDINGS | RENOVATION | NEW CONSTRUCTION | TOTALS |
|---|---|---|---|
| New Building | | $37,860,855 | |
| Battell | $4,307,940 | | |
| Subtotal: | $4,307,940 | $37,860,855 | $42,168,795 |
| Site Improvements (15%) | | | $6,325,319 |
| Subtotal: | | | $48,494,114 |
| Plus: 1 Ward @ Conn. Mental Health Center | | $1,550,000 | |
| TOTAL: | | | $50,044,114 |

NOTES:

1. Cost estimates are in May, 1989 dollars and do not include design fees or contingencies.

2. As part of the Secondary Option, it is recommended that one 20-bed Evaluation and Brief Treatment (EBT) ward be located at the existing Connecticut Mental Health Center (CMHC). These patients currently accommodated at the hospital should be transferred to the CMHC so that they may be treated closer to their home community. The cost estimate includes this new ward as an additional floor to the CMHC.

Floor by floor cost estimates for each building included in the Secondary Option follow.



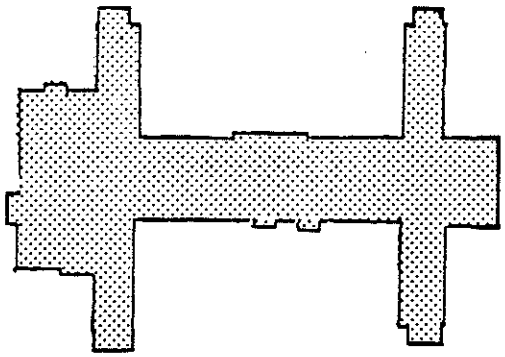
CONNECTICUT VALLEY HOSPITAL
SECONDARY OPTION

BUILDING: New Building

NEW BLDG.

| TOTAL AREA (gsf) | TOTAL COST | TOTAL BEDS |
|---|---|---|
| 339,172 | $37,860,855 | 280 |

| FLOOR # | BUILDING TYPE | TOTAL SF (PROPOSED NEW CONSTRUCTION) | PROPOSED USE | LEVEL OF IMPROVEMENT | COST PER Sq. FOOT | TOTAL COST |
|---|---|---|---|---|---|---|
| N/A | V | 184,420 | 3 EBT; 10 IT 1 MED PSYCH. MED CLINIC ADMIN. SUITE REHAB DIETARY (A) | 3 | $155 | $28,585,100 |
| N/A | | 28,601 | ADMINISTR. GENERAL SUPP PROG. SUPPORT (B) | 3 | $105 | $3,003,105 |
| BASEMENT | | 110,000 | STORAGE | | $35 | $3,850,000 |
| BLDG. TOTAL | | 323,021<br>(5%) 16,151<br>339,172 | | 3 | $150 | $2,422,650<br>$37,860,855 |
| TOTAL RENOV. | | --- | | | -- | --- |



CONNECTICUT VALLEY HOSPITAL
SECONDARY OPTION

BUILDING: Battell

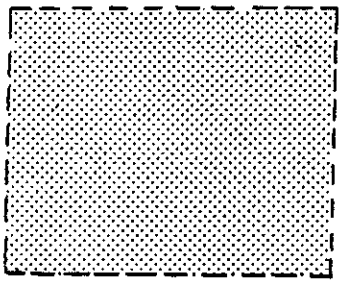
BATTELL

| TOTAL AREA (gsf) | TOTAL COST | TOTAL BEDS |
|---|---|---|
| 126,355 | $4,307,940 | 80 |

| FLOOR # | BUILDING TYPE | TOTAL SF (PROPOSED REN.) | PROPOSED USE | LEVEL OF IMPROVEMENT | COST PER Sq. FOOT | TOTAL COST |
|---|---|---|---|---|---|---|
| 4 | III | 25,271<br>(25,271) | RESERVE<br>(A) | --- | --- | --- |
| 3 | III | 25,271<br>(25,271) | 2 LTC<br>(A) | 2 | $70 | $1,768,970 |
| 2 | III | 25,271<br>(25,271) | 2 LTC<br>(A) | 2 | $70 | $1,768,970 |
| 1 | III | 25,271<br>(1,000)<br>(10,000)<br>(14,271) | SAT. PHARM<br>REHAB<br><br>RESERVE | 2<br><br><br>--- | $70<br><br><br>--- | $770,000<br><br><br>--- |
| BASEMENT | III | 25,271 | STORAGE | --- | --- | --- |
| BLDG. TOTAL | | 126,355 | | | | |
| TOTAL RENOV. | | 61,542 | | | | $4,307,940 |

CONNECTICUT VALLEY HOSPITAL

SECONDARY OPTION
BUILDING: Addition to Connecticut
Mental Health Center (CMHC)



Addition to CMHC

| TOTAL AREA (gsf) | TOTAL COST | TOTAL BEDS |
|---|---|---|
| 10,000 | $1,550,000 | 20 |

| FLOOR # | BUILDING TYPE | TOTAL SF/ (PROPOSED NEW CONSTRUCTION) | PROPOSED USE | LEVEL OF IMPROVEMENT | COST PER Sq. FOOT | TOTAL COST |
|---|---|---|---|---|---|---|
| | | 10,000 | 1 EBT (A) | 3 | $155 | $1,550,000 |
| BLDG. TOTAL | | 10,000 | | | | $1,550,000 |

# Section 3.7. Site Plan Description: Preferred Option

The description below is intended to accompany the site plan presented on the following page. The site plan depicts the buildings and land area at Connecticut Valley Hospital recommended in the Preferred Option for future use by the Department of Mental Health (DMH). The improvements depicted on the site plan are not intended to be taken literally, but instead as guidelines for future site design of the consolidated campus.

**Buildings Proposed for use by the Department of Mental Health**

| | | |
|---|---|---|
| Shew/Beers/Dix | Woodward(old)* | Page |
| Chapel | Battell | Haviland |
| Noble | Woodward(new)** | Stanley |
| Existing maintenance | | |

* Demolition is recommended.
** Phase out over time.

Concept

In the Preferred Option, the current main entrance to the hospital is retained. From Eastern Drive, Vance and Flood Drives lead to the main hospital complex housed in Shew/Beers/Dix. Additional patient wards are housed in Battell and the "new" Woodward buildings; Battell houses both Intermediate Treatment and Long Term Care patients, while "new" Woodward houses only Long Term Care patients and will, therefore, be phased out when these patients are transferred to community-based facilities.

The three main patient care buildings, Shew/Beers/Dix, Battell, and Woodward, are currently sited in such a manner so that the relationship between the buildings is not immediately evident. Additionally, Battell and Woodward are located at some distance from the Shew/Beers/Dix complex. A slightly realigned road network, landscaping, and a somewhat redesigned parking lot layout are proposed to physically and perceptually relate the buildings. Outdoor recreational facilities are located to maximize potential usage as well as staff supervision of patient activities. In addition to open recreational space, secure courtyards are provided at each patient care building for safe recreation.

A number of staff houses are retained for DMH use; it is recommended that these houses accommodate staff and/or DMH clients, depending on future needs.

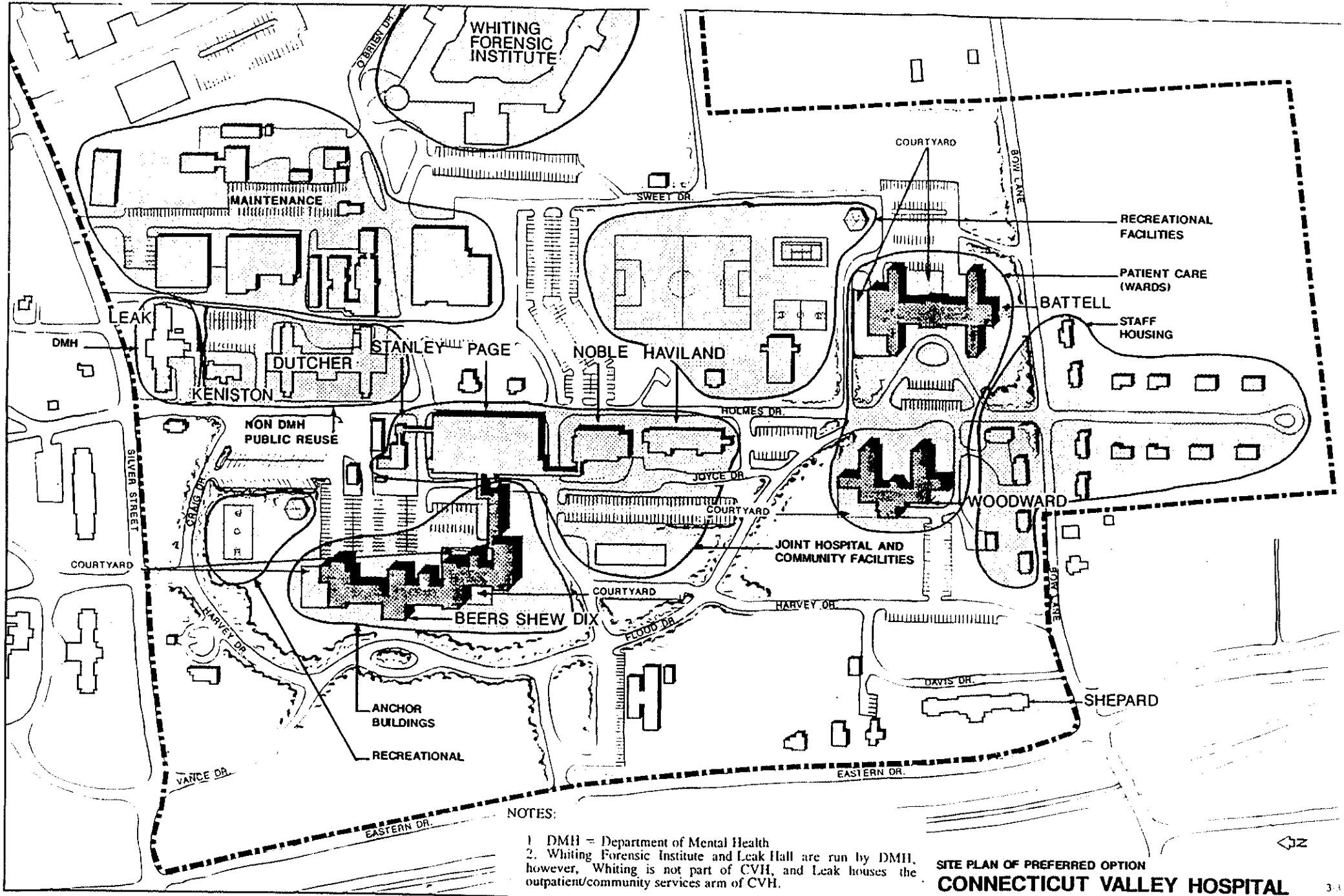
The historical and physically connected cluster of Page, Noble, and Stanley, along with the newer Haviland and School buildings are reserved for shared use by DMH, non-DMH users of the campus, and the community at large. The School building is currently used as a Day Care Center and it is recommended that this use continue. It is proposed that Stanley, the smallest building in the historic cluster, be converted to a Museum of Mental Health. Haviland may be used by DMH in the transitional phase for reserve space, as well as its current use as a DMH training center, but may be available in the future for shared use among other campus users and the community at large. For the grand historic buildings of Page and Noble, it is recommended that DMH manage the buildings, but that the buildings be used by the public at large. Potential uses for Page and Noble include an auditorium, banquet hall, conference center, recreation center, theater, etc.

The existing maintenance cluster is recommended for continued use by DMH because of its proximity both to the consolidated hospital and to Whiting Forensic Institute (which is also managed by DMH), as well as to the Dutcher treatment center operated by CADAC.

Four additional buildings fall within the proposed boundaries of the Preferred Option, these are: Dutcher, Leak, Shepard and Keniston. Two of these are currently occupied by non-DMH public uses; Dutcher is occupied by CADAC, and Shepard by the City of Middletown, which provides shelter to homeless individuals. Leak is occupied by River Valley Services, a component of CVH, which provides comprehensive community mental health services. Although River Valley Services should be physically located within the community, the service will continue to be housed in Leak Hall until more desirable accommodations are found. All three uses are compatible with the functions of Connecticut Valley Hospital. Keniston is in poor condition and is presently vacant. If a non-DMH public agency, judged to be compatible with DMH, (based on the reuse criteria described in the *Task 9 Report* of this study), were interested in renovating the building, it would be recommended that they do so. However, absent interest on the part of other users, after a lapse of five years, demolition of Keniston is recommended.

A floor by floor allocation of uses is provided in the *Task 6 Report* of this study.

*Noble Hall*
*Connecticut Valley Hospital*




NOTES:

1. DMH = Department of Mental Health
2. Whiting Forensic Institute and Leak Hall are run by DMH, however, Whiting is not part of CVH, and Leak houses the outpatient/community services arm of CVH.

SITE PLAN OF PREFERRED OPTION

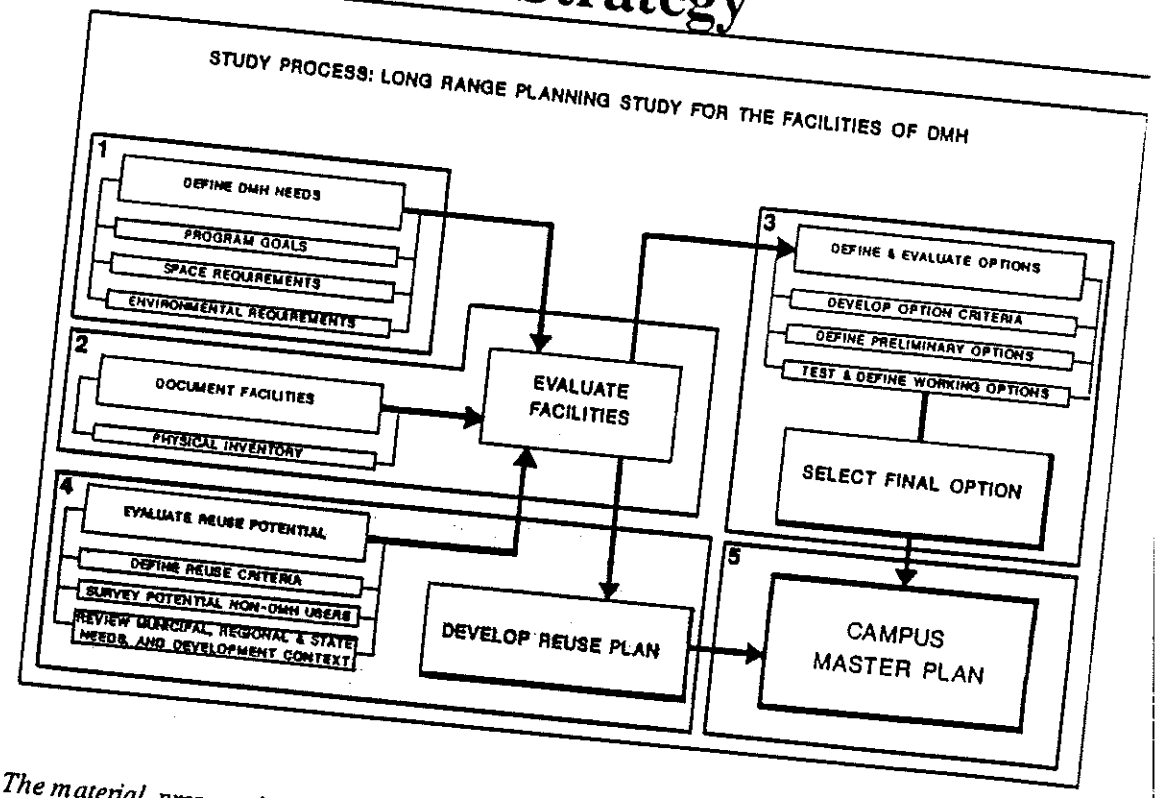
**CONNECTICUT VALLEY HOSPITAL**

# CHAPTER 4: CAMPUS REUSE STRATEGY

*"Public relations will need cultivation. Never, despite improvements in the past three to four decades, have public mental [health] hospitals really enjoyed good standing in the community. The barrier is psychological and related to persisting distorted concepts of mental disease which accentuate the unpleasant aspects but fail to recognize the social and economic values in maintaining mental health and restoring the maladjusted...Psychiatry must be fostered and popularized even to the extent that the patient will discuss his treatment with the same aplomb he now speaks of 'my operation'."*

Dr. Clifford D. Moore, 1944, Superintendent of Fairfield Hills Hospital, discussing plans for the future at a meeting with the Board of Trustees.

# Chapter 4: Campus Reuse Strategy




## Introduction

*The material presented in this chapter summarizes the results of the lower tier of the study depicted in the accompanying flow chart. The primary result of this part of the study is a set of recommendations identifying the reuse program that best fits both the Department of Mental Health and the State's interests. These interests have been defined in previous documents in terms of criteria for reuse, and can be summarized as being those uses which are compatible with the psychiatric hospitals and are consistent with municipal, regional, and State plans.*

*This chapter identifies reuse possibilities for the excess buildings and lands at Connecticut Valley Hospital. Reuse recommendations are discussed in more detail in Task 9 of this study.*

## Purpose

The purpose of this part of the study was to evaluate the reuse potential of, and identify reuse options for those properties which were determined to be in excess of DMH's future needs. These properties have the potential to meet a number of important public needs. Certain reuses could benefit DMH patients and staff. Further, existing buildings can be

occupied by State agencies in need of space more quickly, and sometimes more economically, than space obtained through new construction or lease. The property is also important in terms of its local context, offering possibilities for housing, employment, and open space conservation. On the other hand, introducing non-DMH reuses on the campus property, while continuing to provide DMH patient care, may carry risks and impacts which should not be overlooked; potential impacts must be evaluated and a determination made as to the appropriateness and/or "desirability" of specific reuse options. A set of guidelines, in the form of reuse criteria, were developed to facilitate this process.

As discussed in the previous chapter, in the future, DMH will be occupying a smaller number of buildings on the Connecticut Valley Hospital campus. As presented in Chapter 3, the Preferred Option recommends that the DMH facility be consolidated into three main buildings: Shew/Beers/Dix, Battell, and Woodward. In order to determine the reuse potential of buildings and lands which, based on the premises of the Preferred Option, are in excess of the future needs of DMH, the remaining buildings and grounds were divided into zones or parcels for potential reuse. Recommendations are provided for the reuse of these buildings and parcels of land.

In summary, this chapter presents recommendations for the reuse of properties in excess of DMH future needs at Connecticut Valley Hospital and provides general suggestions for their implementation.

## Organization of this Chapter

This chapter is organized in the following manner:

- **Methodology:** This section describes the methodology used in developing the reuse options for the campuses; the criteria applied to select reuse options are also presented. Additionally, general recommendations for reuse are set forth.
- **Context:** Next, the context of the hospital is briefly described; relevant descriptions of the municipality and region in which the campus is located provide the framework for reuse recommendations.
- **Recommended Reuse:** Finally, reuse recommendations are provided for each parcel; recommendations are evaluated as to their compatibility with reuse criteria.

The campus overall, and each parcel specifically, are described in terms of:

- natural features
- adjacent uses
- access
- zoning

Recommended reuses are provided for all property in excess of DMH future needs and are discussed in terms of:

- Reuse Recommendation
- Parcel Description
- Consistency with Municipal, Regional, and State Plans
- Feasibility and Constraints

The analysis described herein and the resultant recommendations should serve as a useful starting point, identifying apparent and appropriate reuse possibilities for excess buildings and lands at the campus of Connecticut Valley Hospital. The recommendations which follow are intended to help to shape the process leading to the best possible use of these valuable resources.

# Section 4.1. Methodology

As previously mentioned, the purpose of this part of the study was to evaluate the reuse potential of properties which will be in excess of DMH future needs, and to identify appropriate and desirable reuse options for these buildings and land. Three main activities comprised this stage in the study process: 1) a survey was conducted of potential non-DMH users to determine ways in which excess property on the campus could meet other State agency needs, 2) reuse criteria, defining "appropriate" and "desirable" uses were developed to help guide the selection of reuse options, and 3) municipal, regional, and State plans were reviewed to ensure that recommendations were consistent with the stated goals for the future of these communities. At the same time, the development context was analyzed, (including market conditions, demographic trends, etc.) to determine the degree of need and support for potential reuse options.

First, the Statewide Facility and Capital Plan (FACCAP), 1988-1993 was used to identify State agency requests for building space, and/or lease space, which might possibly be met by using buildings or land at the three DMH campuses.

Interviews were conducted to define the size, functional needs, and locational requirements of relevant State agency space requests. State agency representatives were asked to anticipate building space and land needs beyond the 5-year FACCAP time horizon. The results of these interviews are documented in *Task 2 Report* of this study.

In addition to State agencies, other individuals, organizations, and agencies relevant to the reuse of the campus were interviewed. Public meetings were held in the municipality in which the hospital is located in order to provide a forum to compile reuse ideas and concerns from the Town's residents. Summaries of the results of this contact with the affected communities (i.e. correspondence and interviews with local officials, comments at public meetings), are included where relevant, in the discussions concerning recommendations for reuse. Municipal, regional and State plans were also reviewed to identify needs that could potentially be met by reusing campus resources, and ensure that recommendations for reuse are consistent with stated goals for the future of the community and region in which the hospital is located.

In order to facilitate the selection of reuse options, and to ensure their "appropriateness" in terms of DMH needs, requirements or criteria for reuse were defined. These are listed in the pages which follow.

An analysis of topographic features, demographic trends, market conditions, and a review of adjacent uses also guided the formulation of recommendations.

### 4.1.1. Criteria For Reuse

Reuse options were derived according to a set of reuse criteria developed for parcels which were determined to be in excess of DMH needs. The criteria were developed in *Task 4 Report* of this study. The following is a list summarizing the criteria; see the *Task 4 Report* for an explanation of each. Reuses should:

- Be compatible with the atmosphere of a hospital and reinforce the perception and management of DMH hospitals as specialized treatment facilities.
- Enhance quality of care and professional status of DMH facilities.
- Encourage positively perceived uses and activities in order to increase public contact and reduce the isolation of the hospital from the community.
- Minimize negative imagery associated with DMH facilities and properties.
- Protect the physical safety and welfare of DMH patients and staff.
- Encourage non-DMH reuses that will preserve buildings with the greatest architectural and historic importance.
- Achieve benefits to DMH and DMH patients.
- Protect environmental resources/preserve scenic values.
- Encourage uses which contribute to improvements in hospital utilities and infrastructure systems.
- Ensure new uses are consistent with campus master plans.

Recommended reuses were refined based on physical characteristics, surrounding land use patterns, and general market trends. Recommendations for reuse were reviewed for:

- compatibility with existing and proposed land uses
- compatibility with local, regional, and State plans and policies
- compatibility with existing zoning
- environmental impact
- degree to which a municipal need is fulfilled
- degree to which interest has been expressed by a specific party
- degree of predicted market support
- fit with topography
- appropriate supporting infrastructure, including access and utilities

### 4.1.2. Criteria For Parcelization

In the future DMH will be occupying a small number of buildings at Connecticut Valley Hospital. In accordance with the Preferred Option, the hospital functions will be consolidated in the historic core, located approximately in the middle of the main campus in three main buildings; the remaining buildings and grounds were divided into use zones or parcels for potential reuse.

The division of each campus into parcels was established:

- following the constraints and opportunities created by topographical conditions.
- with consideration of adjacent uses.
- with attention to the area's proximity to the future DMH campus.
- with consideration to the existence, or creation, of buffer zones between the future DMH campus and new adjacent uses.
- with attention to access.

Campus parcelization is presented in tabular and mapped form in Section 4.4 of this chapter. The estimated acreage shown for each parcel is approximate as measured from United States Geological Survey (USGS) maps. More accurate measurements should be taken prior to initiating any reuse activity.

