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VETERANS ADMINISTRATION MEDICAL CENTER  
MARION, INDIANA

FACILITY DEVELOPMENT PLAN  
STAGE ONE

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Prepared For

VETERANS ADMINISTRATION

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0.0 EXECUTIVE SUMMARY

.1 Stage One

## 0.0.0 EXECUTIVE SUMMARY

### a. STAGE ONE

#### (1) Background

Stage One of the Facility Development Plan (FD) as defined in the Veterans Administration Statement of Task (Appendix) focuses on problem definition. Stage One has concentrated on documenting existing functional, technical and historical conditions, identifying technical and functional deficiencies, and evaluating the current transport system. By comparing the existing functions against the projected, an evaluation of the suitability of the existing facility to meet potential needs can be assessed.

#### (2) Historical Analysis

This facility was originally developed in 1889 as a branch of the National Home for Disabled Volunteer Soldiers. Since 1921, it has been operated primarily as a psychiatric facility and has been under VA control since 1930. Some 30% of the buildings were built before 1900.

- o The site is a historic district. Both the facility origin and the architecture of many of the buildings, have historical significance;
- o All buildings constructed prior to 1930 have been declared eligible for the Historic Register. This will have obvious impact on any plans for rehabilitation or adaptive reuse of the 50 plus buildings listed;
- o Many of the buildings have been divested of historically significant porches, chimneys, dormers, and several unsympathetic construction projects have taken place in past years;
- o Most of the historically significant buildings are structurally sound enough to be used for some purpose, but there does not appear to be enough alternate uses for complete campus reuse;
- o The most historically significant structures are the least suitable for current medical functions;
- o Buildings 19, 21, 22 and 60 are the most significant historically and the set of Ward Buildings 1 to 6 are next in significance. (Buildings 10, 25 and 122 may be expandable);
- o Construction of enclosed corridors connecting several Ward Buildings with the Occupational Therapy Building and Gymnasium provide easy access in inclement weather but are historical intrusions to the campus and landscape; and are not architecturally compatible with the rest of the campus;
- o The scale and character of Building 138 is not compatible with the rest of the campus.

### (3) The Campus Site

The Veteran Administration Medical Center at Marion, Indiana is located on a 151.4 acre tract at the southeast edge of the city. An additional adjacent 38.6 acres is dedicated to the use of the National cemetery. The pleasant flat to rolling site is adjacent the Mississinewa River, but well above the 500-year flood plain. The facility is presently surrounded by agricultural, single family residential and light commercial uses. The campus concept as illustrated at VAMC Marion was the ideal solution to fulfill the intent of the National Homes, that of a planned self-sufficient community housing a domiciliary patient population. However, since 1889 VAMC Marion's mission has grown more sophisticated and specialized until today its primary mission is the delivery of acute and extended psychiatric treatment. This role evolution necessitated physical changes. The construction was sporadic, lacking a cohesive, long range plan with the results generating problems rather than solutions.

- o Due to the original planning of the site and the change of the main entrance, orientation on the site is poor and is particularly difficult for the first-time visitor;
- o A focal point and point of reference is needed, such as the restoration of the Bandstand in Steele Circle;
- o The size and fragmentation of the medical center's site are such that severe restrictions have been imposed on the development of proper functional adjacencies;
- o The initial placement of structures on the site and the location of subsequent buildings imposes major restrictions on future site development;
- o The historical classifications of certain buildings create barriers to alternate use or demolition thus perpetuating poor functional layouts and relationships;
- o Building 138, the most architectural inappropriate building on the campus, is the only structure that can with modernization be adapted to function as a modern medical facility;
- o While the total number of parking spaces is adequate, the existing locations and distributions of spaces are not appropriately related to building functions;
- o Plant material, including many fine shade trees, is of good quality and well maintained; however, many trees have reached or passed maturity and their replacement should be well planned;
- o Planting has not been planned for the most effective landscape thermal control, ease of maintenance, or delineation of exterior spaces.

#### (4) Technical Analysis

Most of the buildings have red brick bearing walls on stone foundation, with hip and gable wood roof structures. The buildings are generally well sited to take advantage of site contours. The building structures are generally in sound condition, but their age makes most of them deficient in the quantity and quality of space for contemporary standards of a health care facility. Of prime importance is the patient. Few buildings provide a desirable environment, nor are they capable of being converted because of the antiquity and inflexibility of their structures.

- o A major technical problem is the presence of moisture (or standing water) in most of the basements. The storm water system is deficient and water backs up through mortar joints or other openings. This is particularly bad in the many buildings which have shelf stone foundations. The problem is worsened by the type of soils present which hold water;
- o There has been a continuing attempt to reduce energy consumption by insulating attics and replacing old single glazed wood sash with double glazed aluminum replacement units;
- o Cast iron radiation units have been replaced with fin tube radiation having self-contained thermostats. Steam is supplied to most buildings by a loop system from the central Boiler Plant. Some buildings are heated by a hot water loop;
- o Except for Buildings #13, #50 and portions of Buildings #124 and #138, there is no central air conditioning. Window units are being used more extensively;
- o Ventilation is a severe problem with high dependence on wall fans and open windows in warmer weather. Toilet room and medicine preparation area exhaust systems are generally inadequate. Attics are not ventilated and are subject to extreme heat build-up in hot weather;
- o Most buildings have adequate sprinkler systems, smoke detectors, and fire alarms. Emergency lighting generators have recently been installed to replace battery operated units;
- o All of the buildings have new electrical service panels, installed when the station primary service was recently updated. Beyond the service entrances, much of the branch circuit wiring has been updated. Very few of the building electrical services are large enough to provide for central air conditioning.



#### (5) Patient Accommodations

One-third of all of the existing buildings date from the Home's inception. This includes all patient care facilities except for buildings 15, 16, 17, 124 and 138. Although at the time of their completion all met the latest criteria, it has been 30 years since the most recent construction (of Building No. 138), and 50 or more years for the remainder. The physical facilities are well maintained and through the years the staff has made a conscientious effort to keep current through modernization, but the limits of remedial corrections have been reached. Extensive renovation and/or new construction is required to provide not only proper space but an acceptable environment for the majority of patient buildings. Action must be taken to correct these circumstances.

- o Currently only 2.5% of all patient bedrooms have direct access to private or semi-private toilet/bath facilities;
- o Nursing units vary in size from 17 beds to 71 beds. This results in poor staff utilization and inadequate patient supervision. The various ward sizes are a direct result of building limitations.;
- o Patient bedrooms lack uniformity of square footage and shape, generating poor space utilization;
- o Although patient privacy has been accomplished, 85% of all beds are grouped in 3 or 4 bedrooms;
- o Only 2 seclusion rooms exist for the total complement of psychiatric beds;
- o Of the existing 169,575 net square feet now dedicated to nursing units only 33,000 net square feet located in Building No. 138 (20%), can be considered as acceptable for use as patient units.

#### (6) Handicap Accessibility

All federally funded facilities must adhere to the Uniform Federal Accessibility Standards (UFAS). VAMC Marion's campus plans, plus buildings designed prior to handicap awareness make compliance to UFAS difficult and expensive. Although the medical center is constantly correcting deficiencies, some handicap problems may prove insurmountable.

- o Nursing units of the various disciplines, MS&N, Intermediate, Psychiatric, etc., must meet VA and UFAS standards for percent of accessibility. Currently only 3 of 22 wards are non-complimg for patient rooms. However, congregate toilet facilities are non-complimg on a majority of wards. If private toilet facilities are constructed and the current bed count per ward is maintained, then the amount of non-complimg wards will increase dramatically;

- o All buildings are not accessible to the handicapped and internally many patient buildings, through lack of elevators, fail to meet the standards;
- o The campus plan, with it's inherent dispersement of patients and services, generates unreasonably long distances for the handicap must negotiate;
- o The lack of enclosed corridors and adequate ramps limits accessibility and makes movement during inclement weather difficult.

#### (7) Space Analysis

An abundance of excess space exist at VAMC Marion and will increase with the contracted FY 2000. Ninety-nine buildings, varying in size, combine a total of 1,081,753 gross square feet. The existing program utilizes 598,258 gross square feet with the program for FY 2000 projected to reduce the need to approximately 441,000. The space is there but an analysis of the square footage will show:

- o Even though the total square footage allotted to nursing units is in excess of the required square footage. The distribution is uneven, resulting in awkward ward sizes and poor utilization;
- o Buildings 1 through 6 split their space on two floors. Neither floor have adequate space;
- o Critical clinical functions, laboratory, radiology, ambulatory care, pharmacy are respectively, 43%, 65%, 48% and 82% short of required space;
- o Buildings of historical significance, with little or no reuse potential are vacant, but must be maintained.

#### (8) Functional Analysis

The campus plan compromises functional requirements both within departments and between departments.

- o Individual wards are broken up between floors in the acute psychiatric buildings;
- o Departments located within one building often are separated by public corridors and/or floors;
- o Many clinical support function spaces are duplicated in order to properly provide treatment spaces accessible to the patients;
- o The lack of elevators and/or proper location hinders interaction between functions which must have easy accessibility to each other.

## (9) Environment Analysis

The majority of patients at VAMC Marion require extended treatment with stays that can last literally time life. As such, the living environment for the patients is of prime importance, becoming an integral part of the treatment process. But, the age of the buildings and the limitations of their designs make further renovation to correct environmental problems difficult, and in some cases nearly impossible, and/or prohibitively expensive;

- o Again mechanical ventilation is missing in many patient areas;
- o Again minimal central A/C systems exist. The majority of patient bedrooms, are cooled by window units thus limiting the access of sunlight;
- o Regulation of temperatures and humidity is inefficient and insufficient;
- o The proper levels of foot lighting candles is not met in many areas.

## (10) Materials Handling

The movement of patients, staff and visitors throughout VAMC Marion, and the interrelationship between them, and their circulation system are important elements in the Medical Center's efficiency.

- o Due to the size of the campus, the number of independent buildings and the disbursement of departments, pedestrian and vehicular movement is inefficient and excessive;
- o The campus layout necessitates excessive of labor to distribute materials;
- o The absence of elevators or their limited availability severely hinders efficient movement of patients, staff and materials;
- o The campus plan fosters a decentralized materials management system, resulting in increased stock, poor supervision, time delays, and security problems.

The Medical Center is a well managed and well maintained psychiatric facility. The employees at the Center are highly motivated and share a personal interest in the well being of the patients they serve. The planning of future facilities must address effective staff-patient relationships and patient safety, security and comfort.

The following chart summaries and consolidates information in each of the three major categories - Technical, Functional and Historical - by building. Interpolating each major summary, tempering the results with first hand knowledge of the Medical Center as it exists, and considering future needs based on known projections, a potential use for each building is forecasted.

It should be noted that the potential reuses are suggestions only, based on current data. The selection of priorities, the development of strategies, and the final master plan could alter the reuse as initially determined.

Building Number - Listed in sequential order, the buildings correspond to the VA numbering system employed at VAMC Marion.

Services in Building - The major functions contained within each building.

Technical - This portion reflects the ratings indicated on the chart in section 2.2.6. The numbered ratings are based on a 0 to 3 scale and retain the same definition as indicated in the 2.2.6 chart.

Functional - Similar to the Technical summary, this portion reflects a previous chart in section 2.3.8. The rating scale numbers and their definitions corresponds to the 2.3.8 chart.

Historic - This number indicates the level of historical significance of each building based on the rating system explained in Section 2.2.2.

Reuse - The categories noted in this section come from the Statement of Task and reflect major Veterans Administration departments. The solid circle ● denotes the preferred choice with the hollow circle ○ an alternate. The other portion has two columns, Lease and Demolition. With the further reduction of needed space as projected in the FY 2000 criteria, the existing excess of vacant square footage will be compounded. Therefore, buildings that contain ample square footage, have been adequately maintained, and are accessible to the public should be considered for leasing to private organizations, schools, service groups, etc. If a building cannot be reused, has no leasing potential, or cannot be leased, then demolition should be considered.

Comments - Any pertinent information that affect a building but cannot be reflected in the summaries.

# EXECUTIVE SUMMARY

NUMBER	BUILDING SERVICES IN BUILDING	TECHNICAL					FUNCTIONAL					HISTORIC	RE-USE								OTHER		COMMENTS						
		ARCHITECTURAL	STRUCT	HVAC	PLUMB	ELECT.	SUMMARY	SPACE	INTRA-DEPT.	INTER-DEPT.	ENVIRONMENT		EQUIPMENT/SYSTEMS	SUMMARY	BEDS	CLINIC SUPPORT/O.P.	NON-CLINIC SUPPORT	ADMINIS.	EDUCATION	RESEARCH	DVB REG. OFFICE	DMA CEM FACILITY		GENERAL COUNSEL	LEASE	DEMOLISH			
1	Ward Building	1	1.5	1	1.5	2	1.4	2	0	0	0	0	.4	2				●	○										Buildings 1 through 6 are historically significant as a set.
2	Ward Building	1.5	1.5	1	1.5	2	1.5	2	0	0	0	0	.4	2				●	○										
3	Ward Building	1.5	1.5	1	1.5	2	1.5	2	0	0	0	0	.4	2				●	○										
4	Ward Building	1.5	1.5	1	1.5	2	1.5	2	0	0	0	0	.4	2				●	○										
5	Ward Building	1.5	1.5	1	1.5	2	1.5	2	0	0	0	0	.4	2				●	○										
6	Day Treatment Vacant (Ward Building)	1.5	1.5	1	1.5	2	1.5	3	0	1	1	2	1.4	2				●	○										
7	(Ward Building)	1.8	1.5	1	1.5	2	1.5							2				●	○				●	●					
8	Gymnasium	1.5	2.8	1	1.5	1.5	1.6	2	2	2	2	2	2	1		●													Presently adequate-FDP may suggest relocation/replacement
9	O. T. School	1.5	2.8	1	2	1.5	1.7	2	2	2	2	2	2	1		●	○						●	●					Presently adequate-FDP may suggest relocation/replacement.
10	Ward Building	1.5	1.5	1	1.5	2	1.5	3	0	0	0	0	.6	2				●	○				●	●					
11	Ward Building	1.5	1.5	1	1.5	2	1.5	3	0	0	0	0	.6	2									●	●					
12	Ward Building	2.5	2	2	2.5	3	2.4	3	2	2	3	3	2.6	2	●			○					●	●					
13	Nursing Ed.	1.5	3	3	3	3	2.6	3	2	1	3	2	2.2	2				○	●				●	●					
15	Ward & Support	1.5	2.5	1	1.5	2	1.7	1	1	2	1	2	1.4	2	●														Only intermediate beds should be considered for Buildings 15, 16,
16	Ward Building	1.5	2.5	1	1.5	2	1.7	1	1	2	1	2	1.4	2	●														17. Explore alternate uses.
17	Ward Building	1.5	2.5	1	1.5	2	1.7	1	1	2	1	2	1.4	2	●	○													
18	Ward Building Administrative Offices	1.8	1.5	1	1.5	2	1.5	3	0	1	0	0	.8	2					●				●	●					
19	Recreation & Storage Vacant (Ward Building)	1.5	1.5	1	1	1	1.2	0	2	1	2	2	1.4	3				●			○								Should retain for historical significance.
20	Recreation & Storage Vacant (Ward Building)	1.5	1.5	1	1	1	1.2	3	0	1	1	2	1.4	2									●	●					No re-use. Lease or demolish
21	Recreation & Storage Vacant (Ward Building)	.5	1	.5	.5	.5	.6	2	0	0	0	0	.4	2				●					●	●					No patient use, alternative, lease or demolish.





EXECUTIVE SUMMARY

NUMBER	BUILDING SERVICES IN BUILDING	TECHNICAL					FUNCTIONAL					HISTORIC	RE-USE								OTHER		COMMENTS					
		ARCHITECTURAL	STRUCT	HVAC	PLUMB	ELECT.	SUMMARY	SPACE	INTRA-DEPT.	INTER-DEPT.	ENVIRONMENT		EQUIPMENT/SYSTEMS	SUMMARY	SUMMARY	BEDS	CLINIC SUPPORT/O.P.	NON-CLINIC SUPPORT	ADMINIS.	EDUCATION	RESEARCH	DVB REG. OFFICE		DMA CEM FACILITY	GENERAL COUNSEL	LEASE	DEMOLISH	
136	Water Tank Tower		2		2	2	2						0															
137	Eng. Locker & Washroom	2.5	3	2	2.5	2	2.4						0												●			
138	Admin., Med. Treatment ICU/RCU	1.5	2.5	1	1.5	2	1.7	2	1	2	1	2	1.6	0	●	○												Upgrade reuse for patient care, consider methods to make capatible architecturally
140	Vacant	2	3				2.5						0	●	○										●			
142	Flag Pole		2			2	2						0															
144	Smoke Stack		2	2.5		2	2.1						0															
145	Electrical Sub-Station		3			2.5	2.7						0															
146	Cemetery Monument		2.5				2.5						0														Not a building	
147	Underground Gasoline Tank		3		3	3	3						0														Not a building	
149	Vacant	2	2.5			2	2.1						0												●			
150	Comfort Station	3	3	2	2.5	2.5	2.6						0															
151	Oxygen Storage		3				3						0														Not a building	
152	Transformer Pad					2.5	2.5						0														Not a building	
153	Shelter House	2.5	3	2.5	2.5	3	2.7						0															
165	Equipment Storage	3	3			2.5	2.8						0														Continue use and relocate lawn maintenance	
170	Fire Station	3	2.5	2	2.5	2.5	2.5						0															
173	Green House	3	3	3	3	3	3						0			●												
T504	Paint Shop	2	2	1	2	2	1.8						0												●			
T516	Equip. & Material Stor.	2	2	1		1.9	1.7						0												●			



1.1 PURPOSE AND SCOPE

- .1 Purpose
- .2 Scope
- .3 Methodology
- .4 Acknowledgements

### 1.1.1 PURPOSE

To provide the professional services necessary for the development of a pilot Facility Development Plan for the Veterans Administration Medical Center, Marion, Indiana. The work includes the definition of the problem, the development of alternate strategies, and a final strategy with estimates for construction and implementation of the proposed Plan. The study was prepared in accordance with Veterans Administration criteria and standards. The Facility Development Plan is a written, comprehensive plan for the planned physical development of the Veterans Administration Medical Center over a specific long-range planning horizon (currently the year 2000).

### 1.1.2 SCOPE

- a. To develop one total facility development strategy, sufficiently complete to permit the logical groupings of capital improvements that could be regrouped as necessary to accommodate the VAMC's Five-year Facility Plan.
- b. To develop a land utilization study identifying possible uses of the existing site for additional construction, parking, and traffic access.
- c. To develop alternative strategies which could be narrowed to one total facility strategy.
- d. The V.A. does not require a total Medical Center replacement design concept.
- e. To include in the planning, alternate sites for the Nursing Home Care Unit.
- f. The following planning approaches are considered:
  - (1) Combination of Renovation and New Construction: The purpose of these concepts is to utilize existing structures as well as new construction for developing cost estimates that demonstrate a delineation in concept costs.
  - (2) Renovation: The purpose of this concept is to demonstrate use of existing structures to satisfy program needs, Joint Commission on Hospital Accreditation (JCAH) standards, handicapped accessibility, and Life Safety Codes. The concept is also required to demonstrate a delineation in costs of new construction and the combination of renovation and new construction.
- g. The Functional and Technical Evaluations completed in 1981 was updated and incorporated into stage one.
- h. Preparation of a projected cost analysis that compares the operational costs of the existing campus (large multi-building campus) to costs of a smaller campus with less land and buildings. The analysis to include employees, utilities, transportation, and maintenance costs.
- i. Based on judgment analysis, focus on major problem areas that in the Architect/Engineer's opinion need to be addressed immediately and minor problems that, although may be deficient, could be lived with "as is" or correction could be deferred five years or longer.

### 1.1.3 METHODOLOGY

- a. The McGuire & Shook Corporation team recognizes the data base of information that had already been completed and the accessibility and knowledge of the Veterans Administration Management Team and staff support.
- b. The data provided was supplemented by on-site investigation and analysis as required.
- c. The collected data was analyzed and information and summary sets were developed. The problem was defined, alternative strategies were developed, and a final strategy was selected and detailed.
- d. Reviews were conducted in both Washington, DC, and Marion, Indiana. Group participation was encouraged.
- e. This document is housed in 3-ring binders in order to allow for change, expansion, and deletion. There are no page numbers.
- f. This document is keyed with a decimal/letter system which can be used for cross reference. Using this number, reference can be made directly to other sections for explanatory information or for the source of the information. For example, the reference 2.2.3b would refer to Site Plan: Existing Facility Layout (2.2.3b).

#### 1.1.4 ACKNOWLEDGEMENTS

The content of this study represents many hours of effort on the part of many people.

Mr. John Arnst, Russ Daughtery and other members of the Central Office Staff are acknowledged for their assistance in providing necessary information and guidance.

Appreciation is extended to the many staff persons at VAMC, Marion, Indiana, who were very courteous and helpful in answering questions, finding information and otherwise facilitating the work of the persons involved in on-site survey work. In particular, acknowledgement is extended to:

- Mr. A. G. Branch, Director
- Mr. Edward L. Peterson, Associate Director
- Mr. Scott V. Pierce, Staff Assistant to the Director
- Dr. Metin Arat, Chief of Staff
- Mr. Michael W. Breeden, Administrative Assistant, Chief of Staff
- Mr. Harold Rooks, Chief of Engineering Services
- Mrs. Sue C. Curtis, Chief of Security Service

Lammers and Gershon, Health Facility Planners of Reston, Virginia were consultants for the functional survey and analysis work and assisted in document preparation. Special thanks are extended to Don Sebastian and Joseph Strauss.

Richard C. Frank, AIA, of Saline, Michigan, was the Historic Preservation consultant for the historic survey and analysis work. He was assisted by Elisabeth E. Knibbe and William J. Johnson Associates, Inc.

Finally, among the staff of The McGuire & Shook Corporation the following persons contributed to the project:

- Mr. David H. Partenheimer & Robert A. Cochran, Principal-in-Charge
- Mr. H. Allen Thorpe, Project Manager
- Mr. Joe Fu, Chief Structural Engineer
- Mr. Ken Bowman, Chief Civil Engineer
- Mr. Ben Rawlins, Landscape Architect
- Mr. Russ Peek, Chief Mechanical Engineer
- Mr. Marlin Smith, Mechanical Engineer
- Mr. Riyad Bannourah, Chief Electrical Engineer

1.2 MANAGEMENT PLAN

- .1 Schedule of Project Activities
- .2 Management Approach
- .3 Outline of Facility  
Development Plan
- .4 Contractor/VA Responsibilities
- .5 Contractor Offices
- .6 Contractor Key Personnel
- .7 Project Organization Chart
- .8 Team Member Duties

## 1.2.1 SCHEDULE OF PROJECT ACTIVITIES

### a. TABLE: STAGE ONE

The large fold out schedule of Project Activities included in the Management Plan submittal is not included in this report.

#### Background Data/Information

<u>Item</u>	<u>Furnished by VA Team</u>	<u>Furnished by MSC Team</u>
1. Program and Operational Priorities in Accordance with Regional and District Office Policy and Guidelines	X	
2. MEDIPP Projections (beds, outpatient workloads, programs)	X	
3. Mission Statement	X	
4. Department of Veterans Benefits (DVB) and Department of Memorial Affairs (DMA) and Other Staff Offices Program Requirements	X	
5. Data Package (Staffing and Departmental Programs)	X	
6. Up-to-Date Space Survey		X
7. Up-to-Data Equipment List	X	
8. Listing of Funded, Approved, or Recently Completed Construction Projects	X	
9. Updated project record drawings	X	
10. Site and Utility Drawings	X	
11. Functional and Technical Evaluation Study (in place of Capital Facility Study)		X
12. Seismic Evaluation Study		X
13. JCAH Survey	X	
14. SERP Report	X	
15. IG Audit Report	X	
16. Other Appropriate Survey Reports	X	
17. Current Five-Year Facility Plan	X	
18. Parking Analysis	X	
19. Land Utilization Study	X	
20. Fire and Safety Survey	X	
21. Environmental Considerations		X
22. Historic Preservation Considerations		X
23. Asbestos Survey	X	
24. Space Planning Criteria (H-08-9)	X	
25. Equipment Guide List (H-08-5)	X	
26. Space Program Based on Projected Workloads	X	
27. Small-Scale "As-In-Use" Plans	X	X
28. Topographic Maps/Site Plats	X	
29. Profiles of Other District Medical Centers	X	
30. Utilization Data	X	
31. List of Affiliations, Satellites, Shared Services etal	X	

### 1.2.2 MANAGEMENT APPROACH

The planning process addressed the uniqueness of the Veterans Administration Medical Center in Marion, Indiana. Elements of this uniqueness include:

- a. Historic nature of the Medical Center
- b. Large campus
- c. Age/Change in function of the campus
- d. Downsizing of the Medical Center

The planning process was participatory. The McGuire & Shook Corporation encouraged client participation and team concept in their projects. Their goal was to work with the Project Team in a professional manner so that they could provide a facility that meets services, physical plant, manpower and financial requirements.

They consider the Planning Team to include:

CENTRAL OFFICE/DISTRICT/REGION  
ADMINISTRATION (STATION)  
MEDICAL STAFF  
NURSING STAFF  
DEPARTMENT HEADS  
COMMUNITY

PLANNING CONSULTANT

HISTORIC PRESERVATION CONSULTANT

RELATED AGENCIES

THE MCGUIRE & SHOOK CORPORATION

They worked closely with all team members involved, including the incorporation of previously developed materials. Their work, at appropriate times, included a review with Central Office Administration representatives and interviews and reviews with Administration, Medical Staff, Nursing Staff, Department Heads and Central Office representatives. They stressed personal service and constant involvement.

From a staff experienced in planning, programming, architectural and engineering disciplines, they selected a team specifically to meet the requirements. They approached from three major discipline groups; (1) architectural and engineering, and (2) planning, and (3) historic preservation, all under the direction of the Principal Architect. This allowed them to develop the facility development plan from a facility design, hospital functional and historic point of view. In all major meetings with the Owner, all key members of the design team, i.e., the Principal Architect, The Project Manager, the Project Architect, the Project Engineers, and when appropriate, other department heads were present.



1.2.3 OUTLINE OF FACILITY DEVELOPMENT PLAN

COVERS/BINDERS

COVER LETTERS

TITLE PAGES

TABLE OF CONTENTS

0. EXECUTIVE SUMMARY

- 0.1 STAGE ONE
- 0.2 STAGE TWO
- 0.3 STAGE THREE

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- .1 Purpose
- .2 Scope
- .3 Methodology
- .4 Acknowledgements

1.2 MANAGEMENT PLAN

- .1 Schedule of Project Activities
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- .4 Contractor/VA Responsibilities
- .5 Contractor Offices
- .6 Contractor Key Personnel
- .7 Project Organization Chart
- .8 Team Member Duties

2. PROBLEM IDENTIFICATION (STAGE ONE)

2.1 CURRENT MEDICAL PROGRAMS

- .1 Current Medical Services and Programs

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- .2 Historic Preservation
- .3 Building Survey
- .4 Existing Site Relationships
- .5 Existing Utilities
- .6 Overall Summary of Major Technical Deficiencies

2.3 SPACE AND FUNCTIONAL STUDY

- .1 Campus Plan
- .2 Interdepartmental Relationships
- .3 Patient Accommodations

#### 4.2 SITE AND FACILITY PLANS

- .1 Site Plans
- .2 Floor Plans
- .3 Detailed Plans
- .4 Detailed Drawing Sketches

#### 4.3. PHASING/PROBABLE COST

- .1 One-Year Plan
- .2 Five Year Plan
- .3 Plan to 2000

#### APPENDICES

- .1 Technical Evaluation (in place of Capital Facility Study)
- .2 Five -Year Plan
- .3 VA Statement of Task
- .4 Historic Preservation Study
- .5 Major Equipment Survey
- .6 Seismic Study
- .7 JCAH Survey
- .8 SERP Report
- .9 IG Audit Report
- .10 Parking Analysis
- .11 Land Utilization Study
- .12 Fire and Safety Survey
- .13 Equivalencies from the State Fire Marshal's Office
- .14 Asbestos Survey
- .15 Report of Special Purpose Visit from Boiler Specialist
- .16 Space Planning Criteria (H-08-9)
- .17 Equipment Guide List (H-08-5)
- .18 Master Space Program

## 1.2.4 CONTRACTOR/VA RESPONSIBILITIES

### a. Contractor Responsibilities

#### (1) Overview:

"The Contractor shall be fully responsive to the general objectives and specific tasks detailed in this Statement of Task and fully substantiate each proposal and recommendation based on objective data justification to the extent possible. It shall be the responsibility of the Contractor to immediately notify the Contracting Officer's Technical representative (COTR) of any problems experienced including any problems with the information provided by the VA."

#### (2) Management Plan:

"Prior to each stage, the Contractor shall develop a Management Plan for VA approval which describes the Contractor's approach to meet the general objectives and specific tasks of this stage."

#### (3) Qualifications and Experience:

"The Contractor will utilize sufficient personnel or subcontractors with expert knowledge, training, and experience in health care program analysis, long-range planning and facility planning, design and construction to ensure timely and effective fulfillment of the specific tasks and general objectives of this study.

"Qualifications of all personnel who will work on the FDP pilot project will be submitted for VA approval prior to receiving a notice to proceed."

#### (4) Applicable Codes and Directives:

"The Contractor shall ensure that all proposed construction complies with all VA construction standards and the following applicable codes and directives:

- (a) "All applicable public laws (including Uniform Federal Accessibility Standards).
- (b) "NFPA code for Safety to Life from Fire in Buildings and Structures (1985).
- (c) "Uniform Building Code (1985) for structural design.
- (d) "National Electric Code (1987) for electrical design.
- (e) "National Standard Plumbing Code (1980) for plumbing design."

#### (5) "The Contractor must present the information in formats that will facilitate the establishment of a VA-wide data base."

- (n) "Fire and Safety Survey.
- (o) "Environmental and historic preservation considerations, if they exist.
- (p) "Asbestos Survey.
- (q) "Space planning criteria (H-08-9) and equipment guide list (H-08-5).
- (r) "Space program based on projected workloads."

(5) VA Review Procedures:

"The VA will provide written comments and marked-up material within fifteen (15) calendar days of each submission. Any instructions that the contractor is unable to incorporate into any of the phases of work, or that the contractor believes are beyond the scope of this Statement of Task, will be brought to the attention of the contracting officer and the COTR for resolution."

1.2.5 CONTRACTOR OFFICES

Main Office:

The McGuire & Shook Corporation  
7440 North Shadeland Avenue  
Indianapolis, Marion County, Indiana 46250  
(317)842-0000

Other Places of Performance:

Lammers + Gershon Associates, Inc.  
11333 Sunset Hills Road  
Reston, Fairfax County, Virginia 22090  
(703)435-8100

Richard C. Frank, AIA  
302 East Henry Street  
Saline, Washtenaw County, Michigan 48176  
(313)429-9594

1.2.6 CONTRACTOR KEY PERSONNEL

Principal-in-Charge: David H. Partenheimer, AIA, Principal Architect

Project Manager: H. Allen Thorpe, Project Manager

Architectural: Charles F. Wamsley, AIA, Chief Architect/Estimator

Structural: Joseph B. S. Fu, PE, Chief Structural Engineer

Mechanical: Russell E. Peek, PE, Chief Mechanical Engineer

Civil: Kenneth L. Bowman, PE, Chief Civil Engineer

Electrical: Riyad S. Bannourah, GE, Chief Electrical Engineer

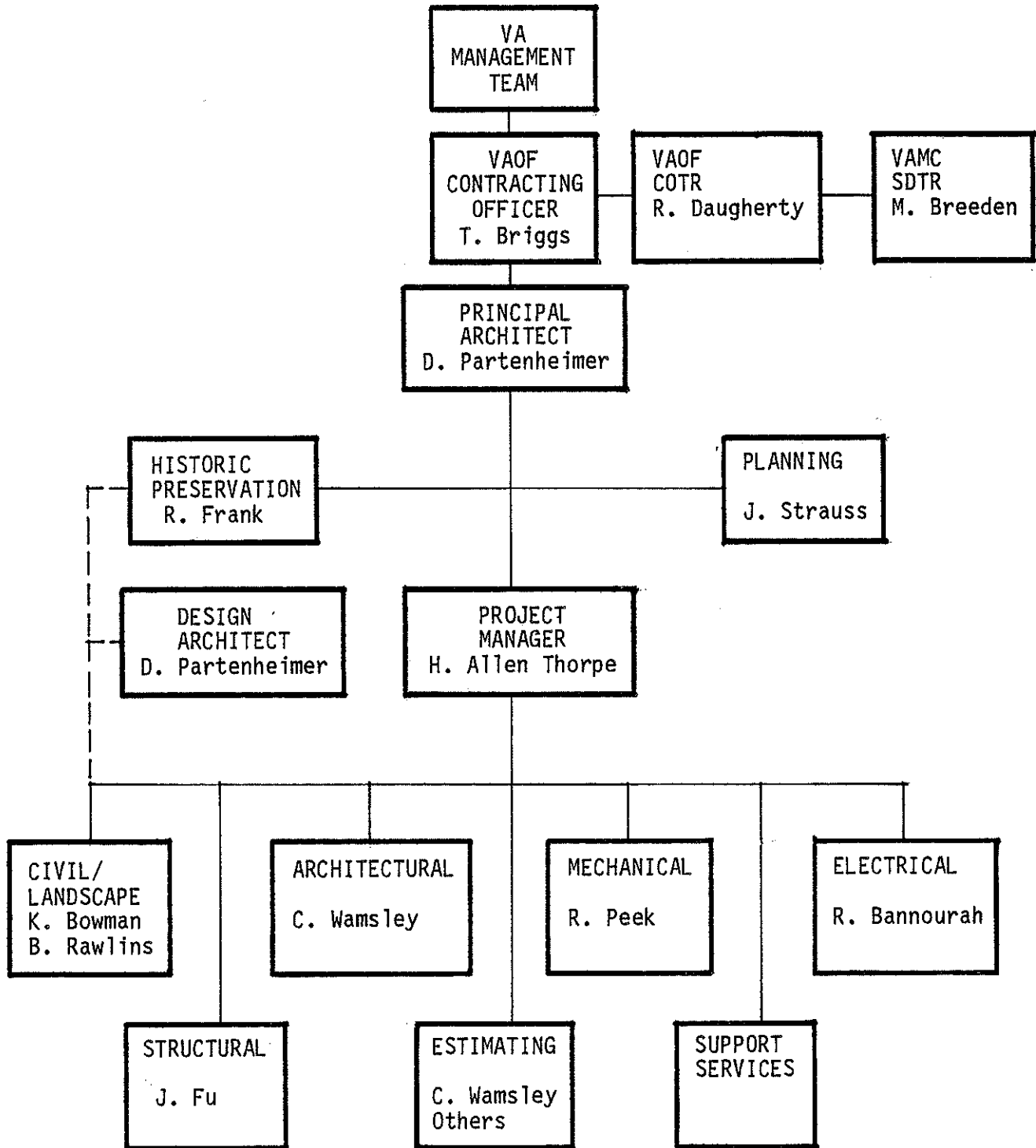
Specifications: Not applicable.

Estimating: Charles F. Wamsley, AIA, Chief Architect/Estimator

Consultant: Joseph J. Strauss, Lammers + Gershon Associates, Chief Planner

Consultant: Richard C. Frank, FAIA, Historic Preservation

1.2.7 PROJECT ORGANIZATION CHART



## 1.2.8 TEAM MEMBER DUTIES

### VETERANS ADMINISTRATION, WASHINGTON, D.C.

Management Team: Composed of selected representatives from the Medical Center, Regional and District offices, The Department of Medicine and Surgery, and the Office of Facilities

T. Briggs, Contracting Officer: Solely and only responsible for negotiating and administering the terms of the contract.

R. Daugherty, COTR: Primary VA contact on the project. Responsible for day-to-day management of the FDP process and study.

### VETERANS ADMINISTRATION MEDICAL CENTER, MARION, INDIANA

M. Breeden, SDTR: Coordination of station activities. Data input. Reviews.

### PRINCIPAL ARCHITECT

D. Partenheimer: Project Administration. Responsible to the Veterans Administration and to The McGuire & Shook Corporation for the entire project.

### PROJECT MANAGER

H. A. Thorpe: Project Management, day-to-day coordination of the project. Works directly for the Principal Architect and technical team reports to him. Coordinates with consultants efforts.

### DESIGN ARCHITECT

D. Partheneimer: Overall review of the design effort, site, architectural and historic.

### FUNCTIONAL PLANNING

J. Strauss & D. Sebastian: Analysis of Data. Analysis of program. Functional analysis and functional and traffic flow diagrams. Transport. Hospital planning and block diagrams.

### HISTORIC PRESERVATION

R. Frank: Site and building historic impact research, analysis, recommendations. Development of historic design vocabulary.

### ARCHITECTURAL

H. A. Thorpe and C. Wamsley: Investigation, analysis and recommendations of architectural elements. Technical architectural design and technical coordination with other disciplines (functional, historic, civil/landscape, structural, mechanical and electrical.) Develops architectural criteria.

### STRUCTURAL

J. Fu: Investigation, analysis, recommendation of structural elements. Structural design criteria. Includes structural limitation and seismic.

### CIVIL/LANDSCAPE

K. Bowman and B. Rawlins: Investigation, analysis and recommendations of civil and landscape elements. Civil input into site and building design solutions and civil design criteria. Landscape develops campus planning solutions, inputs into building design solutions, and provides landscape design criteria. Includes grounds, site utilities, parking and paving, circulation and planting.



2.1 CURRENT MEDICAL PROBLEMS

.1 Current Medical Services  
and Programs

## 2.1.1 CURRENT MEDICAL SERVICES AND PROGRAMS

### a. MEDICAL DISTRICT 15

Medical District 15, one of five districts in Region 4, includes the Veterans Administration Medical Centers at Indianapolis, Ft. Wayne, and Marion, Indiana and Danville, Illinois. The geographic area covers most of Indiana, a part of central Illinois and a small part of northwestern Ohio.

### b. VAMC MARION - PRIMARY SERVICE AREA

Marion, is the county seat of Grant County located in northeast Indiana midway between Ft. Wayne and Indianapolis. Patient origin data shows that in recent years 65.7% of the patients have been from 10 Indiana counties with 51.7% concentrated in the Ft. Wayne - Indianapolis "corridor."

### c. MISSION STATEMENT

VAMC Marion provides acute/extended medical care at the primary and secondary levels, psychiatric treatment at all levels, nursing home care, and medical and psychiatric outpatient services. Inpatient care includes special programs for goepsychiatry, geriatric evaluation and long-term care, rehabilitative medicine, alcohol abuse treatment, general purpose intensive care and a Combat Veterans Unit. For tertiary medical care patients are sent to VAMC Indianapolis and for surgical care to either VAMC Indianapolis or VAMC Ft. Wayne.

### d. VAMC MARION - MEDICAL SERVICES

Alcohol Aftercare  
Ambulatory Care Clinics  
Dermatology  
Ear, Nose, Throat  
Eye  
Nutrition  
Ophthalmology (contract)  
Orthopedic  
Otorhinolaryngology  
Podiatry  
Audiology and Speech Pathology  
Compensated Work Therapy Program  
Contract Nursing Home (State and Community)  
Corrective Therapy  
Day Treatment  
Dentistry  
Dermatology (consultant)  
Education Therapy  
Gastroenterology  
Halfway House (substance abuse)

**f. SHARED SERVICES**

VAMC Marion shares services with nearby Department of Defense facilities as follows:

Grissom Air Force Base  
Bunker Hill, Indiana

VAMC Marion provides:  
o Audiology and Speech Pathology  
o Mental Hygiene (Inpatient/  
Outpatient)

Hawley Army Hospital  
Indianapolis, Indiana

VAMC Marion provides:  
o Mental Hygiene (Inpatient/  
Outpatient)

VAMC Marion receives:

o OB/GYN (Outpatient)

**g. CONTRACT SERVICES**

VAMC Marion contracts for the following services:

<u>SERVICE</u>	<u>CONTRACTOR</u>	<u>SERVICES PROVIDED</u>
Ophthalmology	Dr. Snowwhite of Marion, Indiana	Exams, Emergency Eye Care
Laboratory	International Clinical Laboratory Facility Louisville, Kentucky	Special Chemistry
Community Nursing Home	Agreement with 106 Facilities	Room Board, Basic Medical
Half-Way House	Life House Elkhart, Indiana Harbor Lights Indianapolis, Indiana	Similar to Nursing Home Contracts

**h. AFFILIATIONS/GRANT PROGRAMS**

Currently VAMC marion does not participate in any grant programs. VAMC Marion has affiliations with the following institutions and programs:

Anderson College

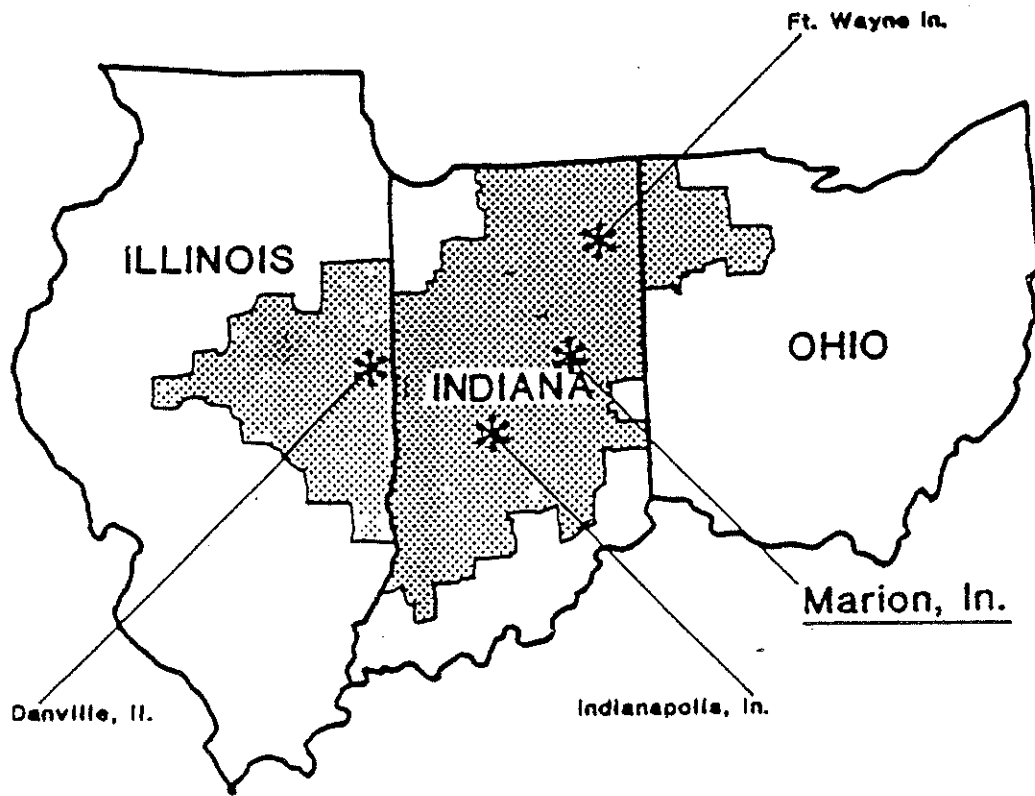
School of Nursing

Ball State University

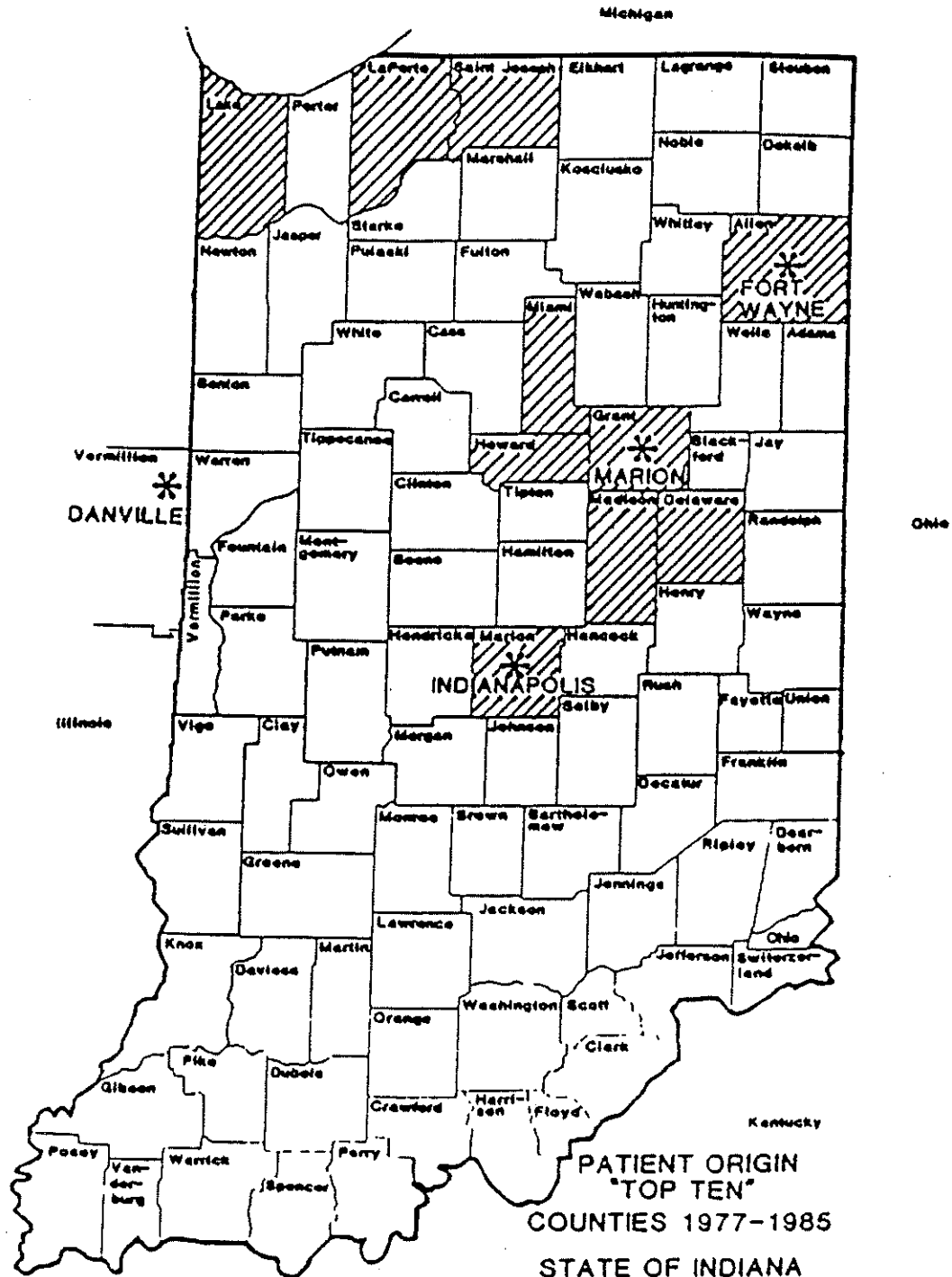
Department of Audiology/  
Speech Pathology  
Department of Psychology  
School of Nursing

Director's Office	19
Director	
Assistant Director	
Quality Control	
Utilization	
Resources	
Assistant Director	
Director	
Clerical	
Engineering	101.5
Fiscal	15
Laboratory	11.3
Library	4
Medical Administration	73
Medical Service	21.5
Nursing	486.9
Personnel	13
Pharmacy	10
Psychiatry	15.4
Pharmacy	10
Psychiatry	15.4
Psychology	15
Recreation	14.6
Rehabilitation	39
Security	13
Social Work	31
Supply	27
Volunteer	2
	<u>1194.7</u>

# MEDICAL DISTRICT No. 15 PRIMARY SERVICE AREA



# PATIENT ORIGIN



## 2.2 CURRENT FACILITIES

- .1 Overview
- .2 Historic Preservation
- .3 Building Survey
- .4 Existing Site Relationships
- .5 Existing Utilities
- .6 Overall Summary of Major  
Technical Deficiencies

## 2.2.1 OVERVIEW

### a. LOCATION

#### (1) Area Definition

Marion, Indiana is located in Grant County, in northeast Indiana. This VA facility was originally a branch of the National Home for Disabled Volunteer Soldiers established at this location in 1889 and designed to house 2,500 veterans. It became a neuropsychiatric hospital in 1921 and was known as the Marion National Sanitorium. In 1930, it became the Veterans Administration Hospital.

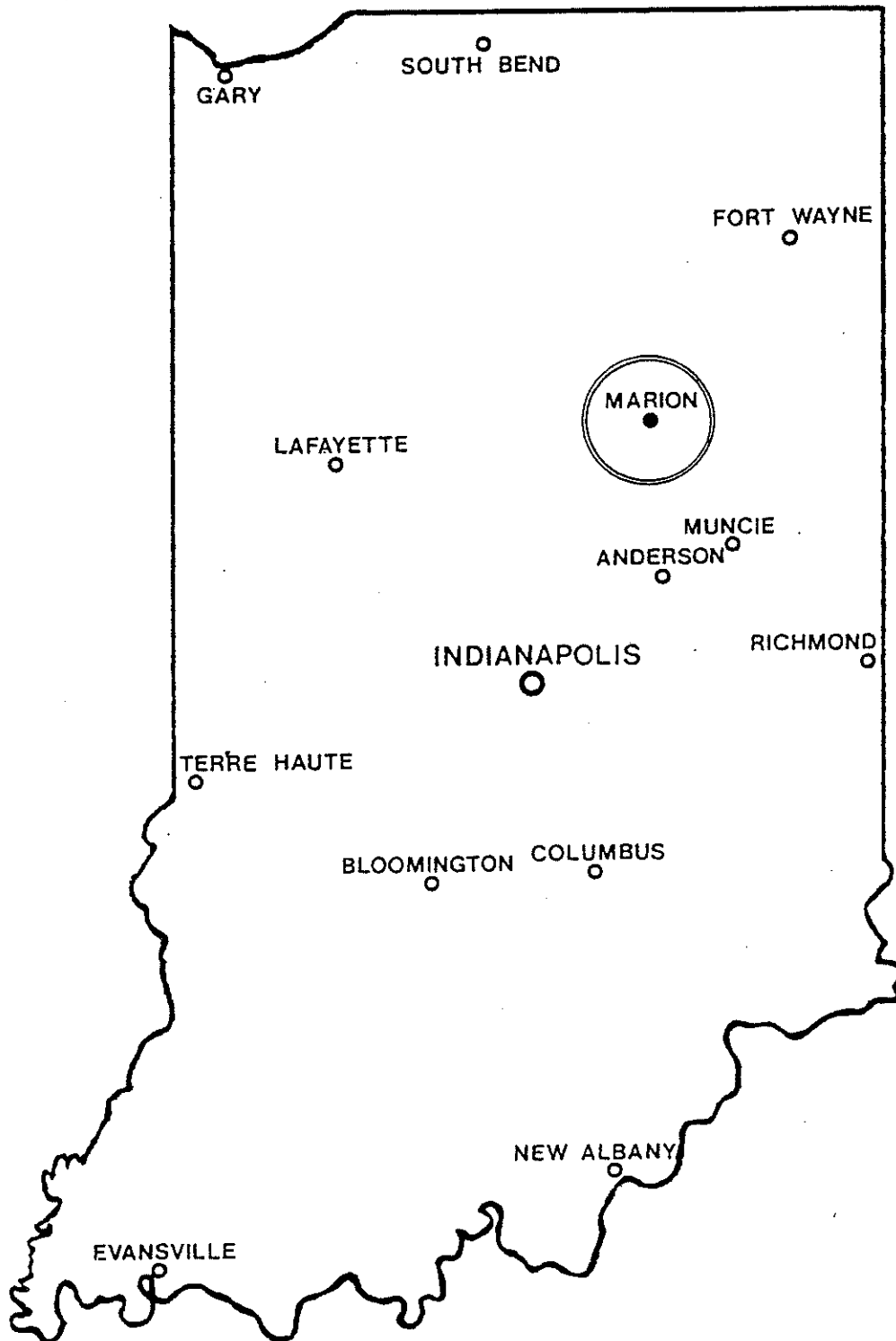
The current facility now known as the Veterans Administration Medical Center, covers approximately 151.4 acres at the southeast edge of Marion. A contiguous 38.6 acres is part of the National Cemetery system. See maps on following pages.

Because of the national scope of the Veterans Administration program, the facility has had no designated primary service area, although in reality, most patients are discharged to Indiana and surrounding states.

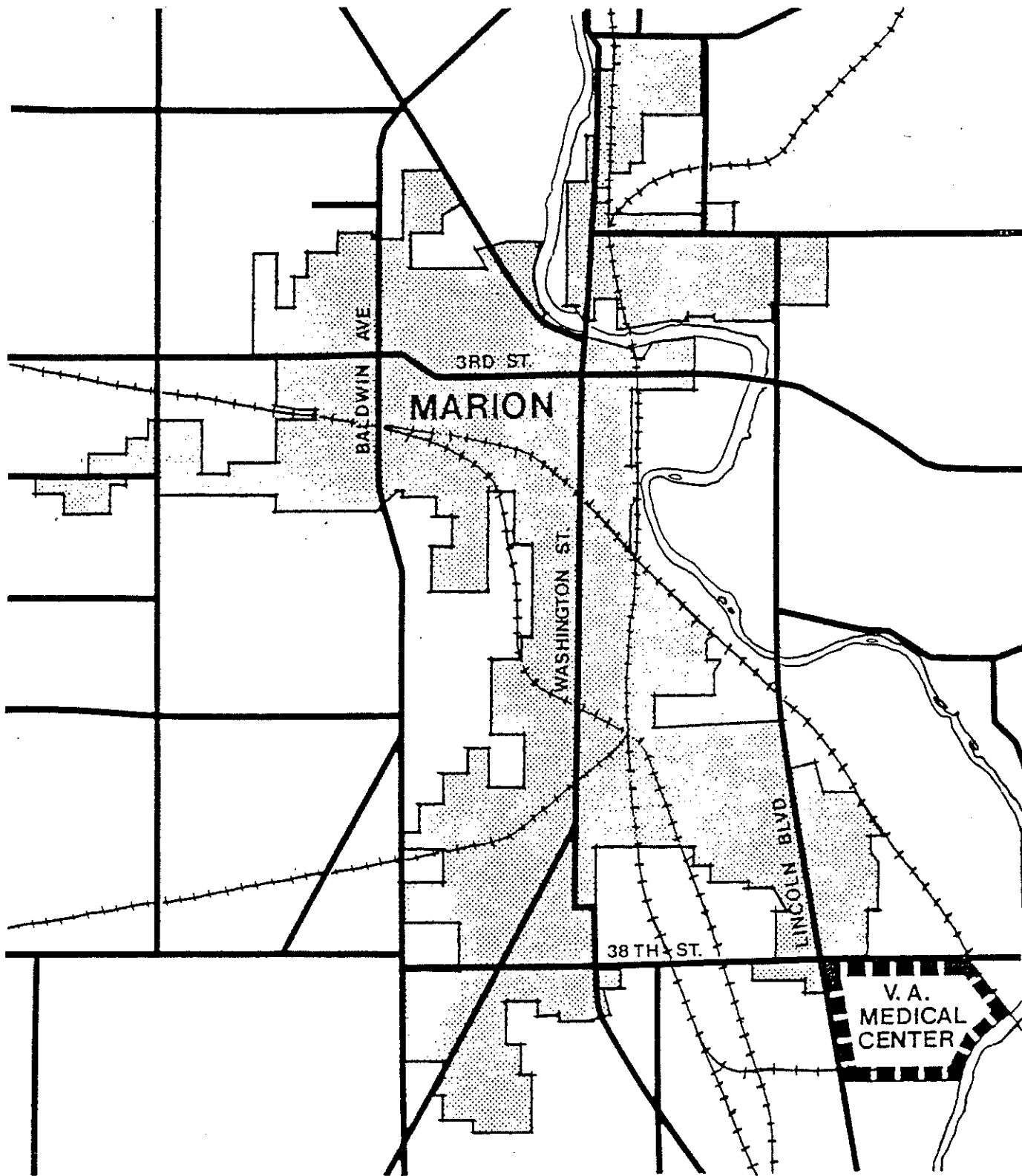


2.2.1a (2)

# STATE LOCATION MAP



# COMMUNITY LOCATION MAP



## 2.2.1 BACKGROUND INFORMATION

### b. BRIEF HISTORY OF MEDICAL CENTER

Benefits for American veterans date back to 1636 in the colonial days of the Pilgrims of Plymouth. Other colonies followed with similar laws, and in 1776 the Continental Congress sought to encourage enlistments during the Revolutionary War by providing pensions for disabled soldiers. Over the years this program was carried out by the Secretary of War (1818), the Office of Pensions (1849), the Sanitary Commission (1861), the Bureau of War Risk Insurance (1914) and the Veteran's Bureau (1921). In 1930 President Herbert Hoover established the current Veterans Administration by Executive Order, bringing together the responsibility for various veterans programs passed by Congress.

Although the Federal Government authorized the Philadelphia Naval Hospital (1811) and the U. S. Soldiers' Home in Washington, D.C. (1851), a major program for domiciliary, hospital and medical care was not established until 1865, as a result of the Civil War. That year Congress established the National Asylum for Disabled Volunteer Soldiers. The word "home" was substituted for "asylum" in 1873. Between 1866 and 1902 eleven Branches of the National Home were established, spread across the entire nation. These formed the basic physical facilities for the Veterans Administration in 1930.

The selection of sites for the Home Branches was based on a number of concepts. Because each Home had to be accessible to those seeking admission and for the delivery of supplies, rail service directly to Home grounds was considered a necessity. Also, the Home had to be located in suburban or rural locations because metropolitan areas were considered a corrupting influence for members. It was intended that the complete needs of the members be met on the grounds, under benevolent supervision. This required Home grounds to be extensive.

The National Home became a self-sufficient planned community. Provision was made for the accommodation of resident members, patients, staff and families. With the advance of medical techniques and the increasing medical problems of aging veterans, medical services grew from an auxiliary function to a primary one. Emotional needs were not forgotten with the provision of facilities for training, recreation and religious worship.

The diversity of Home facilities went far beyond those then common at military installations. The Homes are certainly the first planned communities built with government support. The combination of training, education and readjustment activities appears to be the earliest federal venture into large scale rehabilitation programs. The chapels are reputed to be the earliest non-military construction of religious facilities by the federal government. The Homes constitute and architectural framework for numerous important initiatives in the delivery of services by the federal government.

Congress passed legislation for the construction of a Soldiers' Home in Marion area in a bill approved by President Grover Cleveland, on July 23, 1888. According to the historical records, Colonel George W.

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Steele, a Marion resident and the representative to Congress from the 11th District, has been credited for the leadership in securing Marion as the location for this institution. Colonel Steele sustained direct official connection with the institution and became its governor in 1904. The sum of \$200,000 was appropriated to purchase land and construct original buildings. The measure provided that not less than 200 acres of land should be purchased and a gas well drilled to provide the heat and light.

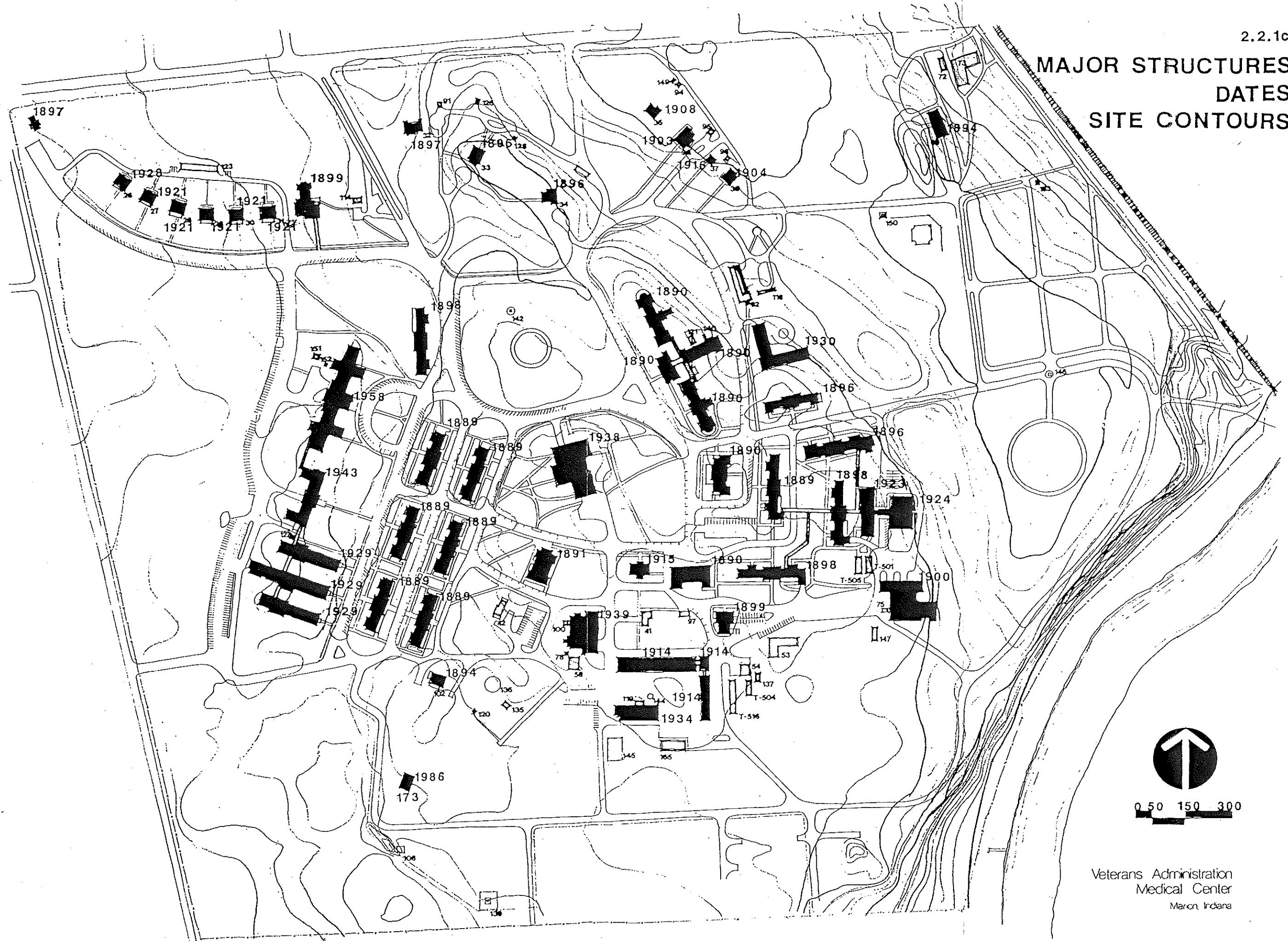
Announcement was made on March 2, 1889, that selection of a site for the new home had been made and that tracts located two and one-half miles southeast of the city had been chosen. The government approved the sale of \$90 an acre but an additional \$20 per acre was made up by interested citizens who wanted to see the home established in this area. A brick works was located on an adjacent farm which supplied brick for the original structures.

On May 2, 1889 an exhibition was given a huge, recently drilled gas well. The gas was lighted for the edification of the visitors and was turned on gradually. As "the roar increased" the visitors were visibly impressed. Then they examined the site, accompanied by Dayton architect, Silas R. Burns FAIA (1855-1940). Burns, a graduate of the Massachusetts Institute of Technology, was also the architect for the National Home in Dayton, Ohio and the Soldiers Home in West Los Angeles, California. A map of the site was started on May 7, 1889, and when completed, the locations of the proposed "barracks" were determined. Plans then called for barracks sufficient to house 2,500 veterans.

Work on the barracks was rushed and the first building, a temporary one was completed so that 35 disabled veterans were brought here to occupy it on November 23, 1889. It was not until March 17, 1890, that the home was opened formally and at this time there were 586 members. The original plans called for the construction of 16 barracks, each 200 by 60 feet, and a chapel, theater, memorial hall, administrative quarters, hospital and gymnasium. Buildings 1,2,3,4,5 and 6 were built in 1889; Buildings 19, 20, 21, 22, 50, 60 and the Mess Hall were built in 1890; Building 18 in 1896 and Buildings 10, 11, 12 and 14 in 1898. The theater and greenhouse were erected in 1891 and the chapel in 1899. The first housekeeping quarters were built in 1891 and converted later into a duplex apartment. The Director's quarters were built in 1896.

The institution was originally known as the Marion Branch, National Home for Disabled Volunteer Soldiers. Because of the urgent need for additional facilities for the mentally afflicted, it became a neuropsychiatric hospital in 1921 and was known as the Marion National Sanatorium. In July, 1930, as the result of the consolidation of various Federal Bureaus handling veterans' affairs the official designation of the hospital was then changed to Veterans Administration Hospital. In September 1976, the designation was changed to its current identification as a Veterans Administration Medical Center. The grounds of the medical center now comprise an area of approximately 151 acres, containing 87 buildings. In addition, the Marion National Cemetery has approximately 38 acres deeded to the system in 1974.

# MAJOR STRUCTURES DATES SITE CONTOURS



0 50 150 300

Veterans Administration  
Medical Center  
Marion, Indiana

## 2.2.1

### d. GENERAL DESCRIPTION OF THE CAMPUS

Sense-of-place is where people strongly feel they are in an important location or clearly defined place. The original plan intended that the campus be so designed to emanate a strong sense-of-place.

The campus is organized around a hierarchy of open space the central one being Steele Circle. Relating to Steele Circle are several other parts of the campus which are distinctive. As one moves along the system of roads and walks, the intensity of visual features shifts and changes. Several physical elements contribute to the overall sense of site character; slight changes in topography, arrangement and density of vegetation, architectural cadence and detail, and view corridors. The specific layout of the site plan is not strongly evident as one might experience in a more formal plan. There is, however, an overall gentleness which pervades the campus mixed with a clear sense of order and control.

For example, Steele Circle, a central open space once featuring a bandstand, is ever present, yet it is never the source of formal plan geometry. The historic main entrance drive is curvilinear, tree-lined and makes a strong impression on the visitor. The six regimented ward buildings is the most formal part of the campus plan and its contrast with the informal campus constitutes a particularly strong sense-of-place. Similarly, the processional route to the cemetery strikes one as a distinctive street that leads purposefully to the cemetery.

Approximately one-third of the buildings on the facility including most of the patient living quarters, were constructed in the original development period of the Soldiers Home, from 1889 to 1900. Half of the structures were built between 1900 and 1941, most of these in the aftermath of World War I when the facility was dedicated to neuropsychiatric care. The main treatment buildings, 124 and 138, were built in 1943 and 1958, respectively. Buildings are dispersed over a wide area. There has never been a master plan for this development, which has led to considerable inefficiencies in operation.

## 2.2.1

### e. GENERAL DESCRIPTION OF THE BUILDINGS

The following page lists the building number, name, type, and evaluation. Building or structures have been grouped into four types as follows:

#### Building Types

- A - Buildings which are used to house or treat patients.
- B - Buildings which support the activities or maintenance of the facility.
- C - Building which (such as Staff Quarters) do not directly support activities or maintenance of the facility, or a vacant.
- D - Structures which are not buildings.

Buildings are evaluated on a four part scale.

#### Key to Technical Evaluations

<u>Rating</u>	<u>Technical</u>
3	Structure is essentially in compliance with only very minor changes such as hardware or fixture change.
2	Minor renovation, including partition revisions.
1	Extensive modification, including wall changes, structural revisions, major electrical or plumbing changes, etc.
0	The cost to upgrade would not be favorable compared to new construction.

Building location and its relationship to other facilities is not a consideration in the Technical Evaluations.



#	BUILDING	STRUCT.	ARCH.	PLUMB.	HVAC	ELECT.	COMPSITE
69	Barn	1.9	1.5	N/A	N/A	1.0	1.4+
72	Vacant (Milk House)	1.9	1.5	N/A	1.0	1.0	1.3+
73	Cemetery Admin & Service	2.8	2.0	2.0	1.5	2.0	2.0+
75	Water & Sewage Lab	2.0	1.0	N/A	1.0	1.5	1.3+
76	Boiler Plant	2.8	2.5	2.5	2.0	2.5	2.4+
78	Pump House (#1 S)	3.0	2.5	2.5	2.5	2.0	2.5
79	Laundry	2.8	2.5	2.5	2.5	2.2	2.5+
83	Cemetery Tool House	1.9	1.9	N/A	N/A	1.5	1.7+
91	1-Car Garage	1.9	2.0	N/A	N/A	2.0	1.9+
93	1-Car Garage	2.0	2.0	N/A	N/A	2.0	2.0
94	1-Car Garage	1.9	2.0	N/A	N/A	2.0	1.9+
95	1-Car Garage	1.9	2.0	N/A	N/A	2.0	1.9+
96	1-Car Garage	1.9	2.0	N/A	N/A	2.0	1.9+
97	Storage	2.0	2.0	N/A	1.0	2.0	1.7+
100	Pump House (#2 N)	3.0	2.5	2.5	2.0	2.5	2.5
102	Staff Quarters, Duplex	2.5	1.9	2.0	1.0	2.0	1.8+
105	Old Gate House	2.0	1.0	1.0	1.0	1.5	1.3
108	Main Gas Service	N/A	N/A	3.0	N/A	N/A	3.0
114	Police Station	3.0	2.0	1.5	1.0	2.0	1.9
118	Vacant (Gardener's Shop)	3.0	2.0	2.0	1.0	2.0	2.0
119	Incinerator	2.5	2.0	2.0	2.0	2.0	2.1
120	Pump House (#3)	3.0	2.5	2.5	1.9	2.0	2.3+
121	2-Car Garage	2.0	1.9	N/A	N/A	2.0	1.9+
122	Main Kitchen & Mess Hall	2.5	1.9	1.9	1.0	1.9	1.8+
123	Staff Row Garage	1.8	1.8	N/A	N/A	2.0	1.8+
124	Admin., Lab & Equip.	2.5	1.5	1.5	1.0	1.5	1.6
125	2-Car Garage	1.9	1.9	N/A	N/A	2.0	1.9+
127	Telephone Exchange	3.0	3.0	N/A	2.5	2.5	2.7+
135	Storage	2.5	2.0	N/A	N/A	2.0	2.1+
136	Water Tank Tower	2.0	N/A	2.0	N/A	2.0	2.0
137	Eng. Locker & Washroom	3.0	2.5	2.5	2.0	2.0	2.4
138	Admin. Med. Treatment	2.5	1.5	1.5	1.0	2.0	1.7
	ICU/RCU						
140	Trash House	3.0	2.0	N/A	N/A	N/A	2.5
142	Flag Pole	2.0	N/A	N/A	N/A	2.0	2.0
144	Smoke Stack	2.0	N/A	N/A	2.5	2.0	2.1+
145	Electric Sub-station	3.0	N/A	N/A	N/A	2.5	2.7+
146	Cemetery Mounument	2.5	N/A	N/A	N/A	N/A	2.5
147	UG Gasoline Tank	3.0	N/A	3.0	N/A	3.0	3.0
149	Vacant	2.5	2.0	N/A	N/A	2.0	2.1+
150	Comfort Station	3.0	3.0	2.5	2.0	2.5	2.6
151	Oxygen Storage	3.0	N/A	N/A	N/A	N/A	3.0
152	Transformer Pad	N/A	N/A	N/A	N/A	2.5	2.5
153	Shelter House	3.0	2.5	2.5	2.5	3.0	2.7
165	Equipment Storage	3.0	3.0	N/A	N/A	2.5	2.8+
T504	Paint Shop	2.0	2.0	2.0	1.0	2.0	1.8
T516	Equip & Material Stor.	2.0	2.0	N/A	1.0	1.9	1.7+

## 2.2.2 HISTORIC PRESERVATION

### a. HISTORIC SITE SUMMARY

Considerations to the original site selection included an extensive site of at least 200 acres sought in a rural setting away from the "vices of the city". The intent was to create a self-contained community with a concern for a healthy exposure to sunlight and fresh air.

It was also intended for the site to be accessible by daily railroad service for easy transportation of men and supplies. The natural gas wells on the site was an apparent attraction providing on-site power and even potential income.

Families, patients, and staff were all to reside on-site in an intended self-sufficient community. It was truly meant to be a home. The "campus" was apparently an aspect of the intended sense-of-community. In such a setting there was programmed vocational training, library facilities, a chapel and a theater. Further perpetuating this "community" theme was the provision for gardening, some farming and raising of livestock.

The bandstand in the center of Steel Circle was a popular feature. It was located close to the streetcar terminus and drew townspeople into the "Home".

Medical care facilities, minimally provided at first, became increasingly dominant as the veterans aged. The cemetery was located a bit away from the center, quietly near the river, in and near the wooded portion of the site.

The plan for site development perpetuated the rural setting with informal landscapes, curvilinear road and walk layout, (such as the gently curved entry drive) and water features introduced where possible. The river provided a popular picnic and walking amenity. The wooded areas toward the river added the "naturalness" of the daily environment. The overall layout was well organized and orderly, but clearly informal without a self-conscious interplay of center-lines or a balanced symmetry. A special and possibly familiar quality of the military, seemed to be expressed in the regimented alignment of the six original ward buildings oriented to the broad parade grounds to the north.

An analysis of the remaining major vegetation originally planted is an important aspect of understanding of the overall historic value of the site. Tree patterns played a significant role in the original plan and many of the originally planted trees remain.

Three basic vegetation types are found on the site: deciduous, evergreen and ornamental. Deciduous trees constitute the dominant planted features of the site. The tree masses are distinctive and help to define the strong spatial framework of the street plan. Many of these trees were determined by the team either by considering their age or their location, to reflect the original plan.

On 25 June 1981, VAMC Marion was declared eligible for listing on the National Register of Historic Places by the Secretary of the Interior. The actual listing has never been finalized, but the determination of eligibility serves the same purpose as far as federal laws and regulations are concerned.

In the eligibility notification the following comments were attached:

"The Marion Veterans Administration Medical Center is significant architecturally and historically as one of the eleven branches of the National Home for Disabled Volunteer Soldiers, which provided medical care and housing for disabled veterans from 1867 to 1929. The Marion facility was established by Act of Congress in 1888 and was incorporated in the Veterans Administration's system of nationwide medical centers after 1930.