Natural features information has been collected from a multitude of sources and compiled onto one map. The purpose of the natural features map is to depict natural features which can be utilized to form parcels and influence land use strategies. The size and scale of the natural features maps is small; only a conceptual interpretation is appropriate. While approximate locations of numerous wetland, agricultural, and sloped areas are shown in order to make the point visually that these conditions exist, the maps should not be substituted for official and detailed municipal and State maps of these features.

Site specific investigations should be undertaken prior to any reuse activity. Any development on soils classified as inland wetlands or water course must be reviewed by the Commissioner of the Department of Environmental Protection as per Connecticut General Statutes. Generally, where development is proposed, soil characteristics should not present limitations to development. However, site specific environmental impact analyses must be undertaken prior to any building.

Adjacent uses and local zoning maps are provided to demonstrate the compatibility of reuse recommendations with the surrounding uses.

Areas identified on the maps as best suited for the location of uses should be interpreted in a general way; exact boundary definitions are not provided.

# Section 4.2. General Recommendations

Individually, as well as collectively with the other two State-owned hospitals, the campus constitutes a very important State asset because of the clusters of historically and architecturally significant buildings and large expanses of open space. The value of the campus is in large part due to the size of the property, the large variety of facilities, and the availability of utilities. While the State could realize revenue from the sale of campus properties, to dispose of the properties on any large scale basis would result in the permanent loss of irreplaceable State resources. Additionally, it would be virtually impossible to acquire duplicate properties at any cost in the future.

Although a potential return from the sale of land exists, even if the revenues could go directly to DMH (which is unlikely, as they are deposited into a State General Fund), the amount would have a relatively insignificant impact on the long-term budget needs of the Department. To dispose of the property on any large scale basis would result in the permanent loss of irreplaceable State resources at a price far below what it would cost the State to acquire such properties in the future. Therefore, if any land is sold, it should be a minimal amount.

The accompanying chart (Table 4-1) represents the potential of the campus to generate income from the sale of parcels, as based on the recommended reuses presented in this document. Estimated land values used are maximum values in surrounding areas, as provided by local real estate agents and others. Maximum estimated values are used to determine the upper limit of sales possible. This is done in order to assess the maximum possible financial benefit as compared to the significance of the loss of these assets as discussed above. In reality, these land values must be heavily discounted due to the impacts of adjacent uses, bulk sales of properties and other factors. It has not been possible to estimate the discount rate since no comparable properties exist to accurately account for the factors which affect the value of the campus parcels.

Based on the data presented in Table 4-1, the upper limit of potential income generated from the sale of property at Connecticut Valley Hospital is $3,000,000. The sum of $3,000,000 must be heavily discounted based on the factors listed below the chart. While the State could realize revenue from the sale of campus property, the potential to generate income is minimal when compared to, for example, the State's budget needs; the maximum potential income from the sale of property at Connecticut Valley Hospital, (calculated according to the reuse recommendations presented in this chapter), represents approximately 1.1% of the Department of Mental Health's budget of $273,056,307 for Fiscal Year 1991 (Agency General Fund Appropriation including both capital and operating budgets). Additionally, the upper limit of the potential to generate income through the sale of property is far below what it would cost the State to acquire such property in the future.

Therefore, it is recommended that the State not sell land, but instead, lease parcels for extended time periods. Furthermore, it may be necessary to lease some parcels (or portions of parcels) for nominal fees in order to attract desirable reuses to the campus.

## Table 4-1 Potential To Generate Income

| Parcel | Recommended Reuse | Approx. Acreage* | Max Val (per acre) | Total |
|---|---|---|---|---|
| Reuse Parcel 1 | Community Development | 50 | $60,000 | $ 3M |

* Approximate gross acreage must be reduced to account for topographical and other constraints to obtain net buildable acreage.

** Maximum Estimated Land Value: Values presented are based on sales of individual lots and are absolute upper limits; they must be heavily discounted for the following reasons:

- negative perceptions of properties because of proximity to psychiatric hospital and other institutions, including Department of Correction
- bulk sale of properties
- reduction of gross acreage to reflect net, developable acreage
- other locational constraints, such as adjacent uses

Source: Estimated land values were derived by comparing values provided by local real estate agents, city officials and others, as well as by reviewing newspaper advertisements for the sale of properties.

The Connecticut Valley Hospital campus is currently utilized by a multitude of State agencies; DMH is increasingly becoming a minority user of the campus. The property has undergone a number of changes over the years in terms of users and uses, and will continue to experience changes in the future. The reuse recommendations provided in this chapter should be used to carefully guide these changes. Although a challenge, coordinating multiple uses on the campus has the potential to meet a number of State and DMH needs simultaneously. However, the reuse recommendations must be implemented with care. The hospital campus was established to serve and benefit persons with mental illness, and it will continue to play an important role in the State's mental health system – as a center of specialized, intensive acute care. Providing quality mental health care should continue to be the priority function of the campus, and reuse of the excess facilities should not conflict with this goal. The recommendations for reuse which are included in this chapter, provide the general parameters for reuse of excess properties; the reuse criteria previously described should be used to guide the selection of specific reuse options.

# Section 4.3 Context

## 4.3.1. Middletown and the Midstate Planning Region

The Connecticut Valley Hospital (CVH) is located in Middletown, situated along the westerly bank of the Connecticut River, midway between Hartford and Long Island Sound. Middletown, as the name implies, is located near the geographic center of the State. The town is located in the center of the New Haven-Hartford corridor, and is connected with New London by Route 9, which intersects Interstate 95 at Old Saybrook.

Middletown is the largest town in the Midstate Planning Region, with a 1986 population of 41,220, an increase of 5.6% from 1980 (see the map entitled, "Midstate Planning Region" for the location of the region within the State). In addition to having the largest population in the planning region, Middletown also has the largest percentage and number of minority group residents of lower income in the planning region. However, the median income for a family of four in Middletown in 1988 was $40,300.

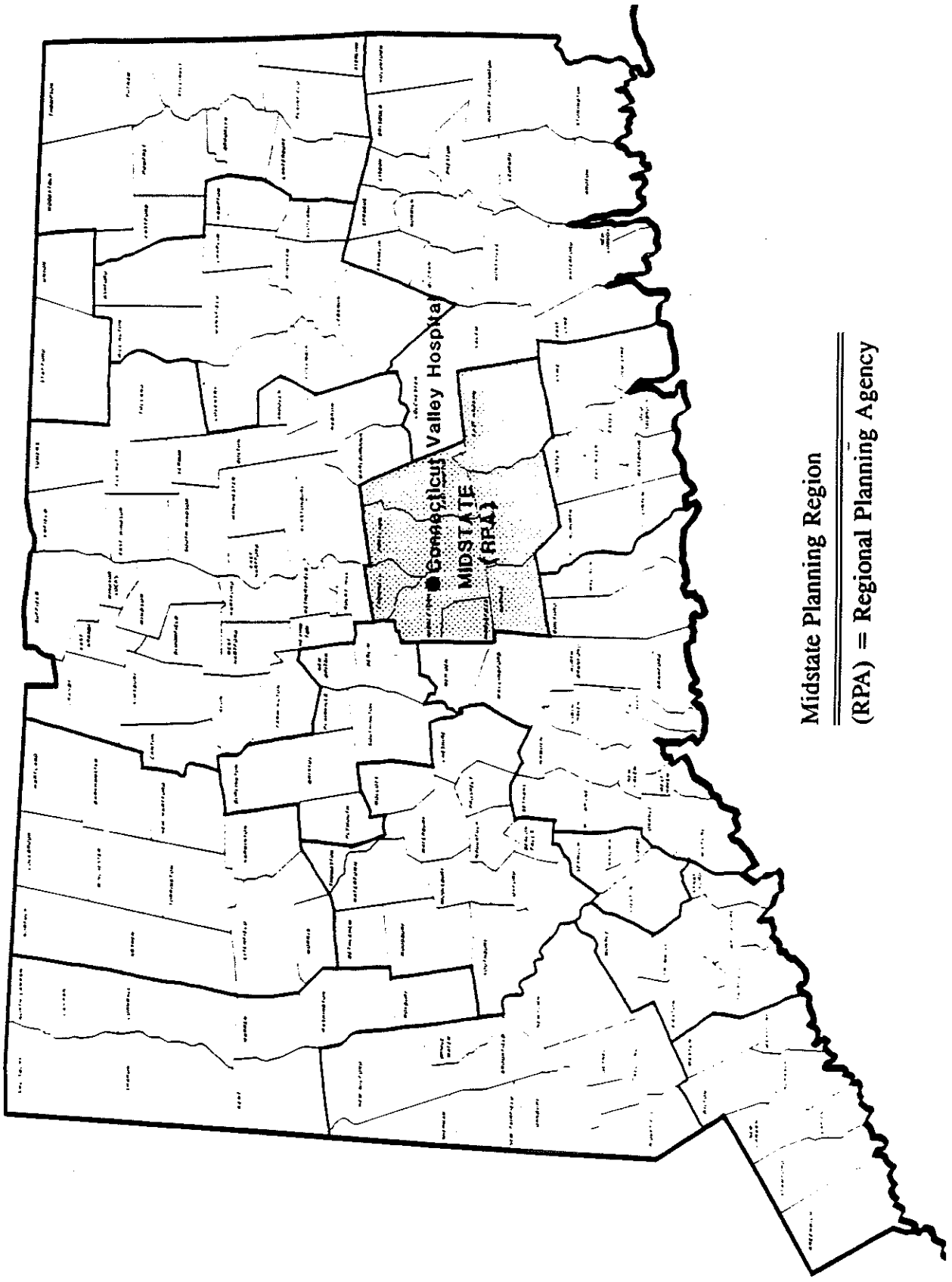
The Town of Middletown is experiencing relatively steady growth, primarily due to its proximity to the Greater Hartford area. As a result of increasing housing costs in the Hartford area many individuals are choosing to relocate southward to the Midstate Region, a number of them to Middletown. This has had an impact on the region, evident in the steadily decreasing relative difference in housing cost between the Capital Region and the Midstate Region, which has been decreasing steadily since 1980.

One of the significant factors affecting housing demand and costs has been the substantial economic growth occurring both in the Midstate Region and in adjacent Regions on the Route 91 corridor. According to the Midstate Regional Housing Needs Assessment Report (December, 1987), major new developments particularly in Middletown, Wallingford, and Meriden, have resulted in attracting new residents to the Region.

More recently, however, development in Middletown has been increasing at a slower rate. A certain amount of overbuilding has taken place; the residential market has become saturated and the cost of housing has not been increasing as rapidly as it had been.

There is a relatively high percentage of multiple-family dwelling units in Middletown, with approximately 72% of region's multi-family units located in Middletown. Most of the eight-town region's low- and moderate-income housing is located in Middletown, including three public housing projects. One, Long River Village, forms the northern boundary of the CVH campus. In addition to these, there are five Planned Residential Developments and several elderly housing complexes in the Town.

Housing for the elderly is a growing need. Over the next two decades, this age cohort is expected to be among the fastest growing population groups in the Region. By the year 2000, the Office of Policy and Management's revised 1989 projections, estimate that the region's elderly population (65+) will increase from 9,460 in 1980 to 12,900 in the year 2000. According to the Midstate Regional Planning Agency, semi-independent living units are needed for elderly individuals requiring assistance but not institutional care.




Midstate Planning Region

(RPA) = Regional Planning Agency

## Table 4-2 Population Projections To Year 2000

### Midstate Planning Region and City of Middletown

| | 1980 | 1985 | 1990 | 1995 | 2000 | % change 1980 - 2000 |
|---|---|---|---|---|---|---|
| Planning Region | 87,203 | 88,800 | 92,450 | 95,000 | 96,450 | + 10.6% |
| Middletown | 39,040 | 38,900 | 39,400 | 39,550 | 39,900 | + 2.20% |

Over the years, the campus of Connecticut Valley Hospital has received varying degrees of attention in planning efforts by the City of Middletown. The Town's 1976 Plan for Development does not mention the campus of Connecticut Valley Hospital at all; the 1965 Plan for Development recommended that the property remain in institutional use. However, the City's most recent Plan for Development, still pending approval, sets forth a series of goals for the Year 2000 which include plans that directly incorporate the hospital property into a proposed "open space corridor" along the Connecticut River. The plan calls for a number of recreational and other uses along the riverfront resulting in integrating the property with the surrounding neighborhoods, from which the hospital is presently isolated. The Plan for Development 2000, also proposes that some of the area adjacent to the CVH property be developed for low-density residential use at 0-4 units per acre. Campus land adjacent to the riverfront strip should be allocated uses which are compatible with these plans.

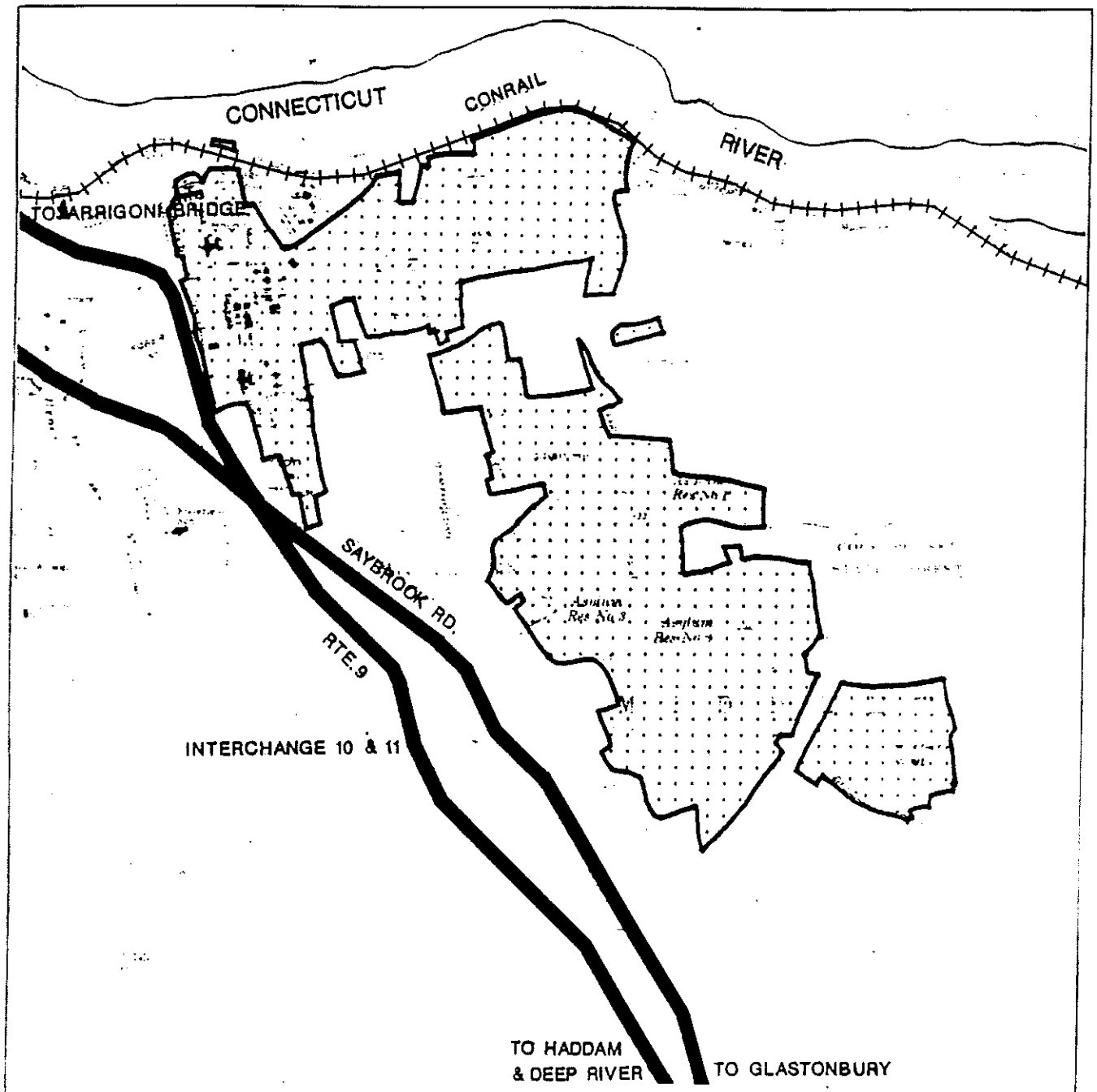
### 4.3.2. Connecticut Valley Hospital Campus

**Location:** Connecticut Valley Hospital (CVH), established in 1867, is the oldest public psychiatric hospital in the State. Originally, the campus contained only DMH hospital facilities. Today it contains four hospitals: the DMH-run CVH and Whiting Forensic Institute; DCYS' Riverview Children's Hospital; and CADAC's Dutcher Chemical Dependency Program. There are several other facilities on the campus as well, including a day care center, a conference facility, various Department of Administrative Services (DAS) operations, DOC's Eddy Home, and a Middletown Shelter.

Within Middletown, the hospital is located one mile east of the center of town, high on a hillside overlooking the Connecticut River. From the central business district the main campus is viewed across a large bend in the river.

The campus is adjacent to Long River Valley, a 198 unit public housing project constructed in 1942 on approximately 35 acres of land.

**Access:** Excellent access to the campus is provided by Route 9, a major north-south route located approximately one-half mile from the campus. Route 9 between Old Saybrook and Cromwell, connects Interstate 91, a major north-south expressway, with Interstate 95, a major east-west expressway. Once on Route 9, Interstate 91 is less than 9 miles to the north and Interstate 95 is 17 miles to the south. Other major State highways serving the City of Middletown are Route 66 in an east-west direction, Route 17 connecting the New


CONNECTICUT
CONRAIL
RIVER
TO ARRIGONI BRIDGE
SAYBROOK RD.
RTE.9
INTERCHANGE 10 & 11
TO HADDAM
& DEEP RIVER
TO GLASTONBURY
KEY: ACCESS
MAIN TRANSPORTATION ROUTES
RAILROAD TRACKS

Haven area with communities above Middletown on the east bank of the river, and Route 72 from the Bristol-New Britain area.

Additionally, the Connecticut Transit Company buses run from Hartford to Long River Village, adjacent to the hospital, at regular intervals during the day.

Bow Lane, the primary road through the campus, is connected by an exit ramp from Route 9; additional ramps are being planned. River Road provides access to the north and Bow Lane to the south. River Road, which is owned and maintained by the City of Middletown, eventually connects with the City's central business district northwest of the campus.

**Circulation:** Important features of the campus circulation system are the public streets of Silver Street and Holmes Drive. In addition are a network of campus roadways which link the various buildings and clusters. Silver Street, a well-traveled local street, effectively divides the campus into two parts, passing through major building complexes. In particular, Silver Street separates the Merritt-Weeks-Russell portion of the campus on the north, from the Shew-Beers-Dix and Batell-Woodward sections on the south.

Silver Street poses some danger for pedestrian crossings, particularly for DMH patients. Such crossings are necessary given the current DMH use of buildings on both sides of the street, but should no longer be necessary when DMH consolidates into the buildings identified in the Preferred Option.

**Buildings and Grounds:** The campus contains a total of 1,208 acres of land. Of this, approximately 243 acres are occupied by DMH buildings and related grounds; 60 acres by Riverview Children's Hospital; 2 acres by Whiting Forensic Institute. Some 464 acres (38 percent of the total) is occupied by reservoirs or designated watershed land, and 439 acres (36 percent of the total) is open tillable or wooded land.

Generally speaking, the campus can be divided into three main portions: 1) the main campus, 2) the reservoir, forest, and watershed areas, and 3) the meadowlands of farming and haying. The campus's general topography is hilly, characterized by large, open expanses of lawn and thickly wooded tracts of land. Some of the property is comprised of wooded areas, watershed areas and/or riverfront property.

The campus has varied land forms, including hills, streams, wetlands, bedrock outcroppings and plateaus. The stream beds, marsh areas and bedrock outcroppings add to the natural beauty of the property and lend themselves nicely to nature-walk areas. The general view is one of rolling forested hills surrounding the Connecticut River.

Portions of the northern main campus grounds which overlook the river have a truly spectacular view of Middletown, the river and surrounding countryside. The remainder of the property has a campus-type atmosphere, with a gracious entrance driveway, large trees and many older, dignified buildings. The undeveloped parts of the campus are wooded and distinctly rural.

There are 118 structures on the campus, built between 1867 and the late 1950's. Of these buildings, 16 can be termed major buildings (that is buildings other than sheds, barns and similar structures). The major buildings include five built in the late 19th century, three in the early 20th century, and five during the mid-20th century.

Nine of the major buildings are currently used by DMH for patient care, related services, administration, storage, and the like. Five major buildings are used by non-DMH agencies; four buildings are vacant.

The campus does not contain a single, unified cluster or core. Instead, the buildings several smaller complexes. One is in the northern part of the campus, and consists o diverse group of buildings including Merritt Hall, Russell and Weeks. A second com is a grouping of older, architecturally consistent buildings, including Shew, Dix, Beers Noble and Page Halls. A third, smaller complex consists of Battell and Woodward H

It is in the second complex that the Preferred Option proposes to consolidate the futu DMH facilities, renovating Shew, Dix, and Beers to house the core functions of the hospital.

### 4.3.3. Constraints To Reuse

The following summarizes some of the conditions, locational and other, which place constraints on the possibilities for reuse of the portions of the campus which are in exce of DMH future needs.

- The negative perception associated with the institutions currently occupying the campus may present an obstacle to reuse. These institutions include the DMH-r Connecticut Valley Hospital and Whiting Forensic Institute, DCYS' Riverview Children's Hospital, CADAC's (Connecticut Alcohol and Drug Abuse Commission) Dutcher Chemical Dependency Program, the Department of Correction's Eddy Home, as well as Middletown's Shelter in Shepard.
- The immediate adjacency of the Long River Valley public housing project, constructed in 1942, and comprised of 198 units of housing for low-income individuals, creates both real and perceived negative impacts on the reusability of the site.
- A portion of the City's aquifer recharge area is along the river and encompasses most of the main campus. Reuse possibilities for the campus are therefore limited to those that would not pollute the ground. These exclude the storage of salt, petroleum, and underground oil storage in tanks, among others.
- There are six reservoirs located on the property. These are an important water supply to the campus, and in the future may also serve the City of Middletown. Approximately 400 acres of watershed are required to ensure clean run off to the reservoirs.

# Section 4.4. Recommended Reuses

In the following pages, reuse recommendations are presented for excess buildings and lands at Connecticut Valley Hospital.

First, reuse recommendations are mapped by parcel. Next, these recommendations are evaluated against the reuse criteria developed in the *Task 4 Report* of this study and summarized in the introduction to this report. The evaluation is presented in summary form; impacts are reported as positive, negative, or neutral, and displayed in a matrix. Criteria are not weighted.