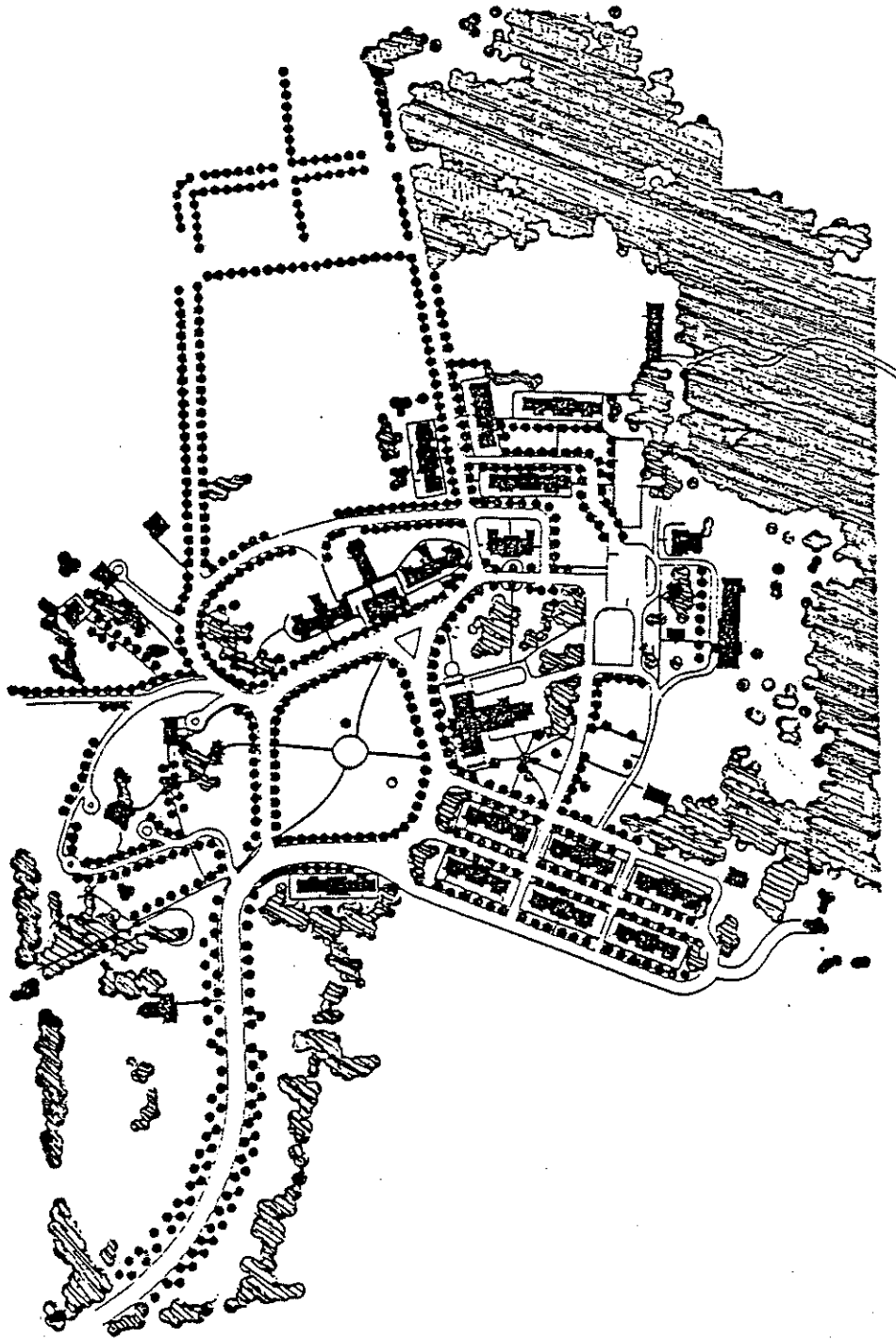
The numerous buildings of varied functions set into spacious and landscaped grounds (that includes a veteran's cemetery) reflect the evolution of the National Home's cultural, recreational, occupational, residential, religious, and medical program over a period of forty years. The complexes overall cohesive design and architectural detailing in Victorian Gothic, Queen Anne, and Colonial Revival styles are of architectural merit."

The proposal by the VA and the noted exceptions by the National Register have resulted in the following identification of structures as contributing, non-contributing and intrusions which stands as a federal record to this date:

1	1889	Contributing	Ward Building
2	1889	Contributing	Ward Building
3	1889	Contributing	Ward Building
4	1889	Contributing	Ward Building
5	1889	Contributing	Ward Building
6	1889	Contributing	Ward Building
7	1893	Contributing	Ward Building
8	1924	Contributing	Gymnasium Building
9	1923	Contributing	M.A.T., C. T. Clinics
10	1898	Contributing	Ward Building
11	1898	Contributing	Ward Building
12	1898	Contributing	Ward Building
13	1899	Contributing	Nursing Ed. & Med. Library
15	1929	Contributing	Ward Building & Administrative Office
16	1929	Contributing	Ward Building
17	1929	Contributing	Ward Building
18	1896	Contributing	Ward Building
19	1890	Contributing	Administration Bldg., Credit Union, Barber
20	1890	Contributing	Administration Building
21	1890	Contributing	(vacant)
22	1890	Contributing	(vacant)
24	1896	Contributing	Ward Building
25	1930	Contributing	Ward Building
26	1923	Contributing	Duplex Quarters
27	1921	Contributing	Duplex Quarters

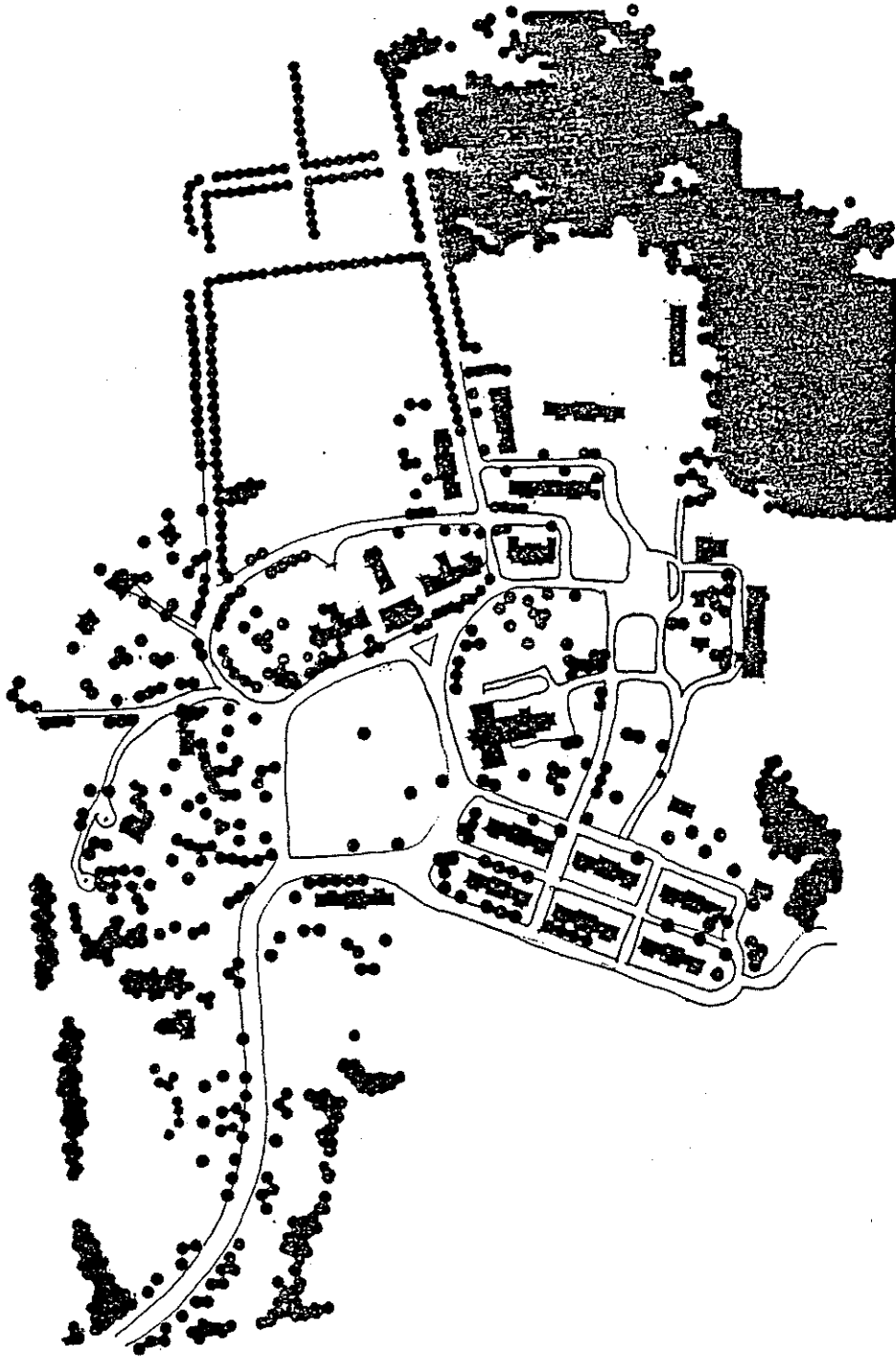
128	1940	Intrusion	Transformer Vault
135	1958	Intrusion	Pump House
136	1956	Intrusion	Water Tank
137	1951	Intrusion	Employee's Restroom
138	1958	Intrusion	Patient Treatment & Administrative Office
139	1957	Non-Contrib.	Pump House - Well No. 4
140	1947	Intrusion	Trash House
142	1928	Contributing	Flag Pole
144	1934	Intrusion	Stack
145	1935	Intrusion	Switchgear
146	1900	Contributing	Memorial Monument
147	1920	Intrusion	Underground Gasoline Tank
148		Intrusion	Transformer Pad
149	1969	Intrusion	Transformer House
150	1970	Intrusion	Comfort Station
151	1978	Intrusion	Oxygen Storage
152		Intrusion	Transformer Pad
153	1976	Intrusion	Shelter House
501	1947	Intrusion	Manual Arts Clinics
504	1947	Intrusion	Paint Shop
505	1947	Intrusion	Manual Arts Clinics
506	1947	Intrusion	Machine & Carpenter Shops

**ORIGINAL  
PLANTINGS  
1903**



2.2.2a (2)

**ORIGINAL  
PLANTINGS  
REMAINING  
1986**



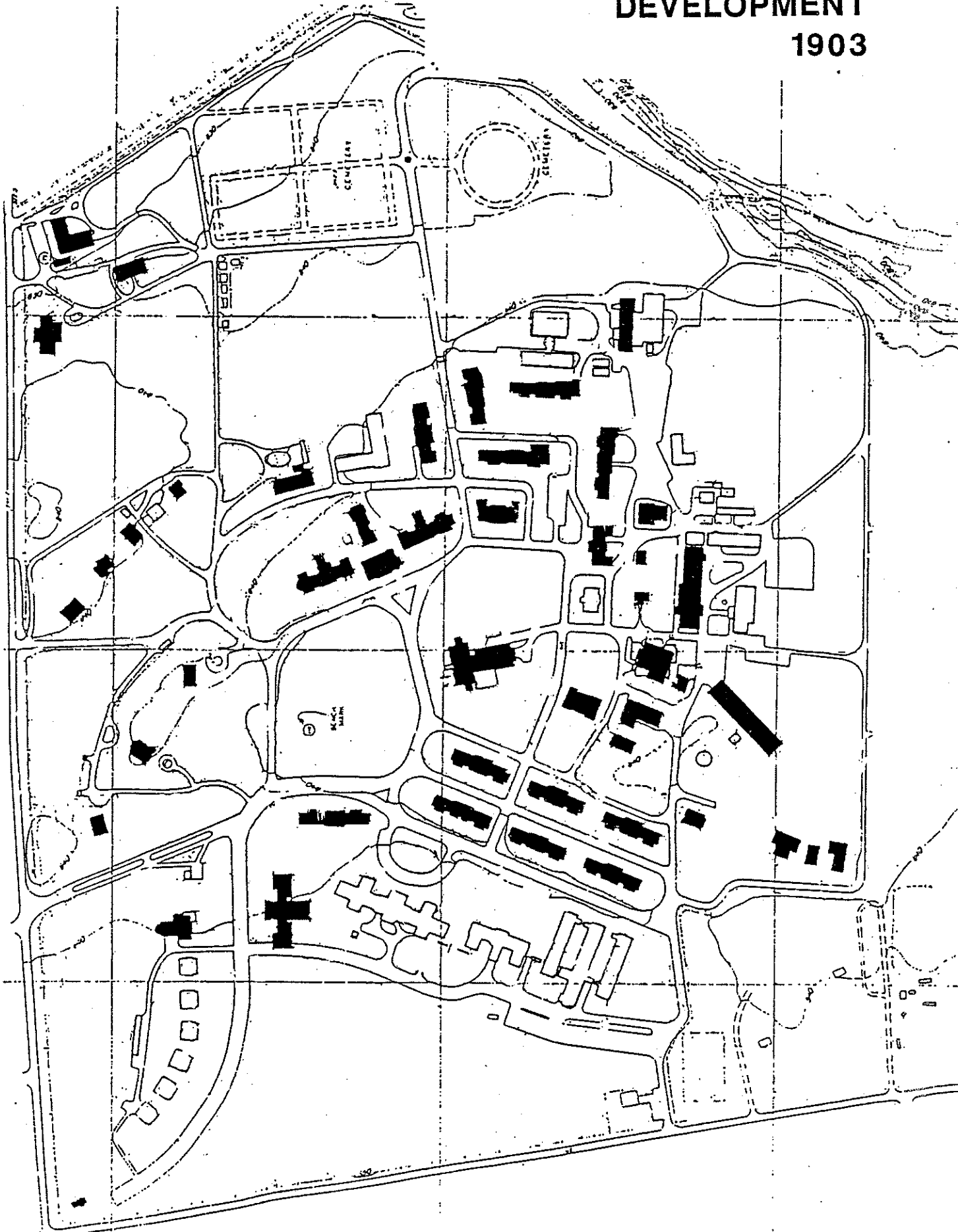
## 2.2.2

### b. SITE PLANS: HISTORIC STRUCTURES

Three historic site plans were discovered at Marion. These plans of 1903, 1927, and 1940 show the growth of buildings and site over the years and essentially when the visual historic character of the development was established. By the turn of the century the quality of the site was established. This is illustrated on the accompanying maps.

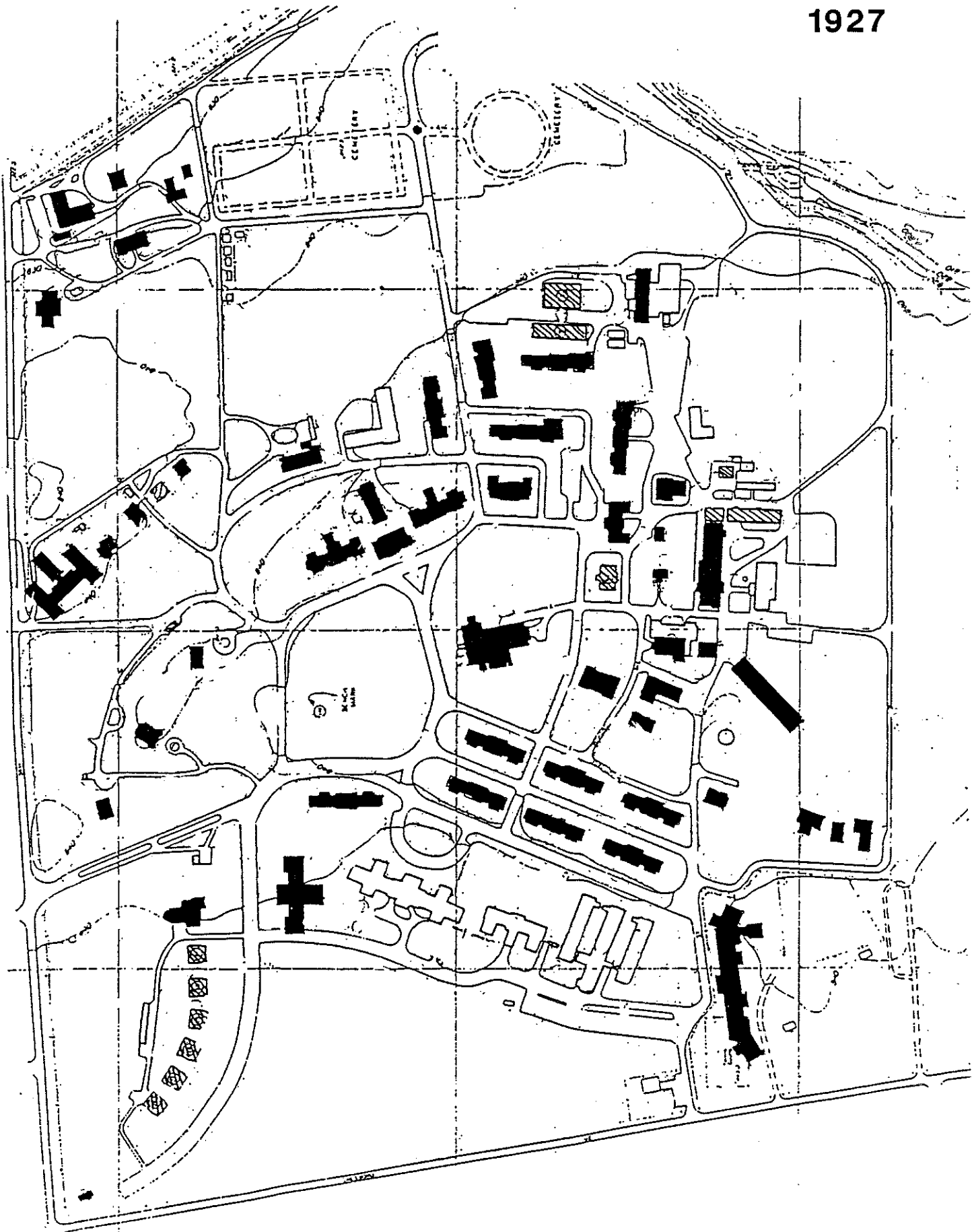
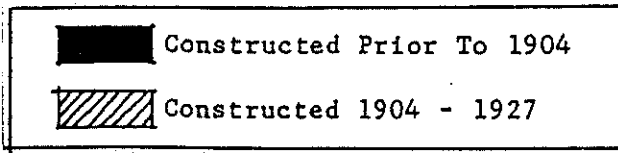
Constructed Prior to 1904

# SITE DEVELOPMENT 1903





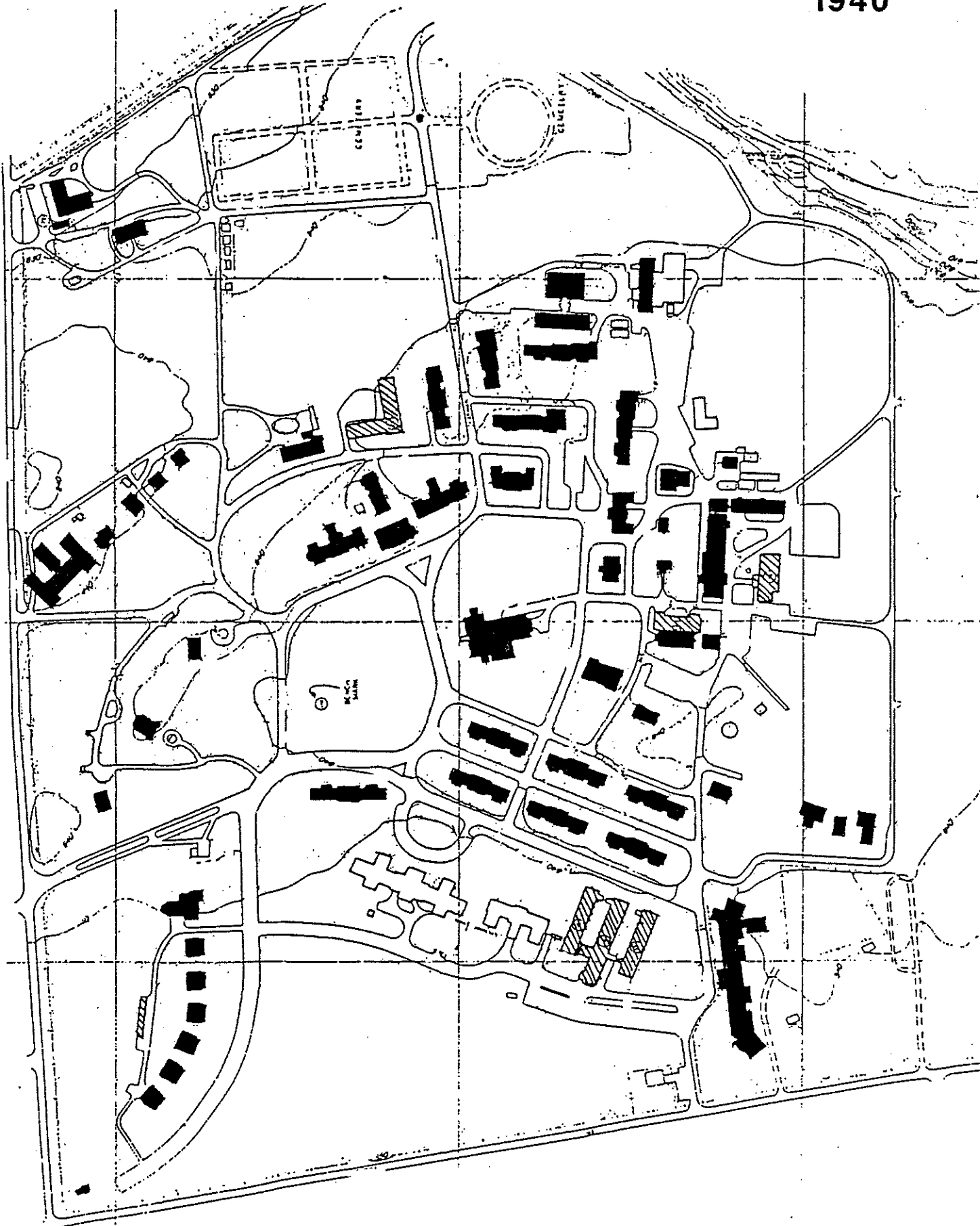


# SITE DEVELOPMENT 1927



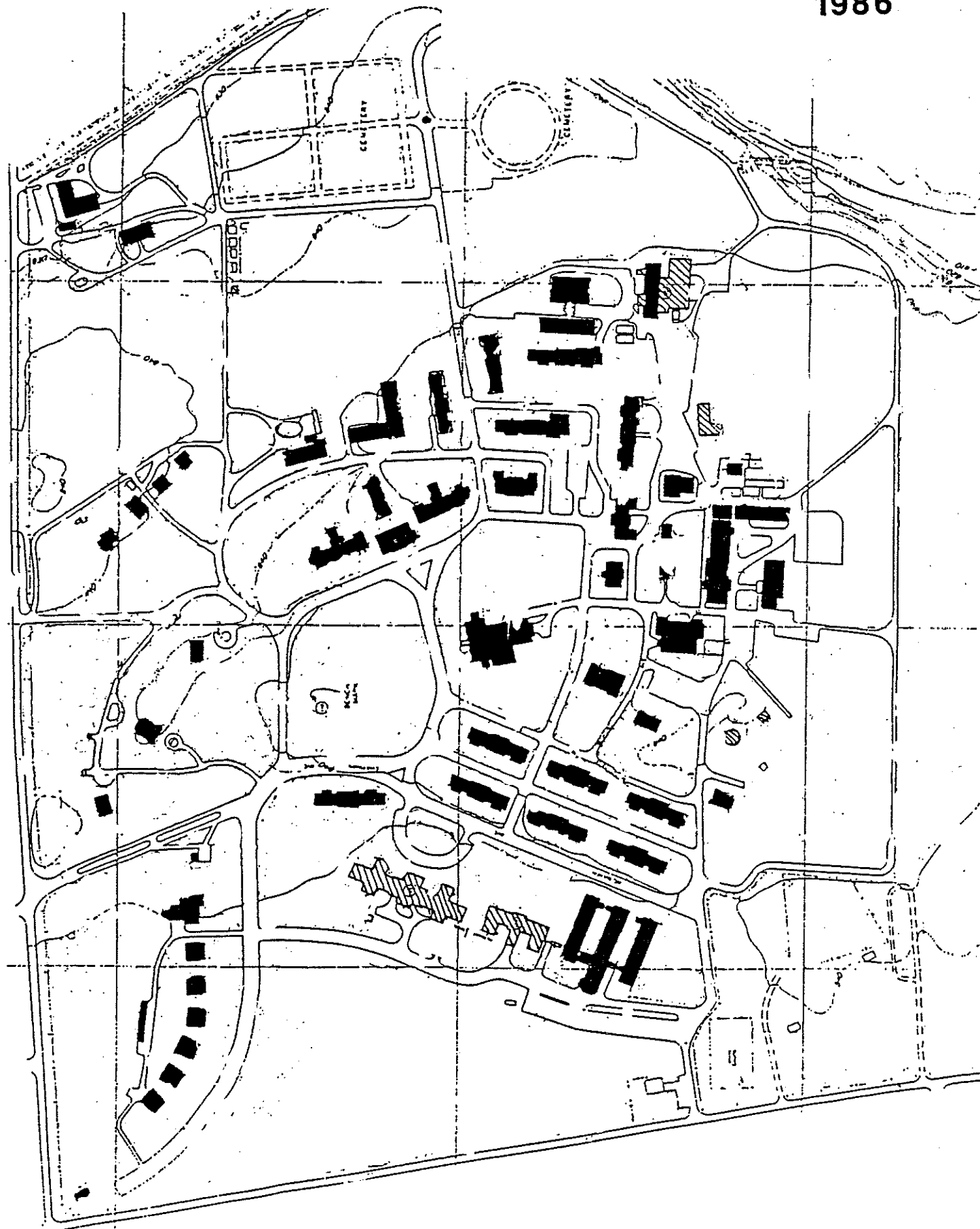
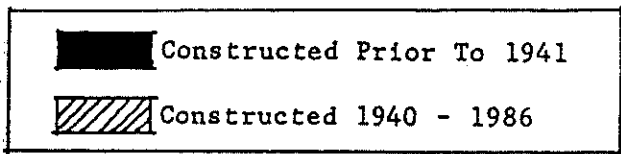
# SITE DEVELOPMENT 1940

	Constructed Prior To 1928
	Constructed 1928 - 1940



2.2.2b (4)

# SITE DEVELOPMENT 1986



## 2.2.2

### c. HISTORIC BUILDING SUMMARY

The contribution each structure makes to the historic district was evaluated considering their architectural significance and site significance. Each structure is placed into one of the following categories:

#### Key to Evaluations

<u>Rating</u>	<u>Historical</u>
3	Outstanding - structures which are outstanding examples of the stylistic period, and were built during the original development period, 1899 to 1903. The design for these structures must be well proportioned, elegant and innovative with a sophisticated use of architectural features, and those which establish the site character by defining major spaces or axes.
2	Important - structures which are very good examples of the stylistic period and are architecturally important to the district. Their design is well-proportioned, but less sophisticated in detail, and enhance and strengthen the site character by defining minor spaces or axes.
1	Contributing - structures which have minor architectural significance, but they support the general architecture character of the district. Their stylistic treatment is of a vernacular mode without much sophistication or refinement, and support the general site character, but are generally background buildings.
0	Non-essential - structures which do not contribute to the architectural character of the district, or are an intrusion to the district, and detract from the general site character.




The evaluations given are shown on the accompanying map.

## Historic Evaluations of Buildings


<u>#</u>	<u>Building Name</u>	<u>Hist.</u>	<u>#</u>	<u>Building Name</u>	<u>Hist.</u>
1	Ward Building	2	69	Barn	3
2	Ward Building	2	72	Vacant (Milk House)	1
3	Ward Building	2	73	Cemetery Adm. & Service	2
4	Ward Building	2	75	Water & Sewage Lab	0
5	Ward Building	2	76	Boiler Plant	0
6	Day Treatment	2	78	Pump House (#1 S)	0
7	Vacant (Ward Building)	1	79	Laundry	0
8	Gymnasium	2	83	Cemetery Tool House	0
9	Occupational Therapy School	1	91	1-Car Garage	0
10	Ward Building	2	93	1-Car Garage	0
11	Ward Building	2	94	1-Car Garage	0
12	Ward Building (Temp. Vacant)	2	95	1-Car Garage	0
13	Nursing Ed. & Med. Library	2	96	1-Car Garage	0
15	Ward Support	2	97	Storage	2
16	Ward Building	2	100	Pump House (#2 N)	0
17	Ward Building	2	102	Staff Quarters, Duplex	2
18	Ward Building	2	105	Old Gate House	3
19	Administrative Offices	3	108	Main Gas Service	-
20	Recreation Storage	2	114	Police Station	1
21	Vacant (Ward Building)	2	118	Vacant (Gardeners Shop)	1
22	Vacant (Ward Building)	2	119	Incinerator	0
24	Vacant (Ward Building)	2	120	Pump House (#3)	0
25	Ward Building	1	121	2-Car Garage	0
26	Staff Quarters, Duplex	2	122	Main Kitchen & Mess Hall	0
27	Staff Quarters, Duplex	2	123	Staff Row Garage	0
28	Staff Quarters, Duplex	2	124	Admin., Lab & Treatment	2
29	Staff Quarters, Duplex	2	125	2-Car Garage	0
30	Staff Quarters, Duplex	2	127	Telephone Exchange	0
31	Staff Quarters, Duplex	2	128	Transformer Vault	
32	Staff Quarters, Single	3	135	Storage	0
33	Staff Quarters, Duplex	3	136	Water Tank Tower	-
34	Staff Quarters, Single	3	137	Eng. Locker & Washroom	0
35	Staff Quarters, Single	2	138	Admin., Med.	0
36	Staff Quarters, Single	2		Treatment ICU/RCU	
37	Staff Quarters, Single	2	140	Trash House	0
38	Staff Quarters, Single	2	142	Flag Pole	-
41	Transportation Office	2	144	Smoke Stack	0
42	Admin. Supply	2	145	Electric Sub-Station	-
47	Theater	3	146	Cemetery Monument	3
49	Library	3	147	Underground Gasoline Tank	-
50	Canteen	2	149	Vacant	0
51	Eng. Shops & Store Room	1	150	Comfort Station	0
52	Engineering Office	1	151	Oxygen Storage	-
53	Engineering Shops	0	152	Transformer Pad	-
54	Sheet Metal Shop	0	153	Shelter House	0
55	Warehouse	1	165	Equipment Storage	0
58	Lawn Storage	1	170	Fire Station	0
60	Admin. Support	3	173	Green House	0
62	Vacant (Greenhouse)	1	T504	Paint Shop	0
65	Chapel	3	T516	Equip. & Material Stor.	0

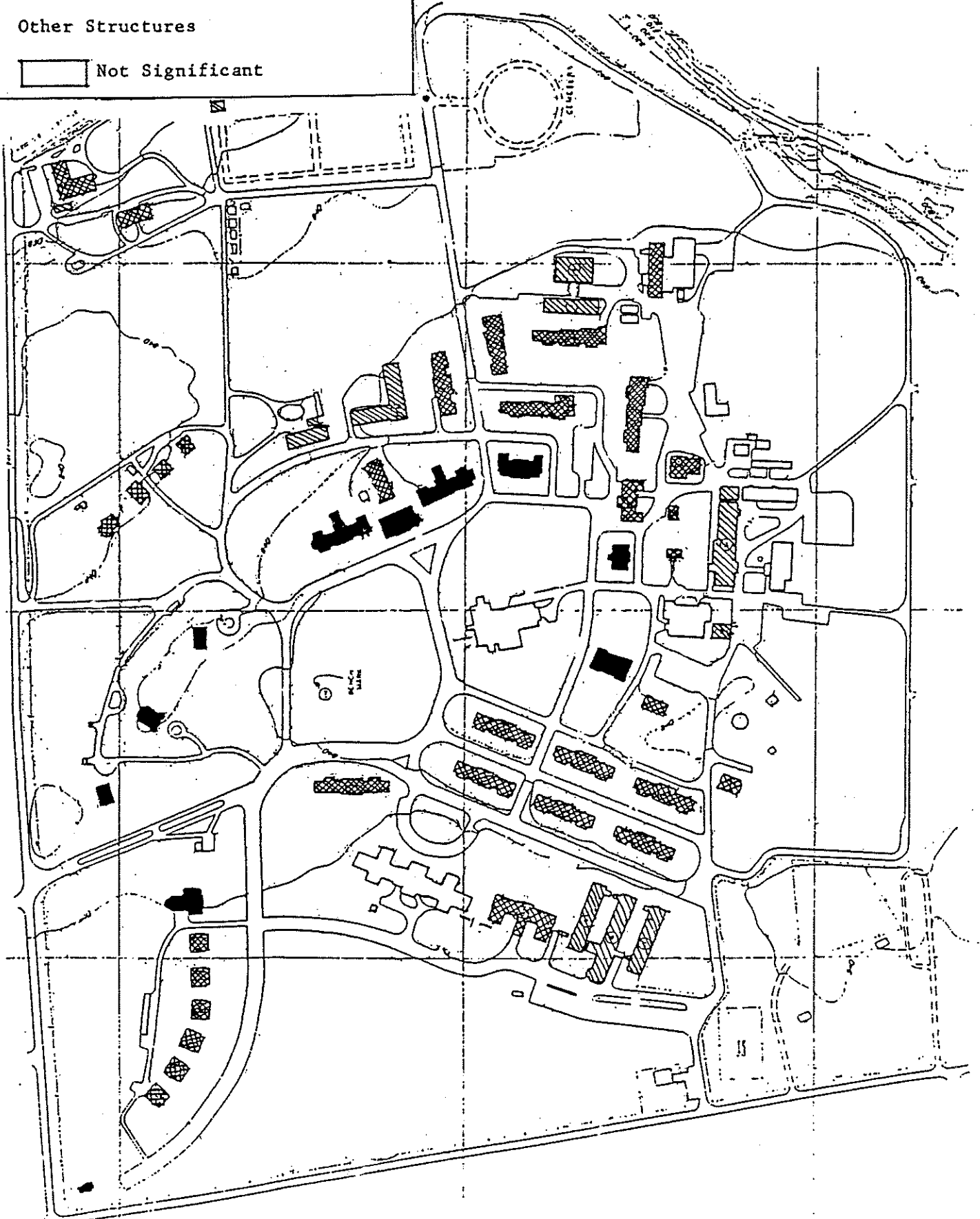
# HISTORIC BUILDING SUMMARY

**Significant Structures**

-  Outstanding
-  Important
-  Contributing

**Other Structures**

-  Not Significant



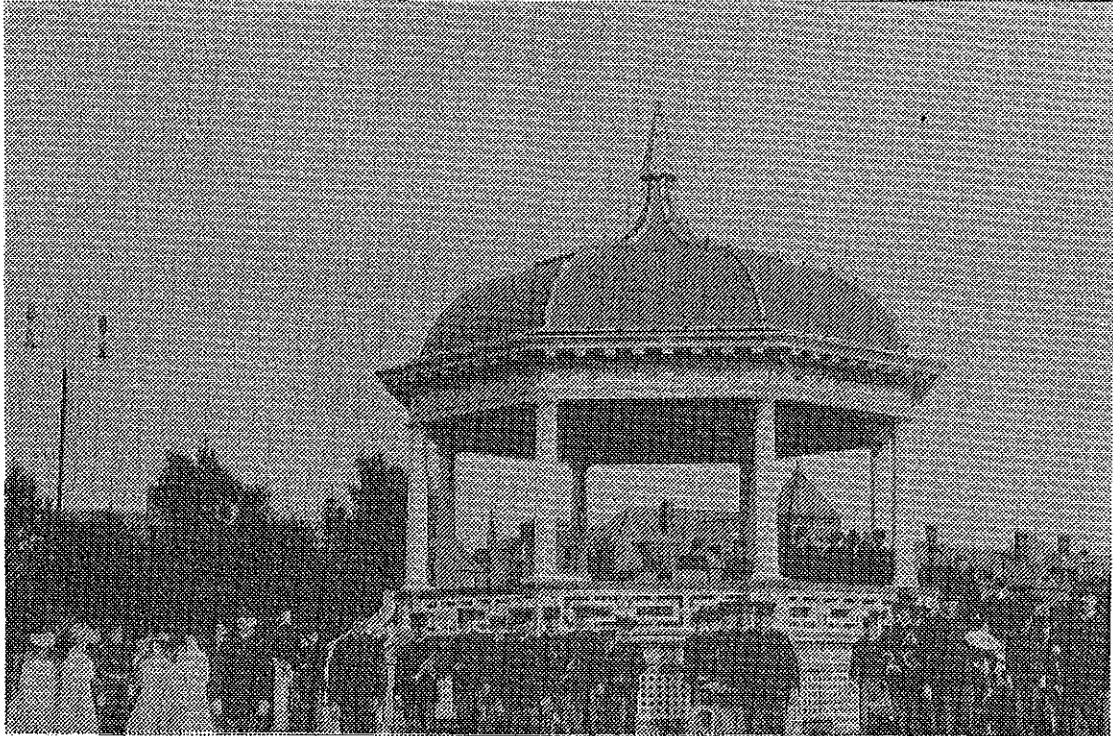
## Summary Of Year Constructed

<u>Bldg. #</u>	<u>Building Name</u>	<u>Date</u>	<u>Bldg. #</u>	<u>Building Name</u>	<u>Date</u>
1	Ward Building	1889	69	Barn	1894
2	Ward Building	1889	72	Vacant (Milk House)	1905
3	Ward Building	1889	73	Cemetery Admin. & Service	1905
4	Ward Building	1889	75	Water & Sewage Lab	1905
5	Ward Building	1889	76	Boiler Plant	1934
6	Day Treatment	1889	78	Pump House (#1 S)	1934
7	Vacant (Ward Building)	1889	79	Laundry	1939
8	Gymnasium	1924	83	Cemetery Tool House	1925
9	Occupational Therapy	1923	91	1-Car Garage	1915
10	Ward Building	1898	93	1-Car Garage	1923
11	Ward Building	1898	94	1-Car Garage	1915
12	Ward Building(Temp.Vacant)	1898	95	1-Car Garage	1903
13	Nursing Ed. & Med. Library	1899	96	1-Car Garage	1903
15	Ward Support	1929	97	Storage	1899
16	Ward Building	1929	100	Pump House (#2 N)	1930
17	Ward Building	1929	102	Staff Quarters, Duplex	1894
18	Ward Building	1896	105	Old Gate House	1897
19	Administrative Offices	1890	108	Main Gas Service	
20	Recreation Storage	1890	114	Police Station	1938
21	Vacant (Ward Building)	1890	118	Vacant (Gardeners Shop)	1906
22	Vacant (Ward Building)	1890	119	Incinerator	1934
24	Vacant (Ward Building)	1896	120	Pump House (#3)	1930
25	Ward Building	1930	121	2-Car Garage	1895
26	Quarters, Duplex	1928	122	Main Kitchen & Mess Hall	1938
27	Quarters, Duplex	1921	123	Staff Row Garage	1941
28	Quarters, Duplex	1921	124	Admin., Lab & Treatment	1943
29	Quarters, Duplex	1921	125	2-Car Garage	1941
30	Quarters, Duplex	1921	127	Telephone Exchange	1947
31	Quarters, Duplex	1921	128	Transformer Vault	1940
32	Quarters, Single	1897	135	Storage	1958
33	Quarters, Duplex	1896	136	Water Tank Tower	1956
34	Quarters, Single	1896	137	Eng. Locker & Washroom	1951
35	Quarters, Single	1908	138	Admin., Med.	
36	Quarters, Single	1903		Treatment ICU/RCU	1958
37	Quarters, Single	1916	140	Trash House	1947
38	Quarters, Single	1904	142	Flag Pole	1928
41	Transportation Office	1895	144	Smoke Stack	1934
42	Admin. Supply	1905	145	Electric Sub-Station	1934
47	Theater	1891	146	Cemetery Monument	1900
49	Library	1915	147	Underground Gasoline Tank	1975
50	Canteen	1890	149	Vacant	1964
51	Eng. Shops & Store Room	1914	150	Comfort Station	1976
52	Engineering Office	1914	151	Oxygen Storage	1978
53	Engineering Shops	1914	152	Transformer Pad	
54	Sheet Metal Shop	1905	153	Shelter House	1976
55	Warehouse	1900	165	Equipment Storage	1979
58	Lawn Storage	1902	170	Fire Station	1985
60	Admin. Support	1890	173	Green House	1987
62	(Vacant) Greenhouse	1892	T504	Paint Shop	1947
65	Chapel	1899	T516	Equipment & Material Stor.	1947