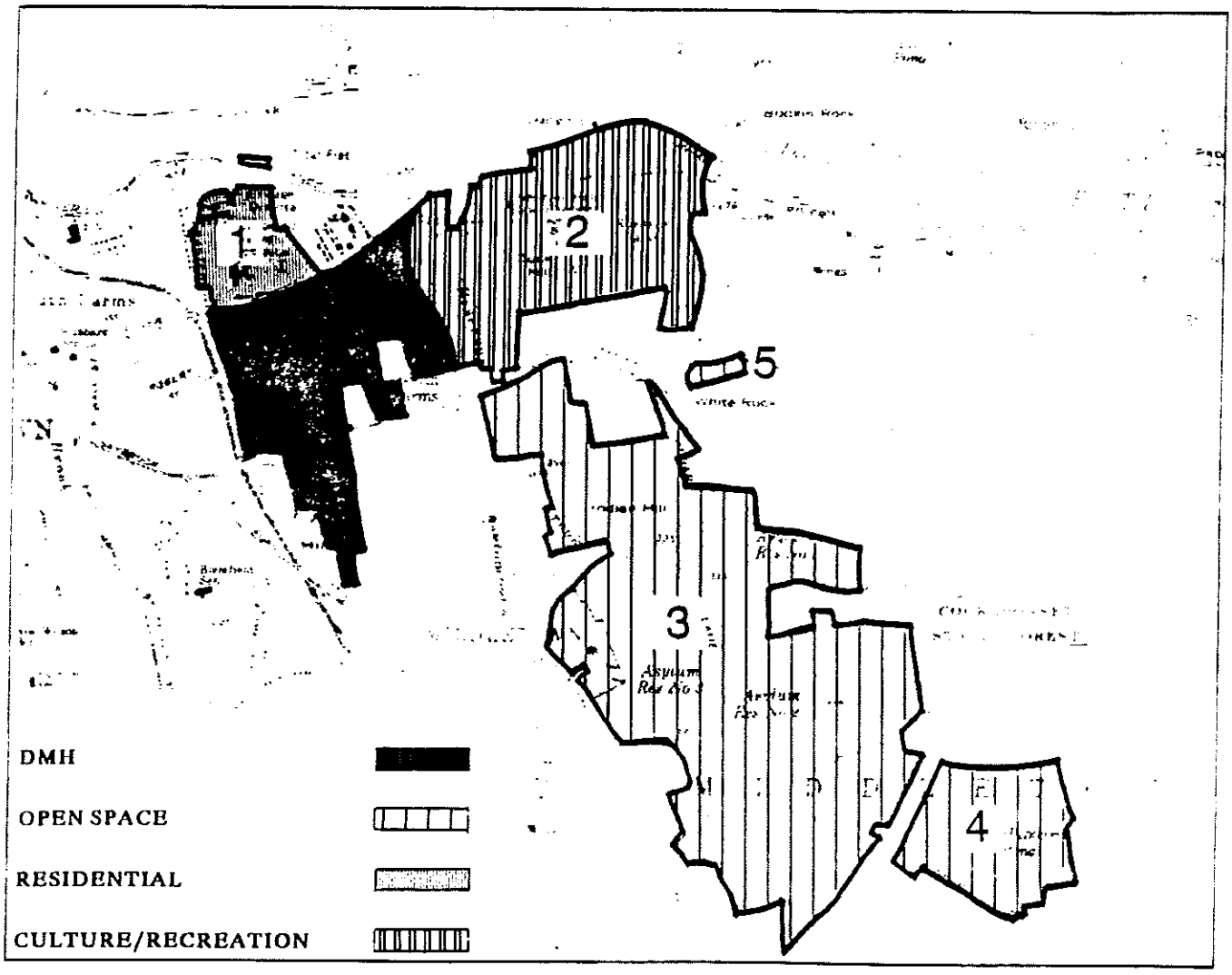
The properties are next described through a series of maps. Natural features maps describe the topography of the campus and surrounding environments. Additional maps depict uses adjacent to the hospital property and existing zoning of the campus and adjacent neighborhoods.

Finally, a description of each reuse parcel is presented, followed by a discussion of the recommended reuses.

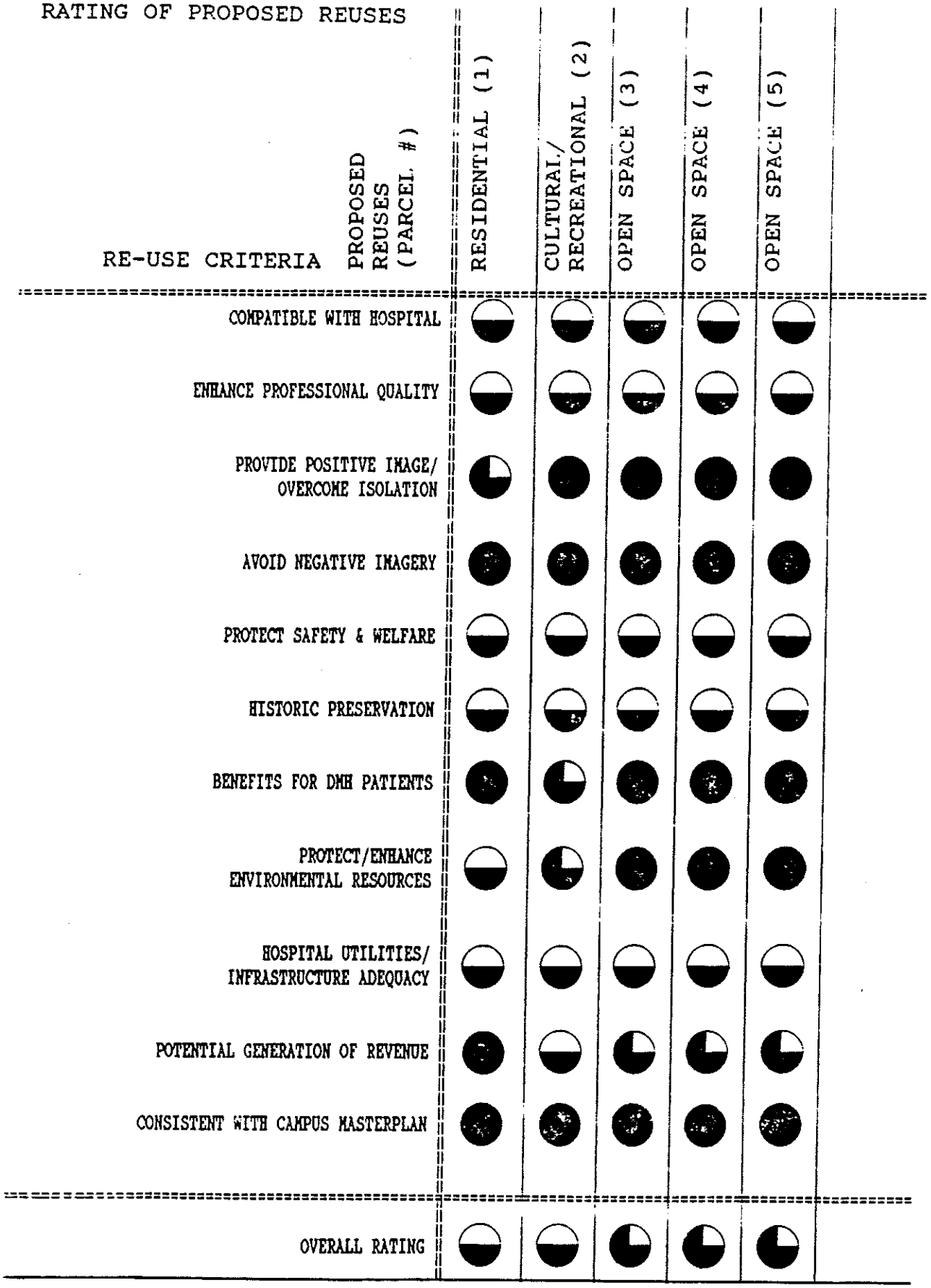
## Table 4-3 Reuse Recommendations

| Parcel | Recommended Reuse | Approx Acreage |
|---|---|---|
| DMH Parcel | Preferred Option* | 193 |
| Reuse Parcel 1 | Residential Use | 50 |
| Reuse Parcel 2 | Cultural/Recreational Uses | 300 |
| Reuse Parcel 3 | Dedicated Open Space | 560 |
| Reuse Parcel 4 | Dedicated Open Space | 100 |
| Reuse Parcel 5 | Dedicated Open Space | 5 |
| TOTAL | | 1,208 |

* The portion of the campus selected for future use by DMH and described in Chapter 3 of this report.

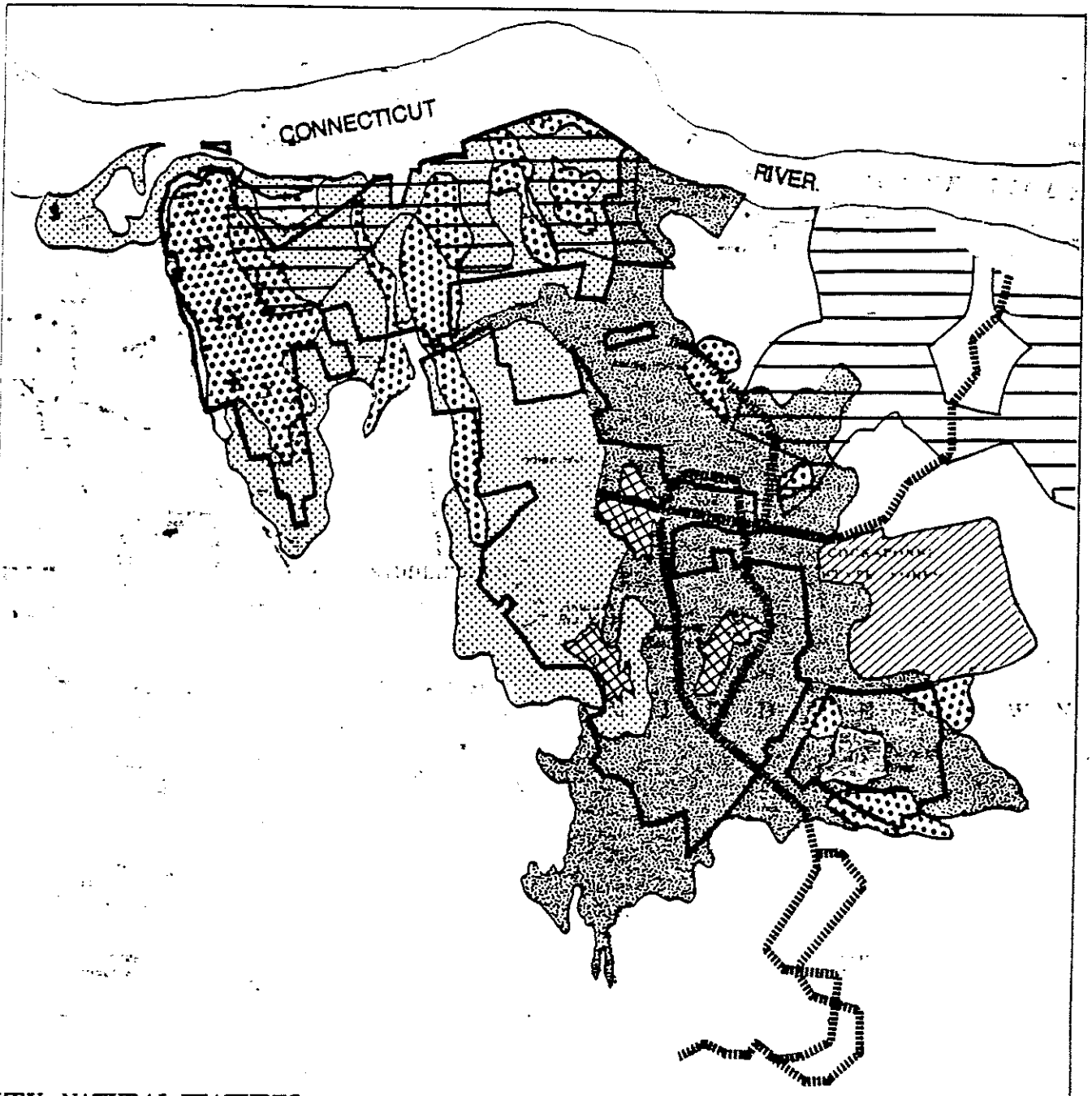


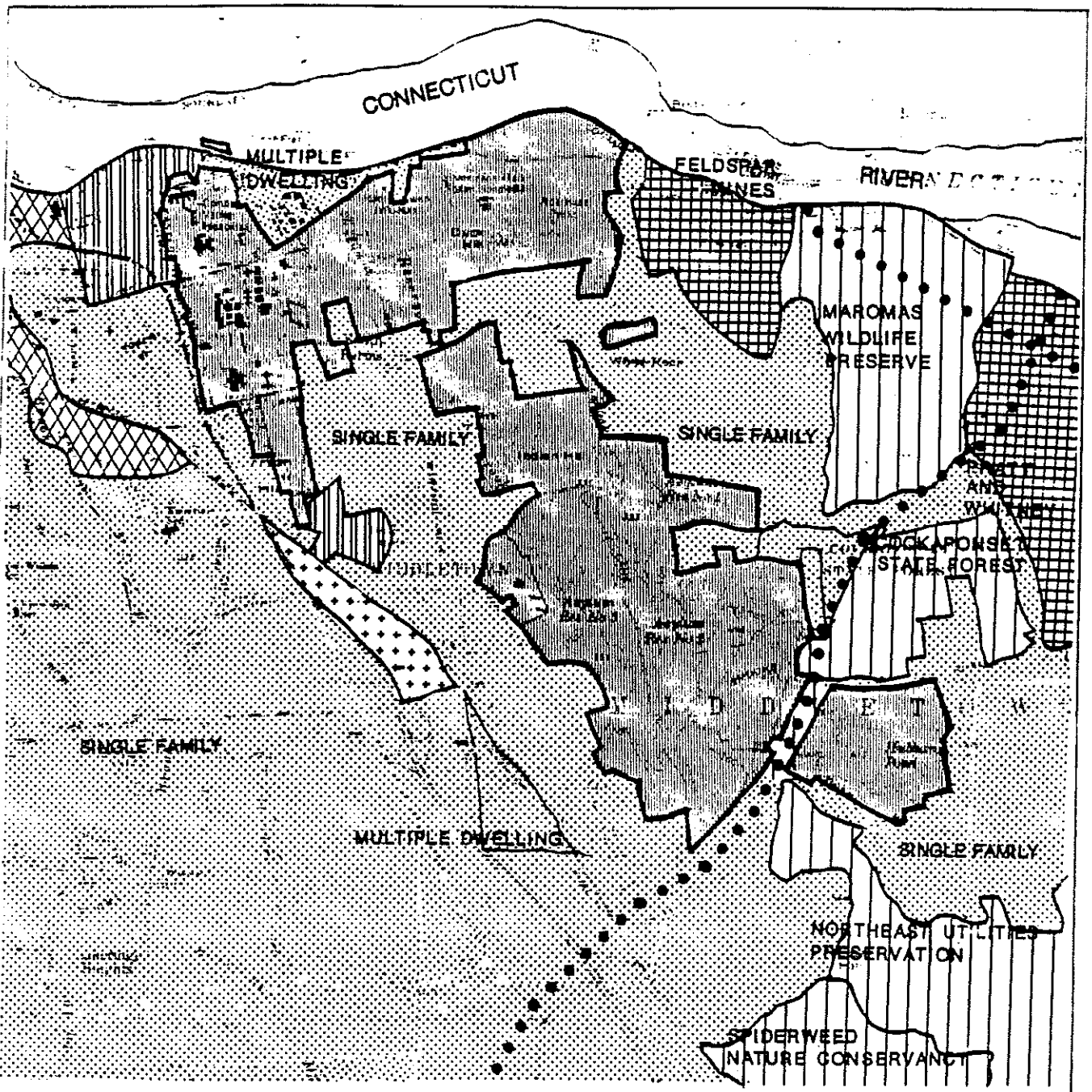
## RATING OF PROPOSED REUSES




RATINGS KEY: Positive ● Neutral ◒ Negative ○

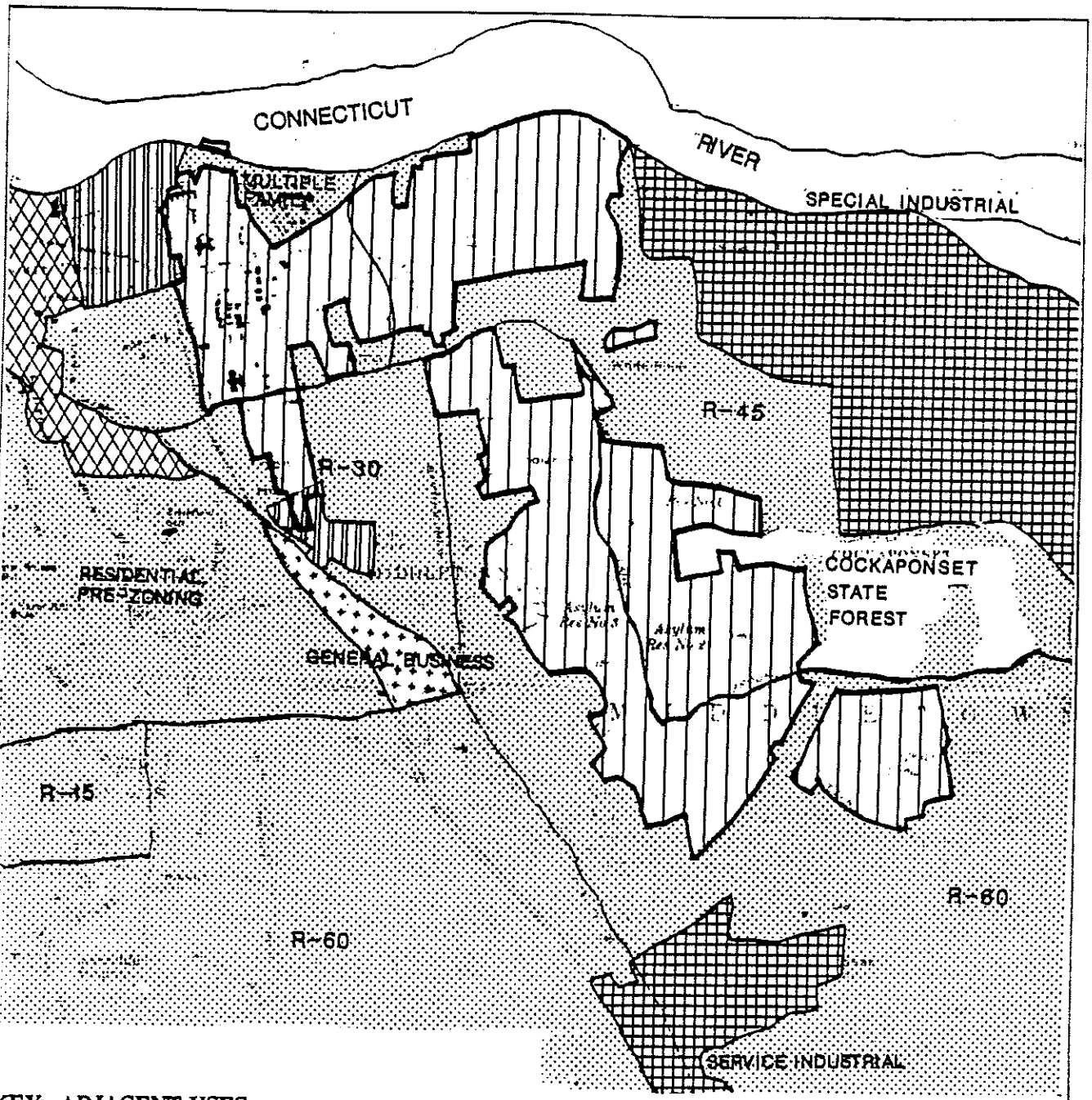
NOTE: The Reuse Criteria are summarized in the introduction to this report and


CONNECTICUT
RIVER
KEY: NATURAL FEATURES
WETLANDS
SLOPES > 20%
PRIME AGRICULTURAL LAND
RESERVOIR
FOREST
AQUIFER RECHARGE BOUNDARY
HIKING TRAILS




KEY: EXISTING ZONING

| | | | |
|---|---|---|---|
| RESIDENTIAL<br>MIN. REQUIRED ACREAGE | e.g. R-15 = 15,000 sf) | TRANSITIONAL DEVELOPMENT | |
| | | INSTITUTIONAL | |
| INDUSTRIAL | | MIXED USE | |
| COMMERCIAL | | | |




KEY: ADJACENT USES

| | | | |
|---|---|---|---|
| RESIDENTIAL | | TRANSITIONAL DEVELOPMENT | |
| COMMERCIAL | | UTILITY RIGHT OF WAY | |
| INDUSTRIAL | | STATE FOREST | |
| OPEN SPACE | | MIXED USE | |

## 4.4.1. Reuse Parcel 1

**Site Description:** relatively flat land with slope greater than 20% at northern edge; separated from future DMH hospital by Silver Street; beautiful views of Connecticut Ri

**Approximate Acreage:** 50 acres

**Location/Parcel Boundaries:** northern boundary is formed by DMH northernmost property line; Silver Street is southern boundary, Eastern Drive forms western boundary and the DMH property line defines the eastern boundary.

**Zoning:** Institutional use (ID)

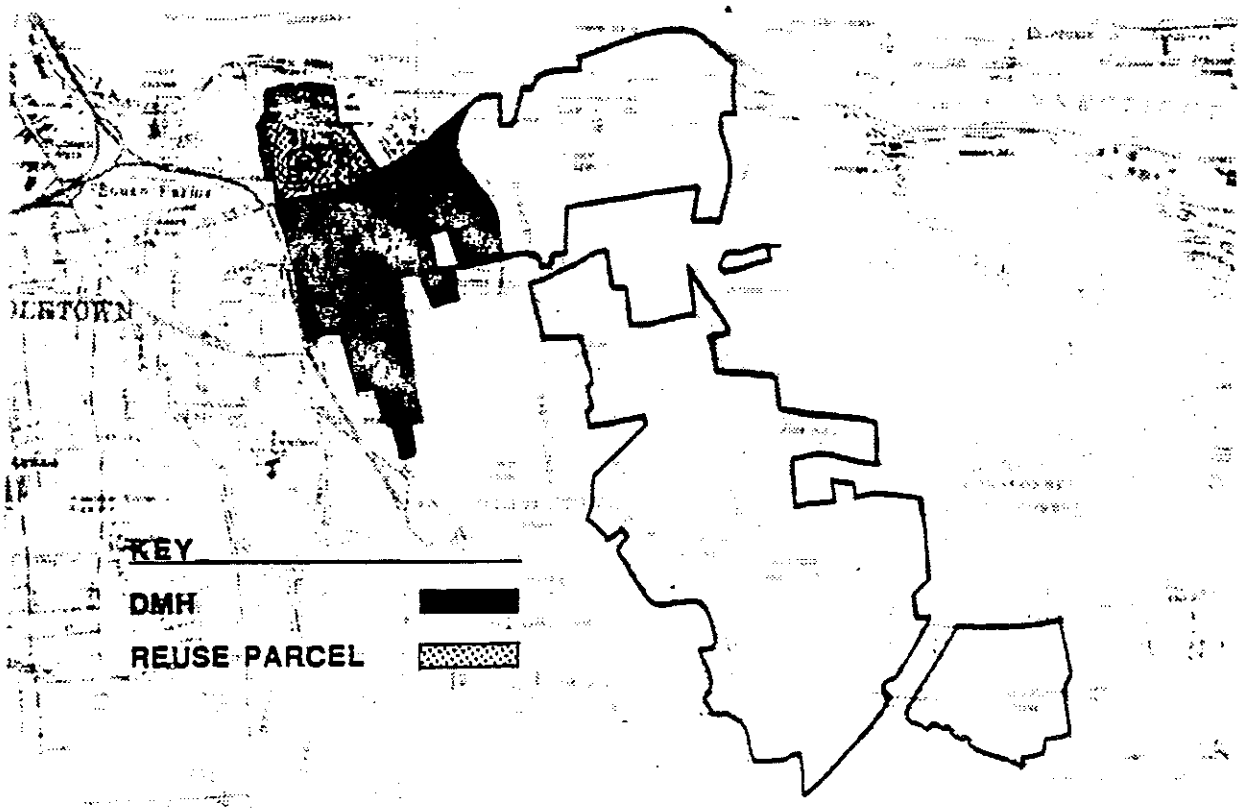
**Current Use:** DMH, DOC

**Site Amenities/Constraints:**

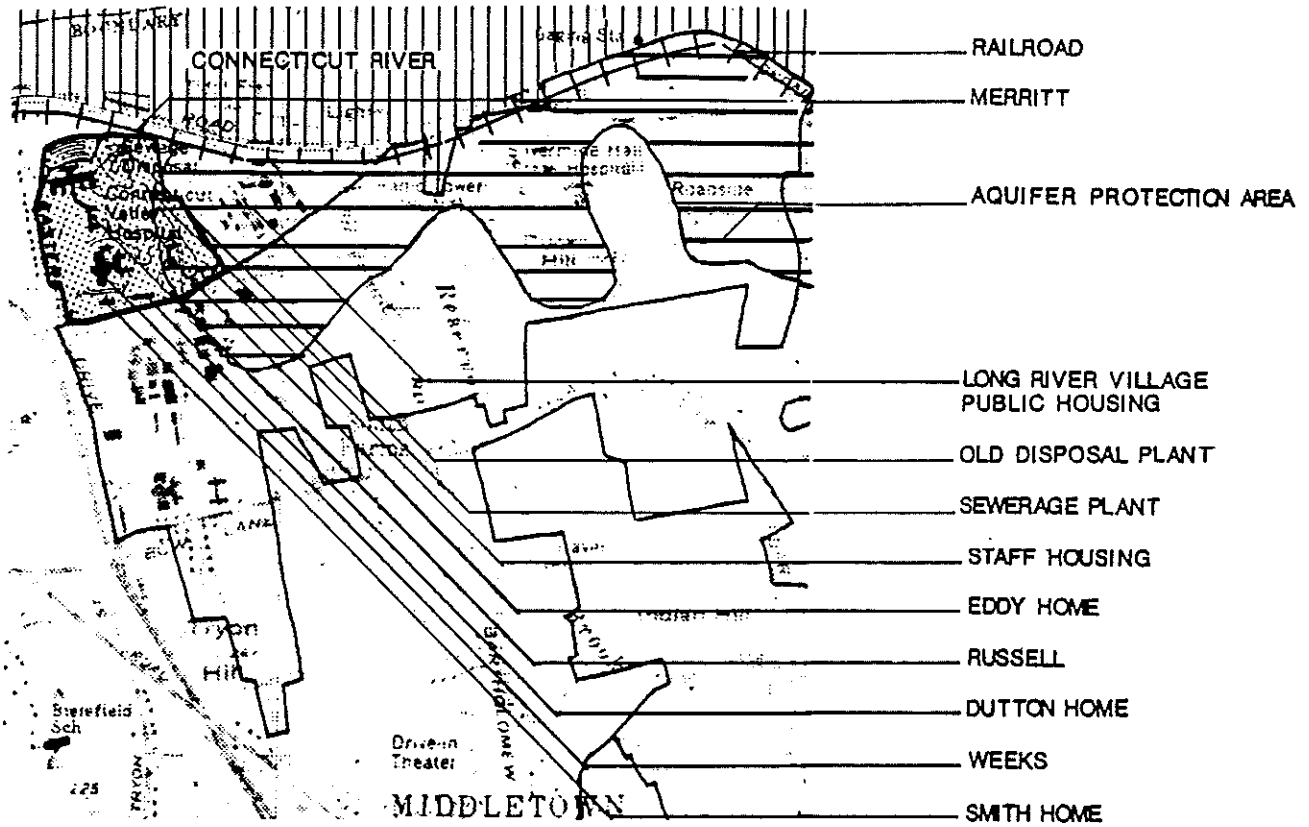
- beautiful river views
- 6 buildings located on parcel: 443,535 gsf total

**Adjacent Uses:** Connecticut River, Long River Village public housing project, DMH hospital, very low density residential area.

**Recommended Reuse:** Residential use:



REUSE PARCEL 1




**Reuse Recommendation**

It is recommended that Reuse Parcel 1 be developed to accommodate affordable housing with a mix of income affordability, housing for special needs populations, and a percentage set aside for former DMH clients.

The river frontage and hilltop location makes for an attractive and unique residential environment. Some of the buildings (for example, Russell, Weeks, possibly Merritt) could be renovated, although the cost required to overcome the institutional nature of Merritt may be prohibitive. The width of Silver Street may be a limitation to the number of units, but the street could be widened. Adequate parking would need to be provided.

**Parcel Description**

Reuse Parcel 1 is characterized by relatively flat land with a steep slope at its northern edge creating one of the most dramatic sites on the campus with spectacular views of the river. Adjacent uses include the Long River Village public housing project, the consolidated DMH facility, including Whiting Forensic Institute, a mixed use area, and the river's edge.

This parcel, by virtue of its location, the orientation and siting of the buildings on the parcel, and the traffic pattern, with Silver Street as a dividing boundary, can be relatively easily separated from the rest of the campus.

## Buildings Within Reuse Parcel 1 Boundaries

| Building | Area (gsf) | Current Use | Recommended Utilization Strategy (*) | Building Condition (+) |
|---|---|---|---|---|
| Merritt (1) | 189,400 | DMH | Reuse | Good |
| Russell (2) | 54,368 | Storage | Reuse | Fair |
| Weeks (new) | 45,212 | Storage | Reuse | Fair |
| Weeks (old) | 73,512 | Storage | Reuse | Poor |
| Smith | 27,756 | Storage | Reuse | Fair |
| Dutton (3) | 26,000 | DMH | Reuse | Fair |
| Eddy Home | 27,287 | DOC | Continue | Good |
| Sewage Plant | n/a | Sewage | Continue | Good |
| Dutton Garage | 2,450 | DOC | Continue | Fair |
| Total | 445,985 | | | |

(*) Continue = recommended continuation of current use
Reuse = recommended reuse by non-DMH user

(+) All hospital buildings were surveyed and their condition documented, in *Physical Inventory, Task 5.1* of this study.

(1) approximate cost to demolish Merritt = $719,720 @ $3.80/gsf
(2) Russell is connected to Merritt by way of an enclosed pedestrian tunnel.
(3) Dutton Home is the only building which can comfortably accommodate the Civil Air Patrol, currently occupying 12,454 gsf of the top floor of Beers, to be displaced by DMH in the Preferred Option for DMH facilities. Of Dutton's two floors, one would provide the needed amount of square footage.

**Consistency with Municipal, Regional, and State Plans**

The recommended reuse is consistent with regional plans. According to the Midstate Planning Region, affordable housing is increasingly needed in the region. Municipal officials at Middletown's City Hall further define the population in need of housing as being the average worker earning up to 150% of the median income, individuals with

special needs, including those with mental (including the deinstitutionalized population) and physical disabilities, and homeless single parents with children.

The median income for a family of four in Middletown in 1988 was $40,300. In order for housing to be affordable, that is, cost no more than 30% of person's income, a 3-bedroom dwelling would have to rent for no more than $1,007 per month including utilities, or have a purchase price of no more than $103,700 (1988).

As previously mentioned, one of the significant factors affecting both housing demand and cost, has been the substantial economic growth occurring both in the Midstate Region and in adjacent Regions on the Route 91 corridor. Major new developments particularly in Middletown, Wallingford and Meriden, and in general, in the Greater Hartford area, have resulted in attracting new residents to the region. The relative difference in housing cost between the Capital Region and the Midstate Region has been decreasing steadily since 1980.

Land costs have also been increasing in the region. Statewide data developed by the Home Builders Association of Connecticut indicate that between 1980 and 1986, land costs increased from 29% of the total cost of a new single family home to more than 40%. Statewide, total housing costs increased by 50% over that period while land costs grew by 109%.

As previously mentioned, housing for the elderly is a growing need. Projections for the year 2000 predict that the region's elderly population (65+) will increase from 9,460 in 1980 to12,900 in 2000 (Office of Policy and Management revised 1989 projections). This increasing population will be placing additional pressures on the existing housing stock.

Additionally, a study published by the Midstate Regional Planning Agency in January of 1988, identified northern Middlesex County's need for 3,900 affordable units of housing. The Regional Planning Agency also calls for semi-independent living units for elderly individuals requiring assistance but not institutional care.

The City's Plan for Development for the Year 2000 proposes some of the area adjacent to the hospital property for low density residential use at 0 - 4 units per acre. Residential use on Reuse Parcel 1 is therefore, compatible with these plans.

Finally, the recommendations are consistent with the stated desires of the residents of Middletown as expressed at a public meeting held as part of this study to solicit their views. The two most popular opinions with regard to reuse of the campus, were housing and open space preservation.

## Feasibility/Constraints

As previously stated, Reuse Parcel 1 is the most dramatic parcel on the CVH campus and would seemingly have the most attractive market value for private redevelopment. On the other hand, several factors act to suppress that potential. The adjacent Long River Village public housing complex, comprised of 198 units, creates both real and perceived negative impacts on the reusability of the site. The presence of the DMH regional hospital and Whiting Forensic, in addition to the Department of Correction's presence in Eddy Home located within the boundaries of Reuse Parcel 1, combine to create negative perceptions of the site which may pose barriers to redevelopment.

Additionally, the Merritt Building, located on the most attractive portion of the site, adds a significant amount to the development costs. Substantial renovation is required to convert

Merritt from its present institutional state to a more appropriate residential environment. On the other hand, the cost of demolition is also substantial. It is more than likely that the cost for the demolition of Merritt may eventually have to be covered by public funds.

At the present time, however, the housing market seems to be saturated; affordable housing being the exception. In fact, some overbuilding has occurred, evidenced by the fact that the newly renovated "River's Edge" condominium complex with views of the river and located in downtown Middletown, is failing to sell and will most likely be converted to office space.

Siting mixed income housing on the campus would bring the community into the campus and inject a normalizing use into an area which has increasingly become institutional in orientation. Any private sector proposal should only be considered if the developers are willing to provide a small percentage of housing for former DMH clients.

The State could retain title of the land and allow use of the buildings and land under an extended lease period.

The public sector has also expressed interest in the site. The City of Middletown has formed a local Housing Partnership comprised of business people, housing advocates, land use and development professionals, some Councilmen, and the Mayor as Chairman. This association, whose purpose is to provide a wide range of affordable housing opportunities, has stated that it is interested in developing housing on the CVH campus. City officials have indicated that substantial funds, in the form of State grants and loans, are available to create housing.

The State could lease the land to the City and allow the City to use the parcel under an extended lease.

*view of site surrounding Merritt Connecticut Valley Hospital*

### 4.4.2. Reuse Parcel 2

**Site Description:** Most of site is characterized by buildable soil. The site is dominated hill (Duck Hill) 212 feet above sea level located in the center of the parcel. The land ge slopes to the north to a base of 25 feet above sea level at the Connecticut River. At the eastern boundary, the salient feature is a flat plateau between 150 to 175 feet above sea level.

**Approximate Acreage:** 300 acres

**Location/Parcel Boundaries:** bounded on the north by the Connecticut River, on the east by the DMH property line, on the south by Bow Lane, and on the west by Silvermine Roa

**Zoning:** Institutional use (ID)

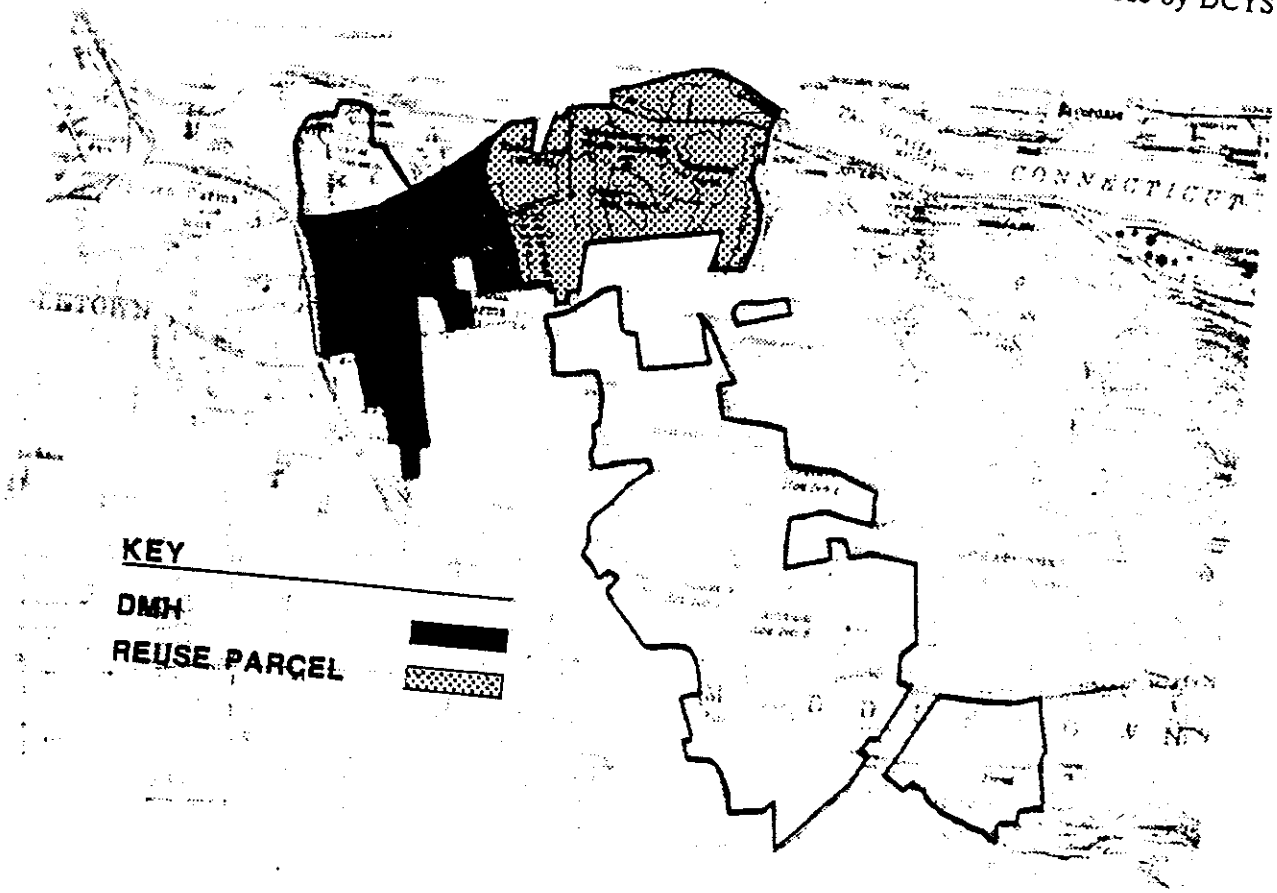
**Current Use:** WCNX radio tower, DCYS Riverview Hospital for Children and related cottages, Millane Nurseries leases a few acres for crop land, a local farmer leases fields for haying.

**Site Amenities/Constraints:**

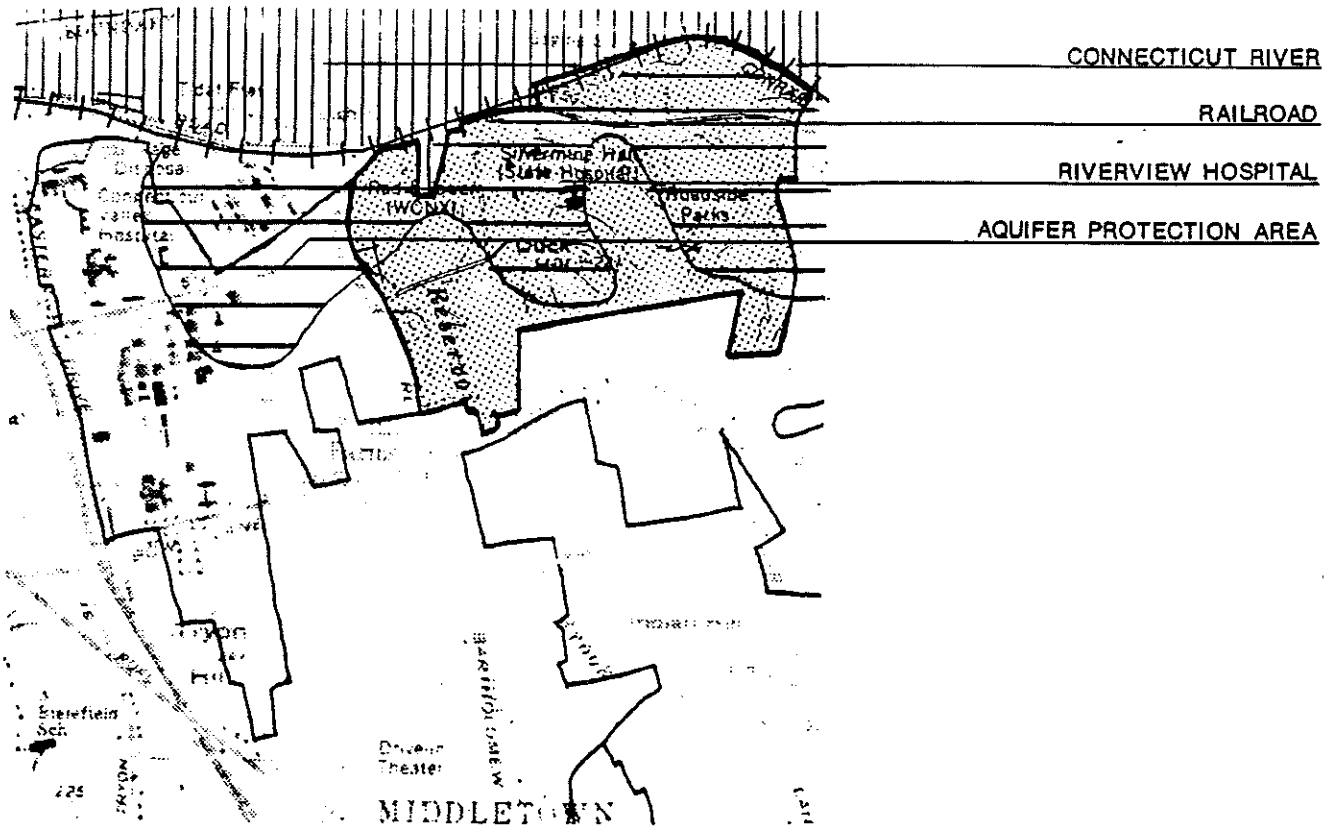
- the site is for the most part cleared of trees although it is bounded by woods on the east;
- smaller wooded areas exist.
- flood prone zone in marsh area surrounding the WCNX radio tower
- 5 existing buildings occupied by DCYS
- aquifer transverses site

**Adjacent Uses:** private agricultural land and very low density residential area (south), Connecticut River (north), CVH main campus (west), slopes greater than 20% and Feldspar mine (east).

**Recommended Reuse:** Cultural / Recreational Uses and Continued Use by DCYS for Riverview Hospital for Children



REUSE PARCEL 2




**Reuse Recommendation**

It is recommended that a portion of Reuse Parcel 2 be used to enhance and increase public access to the riverfront by developing a museum, and creating a variety of recreational opportunities to attract the community at large to the campus. Reusing the parcel in this way would also act to reduce negative imagery associated with the institutions presently on the campus. The portion of the parcel now occupied by Riverview Hospital should continue in that use.

The State of Connecticut does not presently have a museum of the history of the State. Among the fifty states in the United States, there are 34 state museums in 32 states (two states have 2 museums each). Only two New England states have state museums, Vermont and Maine. A State museum would serve many functions, including that of educating children and adults about the State's history, increasing community pride, generating income, and deterring the flow of historical objects from the State to museums in other states.

Over the years numerous proposals for such a museum have been made; however, lack of funding has usually been the obstacle to implementation. At least two of these proposals, including one feasibility study conducted by the Connecticut Historical Commission, considered Middletown as a locale, and the CVH campus as a site. The most recent proposal (December, 1976) prepared by consultants to the Connecticut Historical Commission, considers the CVH site only.

Specifics regarding the museum's exhibition space, degree of interaction with spectators, as well as what the museum would actually exhibit, are not discussed in this document because of the wealth of information contained within the studies undertaken specifically for this purpose.

This is one of two museums recommended for the CVH campus. Included in the Preferred Option for DMH facilities, is a recommendation for a museum of the history of mental health care, to be housed in Stanley Hall, one of the smaller historic buildings. Since CVH is the oldest public institution for the mentally ill in the State, it seems apt that the museum, explaining the history of care, be located on this campus. If funds to develop this museum are unavailable, then it should be incorporated into the State history museum recommended for this parcel. If funds are available, and the museum in Stanley Hall becomes a reality, then the two, the museum of the history of mental health care and the museum of the history of the State, could work together. It is expected that the museum of State history would attract a great many visitors, some of whom would also visit the museum of mental health care, thereby creating a tool for educating the community, helping to increase understanding of the mentally ill and destigmatizing the illness.

The land along the riverfront should be preserved as open space and converted into a riverfront park, wildlife sanctuary, and nature trails, ensuring its compatibility with municipal plans for adjacent riverfront properties. Additionally, space alongside the museum could be used for both passive and active recreation activities. Recommendations made by the residents of Middletown include: an art center (and/or outdoor art exhibits), a band shell along the river for outdoor concerts in warm weather, ice skating rink, health spa, planetarium, golf course, and YMCA-developed recreation, among others. For all of these activities, it is important that views to the river be protected, but also that potentially negative impacts to the Riverview Hospital for Children be avoided.

## Parcel Description

Reuse Parcel 2 is located along the Connecticut River enjoying spectacular views. At its northern edge, the parcel gently slopes to meet the railroad track which runs along the river. The parcel's eastern boundary is formed by the hospital property line which is adjacent to a large open area of feldspar mining.

There are five schools located within two miles from site (Long Lane State school, Mercy Catholic high school for girls, one municipal high school, and two municipal elementary schools).

A portion of Reuse Parcel 2 is adjacent to the Long River Valley, a 198-unit public housing project.

Thirty-five acres (over 2,500 linear feet) of Parcel 2 property have direct access to the river.

Five buildings presently occupied by the DCYS' Riverview Hospital for Children are on the site. In September, 1990, DCYS plans to begin groundbreaking for construction of a psychiatric hospital for adolescents to be located on the same parcel as Riverview.

## Table 4-5 Buildings Within Reuse Parcel 2 Boundaries

| Building Name (1) | Area (gsf) | Current Use | Recommended Utilization Strategy (*) |
|---|---|---|---|
| Silvermine Hall | 20,954 | children's hospital | Continue |
| Cottage A | 6,082 | children's residence | Continue |
| Cottage B | 5,356 | children's residence | Continue |
| Cottage C | 5,356 | children's residence | Continue |
| School/Act. Ctr. | 41,575 | educational/recreational | Continue |
| Total | 79,323 | | |

(*) Continue = Continue Current Use

(1) All the buildings are part of Riverview Hospital for Children; they were not included in the scope of this study, and therefore, the buildings' existing condition was not surveyed.

**Consistency with Municipal, Regional, and State Plans**

The recommendations for reuse are consistent with the City's plans for the area. The City of Middletown's most recent Plan of Development for the Year 2000 (expected approval December, 1990) proposes an open space corridor along the river, with recreational facilities interspersed along River Road. The City of Middletown owns a strip of land between River Road and the river, nearly adjacent to the parcel. The local Harbor Improvement Agency is pursuing plans to develop a boat ramp facility for small boats at a point opposite the MacDonough Inn at the foot of Silver Street. The City is also investigating the feasibility of providing a docking facility for excursion vessels at the same site. If these facilities are constructed at this location, they will serve to connect the campus to the community, and also provide some positive imagery to the area.

Recently, discussions regarding reactivating the train, which runs on the tracks along the river, extending to the central business district and crossing the river, have been revived. The train is still operational at some portions, and could be used to reconnect the property to the downtown. This would be important for both the new development and potential visitors, as well as for improving connections between the hospital and the community.

Preserving public access to the river, not building directly on the river's edge, and providing public recreation opportunities would be consistent with these plans.

The Middletown Riverfront Development Plan, also pending approval, recommends a series of alternative improvements to River Road in order to "enhance travel and access the riverfront". It also recommends that Silver Street be realigned at the existing River Road intersection area "regardless of which River Road alternative is selected due to the detriment to safety it represents." If the plan is not approved, then the museum development would need to include some improvements to River Road in order to increase its capacity as well as to mitigate the safety hazards it reportedly presents.