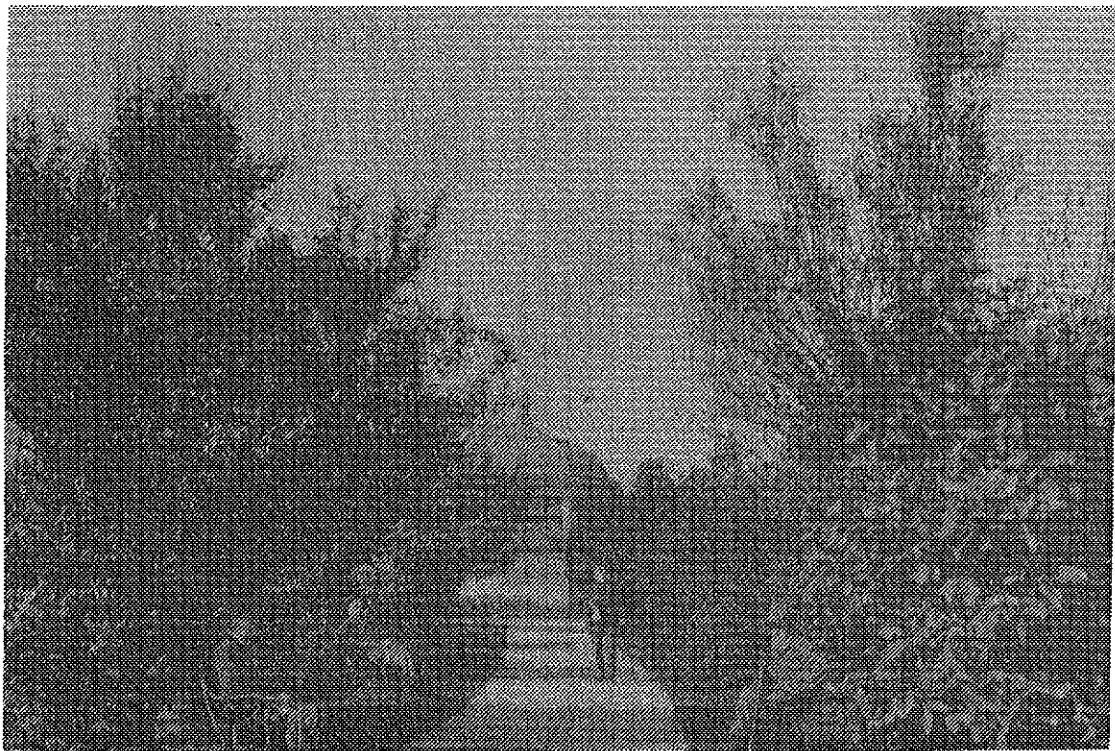
2.2.2

d. HISTORIC PHOTOGRAPHS

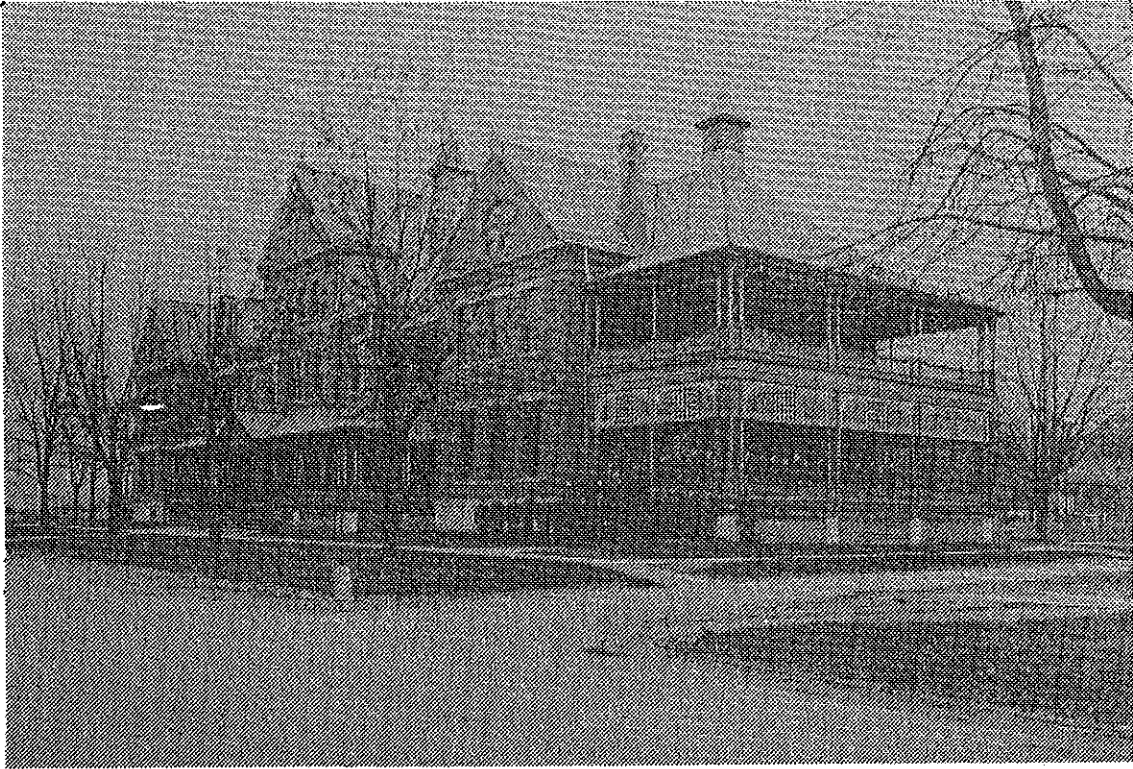




BAND STAND (Demolished) Formerly located in Steele Circle



BAND STAND (Demolished) Formerly located in Steele Circle



BUILDING 4 WARD - Still in Use



BUILDING 47 THEATER - Still in Use

### 2.2.3 BUILDING SURVEY

#### a. NARRATIVE SUMMARY

In the Functional and Technical Evaluation study, each structure was surveyed and rated with regard to its various elements - structure, architecture, mechanical and electrical equipment and services, and with regard to how it functions for its present use.

Structures were observed with regard to present condition of foundation, bearing elements, roof and floor construction.

Architectural elements were observed with regard to compliance with Life Safety and Fire Codes and VA construction standards, particularly regarding use by handicapped persons, as well as general state of maintenance.

Mechanical and electrical equipment and services were noted regarding condition, energy conservation, comfort and code compliance.

Buildings or structures have been grouped into four classes as follows:

A - Buildings which are used to house or treat patients.

B - Buildings which support the activities or maintenance of the facility.

C - Buildings which do not directly support activities or maintenance of the facility, or a vacant.

D- Structures which are not buildings.

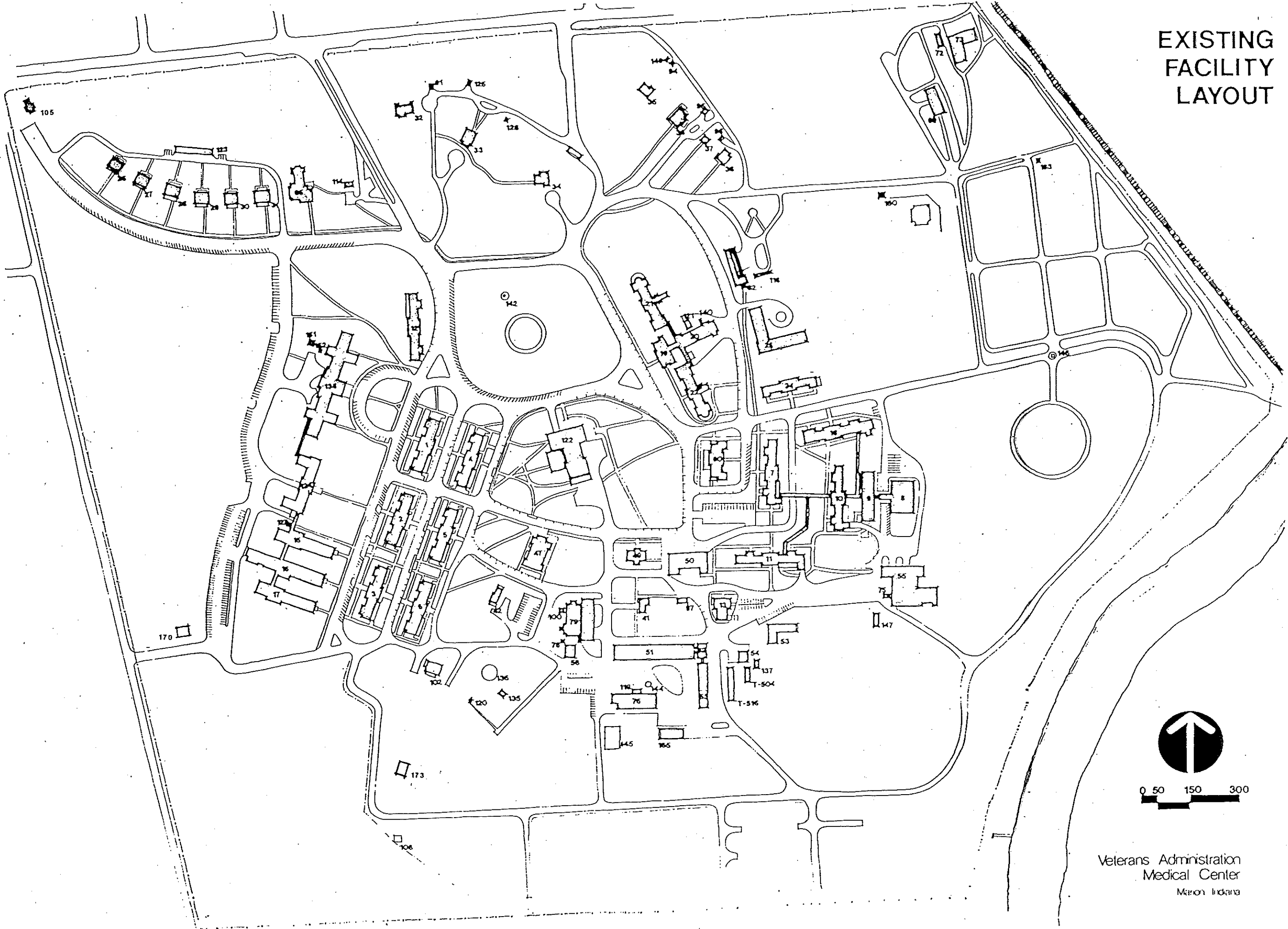
General observations are that structures are sound and in reasonably good repair, but have a number of deficiencies as follows:

Basements and crawl spaces are nearly all damp, caused by storm water not being carried away from building foundations and soils which hold moisture. It is particularly bad in the buildings with shelf stone foundations where many mortar joints have been penetrated. Unexcavated areas without vapor barriers also contribute to the dampness. In some cases water enters through window wells or depressed entrances which do not drain.

Many basements have only one means of egress or large spaces with only one means of egress.

Ventilation is a serious problem in most buildings. Mechanical ventilation is minimal. There is a high dependence on wall mounted oscillating electric fans and open windows in warm weather. Attics are unventilated and have a high heat build-up in summer. In general, floor-to-floor heights would permit addition to duct systems to alleviate this problem.

# EXISTING FACILITY LAYOUT



0 50 150 300

Veterans Administration  
Medical Center  
Marion, Indiana

2.2.3

d. STATISTICAL SUMMARY BY STRUCTURE

#	BUILDING NAME	DATE	STORIES	TOTAL GROSS SQ. FT.	FLOOR GROSS SQ. FT.	FLOOR TO FLOOR HEIGHT	FLOOR LOADING	TECHNICAL DEFICIENCIES
1	Ward Building	1889	Base 1st 2nd	20,291	6,511 7,269	14'-7"	40 lbs.	A
2	Ward Building	1889	Base 1st 2nd	20,678	6,511 6,631 7,416	14'-7"	40 lbs.	A
3	Ward Building	1889	Base 1st 2nd	19,838	6,631 6,348 7,142	14'-7"	40 lbs.	
4	Ward Building	1889	Base 1st 2nd	19,793	6,348 6,352 7,089	14'-7"	40 lbs.	A
5	Ward Building	1889	Base 1st 2nd	20,190	6,352 6,471 7,248	14'-7"	40 lbs.	A E
6	Day Treatment	1889	Base 1st 2nd	20,678	6,471 6,631 7,416	14'-7"	40 lbs.	A
7	Vacant (Ward Building)	1889	Base 1st 2nd	23,972	7,329 9,314 7,329	14'-7"	40 lbs.	A
8	Gymnasium	1924	Base 1st	16,816	8,408 8,408	10'-0"	75 lbs.	
9	Occupational Therapy School	1923	Base 1st 2nd	15,707	2,259 6,724 6,724	12'-2"	60 lbs.	A
10	Ward Building	1898	Base 1st 2nd	23,533	7,466 8,601 7,466	14'-7"	40 lbs.	A
11	Ward Building	1898	Base 1st 2nd	22,651	7,103 8,443 7,103	14'-7"	40 lbs.	A
12	Ward Building	1898	Base 1st 2nd	22,792	7,288 8,216 7,288	14'-7"	40 lbs.	
13	Nursing Ed.	1899	1st 2nd	8,182	4,091 4,091	12'-3"	60 lbs. 50 lbs.	A



<u>#</u>	<u>BUILDING NAME</u>	<u>DATE</u>	<u>STORIES</u>	<u>TOTAL GROSS SQ. FT.</u>	<u>FLOOR GROSS SQ. FT.</u>	<u>FLOOR TO FLOOR HEIGHT</u>	<u>FLOOR LOADING</u>	<u>TECHNICAL DEFICIENCIES</u>
15	Ward Building & Support	1929	1st 2nd	18,045	9,321 8,724	13'-6" 11'-0"	50 lbs. 40 lbs.	A C
16	Ward Building	1929	Base 1st 2nd 3rd	48,025	14,894 14,894 9,470 8,967	10'-11" 13'-6" 11'-0"	40 lbs. 40 lbs. 40 lbs.	A C
17	Ward Building	1929	1st 2nd	18,788	9,688 9,100	13'-6" 11'-10"	40 lbs. 40 lbs.	A
18	Ward Building	1896	1st 2nd	12,492	7,175 5,317	14'-7" 13'-7"	40 lbs. 40 lbs.	A
19	Administrative Office	1890	1st 2nd	8,381	4,216 4,165	13'-7"	40 lbs. 40 lbs.	A
20	Recreation & Storage	1890	1st 2nd	8,836	5,023 3,813	13'-7"	60 lbs. 40 lbs.	A
21	Vacant (Ward Building)	1890	1st 2nd	16,406	8,203 8,203	13'-7"	40 lbs. 40 lbs.	A
22	Vacant (Ward Building))	1890	1st 2nd	17,256	8,628 8,628	13'-7"	40 lbs. 40 lbs.	A
24	Vacant (Ward Building)	1896	1st 2nd	12,102	6,135 5,967	14'-7"	40 lbs. 40 lbs.	A
25	Ward Building	1930	Base 1st 2nd	33,411	11,263 11,207 10,941		40 lbs.	A A H
26	Staff Quarters, Duplex	1928	Base 1st 2nd	5,000	751 2,391 1,858	8'-10"	40 lbs. 40 lbs.	A
27	Staff Quarters, Duplex	1921	Base 1st 2nd	5,000	2,314 1,884	8'-10"	40 lbs. 40 lbs.	A
28	Staff Quarters, Duplex	1921	Base 1st 2nd	5,000	2,314 1,884	8'-10"	40 lbs. 40 lbs.	A
29	Staff Quarters, Duplex	1921	Base 1st 2nd	5,000	2,314 1,884	8'-10"	40 lbs. 40 lbs.	A
30	Staff Quarters, Duplex	1921	Base 1st 2nd	5,000	2,314 1,884	8'-10"	40 lbs. 40 lbs.	A

<u>#</u>	<u>BUILDING NAME</u>	<u>DATE</u>	<u>STORIES</u>	<u>TOTAL GROSS SQ. FT.</u>	<u>FLOOR GROSS SQ. FT.</u>	<u>FLOOR TO FLOOR HEIGHT</u>	<u>FLOOR LOADING</u>	<u>TECHNICAL DEFICIENCIES</u>
31	Staff Quarters, Duplex	1921	Base 1st 2nd	5,000	2,314 1,884	8'-10"	40 lbs. 40 lbs.	A
32	Staff Quarters, Single	1897	Base 1st 2nd	3,400	1,953 1,738	9'-0" 10'-6" 10'-0"	40 lbs. 40 lbs.	A
33	Staff Quarters, Duplex	1896	Base 1st 2nd	4,400	3,034 1,797	7'-5" 10'-4" 9'-4"	40 lbs. 40 lbs.	A
34	Staff Quarters, Single	1896	Base 1st 2nd	4,250	2,666 2,109	8'-8" 11'-6" 10'-4"	40 lbs. 40 lbs.	A
35	Staff Quarters, Single	1908	Base 1st 2nd	2,400	1,464 1,174	11'-0" 10'-0"	40 lbs. 40 lbs.	A
36	Staff Quarters, Single	1903	Base 1st 2nd	2,400	2,036 1,266	11'-0" 10'-0"	40 lbs. 40 lbs.	A
37	Quarters, Single	1916	Base 1st 2nd	2,200	1,312 912	8'-4" 9'-8"	40 lbs. 40 lbs.	A
38	Quarters, Single	1904	Base 1st 2nd	2,200	1,118 1,035	10'-6" 9'-2"	40 lbs. 40 lbs.	A
41	Transportation Office	1895	1st	1,477	1,477	10'-6"	40 lbs.	A
42	Admin. Supply	1905	1st 2nd	2,053	1,553 900	9'-2"	50 lbs. 50 lbs.	
47	Theater	1891	Base 1st	9,136	3,866 5,270		100 lbs.	A
49	Library	1915	Base 1st	5,543	2,529		50 lbs.	A B
50	Canteen	1890	1st Base 1st	15,900	2,464 4,548 5,811	8'-6" 12'-10" 8'-10"	100 lbs.	A
51	Engineering Shops & Store Room	1914	Base 1st	24,026 12,013	12,013 12'-10"	125 lbs.		A

<u>#</u>	<u>BUILDING NAME</u>	<u>DATE</u>	<u>STORIES</u>	<u>TOTAL GROSS SQ. FT.</u>	<u>FLOOR GROSS SQ. FT.</u>	<u>FLOOR TO FLOOR HEIGHT</u>	<u>FLOOR LOADING</u>	<u>TECHNICAL DEFICIENCIES</u>
52	Engineering Office	1914	Base 1st	5,065	1,659		50 lbs.	
			2nd		1,841		50 lbs.	A B
53	Engineering Shops	1914	Base 1st	9,525	1,565		60 lbs.	B F
54	Sheet Metal Shop	1905	1st	1,250	4,849			
55	Warehouse	1900	Base 1st	32,147	4,676	9'-0"	125 lbs.	A
58	Lawn Storage	1902	1st	1,907	1,250			
					15,611			
					16,536			
					1,907			
60	Admin. & Ed. Therapy	1890	1st 2nd		5,557		50 lbs.	A B
62	Vacant(Greenhouse)	1892	1st	5,922	5,922		50 lbs.	A Structural
65	Chapel	1899	1st	6,424	6,424		60 lbs.	A
69	Barn	1894	Base 1st	10,560	3,520			A
			2nd		3,520			
					704			
72	Vacant(Milk House)	1905	1st	7,516	6,072		50 lbs.	
73	Cemetery Admin. & Service Bldg.	1905	2nd		1,444		50 lbs.	
75	Storage	1905	1st	364	364			
76	Boiler Plant	1934	Base 1st	6,805	1,300		125 lbs.	A
					5,505			
					176			
78	Pump House (#1S)	1934	1st	176	5,555			
79	Laundry	1939	Base 1st	22,300	11,150		150 lbs. Slab/Gr.	A F
83	Cemetery Tool House	1925	1st	398	11,150			
					398			
91	1-Car Garage	1915	1st	246	246		Slab/Gr.	
93	1-Car Garage	1923	1st	549	549		Slab/Gr.	
94	1-Car Garage	1915	1st	283	283		Slab/Gr.	
95	1-Car Garage	1903	1st	311	311		Slab/Gr.	
96	2-Car Garage	1903	1st	439	439		Slab/Gr.	
97	Storage	1899	1st	871	871		80 lbs.	
100	Pump House (#2 N)	1930	1st	105	105		Slab/Gr.	



#	BUILDING NAME	DATE	STORIES	TOTAL GROSS SQ. FT.	FLOOR GROSS SQ. FT.	FLOOR TO FLOOR HEIGHT	FLOOR LOADING	TECHNICAL DEFICIENCIES
102	Staff Quarters, Duplex	1894	1st 2nd	3,784	2,162 1,622		40 lbs. 40 lbs.	A
105	Old Gate House	1897	1st	400	400		50 lbs.	
108	Main Gas Service		---					
114	Police Station	1938	1st	312	312		Slab/Gr.	
118	Vacant (Gardeners)	1905	1st	1,031	1,031		Slab/Gr.	A
119	Incinerator	1934	1st	780	780		Slab/Gr.	
120	Pump House (#3)	1930	1st	250	250		Slab/Gr.	
121	Grounds Storage	1895	1st	550	550		Slab/Gr.	
122	Main Kitchen & Mess Hall	1938	Base 1st	36,129	17,802 18,327	11'-10"	100 lbs./ Dining 150 lbs. Kitchen	A
123	Staff Row Garage	1941	1st	2,280	2,280	13'-6"	Slab/Gr.	
124	Admin., Lab & Treatment	1943	1st 2nd 3rd	32,428	11,784 10,322 10,322	11'-8"	50 lbs. 50 lbs. 50 lbs.	A G
125	2-Car Garage	1941	1st	400	400		Slab/Gr.	
127	Telephone Exchange	1947	1st	334	334		Slab/Gr.	
128	Transformer Vault	1940	1st	26	26		Slab/Gr.	
135	Storage	1958	1st	571	571		Slab/Gr.	
136	Water Tank Tower	1956	---					
137	Eng. Locker & Wash.	1951	1st	262	262		Slab/Gr.	
138	Admin., Med. Treatment ICU/RCU	1958	Base 1st 2nd 3rd 4th	114,996	22,505 22,505 22,505 22,505	12'-3" 12'-3"	Unit A: 1st A C D G 4th/80 lbs. Unit B: 2nd 4th/40 lbs. Slab/Gr.	
140	Vacant	1947	1st	53	53			
142	Flag Pole	1928	1st					
144	Smoke Stack	1934	---					
145	Electric Sub-Stat.	1934	---					
146	Cemetery Monument	1900	---					
147	Underground Tank	1975	---					
149	Vacant	1964	1st	49	49		Slab/Gr.	
150	Comfort Station	1976	1st	251	251		Slab/Gr.	

#	BUILDING NAME	DATE	STORIES	TOTAL GROSS SQ. FT.	FLOOR GROSS SQ. FT.	FLOOR TO FLOOR HEIGHT	FLOOR LOADING	TECHNICAL DEFICIENCIES
151	Oxygen Storage	1978	---					
152	Transformer Pad	---	---					
153	Shelter House	1976	1st	363	363		Slab/Gr.	
165	Equipment Storage	1979	1st	7,486	7,486		Slab/Gr.	
170	Fire Station		1st	5,376	5,376			
173	Green House	1987	1st					
T504	Paint Shop	1947	1st	1,182	1,182		Slab/Gr.	
T516	Equip. & Material Stor.	1947	1st	2,347	2,347		Slab/Gr.	

KEY TO TECHNICAL DEFICIENCIES

- A. Asbestos (Asbestos Survey)
- B. Means of Egress (Fire & Safety Survey)
- C. Smoke Barriers (Fire & Safety Survey)
- D. Non rated linen chutes (Fire & Safety Survey)
- E. Ceiling sprinkled above tile and not below (Fire & Safety Survey)
- F. Electrical panel without cover (Fire & Safety Survey)
- G. Motor Belts without guards (Fire & Safety Survey)
- H. Distorted mirrors (JCAH)

## 2.2.4 EXISTING SITE RELATIONSHIPS

### a. GENERAL DESCRIPTION OF EXISTING SITE RELATIONSHIPS

There is a conflict of pedestrians and vehicles as people, cars, trucks, busses and taxis mix on the campus. The only separation is often the street and the sidewalk. The conflicts could be reduced by controlling the traffic, closing streets, and consolidating patient and service areas. Consolidation of patient and support areas could also decrease the amount of staff and patient travel time.

Currently there are two primary entrances, Main and Service. Consider further definition of entrances, as employee or east and west entrance. The Main Entrance requires a focal point and the Service Entrance requires better orientation to the delivery points or a consolidation of these points.

The parking is scattered throughout the campus and should be consolidated and planned for more efficient usage. The for distribution/main dock points should be studied further for consolidation, as well as the remoteness of the warehouse and the long distribution paths throughout the campus.

Any development should consider and make use of the natural character of the site provided by the changes in topography. A very limited part of the site is in a Floodway. There are some low and wet areas, but these can be relieved by a storm drainage system.

Existing vegetation is an asset to the campus; trees, flowers and ground cover enhance the campus. This pattern should be maintained in any development. Consolidation of the campus and the increased use of ground cover to replace lawns decrease grounds maintenance, especially mowing.

The soils at the Veterans Administration Medical Center drains poorly. Soil tests should definitely be made prior to any building project. Foundation drains will be required for all below-grade spaces in all new buildings. In fact, below grade spaces should be avoided.

Any Facility Development Plan must weigh facility development against future needs along with their compatibility and suitability to the natural character of the open spaces and overall landscape pattern. Consolidate the medical campus to cut down on patient, staff and material travel distance. The Cemetery is expanding west; encourage this expansion.

Noise appears to be no major problem as past a 300 foot buffer zone along Lincoln Boulevard and 38th Street, the noise levels are clearly acceptable. Enhance this buffer zone.

The pleasant views in the campus should be enhanced. The major focal point for the entire campus and for the west campus is Steele Circle. Another element on the west campus that could be developed is the Guardhouse. The east campus pleasant views include the potential of the Mississinewa River, the Memorial Monument at the Cemetery, the Fountain, are the Outdoor Activities area.

Objectionable views should be reduced by developing screening, or courtyards. Those include the views toward 38th street, toward the Parking and Service Areas behind Buildings 138/124/15/16/17, toward Parking and Loading Areas in the Service/Docking Areas, and the views restricted by building groups such as Buildings 15/16/17 and Buildings 7/10/18.

b. PEDESTRIAL AND VEHICULAR CIRCULATION

(1) Summary

The Veteran Administration Medical Center is 2.5 miles south and east of the Central Business District of Marion, Indiana. It is bounded on the north by 38th Street and on the east by Lincoln Boulevard; both streets have significant use. There are no walks provided along 38th Street or Lincoln Boulevard. All pedestrians use the shoulders of Lincoln and 38th to walk on which may cause some conflicts with automobiles, unless these areas are clearly defined.

The two primary entrances to the Veterans Administration Medical Center site are the Main Entrance on the north (38th Street) and the Service Entrance on the west (Lincoln Boulevard). Two secondary entrances to the campus are located on 38th Street east of the Main Entrance. The first entrance east of the Main Entrance is primarily for staff residence access and for general service vehicles. The second entrance, just east of the residence entrance, is for the cemetery.

The Main Entrance is currently used by patients visitors, staff and employees. There is a control signal for peak hours; it is an orange flasher the remainder of the day. The Main Entrance gives no orientation to the campus. The security center at the Main Entrance serves as an information/orientation area for new visitors. Even with directions, visitors are easily confused by the various roads.

The Service Entrance is primarily a supply truck entrance for separation of service vehicles from employee/patient vehicles. This entrance provides access to the site, but it gives no orientation to the delivery location.

City busses and taxis also come onto the site and use the road system.

Except for sidewalks and streets there is little separation of pedestrian and vehicular traffic. Vehicles have access throughout the site. Pedestrian/Vehicular conflicts occur at the following points:

- Intersection south of Building 66
- Main intersection, north of Building 12
- Intersection south of Building 12
- Intersection at southwest corner of Building 1
- Intersection at southeast corner of Building 4
- Road north of Building 49
- Intersection northwest of Building 60

Further separation or control of pedestrian and vehicular traffic would be beneficial. Eliminate some streets and rerouting vehicular traffic is one solution. This solution would minimize vehicular and pedestrian conflicts.

Patient activity buildings are dispersed on the campus and separate from the patient buildings. Patients must walk outdoors to use the gym, canteen, patient library, theater and occupational therapy building. Patients in Buildings 1 through 5 and in Building 12 walk to the Dining Hall and Building 3 is more than 900 feet from the Dining Hall.

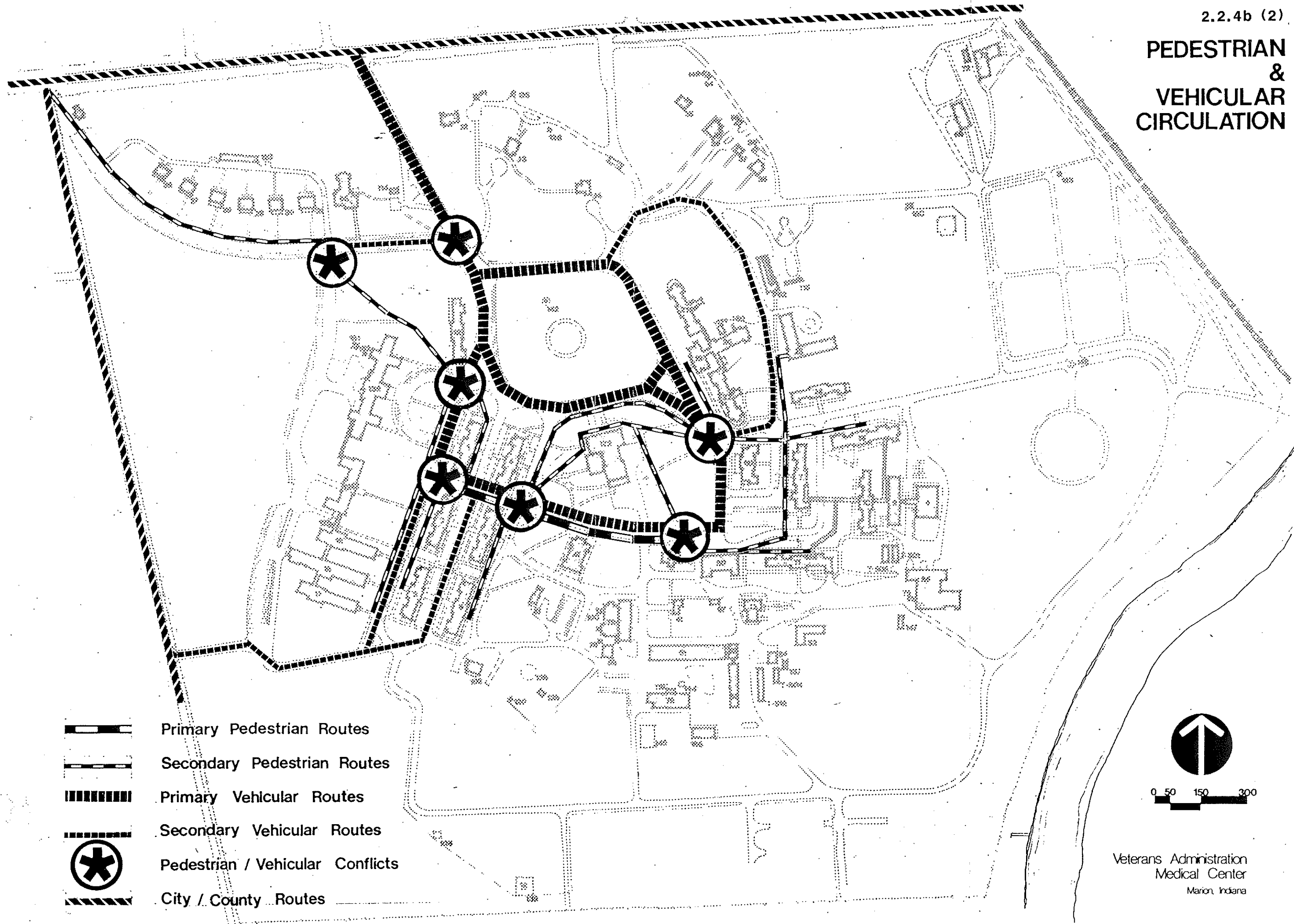
This becomes a major problem during inclement weather.







Because of the campus layout, most administrative functions are located with their related service. Administration, supply and engineering, which need to interact, are in three separate buildings. The distance separations mean more staff time spent in traveling from point to point and probably inhibits both supervision and supportive staff contacts.

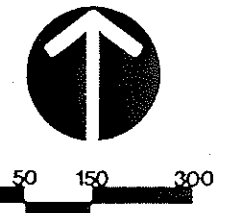
The exterior corridor connections of Patient Buildings 7,8,9,10, 11 and 18 is significant. It shows an effort to reduce the problems of supply distribution, patient and staff movement and inclement weather. Unfortunately, it detracts from the campus atmosphere.

Patients traveling in groups can take up to 20 minutes to reach parts of the campus.

# PEDESTRIAN & VEHICULAR CIRCULATION

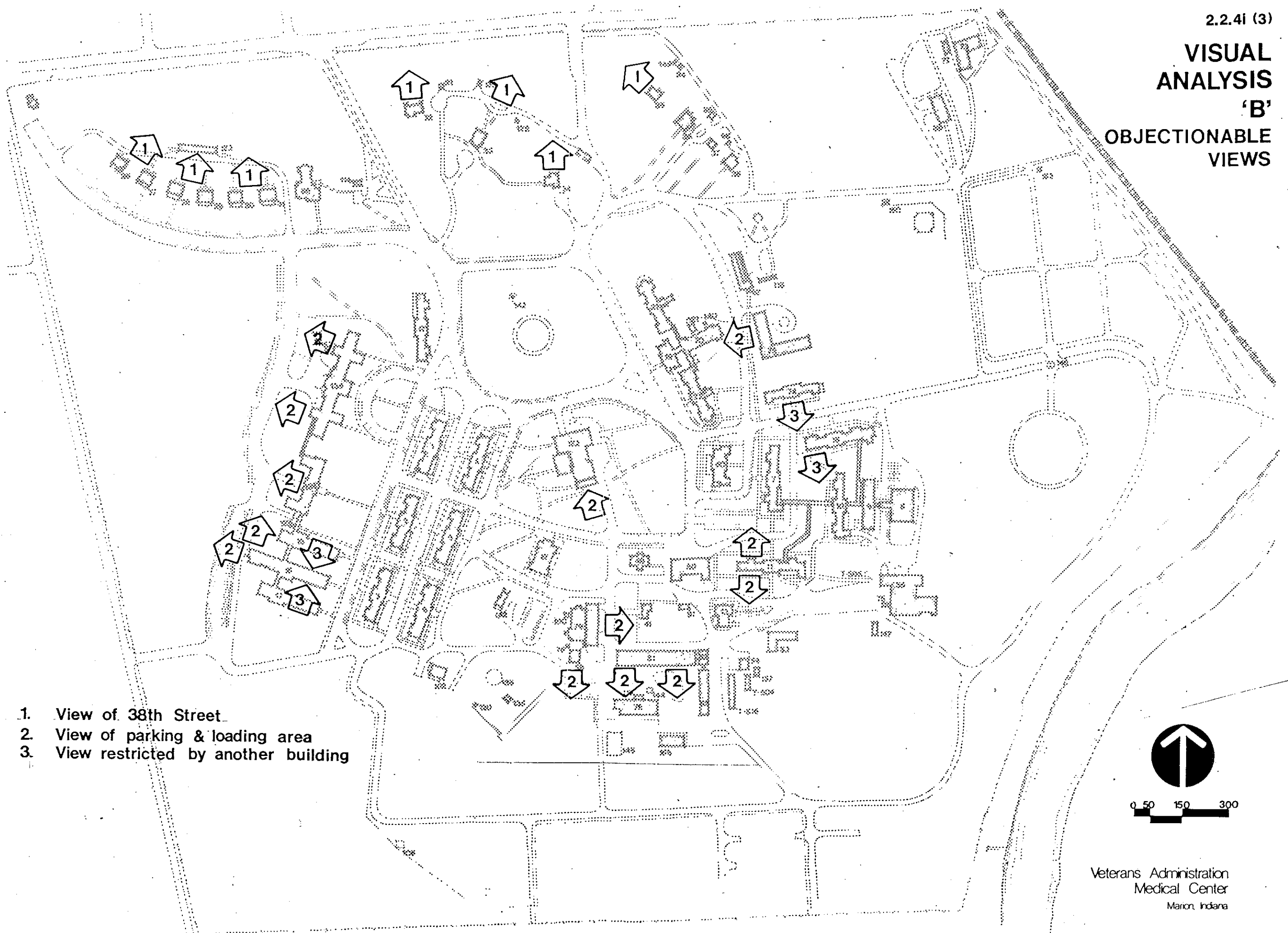


-  Primary Pedestrian Routes
-  Secondary Pedestrian Routes
-  Primary Vehicular Routes
-  Secondary Vehicular Routes
-  Pedestrian / Vehicular Conflicts
-  City / County Routes

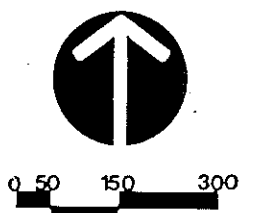


Veterans Administration  
Medical Center  
Marion, Indiana

**VISUAL  
ANALYSIS  
'B'  
OBJECTIONABLE  
VIEWS**



- 1. View of 38th Street
- 2. View of parking & loading area
- 3. View restricted by another building



## 2.2.5. EXISTING UTILITIES

### a. PLUMBING AND FIRE PROTECTION SYSTEMS

#### (1) Existing Sanitary Sewer System

##### (a) Summary

Sanitary sewers throughout the facility are of cast iron, vitrified clay or concrete pipe. The maintenance people do not have any specific or re-occurring problems with the sanitary and report the piping to be in good condition, even though some of it dates back to the original installation. The piping ranges in size from 4" to 12". There are plenty of manhole structures and generally the piping looks to be of adequate size for present and possibly future needs. Manhole and piping inverts are not available at the present time.

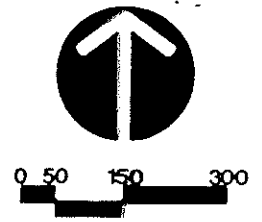
All sanitary sewers on the grounds tie into a common 12" sanitary which runs northeast to a city owned and operated lift station.

The lift station is located on the north side of 38th Street, west of the Pennsylvania Railroad tracks (northeast corner of the grounds). This station consists of a wet well and an 8' diameter dry well with two 7-1/2 HP vertical shaft sewage pumps, control panel and environment equipment. Each pump has an 8" suction and discharge and has a capacity of 600 GPM at 26' TDH. The 8" forced main from the station is approximately 720' long, discharges into a manhole and is then carried by a gravity main.

The existing sanitary sewer system and lift station appears to be more than adequate for the existing facility and should be sufficient for future additions as well. The "Utility Director" for the City of Marion said the gravity sewer which receives the forced main is also of adequate size to accommodate future expansion (based on dry weather conditions). He said that because of the combination sewers in that portion of town, they do become surcharged during heavy rainfalls. The City waste treatment plant is presently undergoing expansion and updating; therefore, it should also be sufficient for future VA growth.



2.2.5a (1)(b)  
**SANITARY  
SEWER**



Veterans Administration  
Medical Center  
Marion, Indiana

## 2.2.5a

### (2) Existing Storm Sewers Systems

#### (a) Summary

The VA Medical Center complex is presently served by a sub-surface storm drainage system. Several curb inlets and yard inlets are located in low points to catch the surface storm runoff. Some of these storm sewer lines also handle the water collected by building roof drains.

All of these lines flow into a 30" line which empties into the Mississinewa River at the southeast edge of the Medical Center Complex, or into a 24" line from the west side which ties into a line on 38th Street. See Storm Sewer Plan.

The location, sizes, inverts and amount of storm lines that serve the complex are not fully known at this time. Many storm lines are no longer in use. They have been capped and re-routed.

According to the Station Engineering Office, existing storm sewer lines are presently undersized. Because of this, many areas contain standing water after heavy rains. Leaves and other litter cover many of the inlet grates and restrict proper flow into these lines causing standing water.

It is recommended that further engineering studies be done to determine present and future needs for upgrading the present sub-surface storm sewer system.

## 2.2.5a

### (3) Existing Cold Water Systems

#### (a) Summary

City water is provided by an 8" service extended from a 12" main line in Lincoln Boulevard (west of the facility). An 8" emergency service is also provided from a 10" main in 38th Street (north of the facility) near Nelson Street. Flow tests were conducted September 25, 1981 near the points of connection with the following results:

12" in Lincoln Boulevard  
2:45 P.M. with one 2-1/2"  
outlet open  
49 P.S.I. Static  
39 P.S.I. Residual  
1043 GPM Flow

10" in 38th Street  
3:00 P.M. with one 2-1/2"  
outlet open  
50 P.S.I. Static  
38 P.S.I. Residual  
1030 GPM Flow

The Water Company also has a 16" main less than a mile away which could be extended, if need be. However, the surrounding area is mostly residential and presently does not require a large volume of water. The main sources of water supply appear to be more than adequate for present and future needs.

The 8" service has a single 8" turbine meter located in the Boiler Plant (Building #76) Basement and supplies two base mounted, end suction booster pumps each with a capacity of approximately 750 GPM at 75' TDH. The pumps are used to boost water up to a 300,000 gallon elevated water tower.

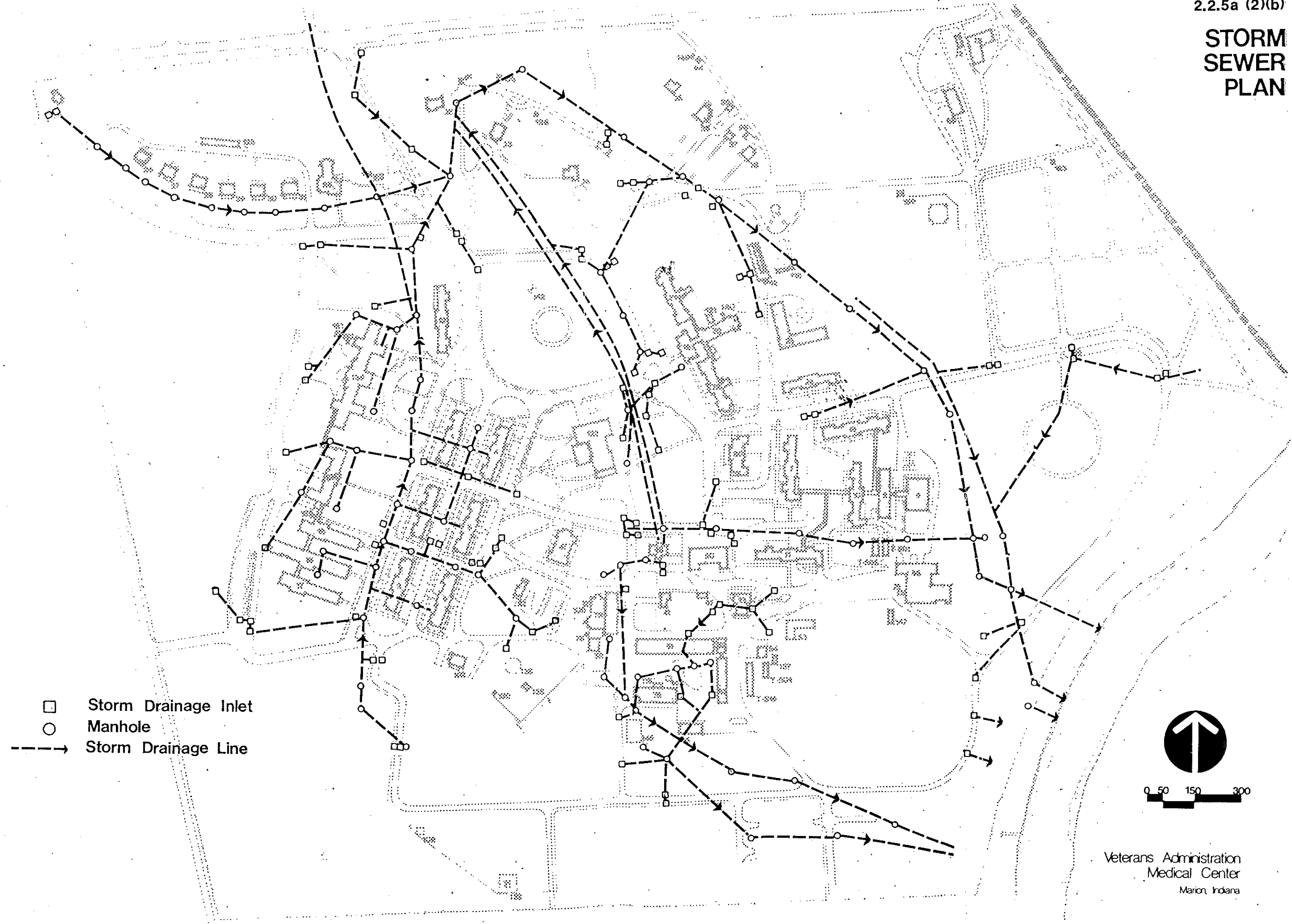
Buried water mains throughout the facility are cast iron. Age of the piping varies considerably. Portions are from the original installation and other portions have been installed as late as 1981. The distribution system has been gridded to enable many areas to be supplied from more than one route.

According to the maintenance people at the facility, the distribution mains are in good condition both inside and out. There are no apparent corrosion problems in the area.

Flow tests have been taken at each fire hydrant location (on the grounds) and appear to be sufficient to supply domestic water throughout the facility.

Two of the four wells located on the grounds are still operational today. They are used only as standby for the boilers and are tested every two weeks for a duration of one hour. Well #2 had a pumping capacity of 530 GPM in 1975 and Well #3 had a pumping capacity of 548 GPM in 1976.

# STORM SEWER PLAN



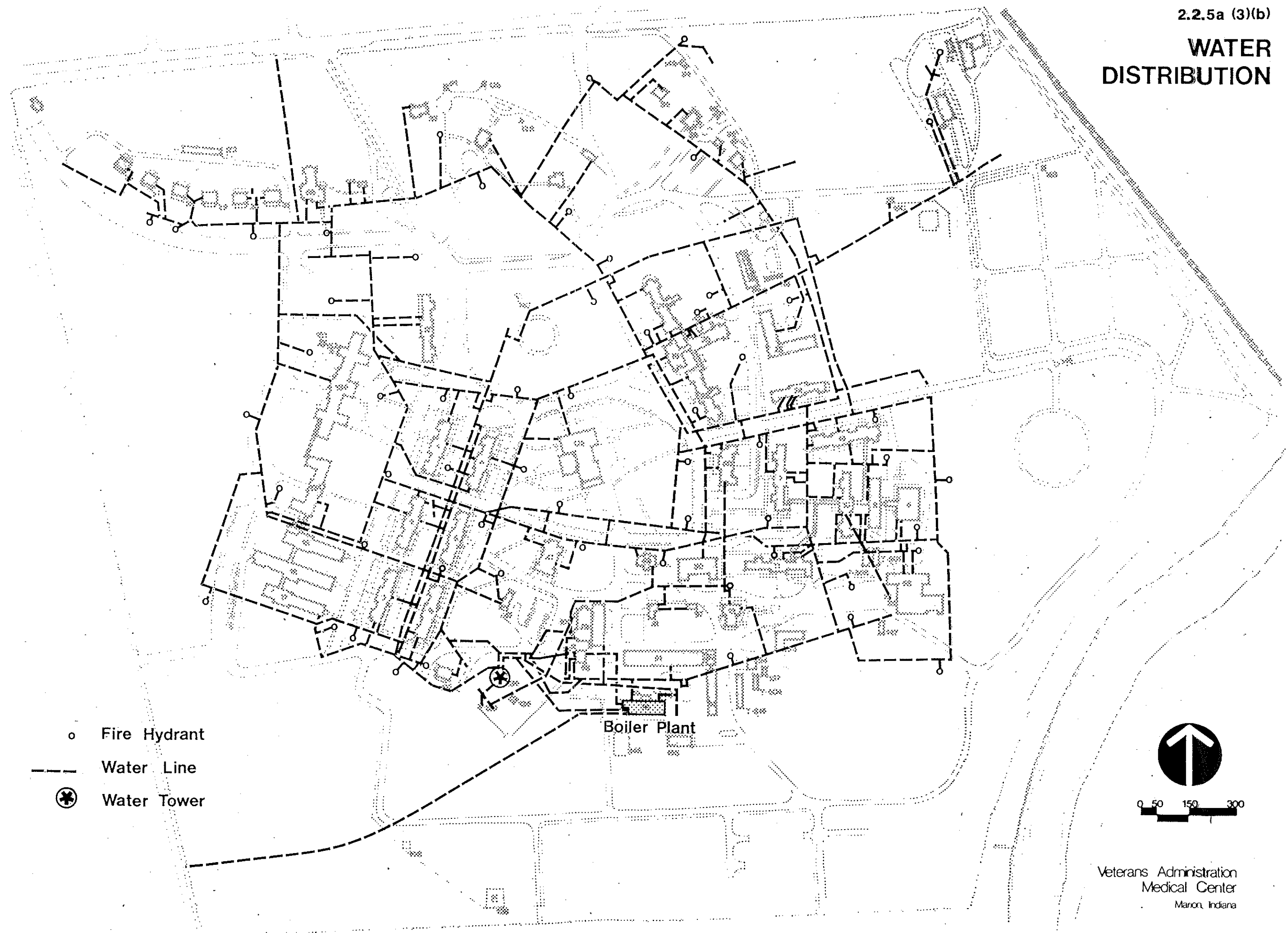
- Storm Drainage Inlet
- Manhole
- > Storm Drainage Line



0 50 150 300

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# WATER DISTRIBUTION



- Fire Hydrant
- Water Line
- ⊗ Water Tower

Boiler Plant



0 50 150 300

Veterans Administration  
Medical Center  
Marion, Indiana

## 2.2.5a

### (5) Existing Medical Gas System

The Medical Gas System consists of piped oxygen, vacuum and medical grade compressed air services in Building 138. Oxygen is fed from a bulk storage tank located adjacent to Building 138. Vacuum and air systems are supplied from duplex units located in the penthouse of Building 138. Zone valve boxes are provided throughout Building 138 where outlets are located. The system does not have line pressure alarms for monitoring purposes. The system appears to be in good condition.

### (6) Existing Natural Gas System

#### (a) Summary

Natural gas is provided by two services extending from a medium and a high pressure main located in Lincoln Boulevard.

A 4" medium pressure service (50-60 PSI) is extended from a 4" city main. The service is metered and regulated to 5 PSI at the southwest corner of the grounds. It is also regulated at a second location down to a given "house pressure". From this location, it then serves various buildings on the grounds (except the Boiler Plant).

A 6" high pressure service (180 PSI) is extended from a 6" city main. The service is regulated and metered at 35 PSI and then regulated to 15 PSI delivery pressure to the Boiler Plant. There are also cleaners located at the reg/meter station.

There is also a third gas service to the grounds on the north side. The service extends from a main in 38th Street near Bellaire Street.

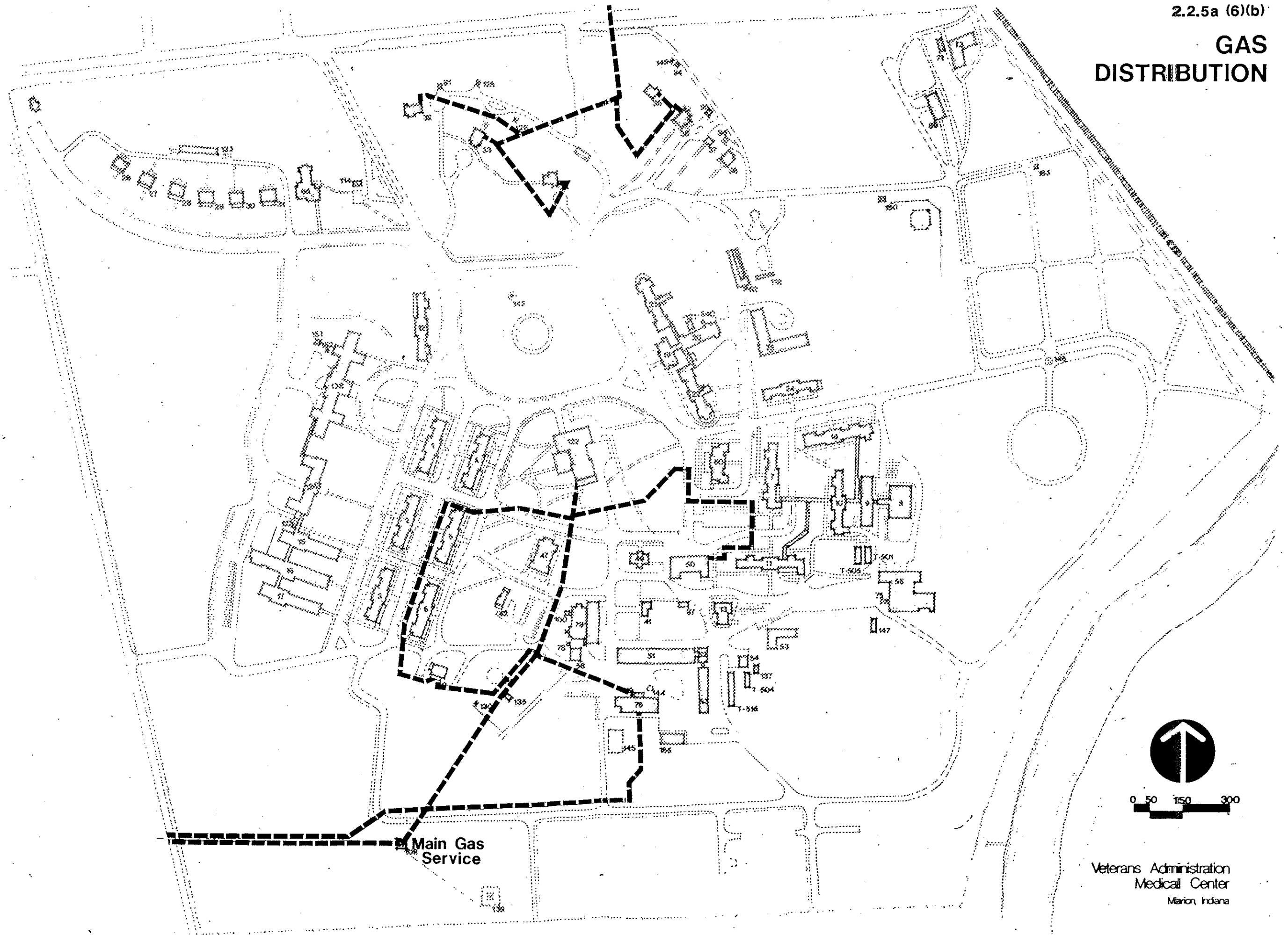
It is regulated and metered near said point of connection and serves only a few residences.

Underground gas piping throughout the facility varies from the date of original installation to 1981. Piping ranges in size from 1" to 6" and is described by the maintenance people as being in good - excellent condition. Pipe materials are a coated, welded steel and plastic. The distribution system is rather limited at the present time.

Therefore, future plans may require extending the facility mains. It is also possible that the "house pressure" regulator may need to change to allow for higher pressure in the facility distribution piping.

The Gas Company does not feel that there will be any problem in obtaining additional gas anytime within the next five years or so.

# GAS DISTRIBUTION



Main Gas Service



0 50 150 300

Veterans Administration  
Medical Center  
Marion, Indiana

(7) Fire Protection

Since most of the buildings at VAMC, Marion have wood floor and roof structures, the possibility of a major fire is significant. A number of protection systems have been installed to safeguard against this hazard.

Many of the buildings have sprinkler systems installed. Most are of the dry type, since they protect unheated attic spaces. They are triggered only by heat build-up. Fire hydrants are well provided throughout the station. Most buildings have a minimum of two hydrants available for combating a fire.

(See Water Distribution Site Plan.) In a few buildings, the sprinklers are installed above a melt-away acoustic ceiling tile system which would delay the activation time of the system. This has been previously cited by JCAH and Fire & Safety surveys and is scheduled for changes this year in 1987. None of the medical treatment or Ward Buildings (#15, #16, #17, #124 and #138) are protected by total sprinkler systems, except for some high hazard spaces.

A Gamewell alarm system was installed in 1978 and covers most of the buildings except staff residences, minor utility and maintenance structures and vacant buildings. This system includes manual alarm stations, ionization detectors and water flow switches. Manual stations are, in general, adequate in number but most are installed too high on the wall for handicapped access. However, most buildings have supervised post-indicator valves and fire main entry valves.

The Gamewell system has central annunciators at the security station and the fire academy and station just outside the west gate.

There are remote annunciators in the Director's house and the house of the Chief of Engineering Services, but neither appeared to be operable.

There is also a remote annunciator at the Boiler House, where a horn alarm can be sounded.

Outside protection consists of fire hydrants which are well dispersed on the recently expanded station water line system with at least two hydrants available to most buildings.

This Medical Center currently has a full time 15 man Fire Department which operates two 1000 gallon per minute triple combination fire apparatus.

Response time to actual fire scene is 4 minutes maximum. In addition, all staff are given fire fighting instruction during



## 2.2.5

### b. HVAC AND ENERGY SYSTEMS

#### (1) Existing Heating Systems

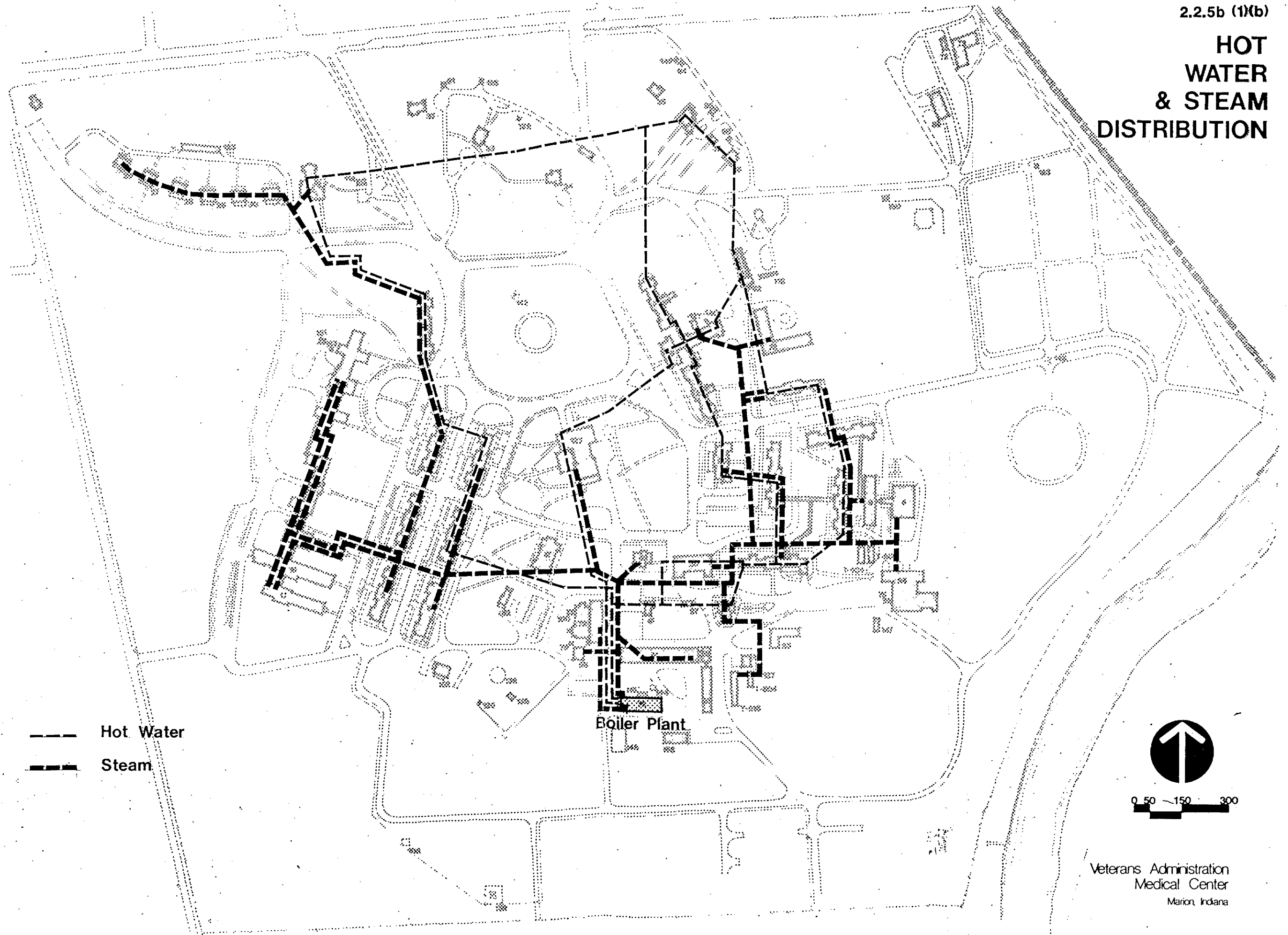
##### (a) Summary

A large portion of the existing buildings use steam supplied from the central plant or their heating medium. High pressure steam is reduced at each individual building thru pressure reducing stations.

Low pressure steam radiation is used extensively in many of the buildings, while others use combinations of air handling systems with steam heating or hot water coils, gas fired furnaces, and cabinet type heaters.

Many of the existing heating systems cannot provide outdoor ventilation air requirements and would have to be replaced with ducted air systems of energy saving design after the building use is decided.

# HOT WATER & STEAM DISTRIBUTION



--- Hot Water  
--- Steam

Boiler Plant



0 50 150 300

Veterans Administration  
Medical Center  
Marion, Indiana

## 2.2.5b

### (2) Existing Air Conditioning Systems

Many of the buildings employ small window air conditioners for individual room cooling. This type of unit can provide some other outdoor ventilation air during the summer cooling season only.

Portions of some existing buildings are air conditioned by air handling units which contain DX. Refrigerant cooling coils and remote air cooled condensers or condensing units located outdoors.

Some existing buildings are presently being remodeled with new central air conditioning systems that use chillers and chilled water for cooling.

### (3) Total Available Capacity

The existing facility uses a central heating steam plant that supplies high pressure steam through underground piped mains for the majority of the buildings. Condensate is returned through underground mains back to the central boiler house.

The steam supply and condensate return piping appears to be in fair to good condition with some sections replaced within the past few years.

Depending on building use and concept alternatives selected some re-routing of heating piping mains is expected.

The present steam demand is approximately 53% of the maximum steam generating capability of the existing boilers. The Facility Engineering department is currently investigating renovation and repairs to the existing Boiler House, boilers, and associated equipment.

2.2.5

c. Electrical, Alarm and Communications System

(1) Existing Primary System

(a) Summary

The primary distribution system consists of a high voltage loop circuit that provides the primary voltage for the individual building transformers. The loop is designed for continuity of service by enabling most of the individual building transformers to be supplied by one of two feeders. The loop system originates at a self-contained enclosure that is labeled as Building #145.

Building #145 is a self-contained unit which consists of two fused disconnects with a tie switch. This unit is the primary service for the entire hospital facility. The service is being fed by two service feeders supplied by the local utility company. Each feeder is connected to a fused disconnect which in turn feeds one side of the primary loop circuit. The tie switch connects both primary service disconnects to one utility feeder if one of the utility feeders is lost.

The primary service unit is manufactured by "Square D". It was installed new in 1978 and is in good condition. The actual loop circuit was installed new in 1978-1979. The transformers and switches that are included in the loop system are manufactured by "S&C", "Square D", or "Transvan". These units were installed new in 1978-1979 and are in good condition.

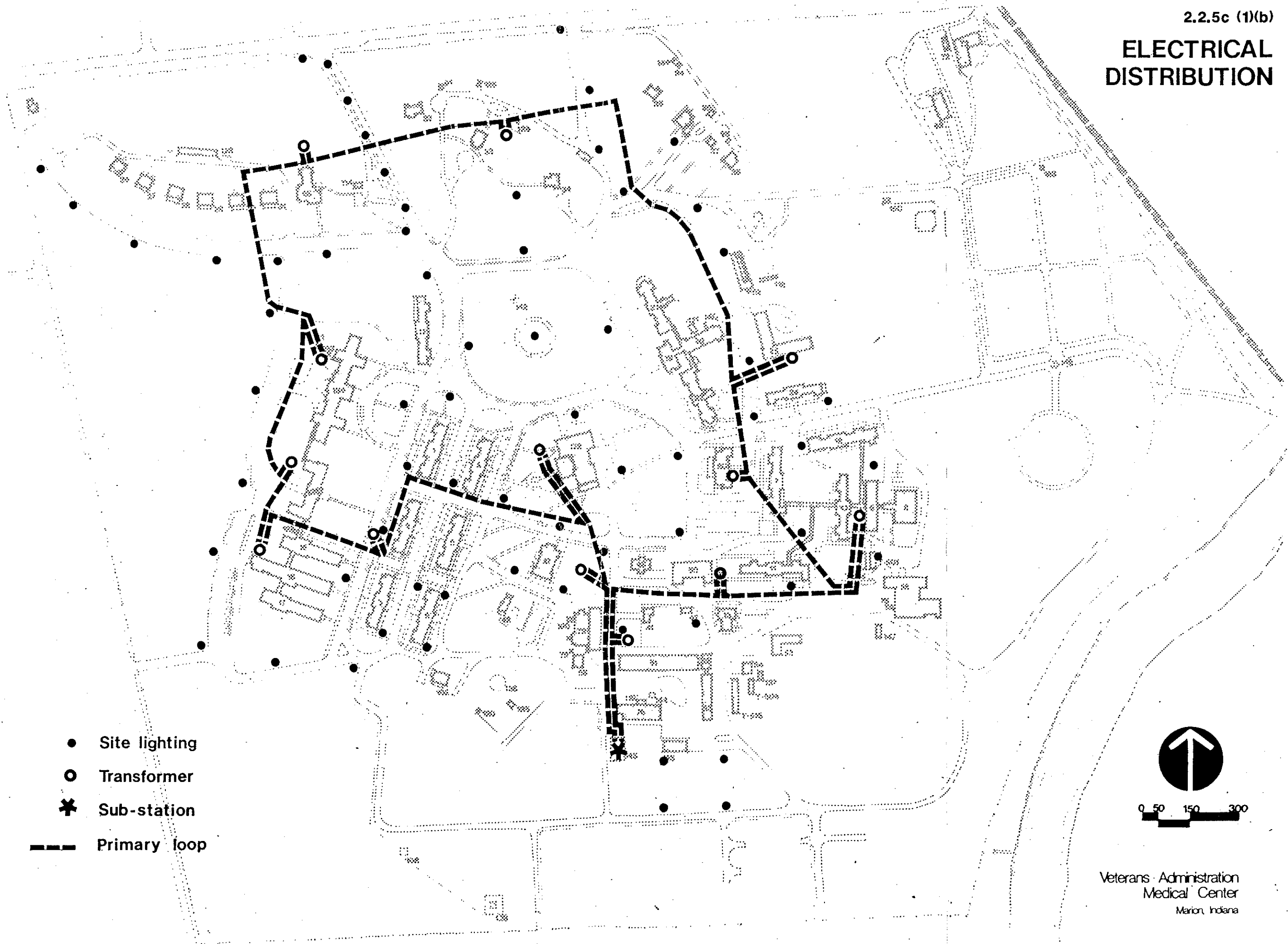
The primary loop system appears to be applicable to the current code. Although the primary loop system is new; the ability for expansion is limited. This is due to the fact that many of the transformers connected to the loop circuit do not have the capability for the addition of any appreciable load, especially building air conditioning. Selected transformers are loaded as follows:

<u>Transformer Building #</u>	<u>Percent Loaded</u>
138	71%
16	64%
122	76%
76	54%
65	41%
9	68%

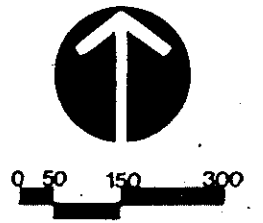
The location of the loop switches and transformers are shown on the electrical site plan. The transformer building number, capacity and the buildings it serves are as follows:

<u>Transformer Building #</u>	<u>Capacity</u>	<u>Building(s) Served</u>
120	225 KVA	120, 135, 102
154	300 KVA	154, 76, 119, 155
13	500 KVA	51, 52, 53, 54, 41, 49, 97, 137, T504, T506, 13
55	75 KVA	55, 75
9	300 KVA	9, 8, 10, T501, T505
50	150 KVA	50
60	150 KVA	60
7	225 KVA	7, 18
25	225 KVA	25, 24, 62, 118, 150
158	500 KVA	158, 20, 19, 21, 22, 121
128	50 KVA	128, 32, 33, 34
149	50 KVA	149, 35, 36, 37, 38
65	112 1/2 KVA	65, 114
157	100 KVA	157, 26, 27, 28, 29, 30, 31, 105
138	1000 KVA	138, 12
124	500 KVA	124, 127, 156
16	500 KVA	16, 15, 17
5	225 KVA	5, 1, 2, 3, 4, 6
122	500 KVA	122
47	75 KVA	47, 42
79	750 KVA	79

# ELECTRICAL DISTRIBUTION



- Site lighting
- Transformer
- \* Sub-station
- Primary loop



Veterans Administration  
Medical Center  
Marion, Indiana

2.2.5c

(2) Existing Secondary Electrical System

Most buildings are served with a main distribution switchboard with distribution section feeding the lighting and power panels. The other buildings are served from the main distribution switchboards in the other buildings. The main distribution switchboards, the lighting and power panels are in good condition.

(3) Existing Emergency System

All the buildings that are used for patient care such as the Ward buildings, administration, Medical Treatment, ICU/RCU, Lab, Treatment and Intermediate nursing care are protected by emergency power. The emergency power consist of an emergency generator with two branch switches which meet the latest codes for nursing homes, residential custodial and care facilities. The generator/building numbers, capacity and the building it serves are as follows:

<u>Generator/ Bldg. No.</u>	<u>Capacity</u>	<u>Bldg. Served</u>
No. 1 (138)	625KVA	138,124,15,16,17,12
No. 2 (25)	125KVA	125
No. 3 (122)	312.5KVA	122
No. 4 (5)	93.8KVA	1,2,3,4,5,6
No. 5 (18)	437.5KVA	7,10,11,18

(4) Existing Isolated Power System

Does not apply

(5) Existing Grounding System

Each building is grounded by bonding the grounding electrode to the main water or sprinkler and the ground rod.

(6) Existing Fire Alarm System

Each building is protected by a "Gamewell" fire alarm system, these systems are connected to the police station. Each building is zoned by the building number, with an outside Bell per building. The signal is detected at the Fire Alarm Annunciator panel at the police station. The police station either calls the fire station by telephone or by the hand carried walkie talkie in case of a fire.

(7) Existing Telephone System

The telephone system is being renovated under a contract at this time.

2.2.5c

(8) Existing Paging System

Does not apply

(9) Existing Intercom System

All the patient care areas are served by an intercom system, each bathroom, bed location has an emergency call devices that call the nurses station in each area.

(10) Existing Cable Television System

The entire campus is served by VA's own cable television system that serve most patient areas.



2.2.6 OVERALL SUMMARY OF MAJOR TECHNICAL DEFICIENCIES

a. TECHNICAL DEFICIENCIES CITED IN THE FUNCTIONAL AND TECHNICAL EVALUATION STUDY

The Functional and Technical Evaluation was completed in October 1981 and The Technical Evaluation updated as part of the FDP project. It stands in place of the Capital Facility Study.

The deficiencies are noted in Section 2.2, CURRENT FACILITIES or Section 2.5, PRIORITIZE DEFICIENCIES. Therefore, the list will not be duplicated in this section.

For the complete study refer to the APPENDICES.

b. TECHNICAL DEFICIENCIES CITED IN VARIOUS SURVEYS

Technical Deficiencies cited in various surveys and reports are noted in Sections 2.1 through 2.5. Therefore, the list will not be duplicated in this section.

The documents reviewed are included in the, APPENDICES section. The documents reviewed are as follows:

- Five-Year Plan
- Major Equipment Study
- JCAH Report
- SERP Report
- IG Audit Report
- Parking Analysis
- Fire and Safety Survey
- Equivalencies from the State Fire Marshall's Office
- Asbestos Survey
- Report of Special Purpose Visit from  
Boiler Specialist

## 2.3 SPACE AND FUNCTIONAL STUDY

- .1 Campus Plan
- .2 Interdepartmental Relationships
- .3 Patient Accommodations
- .4 Handicap Accessibility
- .5 Communications
- .6 Equipment Summary
- .7 Space Analysis Summary
- .8 Summary and Functional Evaluation  
by Department
- .9 Department Evaluation Overview
- .10 Departmental Evaluations
- .11 Functional Plans

### 2.3.1 CAMPUS PLAN

The VA Medical Center, Marion, Indiana was established in 1889 as a branch of the National Home for Disabled Volunteer Soldiers. Its mission at that time was to provide shelter and training to veterans of the Civil War. Commencing in 1921, its role began to evolve into a neuropsychiatric care facility. The mission of the Medical Center today is to provide high quality medical, psychiatric and nursing home care services to all eligible veterans.

The Soldiers Home was constructed to harmonize with the topography thus retaining the natural character of the land. The road network was generated by horse drawn carriage traffic.

The original community was structured on a military format with the veterans organized into companies, living in a barracks environment, with meals served in a large mess hall. By the formal opening date, over 580 veterans were housed at the facility. The original structures, which emphasized more their relationship to the landscape than to one another, functioned extremely well in satisfying the mission of a Soldiers Home.

Approximately one-third of the existing buildings at the Medical Center were constructed during the original development period, from 1889 to 1900. The sitings for the majority of these facilities have no strong geometrical relationship to one another. Buildings No. 1 -6, which are positioned similar to a company in formation are an exception. The largest portion of the existing structures were constructed between 1900 and 1941 when the centers mission changed to provide for neuropsychiatric care. Patient care Buildings No. 15, 16 and 17 were constructed in 1929 as state of the art mental health facilities.

With the construction of the two acute care buildings, 124 and 138 (in 1943 and 1958, respectively), a new core was established at the Medical Center. Modern medical treatment practices led to the development of a consolidated multi-level system and away from the elements of the existing campus plan.

Today's Medical Center is comprised of ninety-nine buildings widely dispersed over a 150 acre campus. Ideally, a campus plan utilizes a spacious land area with buildings on a human scale to create a positive patient environment. Patients are, therefore, encouraged to interact with others in a natural environment. When a Soldiers Home, the campus plan approach was valid. Now, the current levels of medical care at VAMC Marion require a different approach from that taken almost a century ago. The wide range of climate conditions in Indiana work against this highly decentralized campus concept. Patient utilization of clinical services fluctuates with weather conditions. The intensive travel distances inherent in the campus plan alter and adversely affect correct methods of patient treatment.

Disbursement of similar medical activities about the campus necessary for the fragmented patient population results in duplication of equipment, staffing and space thus increasing operational costs.