The 30 acre "chicken farm," part of the hospital's former farm, has been studied by the Riverfront Development Plan and the Harbor Improvement Agency. Both plans consider the area as an integral part of the riverfront dedicated open space and passive recreational strip.

Recommendations for the parcel are also consistent with the State's policy on lands adjacent to water bodies as being priority sites for open space preservation.

## Feasibility/Constraints

As previously stated, there have been a number of proposals for a museum on the site of the CVH campus. The most recent 1976 proposal prepared for the Connecticut Historical Commission, cites the CVH campus as the only site under consideration. A 1974 study by the Connecticut Historical Commission, included CVH as one of the recommended sites. A museum has not been constructed because of a lack of funding. This will continue to be a problem and efforts to find alternative sources of funding could be made.

Although of the State museums across the country, only two are not located in the State capital, at least two earlier studies for a Connecticut State museum have considered Middletown as a location. In the 1974 feasibility study for the museum conducted by the Connecticut Historical Commission, it was indicated that Middletown was located near Interstate 91, along one of the three "museum visitation corridors" in the State (See map entitled, "Museum Visitation Corridors" in the introduction to this report). Therefore, Middletown is a reasonable location for the museum.

The State Museum should be for both residents of Connecticut as well as for out-of-State tourists. The majority of out-of-State vacationers, close to 50%, visit New London County, primarily due to the attraction of Mystic Seaport. Middletown is located in the center of the New Haven- Hartford corridor and is connected to New London by Route 9, which intersects Interstate 95 at Old Saybrook. Locating the museum on the CVH campus may result in the museum being by-passed by some potential out-of-State patrons, but will most likely maximize exposure for State residents.

The museum building should be sited very carefully so as to enhance and not destroy the natural features of the site. Siting of the building should not destroy scenic views, limit access to the river, affect flood storage capacity of river, or disrupt existing farmland.

Also, the museum building and recreational facilities should be carefully reviewed for their potential impact on the DCYS Riverview Hospital for Children.

## 4.4.3. Reuse Parcels 3, 4, and 5:

Reuse Parcels 3, 4, and 5 are discussed simultaneously because of the similarities both in their existing conditions and in their proposed reuses.

### Reuse Parcel 3

**Site Description:** The site is separated from the main campus by Saybrook Lane; the parcel is not contiguous to, and is located south of, the main campus.

**Approximate Acreage:** 560 acres

**Location/Parcel Boundaries:** The site is bounded on all sides by the DMH property lines. The northern boundary is at the height of Bow Lane, the western boundary is approximately parallel to Bartholomew Road and then follows Saybrook Road from the point of intersection with Bartholomew.

**Zoning:** Institutional use (ID)

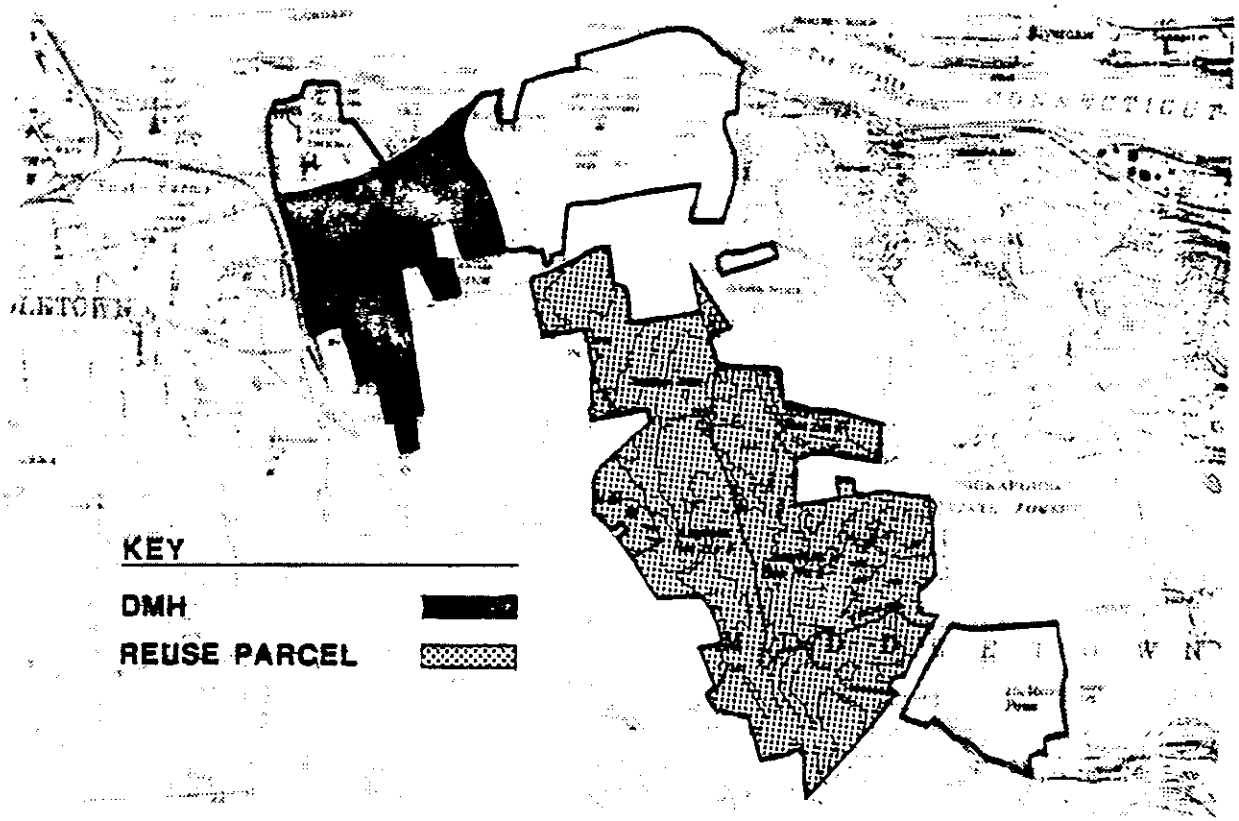
**Current Use:** open space, reservoirs, agriculture (some fields leased to Millane Nurseries), nature trails

**Site Amenities/Constraints:**

- 3 large reservoirs and 3 smaller bodies of water
- hiking trails run through site
- elevations provide opportunities for views to the river
- some prime agricultural land
- 2 species of special concern have been identified in the area

**Adjacent Uses:** Cockaponset State Forest, Manomas Wildlife Management Area, Spiderweed Nature Conservancy, Northeast Utilities land (hunting and hiking), and very low density residential area with medical office park.

**Recommended Reuse:** Open Space



**Reuse Parcel 4**

**Site Description:** small parcel, not contiguous to, and south of main campus. Salient feature on site is Hubbard Pond.

**Approximate Acreage:** 100 acres

**Location/Parcel Boundaries:** Bounded on all sides by DMH property lines; northern boundary is formed by Brooks Road; western boundary is formed by the utility right-of-way; located south of Parcel 3 described above.

**Zoning:** Institutional use (ID)

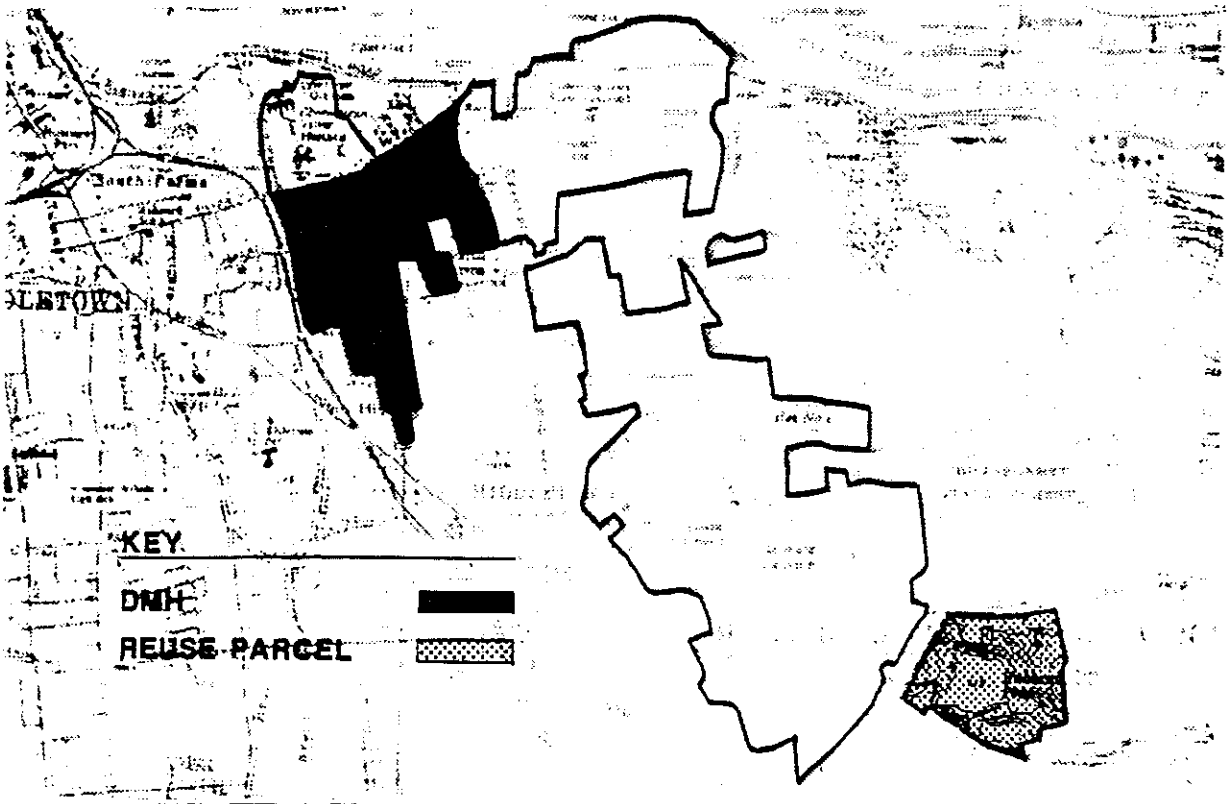
**Current Use:** open space, water source

**Site Amenities/Constraints:**

- Hubbard Pond
- some prime agricultural soil, significant amount of water-retaining soil
- 2 species of special concern identified in area

**Adjacent Uses:** Parcel 3 described above, Cockaponset State Forest, Maroma Wildlife Management Area, Spiderweed Nature Conservancy, very low density residential area.

**Recommended Reuse:** Open Space



**Reuse Parcel 5**

**Site Description:** very small parcel; not contiguous to, and south of main campus

**Approximate Acreage:** 5 acres

**Location/Parcel Boundaries:** bounded on all sides by DMH property lines; northern boundary coincides with Bow Lane.

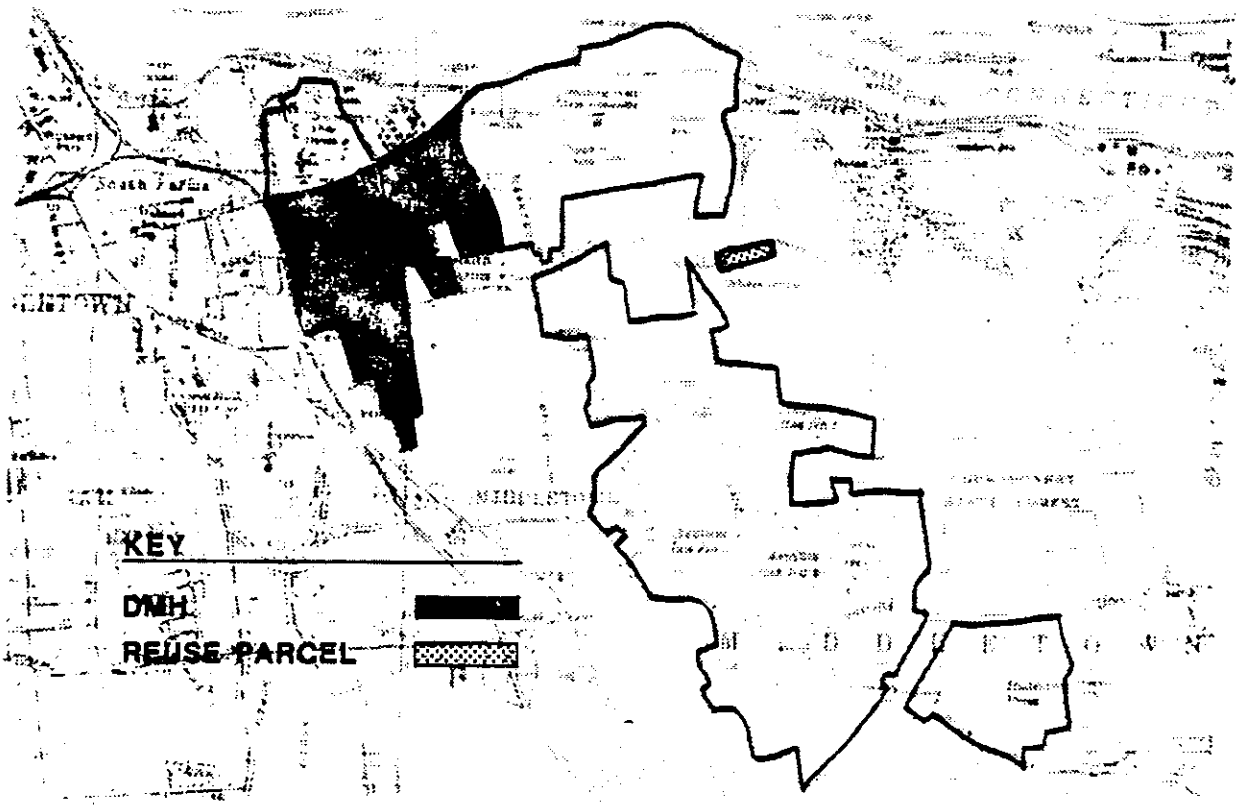
**Zoning:** Institutional use (ID)

**Current Use:** open space

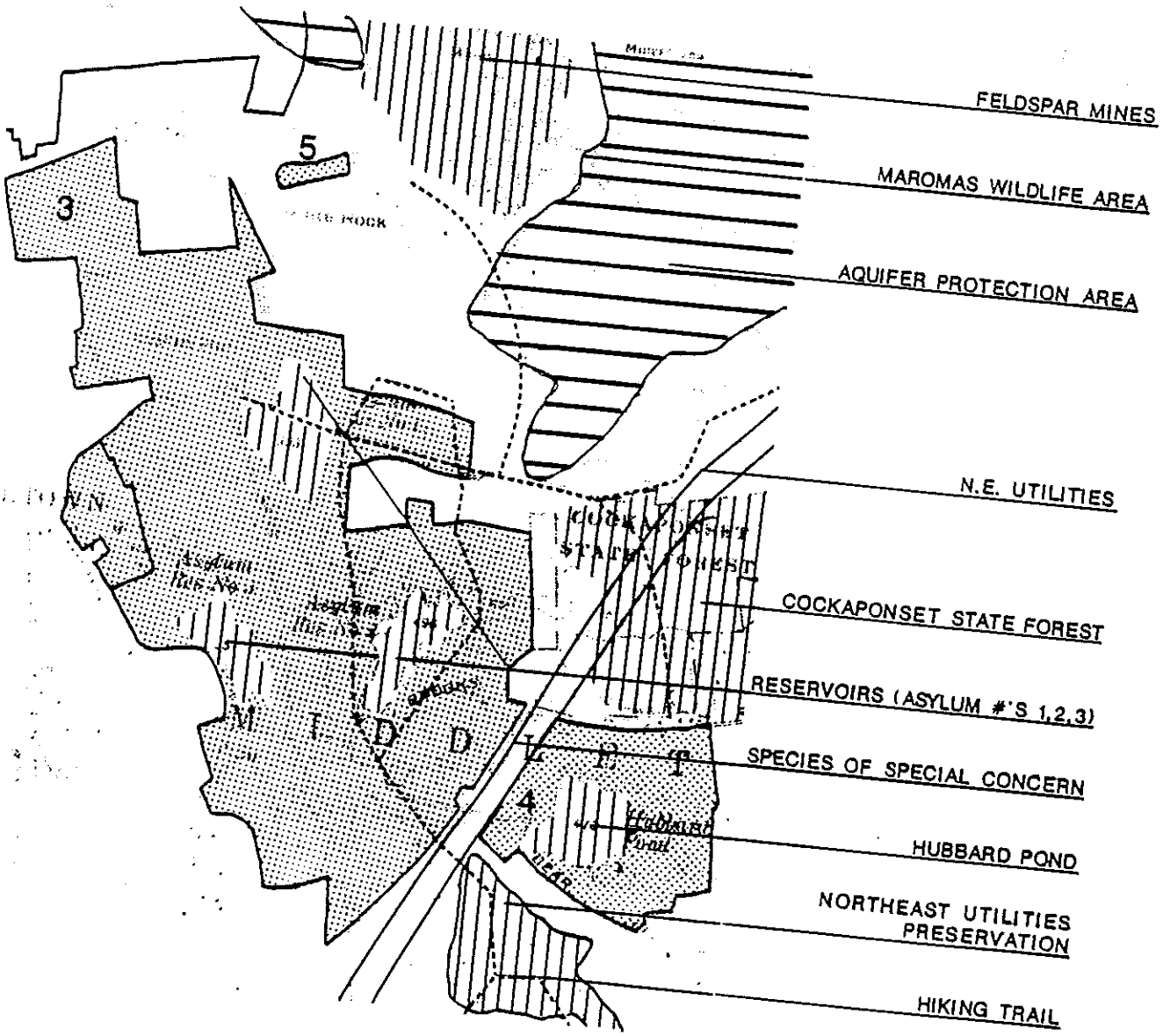
**Site Amenities/Constraints:** all soil poses severe constraint to building and/or has a slope of greater than 20%

**Adjacent Uses:** Reuse Parcels 2 and 3, Feldspar mine.

**Recommended Reuse:** Open Space



REUSE PARCELS 3,4 and 5




**Reuse Recommendation**

It is recommended that Reuse Parcels 3,4, and 5 be preserved as dedicated open space to preserve the area's water supply, for the conservation of natural features, and as a wildlife sanctuary. It is recommended that these parcels be used for passive recreation.

There are several reasons to recommend that Parcels 3, 4, and 5 be preserved as open space, including:

- the reservoirs, located on the parcels, are an important source of water
- prime agricultural land comprises a significant portion of the parcels
- adjacency and proximity to significant portions of preserved open space and nature conservancies
- existence of species of special concern
- portions of the Connecticut Blue Blazed Hiking Trail System are located on the property
- the proximity to Middletown's aquifer recharge area

**Parcel Description**

There are at least five significant bodies of water contained in Reuse Parcels 3, 4, and 5, including three main reservoirs currently used by the hospital as an important source of water. According to Middletown City officials and the Rockfall Foundation's Natural Resource Inventory of the area, the CVH reservoirs may be an important future water supply for both the Hospital and the City of Middletown. The City of Middletown has some excess water capacity, but the City's present supply may prove to be inadequate in the future. Approximately 400 acres of watershed are needed to ensure clean run off to the six reservoirs located on the campus.

The following descriptions of the reservoirs at CVH are based on information provided by the Department of Environmental Protection.

**Asylum Reservoir #1** is a 14 acre impoundment with a 4' high dam. The dam is Class B structure and has not been inspected for some time.

**Asylum Reservoir #2** is a 14 acre impoundment with a 21' high dam. The dam is a Class BB structure.

**Asylum Reservoir #3** is a 14.5 acre impoundment with a 43' high dam. The dam is a Class B (significant hazard) structure.

**Reservoir Brook Pond** is a 1.1 acre impoundment with a 4' high dam. The dam is a Class BB structure.

**Hubbard Pond** is a 17.6 acre impoundment with a 30' high dam. The dam is a Class B (significant hazard) structure.

**Consistency with Municipal, Regional, and State Plans**

The reuse recommendations are consistent with State and local plans for the area. Officials at the Middletown Planning Office have indicated that they would consider it in the best interest of the City if these parcels were preserved as dedicated open space. One of the main objectives of the City's most recent Plan of Development is to provide for a protected and interconnected open space network in Middletown. Preserving Reuse Parcels 3, 4, and 5 as open space completes a major existing corridor comprised of the adjacent Cockaponset State Forest, Maroma Wildlife Management area, Spiderweed Nature Conservancy, and open land owned by Northeast Utilities.

Recommendations are consistent with the Department of Agriculture's policy to preserve as much prime agricultural land as possible. The Department of Agriculture (DOA) assisted DMH in negotiating the terms of a 7-year agreement for use of 70.7 acres of CVH

assisted DMH in negotiating the terms of a 7-year agreement for use of 70.7 acres of CVH farmland by Millane Nurseries. The agreement expires on October 1, 1992. The nursery leases 15 fields or parts of fields for the purpose of horticulture. These fields are dispersed throughout the flattest areas of the campus. A number of other fields are leased by the hospital to a local farmer for the purpose of haying. Preserving the parcels as open land would ensure that these agricultural fields are protected, and would therefore be consistent with DOA policy.

Recommendations are also consistent with the State Comprehensive Outdoor Recreation Plan (SCORP) which states that open space preservation should be a high priority in Middletown.

Additionally, it is the opinion of the Connecticut Forest and Park Association that any portion of the campus reserved as open space would enhance the value of the adjacent Cockaponset State Forest. (Letter dated November 29, 1988, to John Simsarian, Director of Region 2, DMH, from John Hibbard, Executive Director of Connecticut Forest and Park Association).

Finally, recommendations are consistent with the desires of the City's residents. At a public meeting held as part of this study to solicit the views of Middletown's residents, the two most popular opinions with regard to reuse of the campus, were open space preservation and housing.

**Feasibility/Constraints**

Integrating these three reuse parcels with the abutting preserved open spaces would create a very significant and beautiful expanse of open space for the enjoyment of Connecticut residents and visitors. The three parcels could be managed in conjunction with the existing 1400 acre Northeast Utilities/Maromas Wildlife Management Area which is managed by the State under the auspices of the Department of Environmental Protection.

Reuse Parcels 3, 4, and 5 are either directly adjacent or in very close proximity to the following uses, the majority of which represent nature conservancy uses:

- Cockaponset State Forest: primarily wooded area; small game and deer hunting
- Maroma Wildlife Management Area: owned by Northeast Utilities and managed in conjunction with the state; publicly accessible for deer hunting and nature trails; 1400 acres.
- Spiderweed Nature Conservancy: woods and open land
- Feldspar Mine: mineral extraction
- Northeast Utilities land: owned by Northeast Utilities, the riverfront parcel has a power generating plant surrounded by woods and open space.
- Pratt Whitney land: several hundred acres with river frontage; a large industrial plant near the river manufacturing aircraft engines; surrounded by a large buffer area of woods

Portions of the Connecticut Blue Blazed Hiking Trail System, which is maintained for use by the general public, are located on CVH property. Two additions to the Mattabasett Trail -- the Reservoir Trail and the Reservoir Loop Trail -- run through the parcels.