Two centers of patient care currently exist on the campus, psychiatric patients are housed on the eastern perimeter of the site along with related rehabilitation services. On the western sector are intermediate and psychiatric beds, diagnostic and treatment facilities and medical center administrative functions. A series of patient support functions, dining, canteen, library, etc., provide a tenuous link between the two areas. Inefficient transport routes service both areas.

The distances between buildings, the fragmentation of patients, the segregation of patients from activity areas and the disbursement of support services are all functional deficiencies of this campus plan. Effective and efficient delivery of modern patient care is extremely difficult. Resolution of these shortcomings will require careful planning and significant modifications to the Medical Center as it exists today. An additional challenge will include the utilization of historic structures to meet modern medical standards.

### 2.3.2 INTERDEPARTMENTAL RELATIONSHIPS

An understanding of interdepartmental relationships and the physical needs of each department provides a realistic base for the continued development of the Medical Center complex and becomes part of the framework for long-range planning decisions. The analysis is founded on a detailed study of each department, based on:

- o the department's present work volume, staffing, and equipment;
- o the department's type and scope of work; and
- o the department's current operating functions and activities;

The primary functional goal of VAMC, Marion is to optimize its departmental relationships. Establishment of the appropriate functional relationships between departments at the Medical Center would result in simplified and controlled movement of patients, staff, visitors and supplies. It can also be anticipated that the number of staff, their time, the amount of space utilized, and necessary equipment can be more economically effectively and efficiently utilized.

Staff, patients, visitors, equipment and supplies are constantly moving from one department to another at the Medical Center. Minimizing this movement by clustering complementary services would strengthen the required interactions, increase efficiency and improve the quality of medical care.

VAMC Marion facility does not adequately provide for the necessary functional relationships at the present time. Very few of the department's at the Medical Center are grouped logically. For example, nursing units are located on separate sides of the campus; radiology, although adjacent to ambulatory care, functions one building away from the acute patients; the chapel is beautiful but remote and inaccessible; canteen service, reflects the chapel's problem; and pharmacy adjoins neither ambulatory care nor the acute nursing units, its two primer users. Without such grouping, there is no functional zoning to give the campus cohesiveness. Proper zoning creates the desired separation of dissimilar services such as public and service zones from areas of patient utilization. Whereas at Marion, the disbursement of patients, with its inherent result of service fragmentation, generates constant conflict between lines of movement.

### 2.3.3 PATIENT ACCOMMODATIONS

The majority of Intermediate and Psychiatric nursing units are housed in buildings nearly a century old. As originally designed, the veterans slept in large open wards resembling barracks. Through the years as the mission of the Veterans Administration and Marion changed from a caretaker role to one of total care and treatment, the social and medical need for partitioning of patients into smaller groups became necessary. Hence, through numerous projects, the open wards have been broken into patient quarters of no more than 4 beds each.

As the Medical Center grew, additional bed buildings were needed. Buildings No. 15, 16, 17 and 25 were constructed in the late 1920's and early 30's and now house intermediate beds. Building No. 138, the most recent nursing facility was erected in 1958 and currently houses all acute care beds plus a Nursing Home Care Unit. Although at the time of their construction, these buildings met state-of-the-art standards, they are now between 30 and 50 years old.

Nursing units of these vintages do not meet current VA standards, and the architectural constraints imposed make total adherence to present criteria through renovation an impossibility. Programs and space must be adjusted and compromised. The amount of compromise created by renovation will vary from building to building. In some cases, an evaluation of all factors - space, function, and cost - will determine that a building is inappropriate for patient use.

Intermediate and Acute Nursing Units look for an optimum of 40 beds (DM&S Circular 10-81-117) whereas Marion currently averages 28 and 17 beds respectively. A bed mix of primarily private and semi-private bedrooms is sought, but multiple patient rooms of no more than 4 beds are acceptable. The square footage of existing rooms is near criteria. Isolation rooms, required for acute units, are not provided at Marion as cited in CMD Letter IL 10-79-8. It is desirable to provide all patient bedrooms with shared or private bathing facilities, a feature non-existent at Marion. If congregate toilet and bathing components are necessary they must be handicap accessible. The VA requires 50% of all Intermediate bedrooms and private toilets/baths meet UFAS standards. Ten percent MS&N or acute beds must be accessible .

The staffing of the small nursing units for intermediate and acute beds is inefficient and not cost effective. The increase of staff generated by such small units aggravates an already critical issue that is national in scope - a shortage of trained nurses. The small units preclude the efficient stocking of materials and supplies and, again, increase cost by an inefficient use of staff.

Nursing Home Care Units (NHCU) by criteria are sized for 60 beds. Criteria also limits the bed mix to semi-private and private bedrooms. Except for one private room and one semi-private room all bedrooms share toilets. The single room with private toilet provides accommodations for a female patient and/or isolation capability. The two bed room and its private toilet has additional square footage allowing the NHCU to care for severely handicapped veterans. All patient bedrooms and toilets must be handicap accessible.

Patient rooms for the existing 69 NHCU bed unit are of proper square footage but the spatial configuration on many rooms does not allow for minimum handicap clearance. Only one private toilet exists for the entire unit. All other bedrooms are serviced by congregate toilet facilities.

Psychiatric units average 35 beds, although 5 above the preferred standard (DM&S Circular 10-81-117), this is acceptable. As with other nursing units no private toilets and/or baths exist. The current mix contains many four-bed rooms, that although allowable, are not preferred. The square footage per room is not consistent, nor in many areas of acceptable configuration. VA criteria requires 2 seclusion rooms per 30 bed unit. VAMC Marion has only two seclusion rooms for the entire psychiatric bed compliment.

The accompanying chart indicates the type of accommodations by unit. As shown, 85% or 593 beds are grouped in 3 or 4 bedrooms with no access to private or shared toilet facilities. In fact, only 2% of all beds have direct access to toilets.

# PATIENT ACCOMMODATIONS

BED COMPLEMENT CLASSIFIED  
BY TYPE OF ACCOMMODATION  
(AS OF MARCH 1986)

NURSING UNIT	No. 1	No. 2	No. 3	No. 4	No. 5	No. 10	No. 11	No. 12	No. 15B	No. 16A	No. 16B	No. 16C	No. 17A	No. 17B	No. 18	No. 25	No. 138 2B	No. 138 2C	No. 138 3A	No. 138 3B	No. 138 3C	No. 138 4B	No. 138 4C	Total	Per- cent
Priv. w/o Toilet or Bath	1		1	1	1			2		1	1	1	4			23	3	3	6	1		2	3	55	8%
Private/w Toilet & Bath																				2	2			3	.5%
Semi-Priv w/o Toil or Bath								2	8		2	6	2	4		4	2	2		4		8	2	46	7%
Semi-Priv w/Toilet	2		2														2	2			2			10	1.5%
3-Bed Room w/o Toil or Bath		3						6	3	6	18	18	24	21	6	12	6	12		12	12	12	12	183	25.5%
4-Bed Room w/o Toil or Bath	28	28	28	24	36	48	40	24	20	16	4		8	28	32	20	16							400	57%
4-Bed Room w/Toil or Bath																					4			4	.5%
<b>TOTAL BEDS (Operating)</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>25</b>	<b>37</b>	<b>48</b>	<b>40</b>	<b>34</b>	<b>31</b>	<b>23</b>	<b>25</b>	<b>25</b>	<b>30</b>	<b>33</b>	<b>34</b>	<b>71</b>	<b>33</b>	<b>36</b>	<b>6</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>17</b>	<b>701</b>	<b>100%</b>

Source: Lammers+Gershon Associates, Inc.



#### 2.3.4 HANDICAP ACCESSIBILITY

A goal of the VA Medical Center, Marion, Indiana is to provide the handicapped the right of access to, and the use of all facilities. To achieve this goal of accessibility and to assist in providing normal activity levels associated with daily living functions, specially designed elements of site and architecture have been provided. The Uniform Federal Accessibility Standards publication establishes the compliance standards for facility accessibility by the physically handicapped in all VA facilities.

The Medical Center should be a barrier free campus. Movement about the site for the physically handicapped is being accommodated by the installation of curb cuts and ramps, but access into many buildings remain restricted. The accessibility to the building is as follows: Buildings No. 1, 2, 3, 4, 5, 6, - no accessibility; Buildings No. 8, 9, 10, 16, 17, 18, 19, 21 and 22 - access through adjoining buildings; Buildings No. 7, 11, 13, 15, 20, 25, 47, 49, 50, 53, 65, 121, 122, 124, 138 - directly accessible.

To facilitate the movement of handicapped patients, staff and visitors at the Medical Center provisions for grade level or ramped entries into the buildings are essential. Entry doors should permit wheelchair access with ease of operation. Once inside ramps and/or elevators must be available to make floor level changes accessible. The absence of elevators within numerous patient care buildings represents a major barrier to this system.

Accessibility in the patient's room, where daily living activities take place is of primary importance. The following VA standards set the percentage level of handicap bed accessibility for each type of nursing unit:

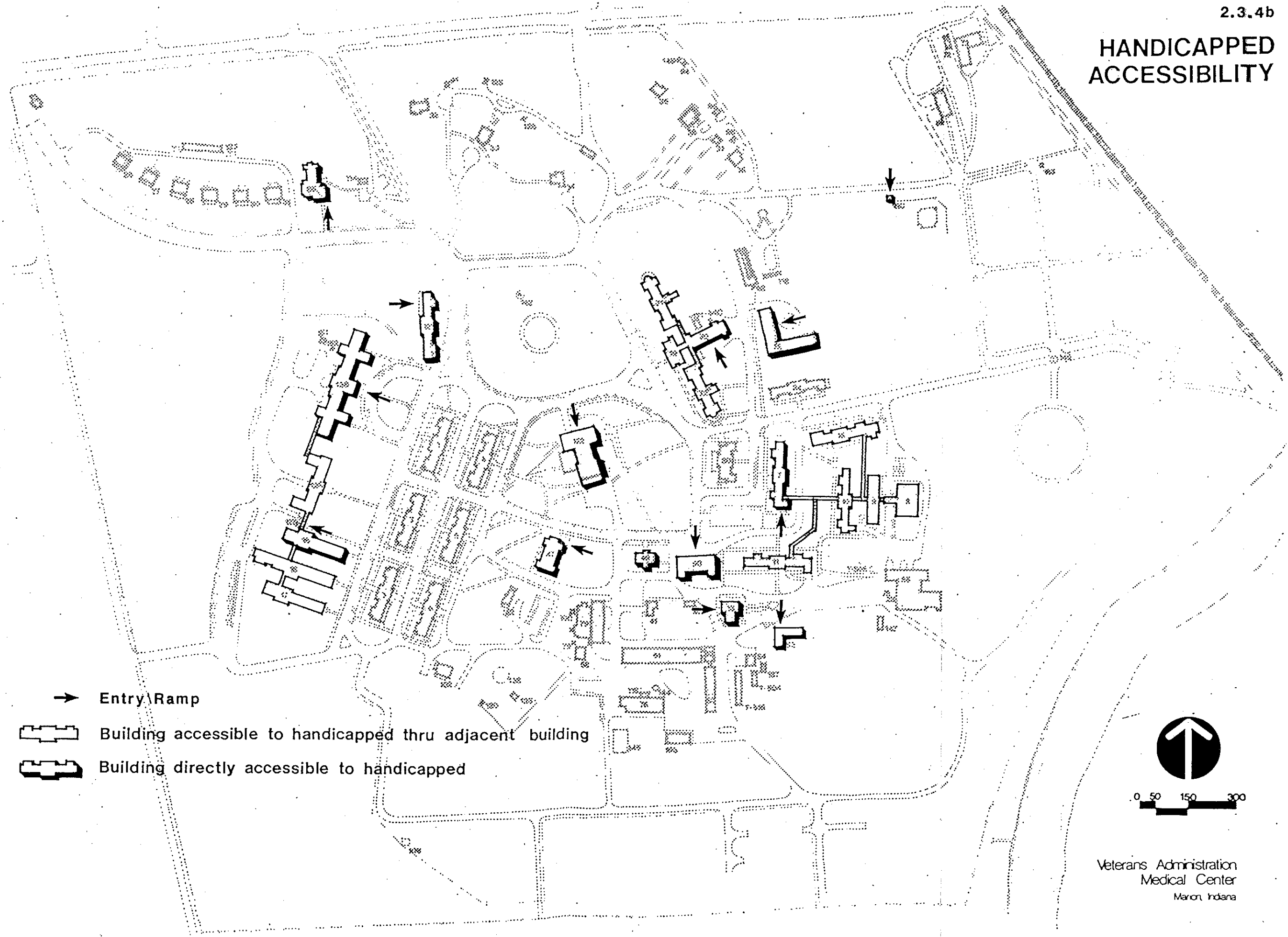
MS&N	10%
Rehabilitation	100%
Intermediate	50%
Nursing Home Care Unit	100%
Psychiatric	10%



By comparison, nursing units for these services at Marion vary in handicap accessibility from unit to unit as shown by the accompanying chart. Only bed access is considered even though some units are marginal on accessible congregate bathing facilities.

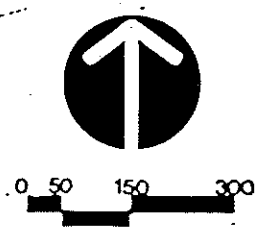
		<u>Compliance</u>	<u>Non Compliance</u>
<u>Medical Surgical and Neurology</u>			
General Purpose ICU	Building 138 3A	o	
Respiratory Care	Building 138 3C	o	
General Medicine	Building 138 3B	o	
<u>Intermediate Medicine</u>			
Unit 15B	Building 15		o
Unit 16A	Building 16	o	
Unit 16B		o	
Unit 16C		o	
Unit 17A	Building 17	o	
Unit 17B		o	
Unit 18	Building 18	o	
<u>Rehabilitation Medicine</u>			
Unit 1	Building 1	o	
Unit 2	Building 2	o	
Unit 3	Building 3	o	
Unit 4	Building 4	o	
Unit 5	Building 5	o	
Unit 10	Building 10	o	
Unit 11	Building 11	o	
Unit 12	Building 12	o	
<u>Nursing Home Care (NHCU)</u>			
NHCU 2A-B	Building 138		o
Geriatric Evaluation Unit 4A	Building 138		o
Geropsychiatric Unit	Building 25	o	

To summarize, barrier free access is mandated by federal law, Proper and efficient medical care is dependent upon ease of patient circulation, and the quality of life for the handicap is largely affected by their freedom of movement.

# HANDICAPPED ACCESSIBILITY



- Entry/Ramp
-  Building accessible to handicapped thru adjacent building
-  Building directly accessible to handicapped



Veterans Administration  
Medical Center  
Marion, Indiana

## 2.2.4

### c. PARKING/DOCKS

#### (1) Summary

Available parking facilities have been categorized under the following types:

	<u>Type</u>	<u>Spaces Available</u>
(a)	Employee/Staff	818
(b)	Visitors/Volunteer	18
(c)	Outpatient/Patient	30
(d)	Handicap	11

The "employee/staff" parking includes all part-time and full-time employees, government vehicles, carpools and escorts. Due to the small parking areas that are located adjacent to buildings or on the streets, some employees park their cars in a space that is some distance away from their work station. Additional paved lots have been added near work areas recently. Proper parking layout increases the capacity of parking and can insure accessibility and limited traffic congestion.

Both function and aesthetics of parking areas should be considered along with the impact of vehicle circulation on site.

Planting perimeter hedgerows will visually screen the rows of cars and minimize dust and particle movement. Planting large evergreens and shade trees will provide shade to keep vehicles cooler in the summer and protect these areas from strong winter winds.

Additional controls favoring small cars and cars carrying more than two people, may also be employed.

Several strategically located organized parking areas around the station would be a possible solution to the problem.

Signage adds to the confused orientation.

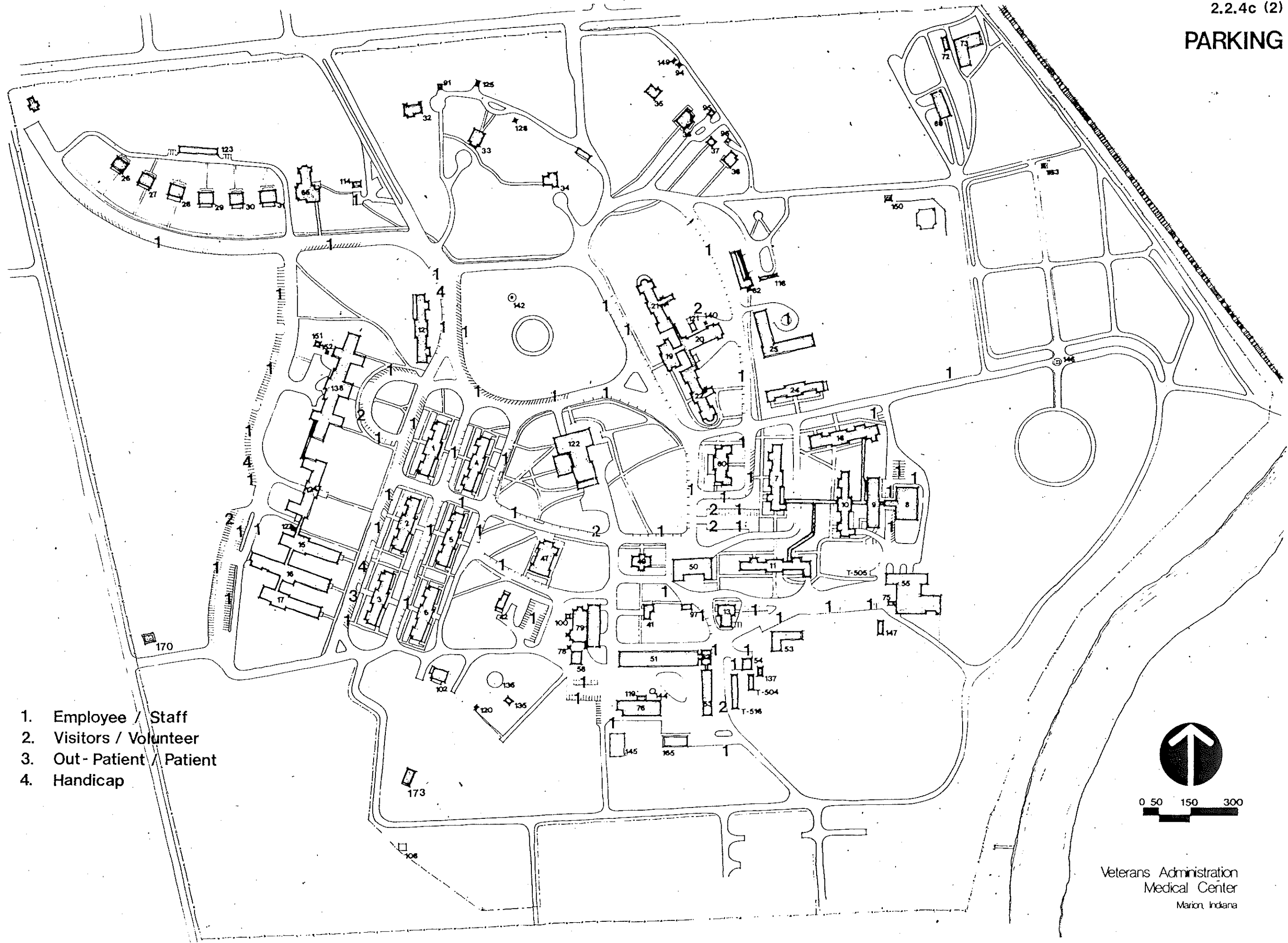
On station supply distribution originates from four major centers remotely located. See Site Plan, Distribution Paths (Supply, Dietary, Laundry and Medication).

(a) Dietary service is located in Building #122, at the center of the site. This generates vehicular traffic in getting supplies from the warehouse and delivering meals to the satellite serving for nursing wards.

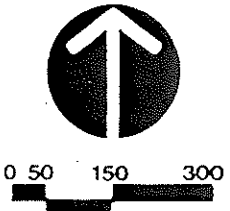
(b) The warehouse is located on the far east side remote from the west service entrance. It would be advantageous to have the warehouse and dietetics contiguous to each other and the site delivery entrance.

- (c) The laundry is centrally located and makes deliveries to all patient buildings, as well as the VA Hospital at Fort Wayne, Indiana, Indianapolis, Indiana and Danville, Illinois.
- (d) Distribution of medications from Building #15 to all patient buildings is a major problem. Additional staff is necessary and security problems are increased. Scheduled deliveries accommodate most medication, but special request always arise.

Each of the distribution patterns creates pedestrian-vehicular conflicts which detracts from the calming effect of the "campus plan".



- 1. Employee / Staff
- 2. Visitors / Volunteer
- 3. Out - Patient / Patient
- 4. Handicap



Veterans Administration  
Medical Center  
Marion, Indiana

## 2.2.4

### d. TOPOGRAPHY

#### (1) Summary

The Mississinewa River, which forms part of the east boundary of the Veterans Administration Medical Center, reached an elevation of 814 feet, Mean Sea Level, adjacent to the Medical Center during the flood of March, 1913. Approximately 1-1/2 miles downstream a flood insurance study submitted to the Department of Natural Resources by the Federal Emergency Management Agency indicates the 100 year frequency flood is one to two feet below the 1913 flood elevation, and the 500 year flood two feet higher than the 100 year flood. This would show the 100 year flood elevation at the Medical Center to be approximately 813 feet and the 500 year flood to be 815 feet.

Since the Veterans Administration Medical Center is located on grounds that are approximately 840 feet, Mean Sea Level, it should be free from flooding from the 100 and 500 year flood from the Mississinewa River.

A small strip of Veterans Administration Medical Center adjacent to the Mississinewa River is zoned for "Flood Way".

The Veterans Administration Medical Center site ranges from nearly level (0-2% slopes) in some areas to moderately steep (18-25%) in others. Some areas have grades that exceed 30%. This undulating ground surface combined with the curvilinear roadway patterns and building layout provides pleasant visual effects and serves to soften the buildings.

The existing structures have been carefully located in such a manner as to enhance and reinforce the natural character of the area provided by the changes in topography.

The highest point of ground elevation is approximately 847.0 at the southwest portion behind Building 102 to a low point of approximately 800.0 along the bank of the Mississinewa River. The second highest point is 845.0 located approximately around the flagpole in the center of the complex. See the Topography map.

Parking areas and delivery areas have been maintained at a maximum grade of 3% for proper storm drainage and vehicular maneuverability. Some approach drives and arterial roadways exceed 3% but pose no access difficulties.

There presently exists several wet areas around the Veterans Administration Medical Center Site. Some wetness is attributed to low areas and small watersheds causing water to collect in one area. Other wet areas have been caused by inlets, clogged with leaves and other debris which restrict the proper flow of storm water into the sub-surface drainage system. Further engineering investigations are recommended and necessary to determine the causes of sub-surface drainage problems. See storm sewer map section for location of existing storm lines.

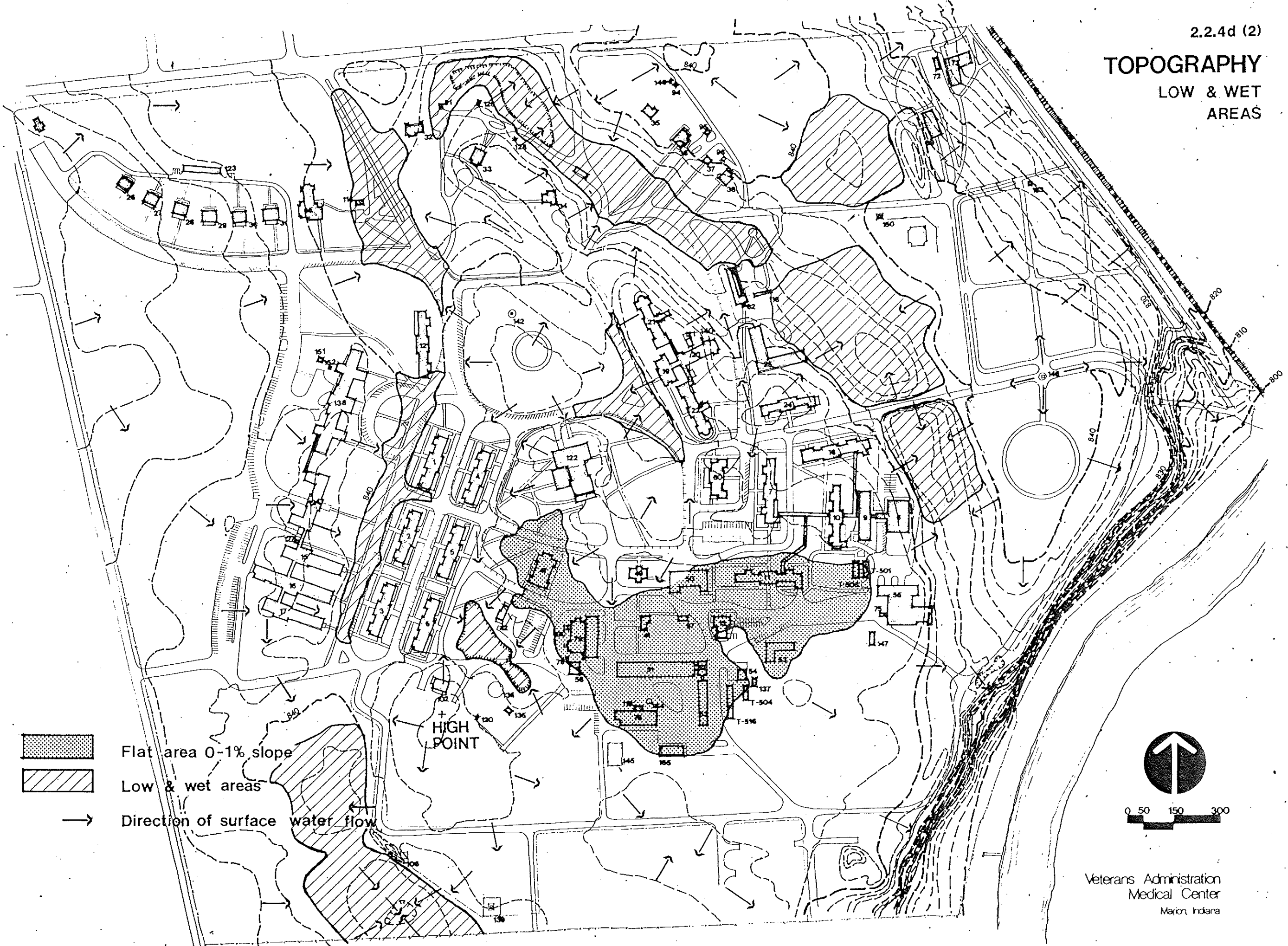
As future building development and expansion take place, it is recommended that care be taken to maintain the natural character of the site provided by the changes in topography.

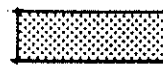
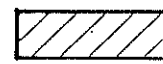

Proper planning, engineering and an awareness of the natural beauty provided by the topography will also help to insure the preservation and proper utilization of the open spaces within the VA Medical Center complex.

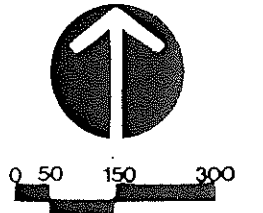


# TOPOGRAPHY

LOW & WET  
AREAS



-  Flat area 0-1% slope
-  Low & wet areas
-  Direction of surface water flow



Veterans Administration  
Medical Center  
Marion, Indiana

## 2.2.4

### e. EXISTING VEGETATION

#### (1) Summary

A majority of the established species and varieties of plant material at the Veterans Administration Medical Center are in excellent condition. Some of the larger trees have died and have been removed.

The majority of existing large trees are deciduous, mature in size and large enough to create bold and dramatic forms that assist with smaller plants in bringing the expansive structures down to a human scale.

The density and height of crowns of these trees lend a feeling of enclosure to the whole complex and still allow enough sunlight to penetrate through for the smaller species to flourish. Some of these trees existed prior to any of the building development beginning in 1889. These areas provide the Veterans Administration Medical Center with landscaped areas relatively undisturbed and natural in character.

This natural character of the landscape extends throughout the Medical Center complex with the help of its vast open spaces and rolling topography.

Some additional plant material has been installed over the years in symmetrical and curvilinear patterns to provide vistas, views, canopy effects to enframe and enhance the buildings and visually screen specific areas from others.

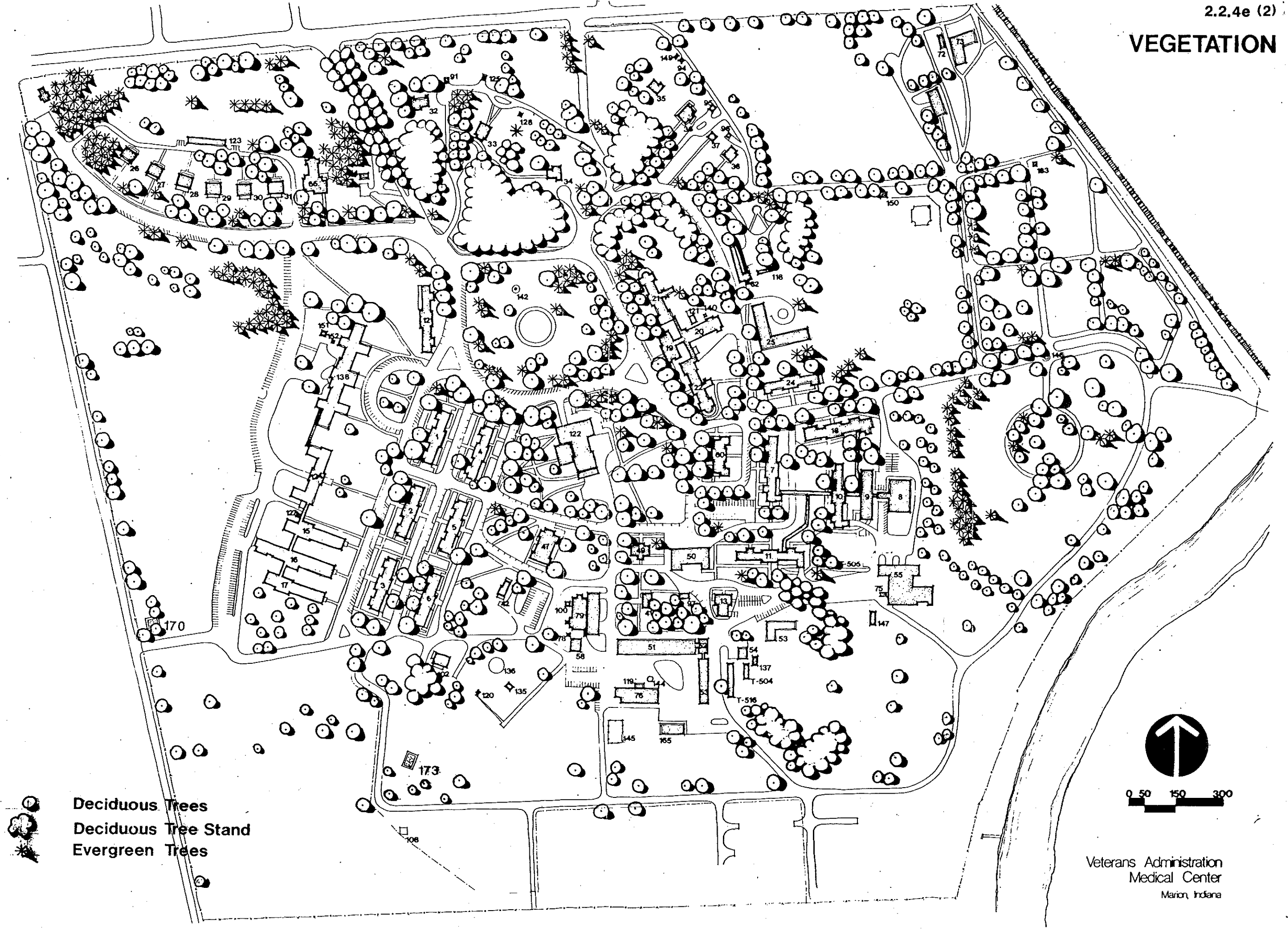
In the spring and summer, splashes of bright colors from various annual and perennial flowers line the walks, entrances to buildings and extend along the foundations of some buildings. The patients are not only able to enjoy the visual effects of the flowers but they are also instrumental in planting and maintaining them through the educational recreational programs.

Over 95 acres of lawns on the Veterans Administration Medical Center ground require mowing and maintenance.

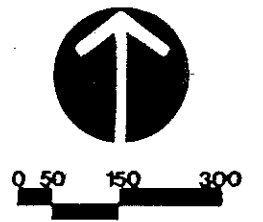
The use of low growing and slow growing plant material has been implemented. Ground covers are desirable from a maintenance aspect, shade tolerant, less expensive than shrubbery, provide more textural interest and help to delineate specific areas more clearly. In addition, stone or bark mulch is being used in areas where plant growth is difficult to maintain due to improper orientation to the sun, strong winds or unfavorable soil conditions. Mulch is easily installed and virtually maintenance free and if used in addition to plant material, can provide considerable aesthetic appeal.

It is recommended that additional ornamental plant material be used for additional seasonal interest and to visually lower the buildings to a human scale. Additional plant material along foundations is also recommended. This would provide some thermal control and assist in visually softening the hard surfaces of the buildings.

# VEGETATION



Deciduous Trees  
Deciduous Tree Stand  
Evergreen Trees



Veterans Administration  
Medical Center  
Marion, Indiana

## 2.2.4

### f. SOILS

#### (1) Summary

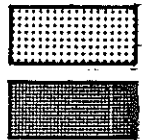
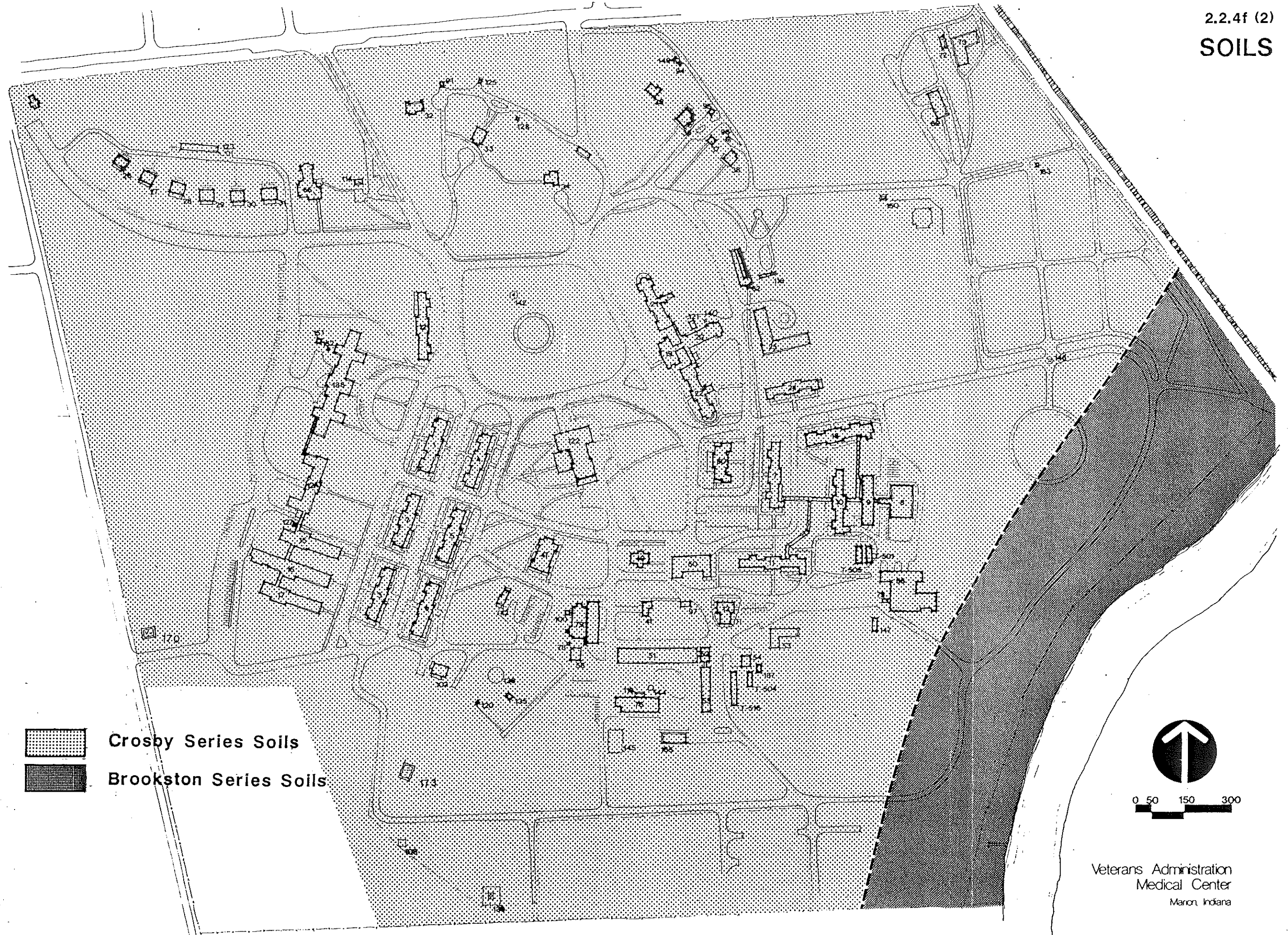
Soils on the Veterans Administration Medical Center site are of the Brookston Series and the Crosby Series.

Classified by the Soil Conservation Service of the U. S. Department of Agriculture, the majority of the project area is made up of the Crosby Series. This soil is somewhat poorly drained. This indicates that the permeability of water through the soil is slow which may cause severe surface wetness. Bedrock is located at an approximate depth of sixty feet.

A small portion of the project area is made up of the Brookston Series soils which are deep and also very poorly drained. These soils may cause severe ponding unless properly sloped to provide ample storm drainage runoff.

Due to the ponding and wetness of the Brookston and Crosby soils, additional soil tests should be made prior to any building development.

Foundation drainage will be required for all below grade spaces in any new buildings.



Crosby Series Soils  
Brookston Series Soils

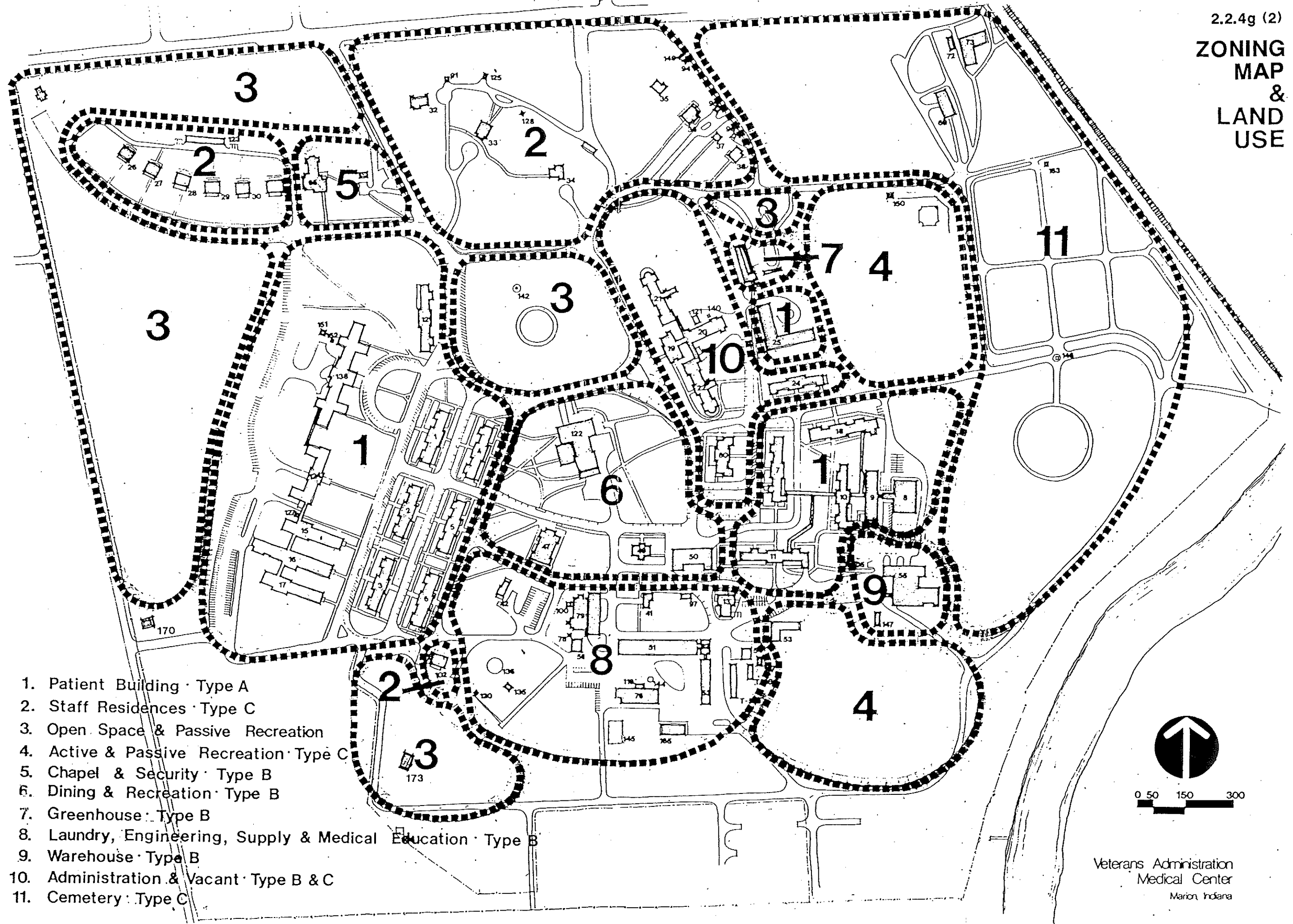


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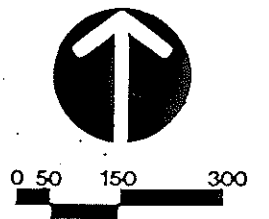
Veterans Administration  
Medical Center  
Marion, Indiana



ZONING  
MAP  
&  
LAND  
USE



- 1. Patient Building - Type A
- 2. Staff Residences - Type C
- 3. Open Space & Passive Recreation
- 4. Active & Passive Recreation - Type C
- 5. Chapel & Security - Type B
- 6. Dining & Recreation - Type B
- 7. Greenhouse - Type B
- 8. Laundry, Engineering, Supply & Medical Education - Type B
- 9. Warehouse - Type B
- 10. Administration & Vacant - Type B & C
- 11. Cemetery - Type C



Veterans Administration  
Medical Center  
Marion, Indiana

2.2.4

g. LAND USE

(1) Summary

The Veterans Administration Medical Center is completely surrounded by county property, but is included within the Marion city limits under the City's jurisdiction.

The Medical Center property is zoned according to the 1974 Grant County Zoning Ordinance. This area is currently zoned "Professional Offices - Residential (PB) and Floodway" (FW) and classified under Commercial Uses. This district has been established as a buffer, generally between commercial and residential districts permitting selected business and professional uses that have limited contact with the public. See the Zoning Map.

Located north of 38th Street between Lincoln Avenue and Adams Avenue is a low density Multiple Family Residential Area (R-3), approximately 10 acres in size. North and west of this R-3 use is an 8 acre single family residential area (R-2) located on Lincoln Avenue.

The Floodway District, designated "FW" is one of two divisions within the Flood Plain District, Classification (FP). Only a small area east of the Veterans Administration Medical Center adjacent to the Mississinewa River is classified as a Floodway District. This small area of the Veterans Administration Medical Center is currently vacant and unused. It consists of a thick stand of scrub vegetation and is not easily accessible. There are no plans for future development of this area.

Within the Floodway, the following uses are permitted, provided they do not involve any structure, obstruction, deposit or excavation according to the area wide Zoning Ordinance/Master Plan Ordinance for Grant County, Indiana.

- (a) Agricultural uses such as the production of crops, pastures, orchards, nurseries, vineyards and general farming.
- (b) Forestry, wildlife areas and nature preserves.
- (c) Parks and recreational uses such as golf courses, driving ranges and play areas.

On the corner of 38th Street and Adams Street and continuing north along the Penn Central Railroad is an area zoned I-1, light industry. The areas directly north of the Veterans Administration Medical Center on the north side of 38th Street, located in the county and under Grant County's jurisdiction, consist of a variety of uses that include Federal Credit Union, Bethel Church, Center Township Fire Department and some residences. Businesses and retail establishments are located on 38th Street adjacent to the Medical Center up to Lincoln Avenue and Adams Street and are also



under the county's jurisdiction. South of the Medical Center is currently used as agricultural crop land. To the east is the railroad and the Mississinewa River.

Presently, there are no future zoning changes planned by either the Grant County zoning or Marion City zoning.

The current Land Use and existing building plan is divided into the following uses:

- |   |            |
|---|------------|
| (a) Patient Building                                  | Type A     |
| (b) Staff Residences                                  | Type C     |
| (c) Open Space and Passive Recreation                 |            |
| (d) Active and Passive Recreation                     | Type C     |
| (e) Chapel and Security                               | Type B     |
| (f) Dining and Recreation                             | Type B     |
| (g) Greenhouse  | Type B     |
| (h) Laundry, Engineering Supply and Medical Education | Type B     |
| (i) Warehouse   | Type B     |
| (j) Administration and Vacant                         | Type B & C |
| (k) Cemetery  | Type C     |

The buildings, patient and otherwise are distributed across the campus, creating long distances of travel to patient, staff and materials. There is a limited area for growth to the south of Buildings 17, 3 and 6. The Cemetery uses the east and northeast portion of the site and plans to expand west.

It is recommended that a further Master Plan study be undertaken to determine the best use of the 105 acres of open space. Present development needs must carefully be weighed against future needs along with their compatibility and suitability to the natural character of the existing open spaces and overall landscape.

2.2.4 h. NOISE

(1) Summary

The Noise Contour Map indicates those areas with normally unacceptable, normally acceptable and clearly acceptable noise levels. The areas of concern are the north (38th Street) and

West (Lincoln Boulevard) boundaries. Noise levels at the streets themselves are normally unacceptable. The part of the site that borders the streets, approximately a 250-foot wide band, has noise levels that are normally acceptable; this affects buildings 170, 26, 27, 28, 29, 123, 32, 91, 125, 35, 149, 94, 72 and 73. Noise levels for the remainder of the site, well over 80% of it, are acceptable; most of the buildings and activity areas are located in this portion of the site.

## 2.2.4

### i. VISUAL ANALYSIS

#### (1) Summary

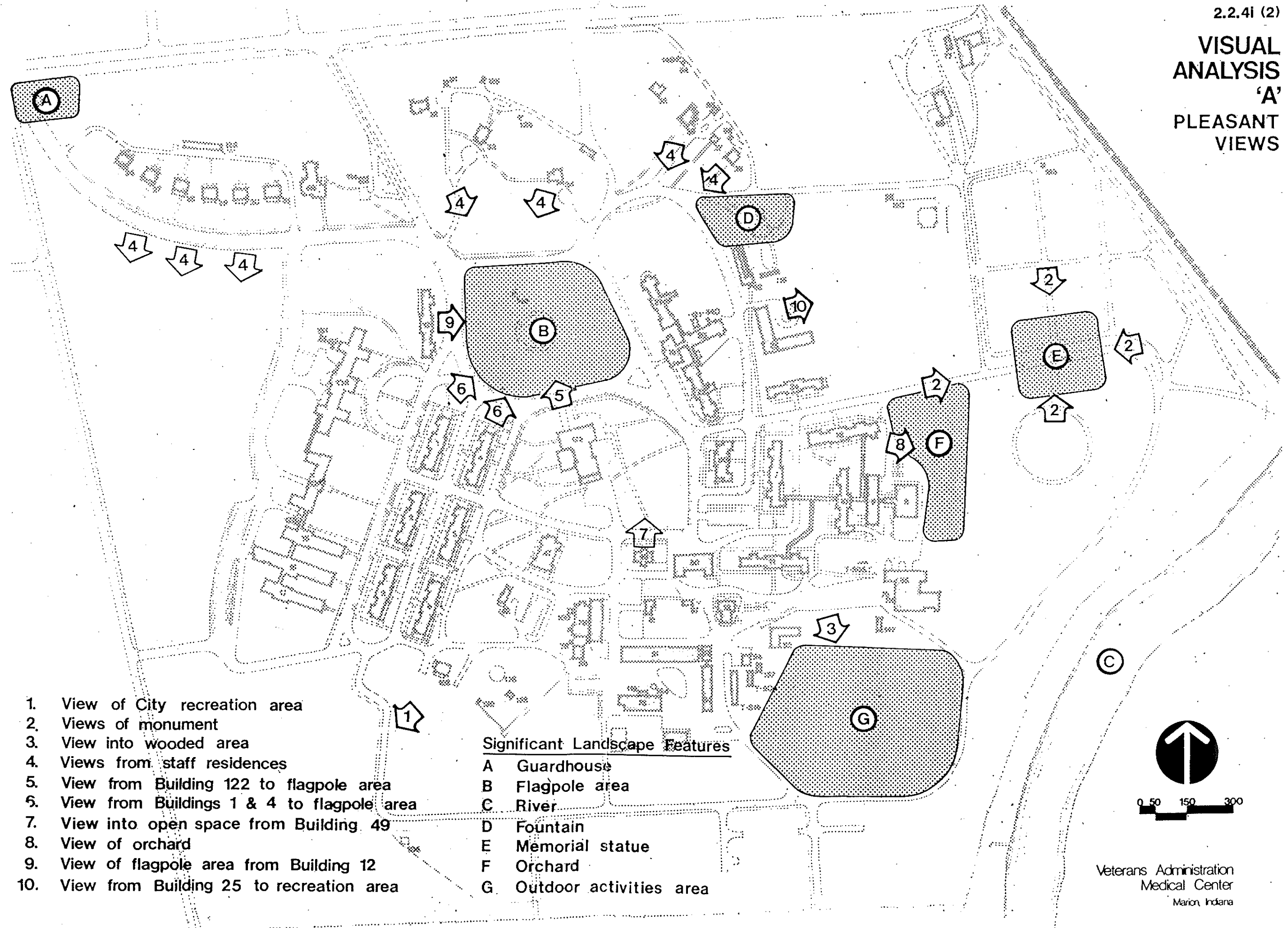
Also refer to the Site Plans Visual Analysis - Pleasant Views and Visual Analysis - Objectionable Views

- Pleasant Views should be maintained and enhanced as possible, they include
- Guardhouse: At the corner of 38th Street and Lincoln Boulevard
- Steel Circle/Flagpole Area: The focus of the Campus.
- Mississinewa River: Views are currently limited and poorly developed.
- Fountain: North of Buildings 62 and 18.
- Memorial Mounument at the Cemetery
- Orchard: East of Building 8
- Outdoor Activities Area: South of Building 11.

The effect of the Objectionable Views should be lessened; planting or other screening or courtyard development should be considered. These views include:

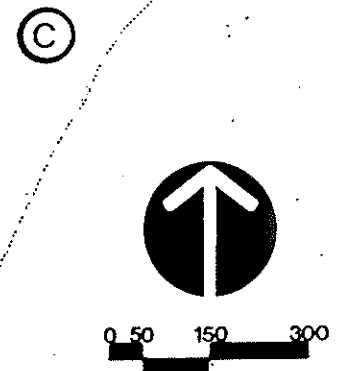
- 38th Street: From the residences
- Parking and loading areas: Primarily west of Buildings 138/124/15/16/17 and in the Dining and Recreation and Laundry/Engineering/Supply and Medical Education areas of the site.
- Restricted by Another Building: Primarily courtyards between Buildings 15, 16, and 17 and Buildings 7, 10 and 18.

**VISUAL ANALYSIS**  
**'A'**  
**PLEASANT VIEWS**



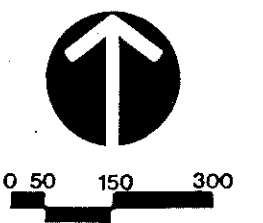
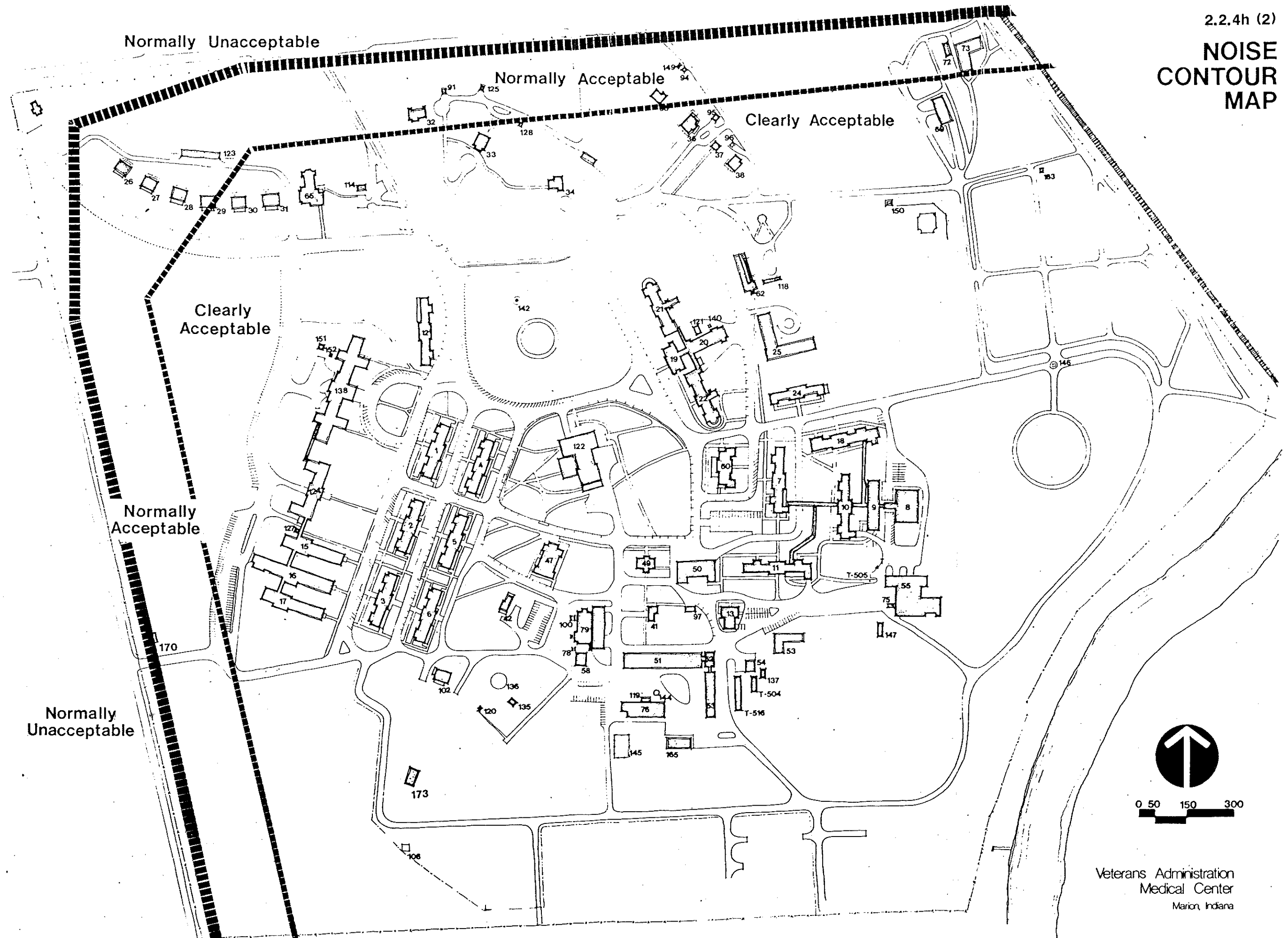
1. View of City recreation area
2. Views of monument
3. View into wooded area
4. Views from staff residences
5. View from Building 122 to flagpole area
6. View from Buildings 1 & 4 to flagpole area
7. View into open space from Building 49
8. View of orchard
9. View of flagpole area from Building 12
10. View from Building 25 to recreation area

- Significant Landscape Features**
- A Guardhouse
  - B Flagpole area
  - C River
  - D Fountain
  - E Memorial statue
  - F Orchard
  - G Outdoor activities area



Veterans Administration  
 Medical Center  
 Marion, Indiana

# NOISE CONTOUR MAP



Veterans Administration  
Medical Center  
Marion, Indiana

# SPACE ANALYSIS SUMMARY

DEPARTMENT/SERVICE	SERVICE CODE	EXISTING SERVICE NET SQ. FT.	EXISTING SERVICE GROSS SQ. FT.	% OF REQ. NSF AVAILABLE (EXISTING)	PROGRAMMED REQUIRED NET SQ. FT.	PROGRAM CONVERTED GROSS SQ. FT.	% OF REQ. NSF AVAILABLE (PROJECTED)	REMARKS
AMBULATORY CARE	262	4,800	8,205	45	9,063	15,407	52	
AUDIOLOGY & SPEECH PATHOLOGY	204	890	1,520	45	1,785	2,856	50	
BUILDING MANAGEMENT SERVICE	406							
ADMINISTRATION, LLTS		1,690	2,197	45	3,340	4,342	51	
LAUNDRY		18,410	22,300	100	-	-	-	No projected program
CANTEEN SERVICE	206	9,458	16,640	75	10,961	13,153	86	
CARDIOLOGY LABORATORIES	210	-	-	-	425	638	0	Existing sq. ft. (one room) is included in Respiratory Care.
CHAPLAIN SERVICE	208	6,458	8,964	185	3,002	3,903	210	
CLINICAL SERVICES ADMINISTRATION	214	1,367	2,310	105	1,120	1,456	122	
DENTAL SERVICE	222	1,921	3,358	75	2,880	4,608	66	
DIETETIC SERVICE	224	30,886	42,676	190	14,132	18,372	218	
ELECTROENCEPHALOGRAPHY (EEG) LABORATORY	226	665	730	90	660	990	100	
ENGINEERING SERVICE	230	36,581	47,555	255	12,247	15,921	298	
EYE CLINIC, ENT (EAR, NOSE, THROAT)	232, 233	-	-	70	555	880	81	Existing sq. ft. is include in the Outpatient Clinic
FISCAL SERVICE	234	2,244	2,973	195	990	1,188	226	
HOSPITAL DIRECTOR'S SUITE	238	2,278	3,415	50	4,920	5,888	46	
LABORATORY SERVICE	240	2,620	3,668	50	4,584	6,418	57	
LIBRARY SERVICE	400	2,398	2,878	50	4,066	4,880	58	
MEDICAL ADMINISTRATION SERVICE	246	5,442	7,201	60	7,487	8,984	72	
MEDICAL MEDIA PRODUCTION SERVICE	248	270	320	85	340	442	79	
NURSING SERVICE ADMINISTRATION	254	1,355	1,568	40	2,980	3,874	45	
NURSING UNITS (TOTAL)		169,575	266,373	95	169,986	237,980	100	
INTERMEDIATE MEDICINE UNIT 15-B	100	5,821	9,264	80			68	Based on 36-bed unit (projected program)
INTERMEDIATE MEDICINE UNIT 16-A	100	4,371	7,924	80			52	Based on 36-bed unit (projected program)
INTERMEDIATE MEDICINE UNIT 16-B	100	4,580	9,886	80			54	Based on 36-bed unit (projected program)
INTERMEDIATE MEDICINE UNIT 16-C	100	5,695	9,476	95			67	Based on 36-bed unit (projected program)
INTERMEDIATE MEDICINE UNIT 17-A	100	6,065	10,310	85			72	Based on 36-bed unit (projected program)
INTERMEDIATE MEDICINE UNIT 17-B	100	6,195	10,515	80			73	Based on 36-bed unit (projected program)
INTERMEDIATE MEDICINE UNIT 18	100	8,412	12,492	105			100	Based on 36-bed unit (projected program)
NURSING HOME CARE UNIT 138	106	13,824	24,418	90			95	Based on 60-bed unit (projected program)
GPICU 3-A 138	102	1,208	1,820	45			44	
GENERAL MEDICINE UNIT 3-B 138	100	4,725	7,808	120			58	Based on 38-bed unit (projected program)
RESPIRATORY CARE UNIT 3-C 138	100	3,751	5,863	90			46	Based on 38-bed unit (projected program)
GERIATRIC EVALUATION UNIT 4-A 138	106	4,961	7,802	85			60	Based on 31-bed unit (projected program)
REHABILITATION UNIT 4-B 138	100	5,163	7,808	110			91	Based on 20-bed unit (projected program)
ACUTE PSYCHIATRIC LOCKED UNIT 1	110	7,954	13,480	95			96	Based on 31-bed unit (projected program)
ACUTE PSYCHIATRIC ALCOHOL TRM UNIT 2	110	9,829	15,227	120			120	Based on 31-bed unit (projected program)
ACUTE PSYCHIATRIC OPEN UNIT 3	110	8,086	13,230	100			98	Based on 31-bed unit (projected program)
ACUTE PSYCHIATRIC LOCKED UNIT 4	110	8,039	13,230	120			97	Based on 31-bed unit (projected program)
ACUTE PSYCHIATRIC SHORT TRM OPN UNIT 5	110	7,842	13,460	80			95	Based on 31-bed unit (projected program)
EXTENDED PSYCHIATRIC NURSING UNIT 10	110	9,899	15,572	75			120	Based on 31-bed unit (projected program)
EXTENDED PSYCHIATRIC NURSING UNIT 11	110	9,401	14,290	100			114	Based on 31-bed unit (projected program)
ALCOHOL DEPENDENCY TREATMENT UNIT	110	13,320	22,792	150			162	Based on 31-bed unit (projected program)
GEROPSYCHIATRIC & LONG TRM CARE UTS. 18	100	20,434	33,411	120			140	Based on 60-bed unit (projected program)
OUTPATIENT PSYCHIATRIC SERVICE	260	5,068	8,656	85	5,171	7,756	98	
PERSONNEL SERVICE	266	1,879	2,066	100	1,735	2,255	108	
PHARMACY SERVICE	268	1,400	1,800	85	7,594	9,872	18	
PODIATRY	262	1,727	3,724	-	-	-	-	No program supplied
PSYCHIATRIC SERVICE ADM	319	380	494	65	510	663	75	
PSYCHOLOGY SERVICE	272	1,242	1,360	70	1,550	2,170	80	
RADIOLOGY SERVICE	276	1,401	2,242	30	4,050	6,480	35	
RECREATION SERVICE	269	27,043	30,457	80	7,190	9,347	324	Existing facilities include a gymnasium/bowling alley 16,816, a theater - 9/36 & additional facilities
REHABILITATION MEDICINE SERVICE	270	37,574	52,603	200	16,256	22,758	231	
RESPIRATORY CARE PROGRAM	212	1,402	3,192	90	1,296	1,814	108	
SECURITY	279	516	682	80	625	813	83	
SERVICE ORGANIZATIONS	280	-	-	-	600	720	-	
SOCIAL WORK SERVICE	282	2,265	3,600	140	1,400	1,820	162	
SUPPLY SERVICE								
ADMINISTRATION	285	2,345	2,804	75	2,660	3,458	88	
SUPPLY PROCESSING & DISTRIBUTION	284	3,937	4,188	75	4,514	5,868	87	
WAREHOUSE	291	23,976	30,836	180	11,315	12,446	211	
VETERANS ASSISTANCE UNIT	218	352	390	110	270	324	130	
VOLUNTARY SERVICE	290	2,092	2,719	130	1,362	1,634	154	
<b>TOTAL</b>		<b>411,664</b>	<b>598,258</b>	<b>95%</b>	<b>323,016</b>	<b>441,565</b>	<b>106%</b>	
<b>TOTAL GROSS SQ. FT. OF THE ENTIRE MEDICAL CENTER</b>			<b>1,081,753</b>					

### 2.3.5 COMMUNICATIONS

Communication within the Medical Center is directly affected by distance and the placement of functional activities (both by zones and department). This places a greater emphasis on the use of technology for communication.

The existing telephone system which provides the only means of electronic communication for numerous services on the campus is inadequate. The limited number of lines available to each service and maintenance problems result in a communication network which does not provide adequate service for the Medical Center. This has impaired internal communications as well as communications with areas outside the Medical Center. The VA has scheduled a FY 87 project to replace the existing telephone system which will resolve all existing deficiencies. The new system will initially have 1,000 voice instruments and provide access for radio and audio paging, modem and direct computer dial-up. Features which will greatly improve the Medical Center's electronic communication include call transfer, pick-up, forwarding, queing and ring back, external and internal conferencing and will interface with a proposed direct dial dictation system.

Automated data processing capabilities at the Medical Center are currently extensive. The system supports over 400 individual users with 250 devices such as terminals and printers. Service applications include Dietetics, Engineering, and Dental with Radiology and Nursing to be brought on-line in this year.

Information management is not limited to the campus. VAMC-Marion through selected services access regional and national (VA) E-mail systems. Within the district, ADP is working with other medical centers to allow shared data basic access for both patient and general information. Other system improvements including Data Over Voice capabilities will link all wards and those services which have little or no ADP access. An integrated campus wide word processing plan, scheduled for completion this year, will provide an enhanced level of communication capabilities.

The progress made to date and those system improvements which are being implemented will allow the Medical Center to provide modern ADP technology, essential in the delivery of medical care.

### 2.3.6 EQUIPMENT SUMMARY

Major Medical Center equipment grouped by service with its description, date acquired, and anticipated date of replacement, plus current value of equipment, anticipated replacement cost (at time of replacement) and any special requirements are all listed on the survey found in the appendix.

The schedule compiled and maintained by the Medical Center indicates in some cases that the replacement date has passed and no new date is shown. For example, in Rehabilitation Medicine Service, a stationary bath lift was scheduled for replacement in April of 1984 at a cost of \$1,900. This piece of equipment and similar circumstances indicate the a replacement has not been acquired. The condition of each piece is not known, but assumed in working order.

The replacement of equipment, even major pieces such as x-ray units will have little effect on Marion's planning process. Although acquisition of new equipment would best coincide with any construction in its area, this is not mandatory. Most, if not all, items listed could be purchased as scheduled and relocated as necessary. The only exceptions being equipment for programs that will be terminated according to FY 2000 projections. For these instances, such as a new pin sitter for the bowling lanes, discretion should be exercised in the allocation of funds.



### 2.3.7 SPACE ANALYSIS SUMMARY

This chart summarizes visually and quantitatively by service the space that exists and the space that is required to fulfill the FY 2000 program. The space is shown in net and gross square feet. The totals for each line item are calculated but should be viewed with an understanding that the numbers do not reflect the square footages of the entire VAMC campus. There are existing structures that are not patient orientated and thus not tabulated plus large volumes of vacant under utilized space. It should be noted that the deficiencies do not constitute recommendations for immediate corrective action. Corrections should be made only after careful view of the finished Facility Development Plan.

Service Title - Each service that exists is listed alphabetically. In addition, services that are programmed but at present do not exist are noted. Podiatry does not have available FY 2000 space requirements. While a service like Eye and ENT is shown combined although projected space indicates separate clinics.

Service Code - This number corresponds to the Service Chapter in the Planning Criteria for VA Facilities, H-08-9.

Existing Service Net Sq. Ft. - The net square footage describes the usable floor area by service.

Existing Service Gross Sq. Ft. - This figure includes the net figure and all space within the department such as columns, walls, stairs, mechanical chases, etc.

Percent of Required NSF Available (Existing) - The percentage indicated is a professional estimate based on comparing the existing net square feet to that required to accommodate the current workloads staffing and/or beds.

Programmed Required Net Sq. Ft. - The number shown is the approved space requirement for FY 2000 as provided by the VA.

Programmed Converted Gross Sq. Ft. - This figure was arrived at by multiplying the programmed required net by a VA standard conversion factor for that department.

Percent of Required NSF Available (Projected) - The percentage is obtained by comparing the existing net square footage to the projected program net for FY 2000.

Remarks - Any comments pertinent to an individual service which affect or clarify the space calculations.

The total utilized space at Marion is 411,664 net square feet or about 494 net square feet per current operating bed. Projected net square feet for FY 2000 is 323,016 or 480 net square feet per bed. Although as calculated the figures indicate sufficient net square footage available to house all the FY 2000 program, note the percentages of available NSF for critical services are meaningfully deficient. The majority of nursing units fail to meet 75% of required NSF. Many of the remaining units have such an excess of square footage that their efficiency is compromised also. Laboratory service approaches 50% deficiency. Critical shortages exist in pharmacy, radiology, and ambulatory care.

Of VAMC Marion's total gross square feet of 1,081,753, only 266,373 gross square feet is devoted to nursing units, a mere 25%. the projected gross square feet will only require 22% of the available space. Of the existing 266,373 gross square feet presently devoted to nursing units only 73,200 can be considered adaptable through renovation to meeting current VA design criteria for nursing units.

### 2.3.8 SUMMARY AND FUNCTIONAL EVALUATION BY DEPARTMENT

This section summarizes in chart form the narrative departmental, functional evaluation found in 2.3.9. Five major areas that affect the functionality of the department are rated. A numerical value is assigned to each area for each department so that some conclusion may be drawn about the severity of the deficiency. This will allow for more objectivity in prioritizing corrective action. The standard for evaluation is the Planning Criteria for VA Facilities, H-08-9.

The columns from left to right across the chart are as follows:

Department/Service - Listed in alphabetical order from top to bottom, all existing departments/services at the Medical Center are evaluated including each individual nursing unit.

Service Code - This code is the chapter number assigned to the service in the Planning Criteria for VA Facilities H-08-9.

Space - This is a comparison of existing net square feet to the projected for FY 2000. Adjustments were made for nursing units in recognition of the bed size difference between existing and projected units.

Function Intradepartmental - This addresses the functional relationships within the department including space adjacencies, circulation, accessibility and configuration that affect workflow.

Function Interdepartmental - Each department has various functional relationships with other departments at the Medical Center. These relationships may involve inpatient or outpatient care, supply delivery, information transfer or management support. This evaluates how well these relationships are presently satisfied.

Environment - This evaluates environmental factors that affect the departments ability function in an efficient and effective manner. These factors include physical appearance, room finishes and furnishings, general illumination, handicap accessibility and heating ventilating and air conditioning.

Equipment/Systems - This evaluates fixed equipment, casework, medical gases, nurse call and intercoms. This section does not address equipment or systems that are part of the building system.

Overall Summary - This rating is the average of the five areas evaluated.

Remarks - These comments include any qualifying information for the ratings given and any additional information not covered by the categories rated.

The departments are rated by the following scale:

- 0 - Unacceptable for utilization by the department indicated. Construction modification cannot satisfactorily correct the deficiencies.
- 1 - Major deficiencies exist that would require significant modifications to correct including renovation and new construction.
- 2 - Moderate deficiencies exist that would require renovation to correct.
- 3 - No deficiencies exist that affect the functioning of the service.

The space evaluation is a comparison of existing net square feet to that required for FY 2000. The ratings are as follows: 0 = 0% to 49% of required net square feet available; 1 = 50% to 74%; 2 = 75% to 99%; and 3 = 100% and over.