Additionally, two Species of Special Concern have been located along the powerline right-of-way located between reuse parcels 3 and 4. The Department of Environmental

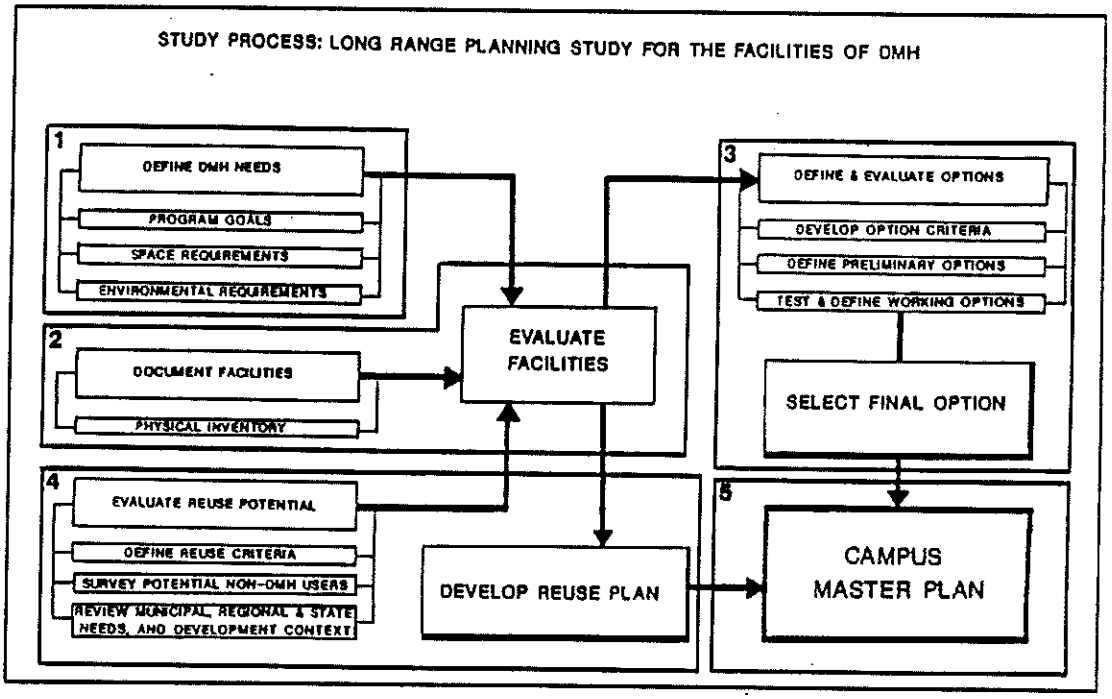
Protection has made an agreement with Northeast Utilities to insure that management of these sites is compatible with these species. Preserving parcels 3 and 4 as open space will help to ensure the survival of these species.

# CHAPTER 5: CAMPUS MASTER PLAN

*"...I have just come from the bedside of a man who has passed the crisis in lobar pneumonia and would get well, but for three days this patient had seen cows in the trees. These were hallucinations and...if one considered the delirium which often comes with high fevers, then the majority of people in this room have been at these times as mentally ill as the patients in a mental hospital."*

from a speech given in 1928 by Dr. Waldo F. Desmond, medical practitioner in Newtown, CT, at a public meeting held for the purpose of discussing the possible choice of Newtown for the erection of a new psychiatric hospital.

# Chapter 5: The Campus Master Plan




## Introduction

*The following chapter presents the master plan for the campus of Connecticut Valley Hospital. The campus master plan is comprised of the two main components of the plan described in Chapters 3 and 4 of this report: the modernized and consolidated future DMH facility as represented by the Preferred Option, and the reuse of those buildings and lands, which based on the premises of the Preferred Option, will be in excess of DMH future needs. The accompanying flow chart indicates the location of this chapter as the culmination of the study process.*

Purpose

As previously discussed, the purpose of the campus master plan is to provide a strategic framework to guide decision-making with regard to utilization of the campus. Specifically, the goals of the campus plan are to provide guidelines for:

- consolidating the DMH facility, converting it into a modern and efficient psychiatric hospital
- reusing the properties which will be in excess of DMH future needs in a way such that municipal, Regional, and State needs are met while respecting, and potentially benefitting, DMH interests.

A third related goal is that of:

- integrating the campus into the surrounding community, thereby reducing the isolation and stigma traditionally associated with the property.

The Preferred Option (described in Chapter 3 of this report), comprises the recommendations for the consolidated future DMH facility. The parameters for the modern and efficient psychiatric hospital are summarized in Chapter 1 of this report and described in full in the *Tasks 1 and 3 Reports* of the study. The proposed Preferred Option assumes significant renovations to the existing facilities; buildings proposed for the future DMH facility were chosen assuming they would be remodeled to suit the physical parameters set forth in the beginning of this report. The buildings comprising the Preferred Option should in no way be viewed with their current environment in mind.

Recommendations for reuse of excess properties are described in Chapter 4 of this report. It is recommended that reuse of excess properties be undertaken with care. The hospital campuses were established to serve and benefit persons with mental illness, and will continue to play an important role in the State's mental health system - as centers of specialized, intensive acute care. Providing quality mental health care should continue to be the priority function of the campuses, and the reuse of excess facilities should not conflict with this function.

Recommendations for the campus master plan include a proposed list of ways in which reuse recommendations benefit DMH; these are both direct (e.g. set aside of a percentage of housing units for former DMH clients) and/or indirect, mainly by integrating the campus with the surrounding community. Integration with the surrounding community is achieved either by introducing uses on the campus which will attract the general public to the campus, thereby bringing the community to the hospital (e.g. recreational facilities), or by proposing uses which actively interact with the surrounding community (e.g. housing).

The campus master plan, has numerous functions, including the following:

- provides a flexible framework for decision-making
- provides a series of rational guidelines to direct future change
- facilititates the optimization and efficient utilization of facilities
- protects the interests of DMH as well as those of the State
- directs capital expenditures towards programmatic needs

The campus master plan is intended to provide a strategic framework to guide decision-making regarding the manner in which facilities are utilized, and investments made, over a twenty-year time period. However, the timing of implementation of the recommendations depends on a number of factors, many of which are characterized by a degree of uncertainty. Implementation of the DMH component of the plan is basically

dependent upon two factors - funding for the renovation of the buildings identified for future use by DMH, and funding for the development of additional community service the appropriate placement of some of the Long Term Care patients. Both of these fact are difficult to predict.

Implementation of the recommendations for reuse of excess properties is dependant on number of factors including: the timing of the renovation of the new DMH facility, regic economic trends, and interest on the part of potential reusers. All of these factors are difficult to predict.

Due to the degree of uncertainty inherent in a planning process extending over such a lon time period, flexibility has been built into the recommendations to account for future change.

The following campus master plan is intended to guide decisions toward achieving optimal utilization of the Connecticut Valley Hospital campus.

## Organization of this Chapter

The chapter begins with a graphic representation of the campus master plan comprised of a series of maps.

The second section of the chapter discusses the mothballing and demolition of vacant buildings and makes recommendations for specific buildings. A strategy for historic preservation is also proposed.

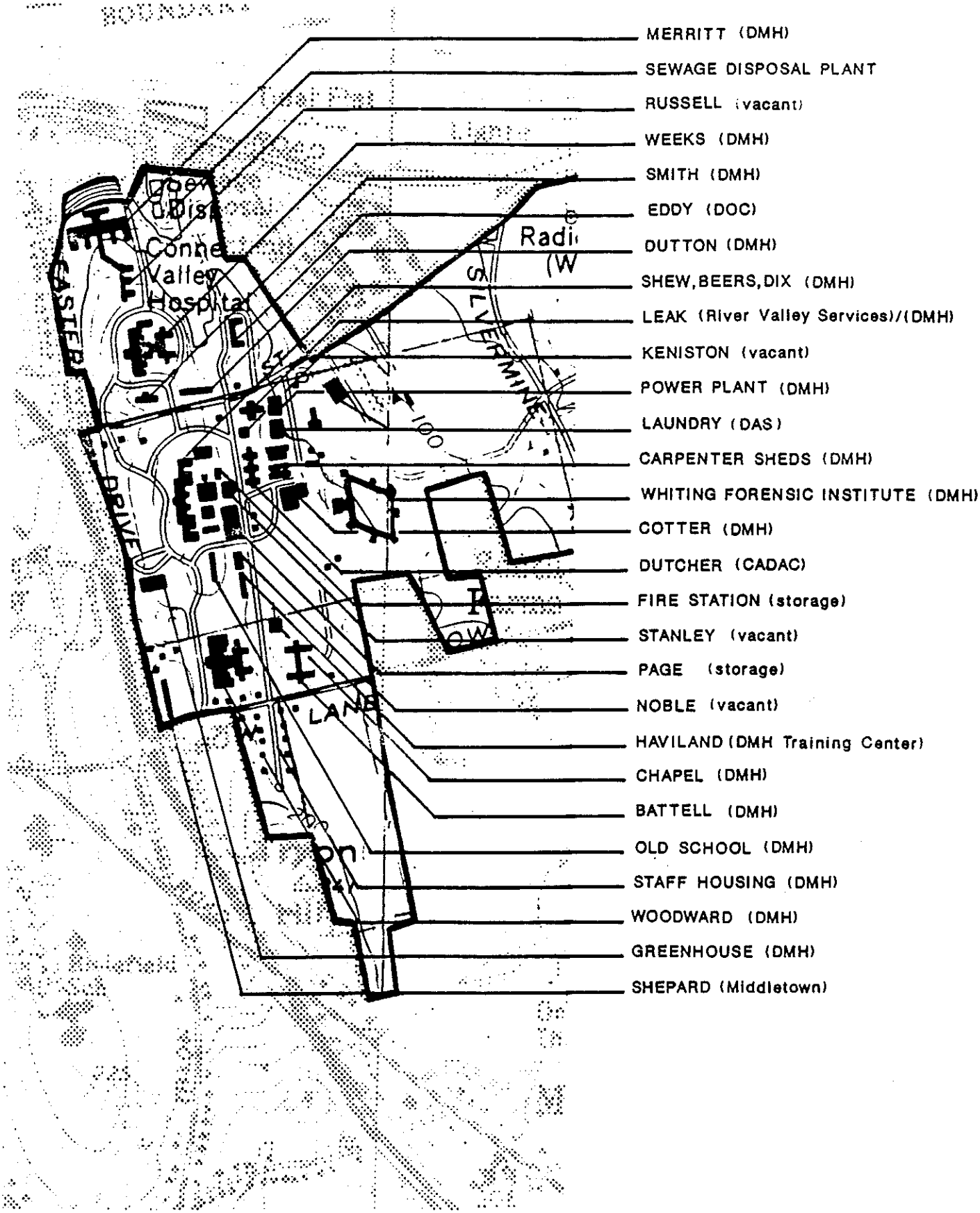
The third section of the chapter sets forth a series of next steps, both for the phasing of the consolidation of the DMH facility, and for the implementation of reuse recommendations.

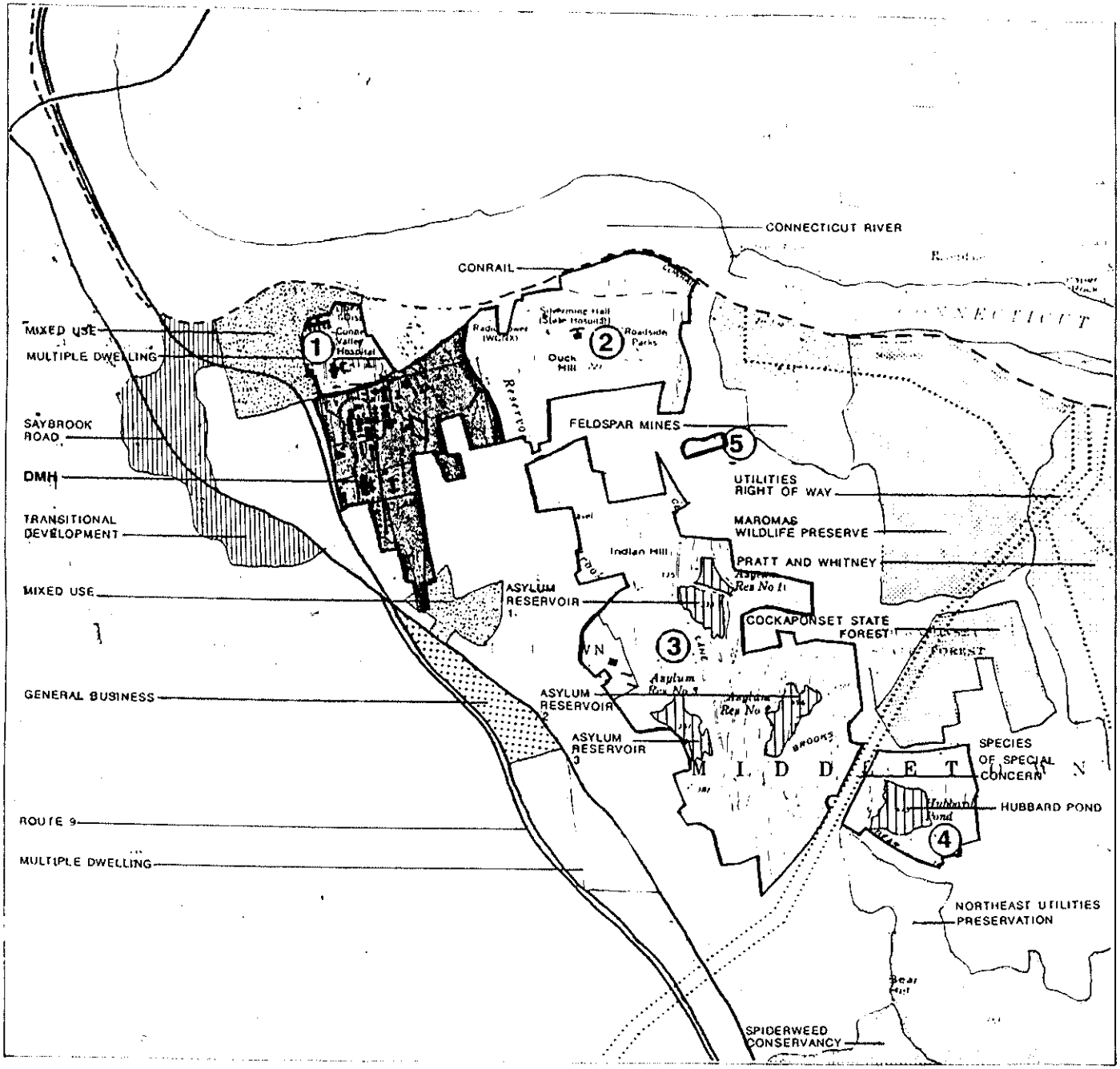
# Section 5.1 Graphic Representation

The following section presents the campus master plan as a series of maps depicting:

- Existing Campus Utilization (detail of campus core)
- Proposed Campus Master Plan
- Proposed Campus Utilization (detail of campus core)
- Parcel Relationships and Benefits to DMH

## Existing Utilization: Detail of Campus Core






## The Campus Master Plan

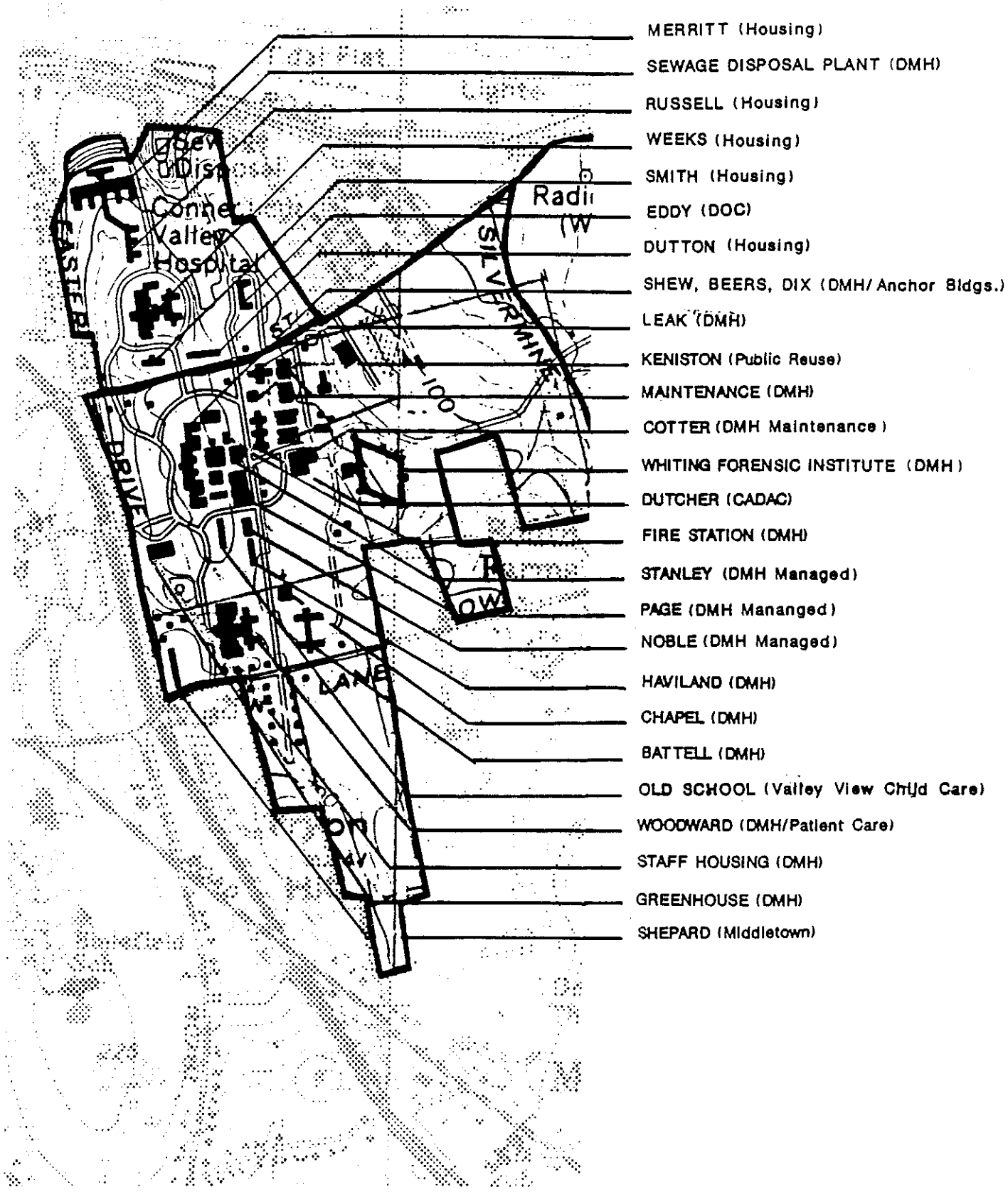
The accompanying map depicts the master plan recommendations. The campus is shown within the context of its immediate environs.

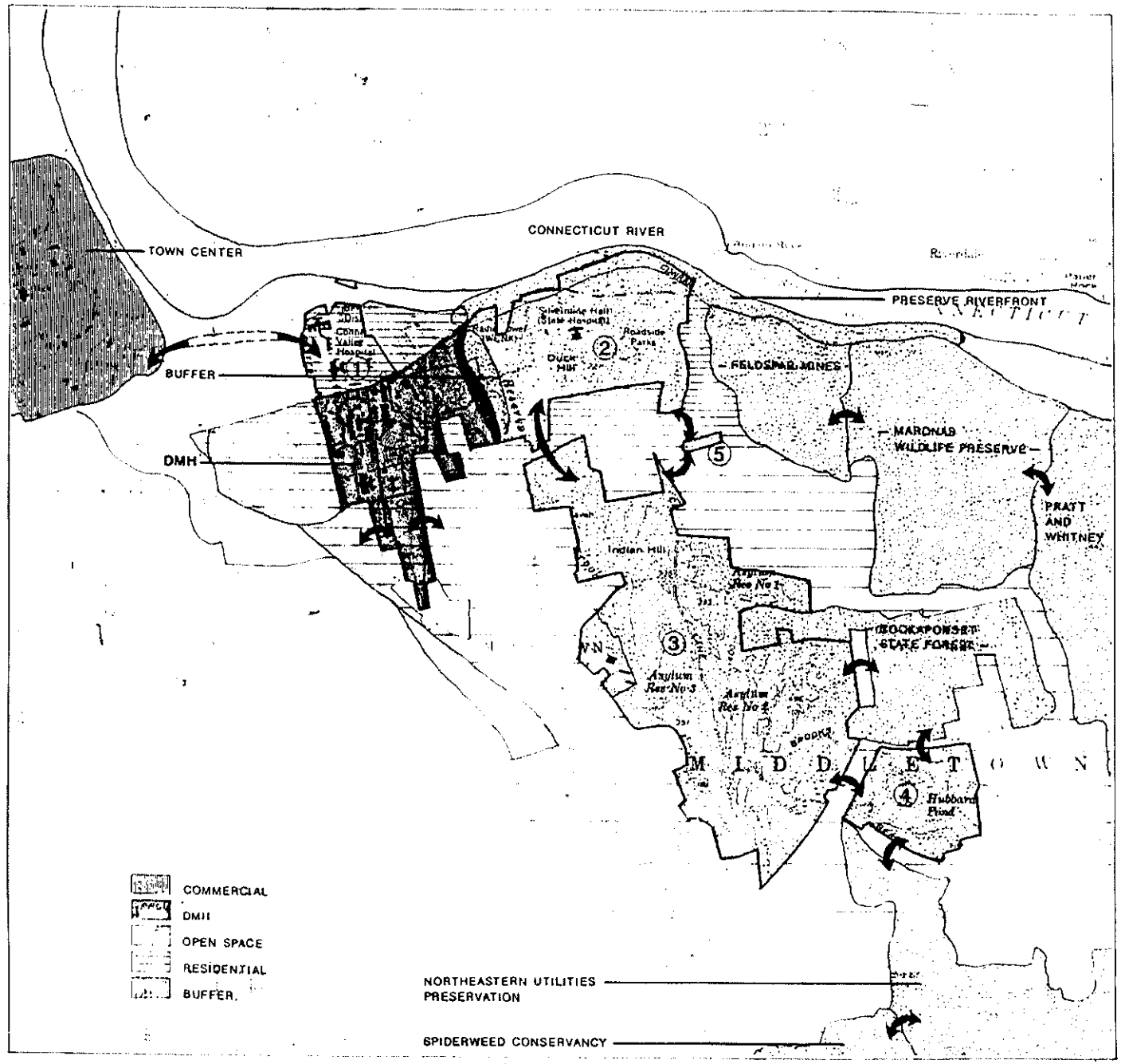
| | |
|---|---|
| **DMH Parcel:** | Preferred Option |
| **Reuse Parcel 1:** | Residential |
| **Reuse Parcel 2:** | Cultural/Recreational |
| **Reuse Parcels 3, 4, and 5:** | Dedicated Open Space |

**KEY: MASTER PLAN**

- DMH
- Mixed Use
- General Business
- Residential
- Industrial
- Transitional Development
- Reservoir
- Open Space

## Proposed Utilization: Detail of Campus Core






## Parcel Relationships And Benefits To DMH

The following comments and accompanying map refer to the relationships between the various uses proposed for the future utilization of the campus, included are observations as to how the recommendations benefit DMH. Benefits are both direct (e.g. set aside of percentage of housing units for former DMH clients) and/or indirect, mainly by integrating the campus with the surrounding community.

## DMH Parcel: The Preferred Option

The Preferred Option consolidates the future DMH facility in three main buildings: Shew/Beers/Dix, Bartell, and Woodward.

The satellite residential campus, adjacent to surrounding non-DMH residential neighborhoods, may be continue to be used as staff housing in the future, or for housing for former DMH clients, as needed.

The large amount of open space between the DMH Parcel and Reuse Parcel 2 acts as a buffer to potential traffic impacts that may result from development of Reuse Parcel 2 recommended for cultural and recreational use.

## Reuse Parcel 1: Residential

**Parcel Relationships:** Residential development on this parcel is compatible with the surrounding uses which include the Long River public housing and a non-DMH residential neighborhood.

The parcel's riverfront location provides the opportunity to create an attractive residential environment. Its location near the Town Center supports the potential for development.

**Benefit to DMH:** It is recommended that a percentage of the housing developed on this parcel be set aside for former DMH clients.

## Reuse Parcel 2: Cultural/ Recreational

**Parcel Relationships:** Included in the recommendations for this parcel are the development of a museum and recreational activities. These activities relate well to nearby Reuse Parcels 3,4, and 5 which are recommended for preservation as open space.

Any development on this parcel must respect the boundaries of the Riverview Hospital for Children.

**Benefit to DMH:** Provides the opportunity for recreational facilities to be shared with the general public.

## Reuse Parcels 3, 4, and 5: Dedicated Open Space

**Parcel Relationships:** These three parcels are adjacent to a number of nature preserves, State parks, and other open space areas. Preserving the parcels as open space results in a significant and beautiful expanse of open space for the enjoyment of Connecticut residents and visitors.

**Benefit to DMH:** Enjoyment of the open space parcels should be available to all Connecticut residents, including DMH patients.

# Section 5.2 Mothballing And Demolition

Each option calls for phasing out DMH use of certain buildings over time. Mothballing or demolition of such buildings may be appropriate.

Generalized descriptions and estimates of mothballing and demolition costs are provided below. The chart at the end of this section provides recommendations for the mothballing or demolition of specific buildings.

## 5.2.1. Mothballing

Mothballing should stabilize buildings to eliminate further deterioration, and secure them through provision of security and fire alarm systems. Per square foot cost estimates are provided on the following page. These costs include both stabilization and security measures. Depending on the condition of a particular building, mothballing costs may vary according to the degree of deterioration which the building has suffered.

Mothballing costs for specific buildings are not provided because actual costs will depend on the particular repairs necessary for each building. Additionally, the recommended timing of mothballing varies depending on a number of factors, as discussed in the pages which follow.

**A) Stabilization.** One of the primary goals of stabilization is to prevent water damage. Water can cause significant damage to a building in two ways - by causing wood to rot and by causing masonry to expand due to freezing and thawing. Stabilization measures include the following:

- boarding up buildings, with provision for some ventilation to prevent moisture build up
- sealing of envelope, particularly the roof, to prevent water leakage and damage; and periodically checking for water damage
- stabilization of expensive or otherwise significant details to prevent deterioration of gutters, cornices, flashing, etc.

**B) Security** The main goals of security measures are to eliminate potential hazards in the interest of public safety and to prevent vandalism to the building. Security measures include:

- ground floor entrance control
- boarding up windows
- breaking and entry alarm system
- closing of tunnel connections
- Fire alarm systems
- Conversion of sprinklers to dry pipe systems

Mothballing a building can be costly. Additionally, if a building remains vacant, over time it continues to deteriorate, making renovation more costly and less likely. Also, the building's deteriorated state may become an obstacle for the reuse of surrounding buildings, and may begin to pose a hazard to public safety. Therefore, it may be necessary to consider demolition of some of the buildings which seem to have the least reuse potential, have limited historical and architectural value, and/or are currently deteriorated to the point of being dangerous.

Mothballing and demolition costs listed below are not included in the construction cost estimates for the options. Furthermore, costs for demolition do not include estimates for asbestos removal.

## 5.2.2. Mothballing And Demolition Costs

A. **Mothballing** ..... $8.00 - $10.00 per gross square foot

B. **Demolition**

1) **Wood frame buildings**

Demolish, load and haul wood frame building...$2.50 per gross square foot

Demolish, load and haul shed or barn.....$1.50 per gross square foot

2) **Masonry Buildings**

Demolish, load and haul masonry building..... $3.80 per gross square foot

Procedures should include removal and stockpiling for future use of salvageable materials such as brick of a particular style or period, granite, roofing slates.

3) **Selective demolition of masonry wall sections**

Demolish wall section, store salvageable materials

4" brick wall.....$8.00 per gross square foot

4" brick, 8" block.....$12.00 per gross square foot

## 5.2.3. Guidelines For Mothballing And Demolition Of Buildings

**Factors:** For those buildings not recommended for use by DMH and currently vacant, or soon to be vacated under the premises of the Preferred Option, the following factors were considered in recommending whether a particular building should be mothballed or demolished and at what point in time.

- building condition(*)
- architectural and/or historical significance, including whether or not the building is listed in State and/or National Registry for Historic Places
- known interest for reuse expressed on the part of a user other than DMH
- building's location in terms of access, proximity to other buildings and their uses
- building size and type and associated renovation costs
- predicted reuse potential

(*) All the hospital buildings were surveyed and their conditions documented in *Physical Inventory, Task 5.1* of this study.

**Guidelines:** The following guidelines were devised to guide decision-making. In ge
unless a building was considered to pose a hazard to public safety and had deterior
the point where renovation would exceed reasonable cost, all buildings were given a
chance at reuse. The guidelines were followed in general; however, each building w
evaluated according to its specific characteristics. In some cases this meant that a bu
was made an exception to the guidelines.

Guide 1.

A large number of buildings on each of the three campuses are listed on the State and
National Registry for Historic Places. Many of these buildings are in Poor condition(*
and would be very costly to renovate; some pose a hazard to public safety. It would be
extremely difficult to preserve all of these buildings; the cost of mothballing them alone
would exceed reasonable expenditure levels. The Registry for Historic Places reports w
carefully reviewed, and in each hospital, a cluster of buildings most representative of the
hospital's past was selected for indefinite preservation. The buildings were chosen for
preservation not necessarily based on their current physical condition, but for their
historical and architectural significance.

Guide 2.

If a particular building is not part of the "representative cluster", is listed on the State
and/or National Registry for Historic Places, and was evaluated as being of secondary
historical and/or architectural significance:

- and the building is in Fair to Good condition(*), absent interest on the part of non-DMH users in two years, mothballing is recommended. After an additional three years without indication of potential for reuse, it is recommended that demolition be considered.
- and the building is in Poor condition(*), emergency stabilization is recommended, unless a building is deteriorated to the degree that it poses a public safety hazard, in which case demolition is suggested. For buildings not deteriorated beyond the point of reasonable renovation, demolition is recommended, only if a specific reuser is not identified within a two year period.
- and the building is small and/or a part of the maintenance cluster, and in Fair to Good condition(*), mothballing is recommended in a number of cases, as these buildings are less expensive to mothball and can be used for storage.

Guide 3.

If a building is in Fair to Good condition(*) and is not listed on the State or National
Registry for Historic Places (indicating that it is most likely less than fifty years old and in
most cases in use), and if a user other than DMH does not express interest in reuse within
two years, mothballing is recommended.

Guide 4.

If a building is in Poor condition* and is not listed in the State or National Registry for
Historic Places, demolition is recommended in most cases.

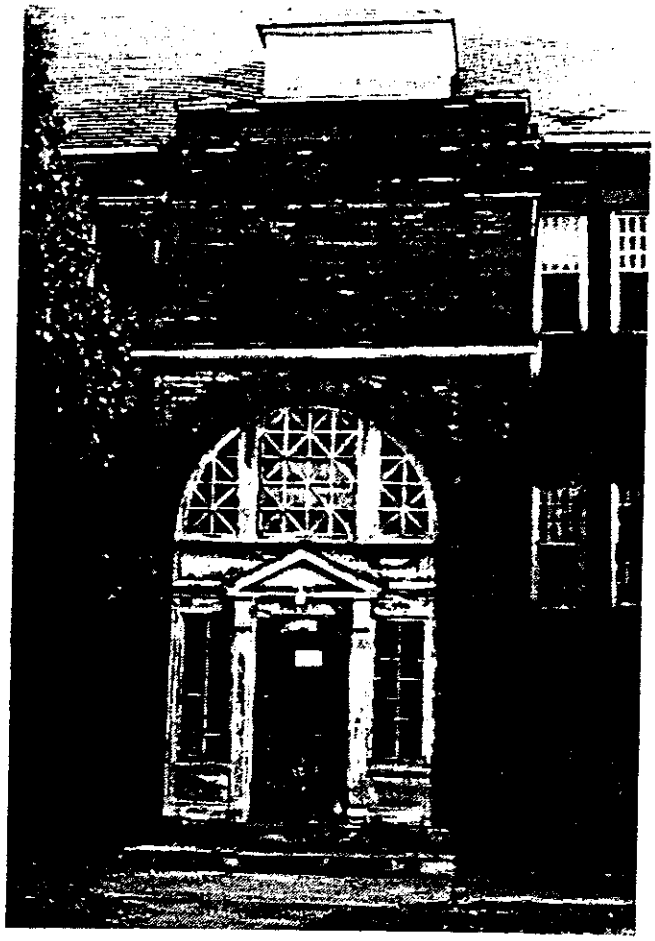
The historic buildings selected for indefinite preservation should be considered as a
valuable state resource both for their historical and architectural significance. In some
cases, an historic building is recommended for preservation because of the historic and/or
aesthetic value which it contributes to a group of buildings, however, the building alone
may not be of primary importance. In these cases, it is indicated that after a certain time
period, if no interest in reuse has surfaced, that demolition should be considered.

(*) All the hospital buildings were surveyed and their conditions documented in *Physical Inventory, Task 5.1* of this study.

**Emergency Stabilization Measures.** All buildings of historic and/or architectural significance that have been vacant for more than one year should be immediately evalua as to the need for emergency stabilization measures. Emergency stabilization measures include patching roof leaks, removing or repairing deteriorated woodworking and/or cornices, and stabilizing any falling bricks. Security measures may be postponed, depending on the condition of the building, in this way delaying this expenditure.

The chart (Table 5-1) on the following page makes specific recommendations for the utilization of the buildings on the campus. A specific course of action is recommended for each building, including the timing of the recommendation where relevant.

The map on the page immediately following the "Proposed Building Utilization and Action" chart, identifies those buildings at Connecticut Valley Hospital, listed on the National Registry for Historic Places, and proposes that a smaller cluster, most representative of the hospital's past and architectural style, be preserved indefinitely.



*Keniston Hall*
*Connecticut Valley Hospital*

(*) All the hospital buildings were surveyed and their conditions documented in *Physical Inventory, Task 5.1* of this study.

# Table 5-1 Proposed Building Utilization and Action

| Building Name | Current Use/User | Bldg Cond (-) | BUILDING UTILIZATION | | | ACTION | |
|---|---|---|---|---|---|---|---|
| | | | DMH | Non-DMH Public | Private Redevel. | Mothball | Demolition |
| PREFERRED OPTION | | | | | | | |
| Battell | DMH: pt. care | Good | ● | | | | |
| Shew, Beers, Dix | DMH:Office,Admin. | Good | ● | | | | |
| Woodward (new) * | DMH: pt.care (Geriatric) | Fair | ● | | | | |
| Haviland * | storage | Good | ● | | | | |
| Noble * | vacant | Fair | O | | | XX | |
| Page * | storage | Good | O | | | XX | |
| Stanley * | vacant | Poor | O | | | XX | |
| PRIMARY BUILDINGS | | | | | | | |
| Dutcher | CADAC | Good | | ● | | | |
| Dutton Home | DMH:patient care | Fair | | O | | X | |
| Eddy | DOC | Good | | ● | | | |
| Leak Hall | River Valley Services | Fair | ● | | | | |
| Merritt | DMH:patient care | Good | | O | | X | XX |
| Russell | vacant, storage | Fair | | O | | X | XX |
| Weeks (new) | DMH:storage | Fair | | O | | X | |
| SECONDARY BUILDINGS | | | | | | | |
| Barn * | DMH:vehicle storage | Fair | ● | | | | |
| Blacksmith Shop * | DMH:storage | Good | ● | | | | |
| Carpenter Sheds * | DMH:bldg.materials | Fair | ● | | | | |
| Chapel * | DMH:religious svcs. | Good | ● | | | | |
| Chlorine Plant | DMH | Good | | O | | | |
| Cottages * | DMH:staff housing | Good | ● | | | | |
| Super. Cottage * | DMH:superintendent | Good | ● | | | | |
| Cotter * | DMH:fire, Post Off. | Good | ● | | | | |
| Dutton Garage | DMH:staff vehicles | Fair | | O | | | X |
| Greenhouse * | DMH | Good | ● | | | | |
| Grounds Garage * | DMH:vehicle storage | Good | ● | | | | |
| Grounds Office * | DMH:maintenance | Fair | ● | | | | |
| Ice House | DMH:vacant | Poor | | | | | O |
| Incinerator | DMH | Poor | | | | | O |
| Keniston | vacant | Poor | | O | | X | XX |

- = All hospital buildings were surveyed and their condition documented in physical inventory, Task 5.1 of this study.

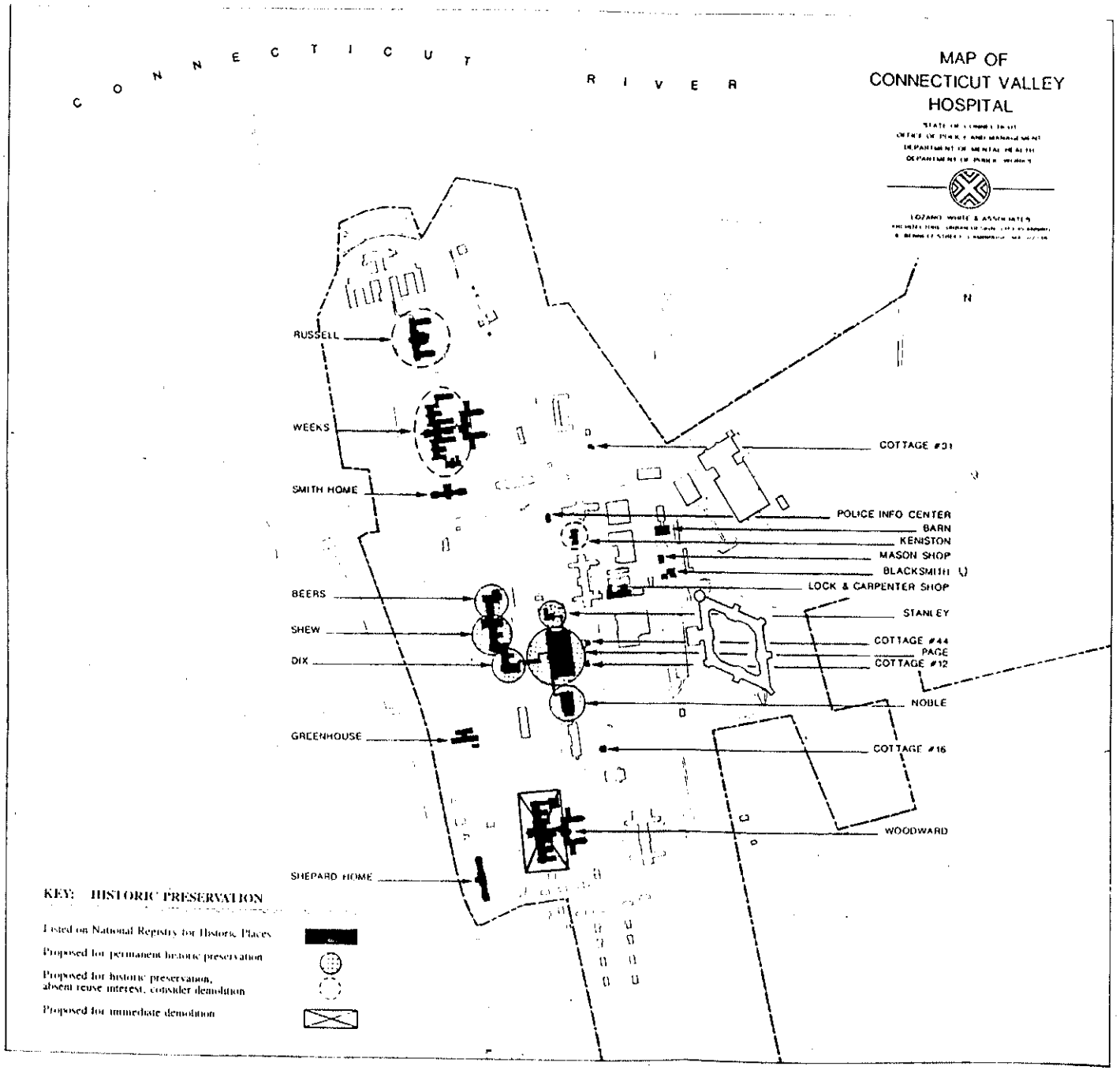
| KEY | |
|---|---|
| ● = | Continue Current Use |
| 0 = | Proposed Action |
| x = | Given absent interest of public non-DMH user and/or private redevelopers (within 24 months) |
| xx = | Given absent interest within 5 years including 2 year mothball if relevant, mothball or demolish as indicated |
| * = | No renovation (DMH) |

| Building Name | Current Use/User | Bldg Cond (+) | BUILDING UTILIZATION | | | ACTION | |
|---|---|---|---|---|---|---|---|
| | | | DMH | Non-DMH Public | Private Redevel. | Mothball | Demolish |
| SECONDARY BUILDINGS (continued) | | | | | | | |
| Laundry * | DMH:laundry | Fair | ● | | | | |
| Lock/Carpenter Shop * | DMH:equip. repair | Good | ● | | | | |
| Mason Shop * | DMH:equip. storage | Fair | ● | | | | |
| Old Fire Station * | DMH:storage | Fair | ● | | | | |
| Old School * | Valley View Child Care | Good | ● | | | | |
| Old Tin Shop * | DMH:storage | Fair | ● | | | | |
| Paint Shop * | DMH:equip. repair | Fair | ● | | | | |
| Police Info Center | Credit Union | Good | | ● | | | |
| Power Plant * | DMH:Power Generator | Good | ● | | | | |
| Purchasing Office | DAS | Good | | ● | | | |
| Purchasing Warehouse | DAS | Good | | ● | | | |
| Root Cellar | DMH:storage,maintena | Fair | | | | | O |
| Sewage Plant | DMH:sewage treatment | Good | | O | | | |
| Shepard | City of Middletown Homeless Shelter | Good | | ● | | | |
| Slaughterhouse | fire training | Poor | | | | | O |
| Smith | U.CT. storage | Fair | | O | | X | |
| Wagon Shed * | DMH:storage | Fair | ● | | | | |
| Weeks (old) | DMH:vacant | Poor | | O | | X | XX |
| Woodward (old) | DMH:vacant | Poor | | | | | O |

+ = All hospital buildings were surveyed and their condition documented in physical inventory, Task 5.1 of this study.

| KEY | |
|---|---|
| ● = | Continue Current Use |
| 0 = | Proposed Action |
| x = | Given absent interest of public non-DMH user and/or private redevelopers (within 24 months) |
| xx = | Given absent interest within 5 years including 2 year mothball if relevant, mothball or demolish as indicated |
| * = | No renovation (DMH) |

NOTE: If Leak is not needed for future DMH use, it can be made available for non-DMH public reuse.




## Historic Preservation

At Connecticut Valley Hospital, the following buildings are recommended for histo preservation:

Shew/Beers Div. Noble Page Stanley

These buildings comprise the original hospital cluster. CVH was the first public hospital for the mentally ill in the state. Much of the complex retains the original la which was designed based on Kirkbride concepts of treating the mentally ill. The buildings are interconnected by pedestrian bridges. The complex is in French Seco Empire style constructed in 1866-1874.

All of the above listed buildings are recommended for use by DMH in the Preferre Option, although only the Shew/Beers Div. building is recommended for renovation patient care building. As the building is presently in use, it is in good condition. According to the premises of the Preferred Option, Page, Noble and Stanley are to managed by DMH, and are to be renovated at a later date to house activities that a interest to both DMH and the community at large (e.g. auditorium, banquet hall, l center, recreation center, museum of mental health, theater, etc.). Joint financing renovation costs (DMH and the municipality of Middletown) may be a possibility. historic core would then become a place of interface between the hospital and the community, and the historic buildings can be enjoyed by a larger number of people. Page and Noble are especially impressive historically significant buildings which req immediate attention in terms of stabilization.

Three buildings are considered to be complementary to the historic cluster; these a Russell, Weeks (old), and Keniston. However, each building considered individual of secondary importance. The buildings are in relatively poor condition and require immediate stabilization. However, if they are not reused within a five year period, demolition should be considered.

The "Proposed Building Utilization and Action" chart on the immediately preceding page, outlines a specific course of action recommended for each building on the cam Recommendations concerning the following buildings require further explanation.

**Merritt:** Built in the 1950's, this building is in good condition, but is very large and institutional in appearance. The building is presently one of DMH's main patient c buildings. In the Preferred Option it is recommended that the building be reused by non DMH user. The building is sited on a hilltop enjoying spectacular views of the river; however, because of the size and institutional environment of Merritt, reuse to be difficult. It is recommended that absent interest on the part of a user other than DMH within a five year period, that demolition of the building be considered.

**Woodward (old):** Woodward and Weeks buildings are "almost twins", that is, they a extremely similar architecturally. They are both in poor condition and it is recommended that only one of the two be preserved. Under the premises of the Preferred Option, DMH will be using the newer addition to Woodward; the deteriorated older portion of Woodward poses a serious hazard to patient safety. It recommended that the older portion of Woodward be demolished and that Weeks, "twin", be preserved.

**Page, Noble & Stanley:** These three grand historical buildings are presently vacant a in relative disrepair. Emergency stabilization is recommended so that adaptive reuse may be viable.

**Note:** All the hospital buildings were surveyed and their conditions documented in Physical Inventory, Task 5.1 of this study.

# Section 5.3. Next Steps

## 5.3.1. Proposed Phasing: Preferred Option

Phasing of the Preferred Option will be conducted in three stages:

**Phase I:** Construction/renovation.

Recommended temporary utilization of buildings and grounds while renovations and construction are underway.

**Phase II:** The hospital in transition.

During this phase, buildings will accommodate approximately 380 beds: 80 for Evaluation and Brief Treatment (includes 20 beds proposed for transfer to a newly constructed floor at the existing Connecticut Mental Health Center in New Haven, and a 20-bed "swing" ward); a 20-bed Medical Psychiatric Ward; 200 beds for Intermediate Treatment; and 80 beds for Long Term Care.

**Phase III:** The hospital of the future.

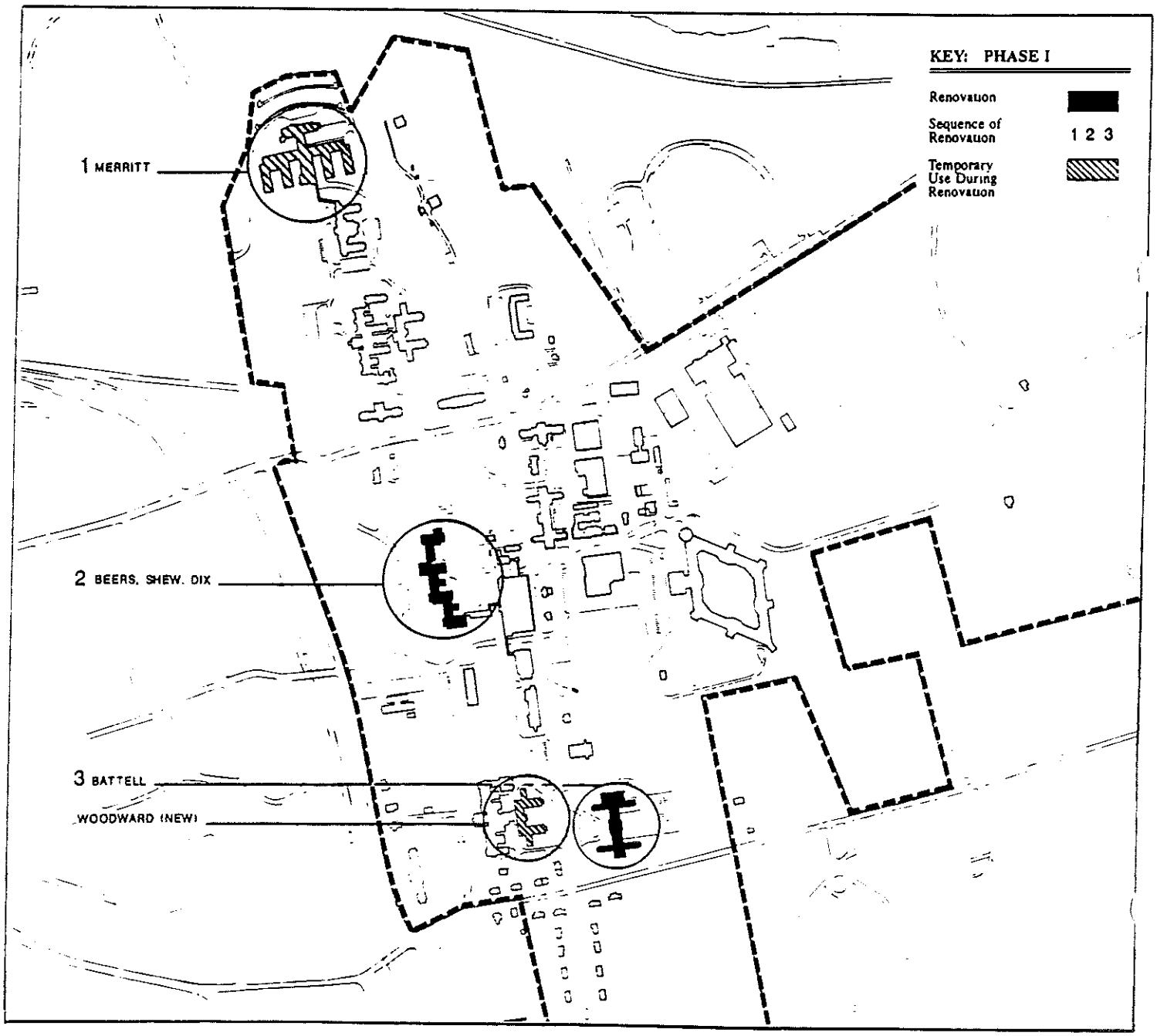
This phase represents the "eventual core" hospital. This core hospital in the long run will accommodate approximately 300 beds, including 60 for Evaluation and Brief Treatment, 20 for Medical Psychiatric, 200 for Intermediate Treatment, and one 20-bed "swing ward". Patients requiring Long Term Care treatment will be transferred to community-based facilities elsewhere.

## A. Phase I: Construction And Renovation

The following is a description of the phasing and implementation of the Preferred Option during construction and renovation, Phase I. Phasing has been designed to minimize costs by utilizing the existing capacity of buildings to accommodate patients as much as possible, so as to avoid the additional expense of renovating buildings to temporarily house patients while renovations are underway. Furthermore, patients placed under the greatest hardship (i.e. remaining in a building which is undergoing partial renovation), are then permanently relocated to renovated buildings first - before other patients who have enjoyed more pleasant living environments during the renovation period. The phasing is described in a series of steps.

### Existing Capacity of Buildings for Patients:

| Building | Beds |
|---|---|
| Battell | 180 |
| Merritt | 207 |
| Woodward | 64 |



The following steps outline the renovation and construction process as summarized on the accompanying map. Attempts will be made to minimize patient movement resulting from renovations; patient placement will be based on program development and specific patient treatment needs.

1. Temporarily place 160 patients in Merritt and 140 patients in Battell. Merritt will require minimal investment for cosmetic renovations for use during this transitional period. Place 40 Long Term Care patients in Woodward to remain there until more appropriate placements are located.

2. Temporarily relocate the administrative offices from the Shew/Beers/Dix complex to Merritt.

3. Renovate the Shew/Beers/Dix complex, reconnecting the three buildings so that they are - as they once were - one building.

4. Relocate 140 patients from Battell to Shew/Beers/Dix. Permanently relocate Administration from Merritt to Shew/Beers/Dix.

5. Renovate Battell.

6. Relocate 160 patients from Merritt to the newly renovated Battell.

### B. Phase II: The Hospital In Transition

Phase II is the hospital in the short term - accommodating all the patients presently at the hospital. It is the policy of DMH that over time, most, if not all of the Long Term Care patients will be relocated to less restrictive and more appropriate therapeutic environments in the community. This will occur over time as appropriate placements are identified and patients are gradually relocated.

In the recommended "phase down" sequence, Long Term Care patients are accommodated in two wards in Battell (both on one floor), and in two wards in Woodward (one ward per floor on two floors) for as long as these beds are required.

As Long Term Care patients are placed in less restrictive settings in the community, it is recommended that wards be closed one at a time starting in Woodward, until both wards are closed, allowing the building to be reused. As more patients are relocated, wards in Battell may be closed and the floor housing two long term care wards may then be reused by DMH.

### C. Phase III: The Hospital Of The Future

Phase III represents the hospital in the future - the eventual "core" hospital. This phase utilizes the buildings once occupied by the Long Term Care patients who have been relocated to less restrictive settings in the community.

In the Preferred Option, the eventual core hospital is concentrated in Shew/Beers/Dix (the anchor building) and in Battell.

## 5.3.2. Next Steps For The Implementation Of Reuse Recommendations

As previously stated, the reuse recommendations contained in this report are intended to be starting points for the process of reusing properties in excess of DMH future needs. The following outlines some of the steps necessary for the successful reuse of these properties.

### 1. Reevaluate Development Conditions

The recommendations contained in this report will not be implemented immediately. For this reason information regarding local attitudes, municipal needs, and market conditions, will inevitably fluctuate. Therefore, the recommendations should be reevaluated at the time of implementation.

Upon resolution of an acceptable plan, the interest of desirable parties should be sought through a real estate marketing program that is comprehensive and clear, with well defined authorization and responsibility for the managing State agent.

### 2. Develop Phasing Strategy

Phasing of the recommended reuses will be an important aspect of the "destigmatization" process which must occur both for the sake of the DMH, and for the sake of reuse of the excess parcels. That is, in order to diminish the negative perceptions regarding these properties, it may be prudent to prioritize the reuse of excess parcels based on the degree to which a specific reuse would act as a neutralizing force, diminishing the stigma associated with the campuses. This would benefit DMH and increase the probabilities of attracting other reusers to the property.

Therefore, the reuse recommendations, although depicted together on one map, should not be interpreted to suggest that all lands shown as suitable for specific uses should be developed simultaneously. In addition to the influence of factors beyond the control of the State such as market forces, in certain cases it may be desirable to target a specific reuse parcel to be developed before the others. It may be necessary to attract a normalizing or neutralizing reuser, in the hope that other potential reusers may be more interested once the perceived negative effects of DMH and other human service agencies have been diluted.

Another aspect of phasing relates directly to the Department of Mental Health's facilities. It is DMH's goal that Long Term Care patients will be gradually phased out of the hospital setting and transferred to community-based facilities. As the buildings where these patients currently live are vacated, it will be important to coordinate the phase-out process with reuse plans so that unnecessary conflicts between reuse and the provision of adequate patient care are avoided.

### 3. Develop Effective Marketing Strategy for Leasing

The three campuses have not yet experienced significant development pressure. Some private sector interest has been expressed over the years, but relatively speaking, one could not characterize these sporadic expressions of interest in the properties, as development pressure. One reason is the perception and stigma associated with the mentally ill. Additionally, a multitude of other uses and users have encroached on the campus over the past few years, adding in some cases to the stigmatization of the properties. These perceptions will be difficult to change and will require that effective marketing strategies be applied by the State.

Marketing efforts for land leasing should be initiated immediately, as it may take some time to attract potential parties. The process of disposition must be clearly defined in terms of the steps to be taken and the responsibility for overseeing the process. The process must first address the realities of the needs and desires of the municipalities involved, and consensus must be forged around defining these needs and desires. Secondly, an in-depth market analysis should be conducted in order to determine the specific degree of market support for the recommended reuse options. The two elements, municipal need and market conditions, should be merged to form the basis for a plan for action for each parcel.

**4. Define Legal and Financial Agreements**

The recommendations contained in this report are comprised of realistic and desirable reuses and their general location on the campuses. The legal and financial relationships between DMH, the State, and reusers, required for the implementation of the recommended reuses, have not been defined. These should be decided on a case-by-case basis.

When a State agency no longer needs a specific property and the State declares the property surplus, there is a formal process for disposal of this property. According to Section 4b-21 (b), "Purchase, Sale and Leasing of State Real Property and Allocation of Space," the Department of Housing has the first right of refusal. Within thirty days of receipt of notification from the Department of Public Works (DPW), the Commissioner of the Department of Housing must inform DPW whether the property can be

> *"utilized or adapted for use as an emergency shelter or transitional living facility for homeless persons or can be utilized for the construction, rehabilitation, or renovation of housing for persons and families of low and moderate income."*

If the Department of Housing waives their right to have the property transferred to their "custody and control," then the Commissioner of DPW determines that the property may be treated as surplus. The Connecticut Alcohol and Drug Abuse Commission (CADAC) also has certain rights of refusal. Next, the Commissioner of the Department of Public Works extends the right of refusal to the municipality in which the property is located, and finally, to the private sector.

The State can allow use of its property by others through a variety of lease, use or other agreements. This has been done at a number of campus facilities and would be an appropriate action in the future when it benefits the State. Revenues generated from such agreements are deposited into the State's General Fund. Dedicated funding programs are used sparingly in Connecticut and are not likely to be applied to the reuse of DMH campus excess property.

It is generally the State's policy not to transfer State property to non-State entities, although there have been some instances in the past where the State has deemed it appropriate to transfer property ownership to a non-State entity, when the transfer has been to serve a demonstrated municipal need. The appropriateness of this type of transfer should be reviewed on a case-by-case basis and the process for doing so, defined.

As recommended above, unless specific circumstances indicate that it is desirable to do otherwise, it is recommended that the State retain title of all parcels at the three campuses and allow use of the buildings and land under extended lease periods. It will most likely be necessary, in the case of private sector reuse, to lease some parcels at a nominal fee in order to attract the desired reuses.

### 5. Conduct Environmental Impact Analyses

Under Connecticut's Environmental Policy Act, any significant action undertak... ...y a State agency that results in a major alteration involving a change in use of these State facilities, must be studied so as to identify the environmental impacts of the action. Key components of such studies include an analysis of the impacts on land and water resource historical resources and local/regional land use policies. The latter includes an analysis of the compatibility with local plans and zoning ordinances. Although these impacts and issues were considered in making recommendations, more specific analyses are necessary, including studies of the traffic impacts of specific reuse recommendations.

### 6. Conduct Management Study of Campus Utilities

This study, the Long Range Planning Study for DMH Facilities, provides a master plan for the use of buildings and land by multiple users at the three campuses which are the subject of the study. It is recommended that an additional study be undertaken in order to determine the most effective management strategy for the existing utility systems at the campuses, which will increasingly be serving a multitude of users.

The three campuses have extensive utility systems which have been in place for many years and represent major investments. Currently operated and maintained by DMH, these systems serve the entire campus at the three hospitals, including the non-DMH uses presently located there. The systems were constructed at a time when service demands were far higher than they are today. Although some improvements in these existing systems are required, in general, the utility systems are adequate to meet DMH's current needs. Since it is projected that in the future, DMH will serve fewer patients than currently served at the campus facilities, the utility systems should be adequate to meet DMH's future needs.

However, since DMH will increasingly be a minority user at the campuses, and since a significant number of additional users are expected to make use of these utility systems, it is important that an effective management strategy be developed, delineating responsibilities and ownership of the utilities and infrastructure. Until such an operations plan is completed, all utilities and infrastructure should continue to be owned and managed by DMH.

# Appendices

# Appendix A: Index of Study Documents

# Appendix A: Index Of Study Documents

The following is an index of the documents comprising the Long Range Planning Study of the Department of Mental Health Facilities. Study products provide a database of information regarding existing conditions and recommendations for future utilization. Additionally, they provide a strategic framework, both for consolidating DMH facilities and for reuse planning. Documents are listed below followed by a brief description of their contents.

Task 1, *Functional Program Statement* (one volume)

Task 2, *Facilities and Land Needs of Selected Agencies* (one volume)

Task 3, *Generic Space Program* (one volume)

Task 4, *Reuse Criteria for Excess Lands and Facilities* (one volume)

Task 5.1, *Physical Inventory of Existing Facilities* (three volumes)

Task 5.2, *Campus Evaluation* (one volume)

Task 5.3 *Option Analysis* (one volume)

Task 6, *Campus Options and Preparation of Facility Plans* (three volumes)

Task 7, *Identify DMH Budget Requirements* (no consultant product)

Task 8, *DMH/DPW/OPM Reuse Planning* (no consultant product)

Task 9, *Reuse Feasibility Analyses* (one volume)

Task 10, *Methods and Procedures Manual* (one volume)

Task 11, *Final Campus Plan Report* (three volumes)

The following briefly describes the contents of each of the study products.

Task 1, *Functional Program Statement*: Task 1 defines the Department of Mental Health's function program for the three hospitals which are the subject of the study. This program served as the basis for development of the subsequent space programs and campus plans. The program was used to formulate a range of policy choices affecting the type, location. and setting of mental health services that the State wishes to maintain in the aforementioned institutional properties.

Task 2, *Facilities and Land Needs of Selected Agencies:* Task 2 identifies and describes the types of non-DMH uses and users which have a potential need for, or interest in, land and buildings which are determined to be in excess of DMH future needs. A related activity undertaken in this Task and documented in the report, was the collection and analysis of local and regional data, surveys and plans, and interviews with local and regional officials. These define the needs, opportunities and constraints which could affect planning for the introduction of non-DMH uses on the campuses.

Task 3, *Generic Space Program:* Task 3 sets forth a set of parameters defining generic space requirements for a state-of-the-art psychiatric facility. These space requirements are then adapted to the existing campus hospitals.

Task 4, *Reuse Criteria for Excess Lands and Facilities:* Task 4 presents a series of requirements or criteria developed in order to facilitate the selection of options for the reuse of properties determined to be excess to DMH future needs. These criteria provide a framework to be used as a guide to defining "appropriate," "desirable," and "compatible" reuses for these excess properties.

Task 5.1, *Physical Inventory of Existing Facilities:* presents the results of a physical inventory conducted of the existing conditions of the buildings at each of the hospitals. The inventory is documented in database form and is provided both in report and computer disc form; one volume is devoted to each hospital.

Task 5.2, *Campus Evaluation:* Task 5.2 presents a series of evaluations of the buildings on the campuses in terms of their suitability and potential to meet the programmatic requirements of DMH. Two types of evaluations were made. First, evaluations were conducted on a campus-wide level, analyzing access, general environment, campus-wide water and sewerage systems, among other factors. Second, evaluations were conducted on the individual building level. A building typology and building evaluation criteria were developed in order to facilitate the evaluation process.

Task 5.3, *Option Analysis:* Task 5.3 presents a series of options for the use of buildings and grounds; buildings are chosen for their potential to meet future needs of DMH. The options constitute various combinations of buildings - some existing, some to be constructed. The options are presented, along with criteria for option selection, in order to facilitate option evaluation and the selection of a Preferred Option for the future consolidated DMH facility.

Task 6, *Campus Options and Preparation of Facility Plans:* Task 6 provides a summary of the four options developed for the future DMH facility, and more fully described in the *Task 5.3 Report.* This report presents further refined versions of the Preferred and Secondary Options for the future consolidated DMH facilities. The Preferred Option is then further defined.

Task 7, *Identify DMH Budget Requirements* (no consultant product)

Task 8, *DMH/DPW/OPM Reuse Planning* (no consultant product)

Task 9, *Reuse Feasibility Analyses:* Task 9 provides recommendations for those portions of the campuses that, based on the premises of the Preferred Option for the location of the DMH facility, will be in excess of DMH future needs. An analysis of the reuse potential of each campus is discussed and reuse recommendations are made for each building and land which will be in excess of DMH future needs.

Task 10, *Methods and Procedures Manual:* Task 10 contains a series of guidelines for updating and revising the Preferred Options for the future DMH facility plans. These guidelines may be used to update and revise plans and study recommendations.

Task 11, *Campus Master Plan:* Task 11 summarizes the study recommendations and brings together all components of the Plan. The Campus Master Plan is presented in three documents, one for each hospital; the contents of this document represent one of the three volumes.

# Appendix B: List of References

# Appendix B

# List Of References: General

1. List Of Documents

"An Act Concerning the Use of Surplus State Property by the Department of Housing", Substitute House Bill No. 5960, Public Act No. 88-290

"Assessment Sale Prices", Towns of Newtown, Middletown, Norwich and Preston

"Connecticut Department of Mental Health Facilities Plan, 1980-1985"

"Connecticut Grown", Department of Agriculture Proposal for an Agriculture Industry Development Program, Kenneth B. Anderson, Commissioner

"Governor's Blue Ribbon Task Force on Mental Health Policy," Interim Report, April 1983

"Five Years of Progress: Accomplishments in the Mental Health System: 1981-1986", DMH

"Master Transportation Plan", Connecticut Department of Transportation, 1988

"Population Projections for Connecticut Municipalities and Regions to the Year 2000", State of Connecticut, 1989

1987-1988 Regional Plans (5) for the Department of Mental Health

"Request for Proposal for Studies on Housing Development at Hudson River Psychiatric Center Site", Hudson River Housing, Inc., Poughkeepsie, New York

"State Policies Plan for the Conservation and Development of Connecticut, 1987-1992", Comprehensive Planning Division, Office of Policy and Management, June 1987

"State-wide Environmental Plan", Public Act No. 87-142

"Water Quality Classification Map of Connecticut", Department of Environmental Protection, State of Connecticut, 1987

Additional documents reviewed include:

- inventories of buildings with notations concerning energy audits, asbestos reports and priority action, square footages, etc.
- floor plans for buildings at the campuses
- aerial photographs of campuses
- informational packets prepared by each hospital

2. List Of Agencies And Organizations

Interviews with State agencies located on DMH campuses, or with future needs for land/buildings which might be met on DMH campuses:

- Connecticut Alcohol and Drug Abuse Commission (CADAC), (7/[illegible]3)
- Department of Administrative Services (DAS), (7/12/88)
- Department of Children and Youth Services (DCYS), (7/12/88)
- Department of Correction (DOC), (7/20/88)
- Department of Education, (6/27/88)
- Department of Higher Education (DHE), (8/27/88)
- Department of Higher Education (DHE), Division of Community Colleges, (8/25/88)
- Department of Motor Vehicles (DMV), (7/15/88)
- Department of Public Safety/State Police, (7/15/88)
- Department of Transportation (DOT), (7/1/88)
- Judicial Department, (7/1/88)
- Rocky Hill Veteran's Home and Hospital, (7/17/88)
- State Library, (6/27/88)

Interviews with State agencies with interests in DMH campus planning and reuse:

- Connecticut Historical Commission, (5/18/88)
- Department of Agriculture, (7/18/88)
- Department of Economic Development, (7/12/88)
- Department of Environmental Protection, (7/12/88)
- Department of Housing, (7/1/88)
- Department of Public Works, (6/27/88)

# List Of References: Connecticut Valley Hospital

## 1. List Of Documents


"A Program for the Connecticut History Commons" for the Connecticut Historical Commission by Daniel R. Porter, Consultant, Dec. 1976

*Connecticut Walk Book*, Fifteenth Edition, Connecticut Forest and Park Association, Inc.

"Environmental Impact Evaluation", Resource Recovery Facility Located on the Grounds of the Conn. Valley Hospital, Middletown, CT, Connecticut Department of Environmental Protection, May 1985

"Feasibility Study for the Connecticut Historical Commission", State Museum of Connecticut History, July 1974

Field Surveys of Connecticut Valley Hospital and Surrounding Area

"Housing and Land Use Element", MRPA, 1977

"Leachate and Wastewater Discharge Sources", Connnecticut Major Basin

Planning Map and Zoning Map, Middletown Planning and Zoning Commission, Middletown, CT

"Proposed Middletown Riverfront Development Plan" by C.E. Maguire, Inc., April 1986

"Regional Housing Needs Assessment for the Midstate Planning Region Staff Report", Dec. 1987

"Reorganization," pamphlet prepared by Connecticut Valley Hospital

National Register of Historic Places, U.S. Department of the Interior, National Park Service

## 2. List Of Individuals

Richard F. R. Boynton
Connecticut Regional Director
Connecticut River Watershed Council, Inc.
118 Oak St.
Hartford, CT
(Correspondence 3/20/89)

Alice A. Chin
Human Resource Planning and Development, Coordinator
State of Connecticut DMH
Office of Regional Director
25 Wallace Street
Wallingford, CT,
(Correspondence)

Geoffrey L. Colegrove
Executive Director
Midstate Regional Planning Agency
P.O. Box 139
Middletown, CT

Susan D. Cooley
President
The Middlesex Land Trust
27 Washington Street
Middletown, CT,
(Correspondence, Nov. 29, 1988)

Leslie N. Corey, Jr.
Executive Director
The Nature Conservancy Connecticut Chapter
55 High Street
Middletown, CT
(Correspondence, Nov. 28, 1988)

Enza Cubetta
Real Estate Agent
Middletown, Connecticut

Robert Froncak
Merritt Hall Deaf and Hearing Impaired Program
(Correspondence, Nov. 29, 1988)

Mayor Sebastian J. Garafalo
Office of the Mayor
City of Middletown, Municipal Building
Middletown, CT 06457
(Correspondence, Nov. 30, 1988)

Melanie Giamei
President
South Middletown Association
54 Virginia Drive
Middletown, CT
(Correspondence)

Angelo Gianino
Vice President
Connecticut Alliance for the Mentally Ill
(Correspondence, Nov. 30, 1988)

Tom Gionfriddo
Director, Middletown Housing Authority
(9/21/88)

Alison C. Guinness, Rockfall Intern
w/ Jim Gibbons
Cooperative Extension Service Land Use
Specialists in Haddam and Chairman of the Rockfall Environment and Education
Committee

Shirley H. Harris
135 Brow Street
Middletown, CT
(Correspondence, Nov. 21, 1988)

Irene Herden
President
Region II
Regional Mental Health Board, Inc.
25 Wallace Street
Wallingford, CT
(Correspondence)

John E. Hibbard
Executive Director
Connecticut Forest and Park Assoc., Inc.
16 Meriden Road
Route 66
Middlefield, CT
(Correspondence Nov. 29, 1988)

Maureen Hulsart
State of Connecticut
Mental Health Program for Deaf
and Hearing Impaired Persons
Middletown, CT
(Correspondence)

Nolan K. Kerschner
The Nolan K. Kerschner Co., Inc.
5 Eversley Avenue
Norwalk, CT 06851
(Correspondence, Nov. 30, 1988)

William M. Kuehn
Municipal Development Director
City of Middletown
DeKoven Drive
Middletown, CT
(Interviews, Correspondence and numerous telephone conversations)

Julius Laffal, Ph.D.
Vice-Chairman of CAC
(Correspondence, Nov. 30, 1988)

Larry McHugh
President
Middlesex County
Chamber of Commerce
70 College Street
Middletown, CT
(Correspondence, Nov. 30, 1988)

Miss Doreen McLean
1004 Silver Street, Apt. B-1
Middletown, CT
(Correspondence, Nov. 19, 1988)

Joyce Antila Phipps
Attorney at Law
Catchment Area Council #10
Representing Tokin of Durham
P.O. Box 672, 23 Main Street
Durham, CT
(Correspondence, Nov. 30, 1988)

Planning and Zoning Commission
Middletown, Connecticut

Representative of Civil Air Patrol
(July 14, 1988)

John H. Simsarian
Regional Director
State of Connecticut DMH
Office of the Regional Director
25 Wallace Street
Wallingford, CT
(Correspondence, Dec. 29, 1988)

George Souto
56 Julia Terrace
Middletown, CT
(Correspondence)

Ann C. Street
Executive Director
Greater Middletown Preservation Trust
27 Washington Street
Middletown, CT
(Correspondence, Nov. 29, 1988)

Lembit Vahur
Director of Inventory and Forecasting
Department of Transportation
24 Wolcott Hill Road
Wethersfield, CT
(Correspondence, June 6, 1984)

Leon F. Vinci, M.P.H.
Director of Health
City of Middletown
Municipal Building
P.O. Box 1300
Middletown, CT
(Correspondence Dec. 7, 1988)

Carolyn S. West
Special Projects
Office of Policy and Management
Energy Division
80 Washington Street
Hartford, CT
(Correspondence)

Attorney Ralph E. Wilson
591 Bow Lane
Middletown, CT
(Correspondence, Nov. 30, 1988)