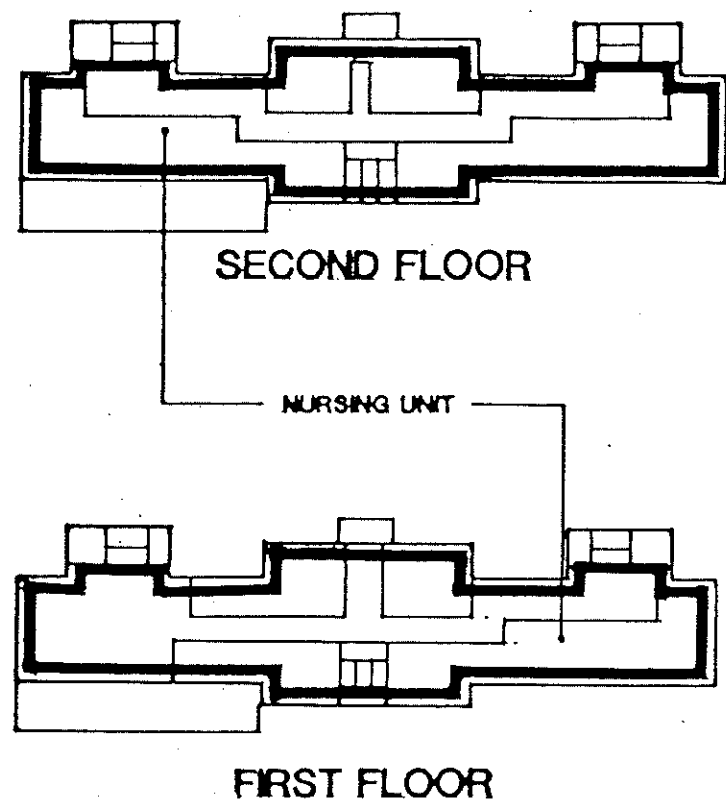
# SUMMARY & FUNCTIONAL EVALUATION BY DEPARTMENT

DEPARTMENT/SERVICE	SPACE CODE	SPACE	FUNCTION INTRA-DEPT.	FUNCTION INTER-DEPT.	ENVIRON.	EQUIP./ SYSTEMS	OVERALL SUMMARY	REMARKS
AMBULATORY CARE	262	0	0	1	2	2	1	Projected FY 2000 will require sign. increase of space.
AUDIOLOGY & SPEECH PATHOLOGY	204	0	2	2	2	2	1.6	
BUILDING MANAGEMENT SERVICE	406							
ADMINISTRATION, LLTS		0	2	1	2	2	1.4	
LAUNDRY		3	3	3	3	3	3	Consolidated facility services all VAMC's in District 15.
CANTEEN SERVICE	206	2	2	1	3	2	2	
CHAPLAIN SERVICE	210	3	2	0	2	3	2	
CLINICAL SERVICES ADMINISTRATION	208	3	2	1	2	2	2	
DENTAL SERVICE	214	1	1	1	1	1	1	
DIETETIC SERVICE	222	3	1	0	2	1	1.4	Scheduled downsizing project will correct all deficiencies except accessibility and ease of distribution.
ELECTROENCEPHALOGRAPHY (EEG) LABORATORY	226	3	3	1	2	2	2.2	
ENGINEERING SERVICE	230	3	2	2	2	2	2.2	
EYE, ENT (EAR, NOSE, THROAT)	232, 233	2	0	1	1	1	1	Eye Clinic should be separate from ENT.
FISCAL SERVICE	234	3	2	2	2	2	2.2	
HOSPITAL DIRECTOR'S SUITE	238	0	2	2	3	3	2	
LABORATORY SERVICE	240	1	0	2	0	1	.8	Critical deficiencies in all areas.
LIBRARY SERVICE	400	1	2	0	2	2	1.4	
MEDICAL ADMINISTRATION SERVICE	246	1	1	1	0	2	1	Critical deficiencies for a critical department.
MEDICAL MEDIA PRODUCTION SERVICE	248	2	2	1	2	2	1.8	
NURSING SERVICE ADMINISTRATION	254	0	0	1	2	2	1	
NURSING UNITS (TOTAL)								
INTERMEDIATE MEDICINE UNIT 15-B	Bldg. 15 100	1	1	2	1	2	1.4	Space is inadequate for projected 36 bed program.
INTERMEDIATE MEDICINE UNIT 16-A	16 100	1	1	2	1	2	1.4	
INTERMEDIATE MEDICINE UNIT 16-B	16 100	1	1	2	1	2	1.4	
INTERMEDIATE MEDICINE UNIT 16-C	16 100	1	1	1	1	2	1.2	
INTERMEDIATE MEDICINE UNIT 17-A	17 100	1	1	2	1	2	1.4	
INTERMEDIATE MEDICINE UNIT 17-B	17 100	1	1	1	1	2	1.2	
INTERMEDIATE MEDICINE UNIT	18 100	3	0	1	0	0	.8	
NURSING HOME CARE UNIT	138 106	2	0	2	1	1	1.2	
GPICU 3-A	138 102	0	1	3	1	2	1.4	
GENERAL MEDICINE UNIT 3-B	138 100	1	1	2	1	2	1.4	12 beds below minimum VA standard.
RESPIRATORY CARE UNIT 3-C	138 100	1	2	3	2	2	2.0	
GERIATRIC EVALUATION UNIT 4-A	138 106	1	1	2	2	2	1.6	8 beds below minimum VA standard.
REHABILITATION UNIT 4-B	138 100	2	2	2	2	2	2	
ACUTE PSYCHIATRIC LOCKED UNIT 1	1 110	2	0	0	0	0	.4	Critical deficiencies in all areas; unsuitable for patients.
ACUTE PSYCHIATRIC ALCOHOL TRIM UNIT	2 110	2	0	0	0	0	.4	Critical deficiencies in all areas; unsuitable for patients.
ACUTE PSYCHIATRIC OPEN UNIT	3 110	2	0	0	0	0	.4	Critical deficiencies in all areas; unsuitable for patients.
ACUTE PSYCHIATRIC LOCKED UNIT 4	4 110	2	0	0	0	0	.4	Critical deficiencies in all areas; unsuitable for patients.
ACUTE PSYCHIATRIC SHORT TERM OPEN	5 110	2	0	0	0	0	.4	Critical deficiencies in all areas; unsuitable for patients.
EXTENDED PSYCHIATRIC NURSING UNIT 10	10 110	3	0	0	0	0	.6	Unit is 18 beds above optimum VA standard.
EXTENDED PSYCHIATRIC NURSING UNIT 11	11 110	3	0	0	0	0	.6	Unit is 10 beds above optimum VA standard.
ALCOHOL DEPENDENCY TREATMENT UNIT	12 110	3	2	2	3	3	2.6	
GEROPSYCHIATRIC & LONG TERM CARE	25 110	3	1	0	1	1	1.2	Unit is 12 beds above optimum VA standard.
OUTPATIENT PSYCH	206	3	0	1	1	2	1.4	
PERSONNEL SERVICE	266	3	0	1	1	2	2.4	
PHARMACY SERVICE	268	0	0	2	1	1	.8	
PODIATRY	262	3	3	2	3	3	2.8	
PSYCHIATRIC SERVICE ADM	319	2	2	2	2	2	2	
PSYCHOLOGY SERVICE	272	2	2	2	1	2	1.8	
RADIOLOGY SERVICE	276	0	0	1	1	1	.6	Critical deficiencies in all areas.
RECREATION SERVICE	269	3	1	2	1	2	1.8	
REHABILITATION MEDICINE SERVICE	270	2	1	2	1	2	1.6	
RESPIRATORY CARE PROGRAM	212	2	3	3	1	2	2.2	
SECURITY	279	2	2	2	2	2	2	Currently off campus.
SERVICE ORGANIZATIONS	280	2	2	2	2	2	2	
SOCIAL WORK SERVICE	282	3	2	2	1	2	2	
SUPPLY SERVICE								
ADMINISTRATION	285	2	2	1	2	2	1.8	
SUPPLY PROCESSING & DISTRIBUTION	284	3	0	2	0	1	1.2	
WAREHOUSE	291	3	2	1	2	2	2	
VETERANS ASSISTANCE UNIT	218	3	2	1	2	2	2	
VOLUNTARY SERVICE	290	3	2	2	2	2	2.2	
STAFF QUARTERS		3	3	3	2	2	2.6	
TOTAL AVERAGES		1.85	1.20	1.36	1.31	1.58	1.45	

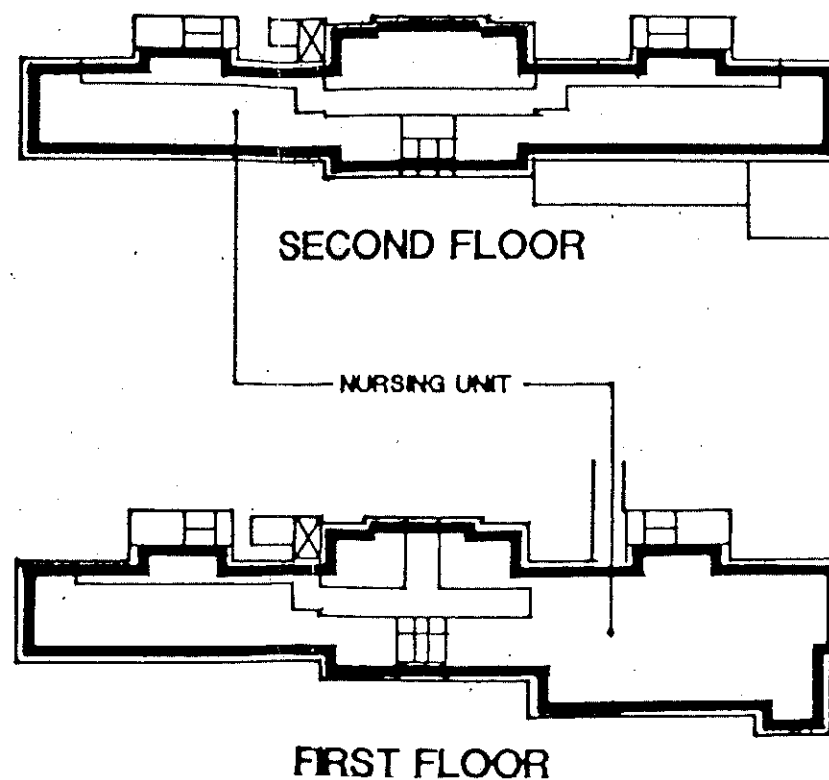
0 - Unacceptable  
1 - Major Deficiencies  
2 - Moderate Deficiencies  
3 - No Deficiencies That Affect  
Functioning of Service

BUILDINGS

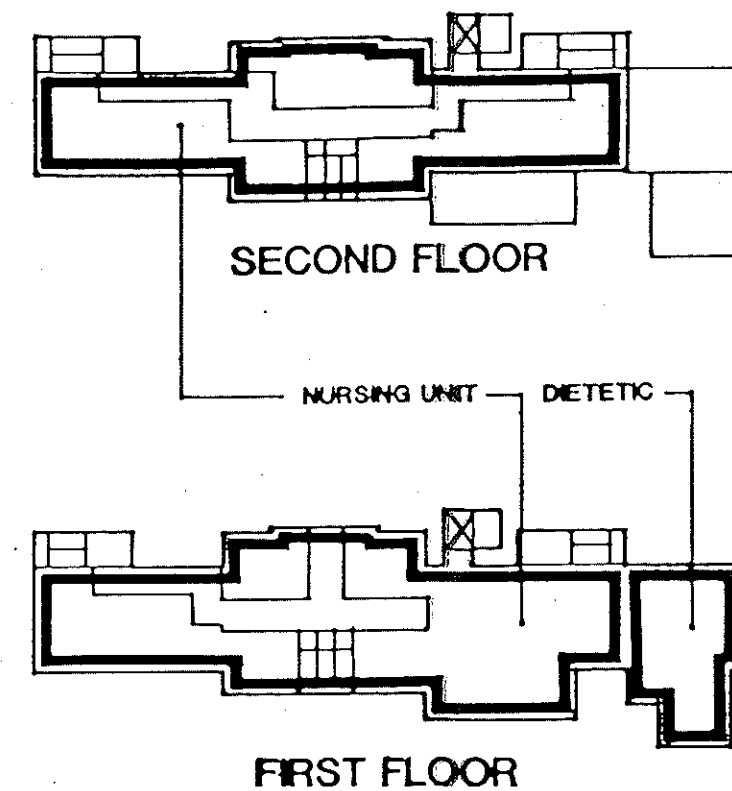
1,2,3,4,5,7,10,11,12,& 18



BLDG. NOS. 1,2,3,4 AND 5 TYPICAL

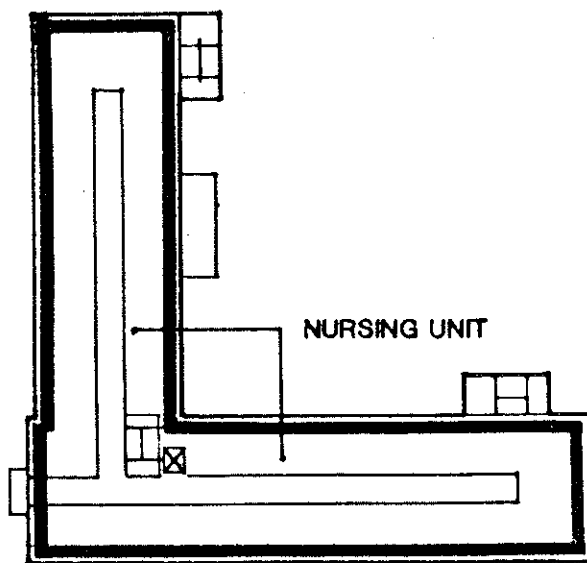


BLDG. NOS. 7,10,11 AND 12 TYPICAL

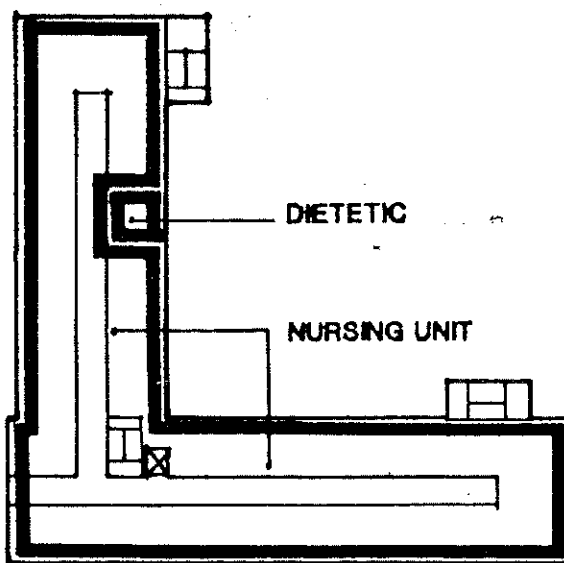


BLDG. NO. 18

**BUILDING 25**



**SECOND FLOOR**



**FIRST FLOOR**

**BLDG. NO. 25**

### 2.3.9 DEPARTMENT EVALUATION OVERVIEW

This section provides a functional evaluation of each department at the Medical Center. The information provided is as follows:

Department/Service indicates what functional area of the existing facility is being reviewed.

Location of the Department/Service is given by buildings(s) and floor(s).

Building Construction Date denotes the construction/completion date.

Utilization Index indicates, where applicable (and available), present and/or projected workloads. These may be in the form of staff, visits, cases, tests, number of beds, etc. These utilization numbers are used to evaluate present and future space needs.

Present Total Sq. Ft. lists current net and gross square feet. This a calculation that reflects net and gross square feet for floor(s) and building(s) where departmental functions are located.

% of Req'd. NSF Available (Exist.) is a professional estimate comparing the existing net space to the space required to perform work necessary to meet the current workload.

Projected Required Sq. Ft. is the amount of space needed to operate the department per FY 2000 workloads. The projected net square feet was provided by the Veterans Administration's Office of Facilities. The projected gross square, essential in determining actual building space required, was obtained by multiplying the NSF by a departmental conversion factor (C.F.) based on recently built VA facilities.

% of Req'd. NSF Available (Projected) compares the existing net space to that required by the FY 2000 program.

Description of Service relates the Veterans Administration's definition of the service, its function, patients served, modalities and any differences that are unique to this service at VAMC Marion.

The Space Analysis section evaluates the adequacy of the existing space to support its present activities. It also provides a comparison to VA criteria and space projections for FY 2000.

Functional Analysis (Intradepartmental) address functional deficiencies within the department. This is an evaluation of the physical layout, circulation, and space relationship.

Functional Analysis (Interdepartmental) addresses functional deficiencies regarding the location of this department at the Medical Center and its relationship to other departments.



Projected Bed Loss (Current Criteria) is only given for nursing units and reflects a professional opinion of the minimum number of existing beds that might be lost by current nursing units to meet minimum VA standards as established in the DM&S Circular 10-81-117 and CMD Letter 1L 10-79-8.

Environment addresses environmental qualities such as lighting, heating, and air-conditioning and how they may possibly detract from the comfort of the occupants and ultimately the functioning of the space.

Equipment/Systems addresses the availability and level of functional operation of fixed equipment and systems. These could include nurse call, telephones, medical gases, radiology equipment, intercoms, etc.

Five Year Facility Plan FY 1988 - FY 1992 indicates any scheduled construction that would correct deficiencies or otherwise impact the functioning of this department. All information and data was obtained from the approved Five Year Facility Plan FY 1988 - FY 1992 dated 3/9/87 provided by the VA.

General Comments/Conclusions cover various observations not noted elsewhere. Data is summarized and conclusions are formulated focusing on the functional and space adequacy of the department. It also may include recommendations for corrective action without regard to the approved FDP.

2.3.10

a DEPARTMENT/SERVICE

AMBULATORY CARE

Location

Building No. 15  
First Floor  
Building No. 124  
First, Second and Third  
Floors

Building Construction Date

No. 15 - 1929  
No. 124 - 1943

Utilization Index

O/P Visits  
FY 1986      FY 2000  
62,752      45,100

Present Total Sq. Ft.

Net - 4,800  
Gross - 8,205

% of Req'd. NSF Available (Exist.)

45%

Projected Required Sq. Ft.  
(FY 2000)

Net - 9,063  
Gross - 15,407 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

52%

Description of Service

The Ambulatory Care Service is responsible for the examination and treatment of non-hospitalized patients on a scheduled or "walk-in" basis. The purpose of visit categories are: 1) compensation and personal (C & P); 2) 10-10 visits (need for health care benefits) and 3) all other visits. The service is subdivided into four functional areas: Reception; Evaluation and Emergency; Clinics; and Administration.

Space Analysis

The first floor of Building No. 124 contains the main waiting area, reception/admissions room, five exam rooms, two treatment rooms, nursing office, health clinic, escort service, two physician's office, outpatient clerk, dietitian, health benefits advisor, admissions/bed count office and specimen collection toilet. The third floor contains offices for the chief of ambulatory care, scheduling of the surgery clinic, compensation and pension and two social workers. Located on the first floor of Building No. 15 are the travel office, waiting area, agent cashier and staff offices.

The present net sq. ft. (4800) is close to half the FY 2000 projected net sq. ft. (9063) and considerably less than what is required to meet current workloads.

### Functional Analysis (Intradepartmental)

Patients must have an orderly flow and be confined, as much as possible to a specific area. At Marion, the fragmentation of this department in two buildings and on three separate floors creates confusion for patients and inefficiency by the staff.

To illustrate a new patient's confusion, he must enter Building No. 124 either through Building No. 15 or via a ramp in the rear of 124. After his file is obtained and the proper forms are filled out, specimens are collected at the lab on the first floor, then an elevator ride to the second floor x-ray suite; followed by a return to the first floor for screening. After which he might proceed to the second floor or third floor of Building No. 124 for specific clinics. When his treatment is over, to make his next appointment he would proceed to scheduling on the third floor. To be reimbursed for his travel expenses and obtain a prescription from pharmacy, he must move to the first floor of Building No. 15. The distance can be lengthened and the confusion increased if specialized clinics (in Building No. 138) such as audiology must be attended. In addition, the department functions in Building No. 124 must operate directly on the main connecting corridor for Buildings Nos. 15, 16, 17, and 138.

### Functional Analysis (Interdepartmental)

Ambulatory care is a department made up of many parts, and heavily dependent upon a number of support services. Therefore, patient and material movement both in quantity and quality determine how well ambulatory care functions. At Marion, although Diagnostic/Treatment support services such as Lab and Radiology are convenient, they do not interact well with Ambulatory Care because of patient accessibility and their relationship to one another (i.e. laboratory and radiology on separate floors, pharmacy in another building). The manual transfer of patient files between MAS record storage and admissions is time consuming and inefficient.

### Environment

The overall quality of space is adequate. Heating and cooling as well as the lighting levels are also adequate. This area was recently renovated.

### Equipment/Systems

All fixed and moveable equipment is in good condition.

### Five Year Facility Plan FY 1988 - FY 1992

The existing ambulatory surgery suite is to be renovated as part of a minor project scheduled for FY 1988 and valued at \$1,900,000. Additional modifications are proposed for Ambulatory Care in FY 1989 with the renovation of the first floor of Building No. 138 for admissions. However, this project is based move on the assumption that the new psychiatric building would be built.

### General Comments/Conclusions

To help meet current deficiencies in space, additional square footage could be acquired if social work and psychology offices were relocated from the 2nd and 3rd floor of Building No. 24. This service needs to be consolidated in a location that will provide proper square footage, ease of access to support departments and clinics, and isolated from through circulation systems.

2.3.10

b DEPARTMENT/SERVICE

AUDIOLOGY & SPEECH  
PATHOLOGY

Location

Building No. 138

Building Construction Date

1958

Utilization Index

Audiology Visits  
FY 1986      FY 2000  
4760          3750  
Speech Visits  
FY 1986      FY 2000  
7293          1058

Present Total Sq. Ft.

Net - 890  
Gross - 1520

% of Req'd. NSF Available (Exist.)

45%

Projected Required Sq. Ft.  
(FY 2000)

Net - 1785  
Gross - 2856 (C.F. 1.6)

% of Req'd. NSF Available (Projected)

50%

Description of Service

The Audiology and Speech Pathology Program provides for identification, evaluation, rehabilitation of hearing and speech, and language disorders for both inpatients and outpatients. Besides serving the veteran, the clinic also is available to Grissom Air Force Base military personnel and their dependents.

Space Analysis

The square footage and functional space that exists works but is insufficient for the current staffing and work load.

Functional Analysis (Intradepartmental)

The overall layout is functional and the space, although minimal acceptable. However, the lack of programmed space means a minimum rather than optimum number of patients can be treated.

Functional Analysis (Interdepartmental)

Direct physical adjacency of this department/function with other services is not required, yet general proximity with ENT and the Outpatient Clinic is desirable in order to maximize operation efficiency for both staff and patients. As located, the clinic is convenient and accessible to all inpatients and outpatients.

Environment

No problems.

Equipment/Services

No problems.

Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will effect the functional operation of this department.

General Comments/Conclusions

At present, no major problems are noted in this service, yet when the service grows to meet the projected program requirements for the year 2000, it can not expand at its present location without absorbing critical space from other services adjacent to it.

2.3.10

c(1) DEPARTMENT/SERVICE

**BUILDING MANAGEMENT -  
ADMINISTRATION**

Location

Building No. 19

Building Construction Date

No. 19 - 1890

Utilization Index

N/A

Present Total Sq. Ft.

Net - 1690  
Gross - 2197

% of Req'd. NSF Available (Exist.)

45%

Projected Required Sq. Ft.  
(FY 2000)

Net - 3340  
Gross - 4342 (C.F. 1.3)

% of Req'd. NSF Available (Projected)

51%

Description of Service

The Building Management Service Administration includes office space, storage, linen handling areas and housekeeping closets. These facilities satisfy all the housekeeping requirements at the Medical Center and meet the clerical support required to manage this department.

Space Analysis

The Administrative offices are currently located on portions of the first and second floors of Building No. 19. Although these activities are housed in space not designed for them, the area is sufficient in space.

Functional Analysis (Intradepartmental)

The administrative offices located in Building No. 19 are scattered on two floors. This creates undesirable work flow patterns and functional efficiency.

In most instances, the number of HAC and their locations are appropriate. They follow the VA standard of one per nursing unit, one per floor, and/or one per 13,000 NSF. However, certain areas that require dedicated facilities such as ICU's, SPD, etc. are not equipped. VA criteria requires one room of 100 sq. ft. per floor for building management supplies. This is not met in all Marion's buildings.

Staff lockers/toilets and lounges are randomly scattered throughout the campus. Some are convenient to the personnel they support others are not. The number of staff lockers available is unknown, in most cases, no dedicated space has been allotted. Lockers are placed in any accessible areas such as HAC's and offices. Staff lounges usually serve other functional uses.

### Functional Analysis (Interdepartmental)

The service interacts with supporting services in an acceptable manner.

### Environment

Task lighting is deficient in the majority of the offices. Ventilation is inadequate and air conditioning is non-existent. Window units are used to cool the office areas.

### Equipment

Office equipment is in good condition. The storage facility requires replacement of shelving/storage systems. The telephone system is inadequate and subject to frequent down periods. Also, the number of lines available is severely restricted. This drastically impacts on this unit and its attempts to supervise its widely scattered component parts.

### Five Year Facility Plan (FY 1988 - FY 1992)

This area is scheduled to be relocated into the administrative area created in Building No. 124 under the FY 1989 minor project to renovate that building.

### General Comments/Conclusions

As with other departments at Marion, the office area is isolated from many of its component parts. A closer relationship to its employees and major areas of work would provide for improved supervision and increased work flow efficiency. Certain areas such as the ICU and satellite kitchen lack dedicated HAC's as required. Some HAC's are not functional since frequently they are being utilized for the storage of equipment which belongs to other services.

BMS lockers, showers and toilets are presently randomly scattered in space designed for and utilized by other services which are not always adjacent to the personnel it must support.



2.3.10

c(2) DEPARTMENT/SERVICE

**BUILDING MANAGEMENT -  
LAUNDRY**

Location

Building No. 79

Building Construction Date

1939  
Addition 1986

Utilization Index

FY 1986 Annual Poundage  
5,600,000  
FY 2000 Projected Poundage  
6,000,000

Present Total Sq. Ft.

Net -18,410 plus addition  
Gross -22,300 plus addition

% of Req'd. NSF Available (Exist.)

100%

Projected Required Sq. Ft.  
(FY 2000)

No Program Provided

% of Req'd. NSF Available (Projected)

N/A

Description of Service

The Laundry provides textile laundering and cleaning service, including preparation, repair and delivery of linens. It is a full production laundry which reprocesses all fabrics to be cleaned including flatwork, patient clothing, pillows, rags, thermal blankets, staff uniforms and surgical linen. There is no dry cleaning processed. The laundry has been designated a consolidated facility for all VAMC's in District 15.

Because the laundry does not operate on weekends, Monday and Tuesday are high productive days. The laundry's operating hours are 7:00 A.M. to 3:45 P.M. Soiled pick-ups occur three times a day at 7:00 A.M., 12:00 Noon, and 3:00 P.M. There is one pick-up on Saturday and one on Sunday.

Space Analysis

The laundry occupies both floors. All laundry equipment, receiving and shipping docks, and staff facilities are on the first floor, with mechanical support such as transformers, water softeners and storage in the basement. The laundry originally designed for 15,000 pounds per day has been totally renovated and an addition constructed. Another addition is planned in the near future. With the renovation and additions, this facility has the space to fulfill all VAMC Marion's needs plus meet its expanded role as a consolidated laundry through FY 2000

### Space Analysis (Intradepartmental)

The recent renovation and new addition has created a facility which is state-of-the-art and capable of processing the projected load of FY 2000. The remodeling included all new equipment laid out so a clear separation of soiled and clean is established. Existing loading docks with levelors were extended and new ones added plus new staff facilities were constructed which again separate soiled and clean users.

### Functional Analysis (Interdepartmental)

The laundry utilizes a cart exchange system for all patient carriers in the hospital except Buildings No. 1, 6 and 12. A noted problem with linen distribution is the dispatch to second level nursing unit buildings that have no elevator. There are two people in the transport pool for linen distribution. Transport of linen is controlled through engineering service. Staff uniforms are stored and distributed at Buildings No. 138, 16, 25 and Building No. 10. Also, dietary uniforms are picked up at Building No. 122. Uniforms are delivered on hangers on a one day service basis.

Presently the majority of laundry is presorted on the patient floors. It is expected of the patients and the staff place patient linen and bedding into respective laundry containers within the linen room. This presents a problem since the patients are psychiatric patients, and often do not understand which container is which.

### Environment

The renovation project corrected all HVAC deficiencies.

### Equipment/Systems

All new equipment that if properly maintained should provide all service necessary for FY 2000 and beyond.

### Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled that will effect the functional operation of this department.

### General Comments/Conclusions

The laundry itself utilizes all modern equipment and techniques. The only problem is the collection and distribution of laundry within VAMC Marion. Presorting by patients should be eliminated. The on-going station level projects to provide vertical transportation in all patient buildings will eventually eliminate the problem of distribution to multi-story buildings, and if the campus is consolidated a more efficient use of staff and work flow can be achieved.

2.3.10

c(3) DEPARTMENT/SERVICE

BUILDING MANAGEMENT -  
CENTRAL STORAGE AND PATIENT  
CLOTHING AND LUGGAGE  
STORAGE

Location

Building No. 20  
First and Second Floor

Building Construction Date

1890

Utilization Index

N/A

Present Total Sq. Ft.

Net - 2,425  
Gross - 4,944

% of Regd. NSF Available (Exist.)

120%

Project Required Sq. Ft.  
(FY 2000)

Net - 1,855 (C.F. 1.3)  
Gross - 3,153

% of Regd. NSF Available (Projected)

130%

Description of Service

Central Storage is for the depository of large equipment and bulk supplies such as Vacuum Cleaning Machines, 55 gallon drums of Cleaning Chemicals, Charging of battery powered equipment, scaffolding, ladders, buffers and wax, etc.

With the majority of inpatients classified as Psychiatric and Intermediate, their lengths of stay are extended. The need for additional clothes and personal items is much greater than a short-stay acute patient. This creates the need for storage of these items that is secure but accessible to patients.

Space Analysis

The total existing space exceeds current, plus projected needs. The utilized rooms are large with ample ceiling height.

Functional Analysis (Intradepartmental)

The administrative and clerical support needed for accounting functions are adjacent and physically connected in Building 19. Although the space required exceeds the need, the storage function is split on two floors. The storage on the second floor could be surplus and the square footage remaining on the first floor would approach the projected need.

Functional Analysis (Interdepartmental)

The present location on the first floor isolates the Recreational Therapy in the rear of Building 20, so that access to it is only possible from an exposed, exterior ramp. All supplies and equipment to the west side of the campus must be trucked.

Long term psychiatric patients on the east campus are convenient to the patient storage. However, the NHCU and intermediate patients who depend on this support are housed on the opposite side of the campus. These patients, who in most cases suffer from various forms of disabilities, cannot without escort or at all, personally control their belongings.

Environment

The working conditions are acceptable.

Equipment/Service

N/A

Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will effect the functional operation of this functional operation of this department.

General Comments/Conclusions

The space meets criteria. It is adjacent to clerical support and convenient to patients on the east side of the campus. In order to provide patients on the west campus ready access to their personal belongings, and give building management personnel close support of equipment and supplies; it is recommended that General Storage and Patient Clothing and Baggage Holding areas be provided with appropriate square footage on the west campus. The east campus area would be reduced proportionally.

2.3.10

d

DEPARTMENT/SERVICE

CANTEEN

Location

Building No. 50  
Building No. 138 - Basement  
Floor

Building Construction Date

Building No. 50 - 1890  
Building No. 138 - 1958

Utilization Index

FTE FY - 1,179

Present Total Sq. Ft.

Net - 9,458  
Gross - 16,640

% of Req'd. NSF Available (Exist.)

75%

Projected Required Sq. Ft.  
(FY 2000)

Net - 10,961  
Gross - 13,153 (C.F. 1.2)

% of Req'd. NSF Available (Projected)

86%

Description of Service

The Canteen Service operates a retail store to make available to the hospitalized veterans, merchandise essential to their comfort. For patients, personnel and visitors, a food service, including vending is operated completely independent from Dietetic Service.

Space Analysis

Building No. 50 houses the Canteen and retail store with a vending and a storage room in the basement of Building No. 138. Although the total amount of space allocated to this department is sufficient, the distribution of space is inappropriate. The retail store at 1500 NSF compares well to the projected 1400 NSF; but the dining area at 1450 NSF and kitchen/serving at 1075 NSF are significantly less than the projected 3288 NSF and 2624 NSF. A large portion of the space, 36% is used for storage (including the entire basement of Building No. 50) compared with only 17% of the projected space.

Functional Analysis (Intradepartmental)

The only significant functional problem within this department is the lack of a good receiving area with clean and soiled separation.

Functional (Interdepartmental)

The Canteen is a free standing building distant from most staff and ambulatory patients with no enclosed connecting corridors. A location closer to other Medical Center activities is desirable.

### Environment

The recently refurbished and air conditioned Canteen Building provide a comfortable environment for patients, visitors and staff.

### Equipment/Systems

Equipment is adequate at present.

### Five Year Facility Plan (FY 1988 - FY 1992)

If the major project for a Psychiatric Care Unit is approved, it is planned to incorporate a satellite canteen area.

### General Comments/Conclusions

Because Building No. 50 is a free-standing structure wholly occupied by Canteen Service, additional space through additions could be achieved to meet any current deficiency. Any major new construction projects that consolidate Medical Center functions should consider the inclusion of Canteen Service. However, if a campus plan with disbursement of patients is maintained, splitting of the service into two fully functioning units placed convenient to a majority of patients is recommended.

2.3.10

e

DEPARTMENT/SERVICE

CHAPLAIN

Location

Building No. 65  
Building No. 60

Building Construction Date

1899

Utilization Index

Protestant 92.44%  
Catholics 3.72%  
Jewish .38%  
Other 3.46%

Present Total Sq. Ft.

Net - 6,458  
Gross - 8,964

% of Req'd. NSF Available (Exist.)

185%

Projected Required Sq. Ft.  
(FY 2000)

Net - 3,002  
Gross - 3,903 (C.F. 1.3)

% of Req'd. NSF Available (Projected)

210%

Description of Service

The Chaplain Service administers spiritual counseling to inpatients and provides worship in appropriate setting.

Space Analysis

This service includes the Chapel, Building No. 65 and chaplaincy offices in Building No. 60. Existing space is adequate and exceeds VA criteria.

Functional Analysis (Intradepartmental)

The chapel stands alone and isolated on the north side of the site. The chaplaincy offices are located on the east side of the campus. Ideally, the functions should be adjacent to each other and the inpatient medical beds.

Functional Analysis (Interdepartmental)

The chapel and chaplaincy offices should be located within easy accessibility to the majority of patients, especially the long term veterans with accessibility problems.

Environment

Building No. 65 has window air conditioners. An upgrading of finishes would be desirable.

### Equipment/Systems

There is no major fixed equipment assigned to this service.

### Five Year Facility Plan FY 1988 - FY 1992

A Minor Miscellaneous project funded in FY 1986 is currently expanding the Chapel (Building 65) to provide office space thus consolidating the service.

### General Comments/Conclusions

Any major new construction projects that consolidate inpatient beds should consider the inclusion of the chaplaincy office and a small chapel or meditation room. The existing chapel should remain.



2.3.10

f

DEPARTMENT/SERVICE

CLINICAL ADMINISTRATION

Location

Building No. 138  
Third Floor

Building Construction Date

1958

Utilization Index

N/A

Present Total Sq. Ft.

Net - 1,367  
Gross - 2,310

% of Req'd. NSF Available (Exist.)

105%

Project Required Sq. Ft.  
(FY 2000)

Net - 1,120  
Gross - 1,456 (C.F. 1.3)

% of Req'd. NSF Available (Projected)

122%

Description of Service

This service is the administrative space for special segments of health care that are affiliated with bed units of 80 or more total beds or in the case of Psychiatric Service, 60 or more total beds.

Space Analysis

The unit consists of just three rooms, 2 offices and a conference room, but all are double the necessary square footage. Compared to the program for year 2000, there is more than enough space. However, seven offices are required in the projected program.

Functional Analysis (Intradepartmental)

The director and his secretary's offices are contained in a nursing unit and are only accessible by entering that unit. The conference room with storage, although on the same floor, is separate and double the needed square footage.

Functional Analysis (Interdepartmental)

Because of VAMC Marion's dispersal of patients and functions, it is hard to consolidate the chiefs of services and still provide them with proper supervisions over their respective departments. The present location at the core of the majority of patients is adequate, yet they would be more accessible if not contained within a nursing unit.

Environment

The spaces are acceptable.

### Equipment/Systems

No specific or specialized equipment used.

### Five Year Facility Plan (FY 1988 - FY 1992)

The relocation and consolidation of this service will be part of the proposed FY 1989 minor project to renovate Building No. 124.

### General Comments/Conclusions

No adjacent space is obtainable, therefore, consolidation is impossible. This service needs to be unified, with each function allocated the correct square footage, and positioned so as to be accessible and convenient to the majority of patients but yet isolated from major circulation.

2.3.10

<b>g</b>	<b><u>DEPARTMENT/SERVICE</u></b>	<b>DENTAL</b>
	<b><u>Location</u></b>	Building No. 124 Second Floor
	<b><u>Building Construction Date</u></b>	1943
	<b><u>Utilization Index</u></b>	Exam & Treatment FY 86 10,027
	<b><u>Present Total Sq. Ft.</u></b>	Net - 1,921 Gross - 3,358
	<b><u>% of Req'd. NSF Available (Exist.)</u></b>	75%
	<b><u>Projected Required Sq. Ft.</u></b> <b>(FY 2000)</b>	Net - 2,880 Gross - 4,608 (C.F. 1.6)
	<b><u>% of Req'd. NSF Available (Projected)</u></b>	66%

**Description of Services**

This service is responsible for providing dental and oral assessments; treatment of dental problems and oral surgery as well as related functions required for the dental care of inpatients and outpatients.

**Space Analysis**

The clinic, although operating efficiently, does not approach current space criteria. Certain areas are undersized but not to a point of being non-functional. However, in the operatories where 2 or 3 square feet is critical, deficiencies exist that create accessibility problems for the handicapped.

**Functional Analysis (Intradepartmental)**

Privacy of individual operatories is comprised by use of half size partition separations. It is impossible to treat a patient on a gurney. Wheelchair access is difficult. The dental suite is separated by a main corridor and although traffic is minimal, it does disrupt the function of the service. The general design of the suite imposed by the building and its structure does not promote ideal functional relationships or ideal circulation patterns.

**Functional Analysis (Interdepartmental)**

The Dental Service is convenient to Ambulatory Care and accessible from all inpatient buildings. The suite's proximity to the elevator provides accessibility for the handicapped from both in and outpatient modes.

### Environment

Window air-conditioning units are in place for cooling. The general cosmetic condition of the space is satisfactory, due to appropriate selection of colors and materials.

### Equipment/Services

Equipment for this service is old and in need of replacement.

### Five Year Facility Plan FY 1988 - FY 1992

As part of minor project proposed for FY 1988 at a cost of \$1.9 million, the Dental Clinic will be moved to Building 138 with additional space provided for oral diagnosis room, private operatories, oral hygiene clinic, and education space. This project and move is dependent on completion of a proposed 240-bed Geropsychiatric NHCU.

### General Comments/Conclusions

If psychology and social work offices were relocated, the existing dental suite could expand to meet current criteria. A May, 1983 SERP review of the service indicated that the service was undersized, equipment was antiquated and a general reconfiguration of the service was recommended. The projected requirements for the Year 2000 confirm the SERP recommendation.

2.3.10

h	<u>DEPARTMENT/SERVICE</u>	DIETETIC
	<u>Location</u>	Building No. 16, 18, 122 and 138
	<u>Building Construction Date</u>	No. 16 - 1929 No. 18 - 1896 No. 122 - 1938 No. 138 - 1958
	<u>Utilization Index</u>	Average peak meals FY 86 622
	<u>Present Total Sq. Ft.</u>	Net - 30,886 Gross - 42,676
	<u>% of Regd. NSF Available (Exist.)</u>	187%
	<u>Projected Required Sq. Ft. (FY 2000)</u>	Net - 14,132 Gross - 18,372 (C.F. 1.3)
	<u>% of Regd. NSF Available (Projected)</u>	218%

Description of Service

The mission of the Dietetic Service is to meet the nutritional requirements of all patients in a manner which makes a maximum contribution towards recovery and rehabilitation. Building No. 122 houses the main kitchen and a patient dining facility. Patients from Buildings No. 1-6 came to Building No. 122 for all their meals. Tray carts are manually delivered to Buildings 10, 11, and 25 (three trips per meal are required). In addition, the kitchen prepares and delivers bulk food in carts to serving lines in Building Nos. 16, 18 and 138. Patient wards in both buildings are served from a tray assembly area in their respective building.

Space Analysis

The main kitchen in Building No. 122, when constructed, was sized to feed approximately three times the current bed number. With current sophisticated dietetic procedures for preparation, with the packaging of foods capable of indefinite storage, with frequent deliveries of fresh supplies, and most important a large decrease in beds, the kitchen is oversized and functionally inefficient. The decrease in beds plus the increase of tray make-up delivery to the wards make the adjoining dining room too big also.

The satellite serving area on the second floor of Building No. 138 provides a cafeteria serving line for the adjacent NHCU and a tray make-up assembly for the remainder of beds in the building. Storage space for this unit is deficient.

### Functional Analysis (Intradepartmental)

Building No. 16 is a former serving line/dining room which currently does not have a functional work flow to accomplish assembly process.

Building No. 18's serving line and dining has ample space and provides meals only for patients in 18.

Due to its space being greatly above the required criteria, both the kitchen and dining areas in Building No. 122 are functionally deficient in the following areas: work flow inefficiencies, soiled/clean areas overlap, and food production is dispersed on two levels.

Building No. 138 experiences staffing and work flow inefficiencies due to its inadequate work area. The placement of the dishwashing area forces the tray make-up area to be shut down in order to allow carts to be transported to the dishwashing area. Required storage space does not exist.

A lack of dietitian offices on the patient units restricts the contacts between dietitians and patients. This is a detriment to total patient care and treatment.

### Functional Analysis (Interdepartmental)

Bulk food arrives from Building No. 122 and is delivered to a general purpose dock at the rear of Building Nos. 16 and 18. Building No. 16 assembles trays that are delivered to patient units in Buildings Nos. 15, 16 and 17. Elevator service is a problem since two elevators provide service to all three buildings. The elevators are also used by the public, patients, staff and for materials.

Although Building No. 122 is located in the approximate center of the campus, walking time ranges from 5 to 20 minutes for patients to reach the facility. No enclosed connecting passage ways exist which forces patient exposure in inclement weather. Bulk food is transported in carts to Building No. 16. Tray carts are manually moved to Building No. 10, 11 and 25. Ample storage space exists within the facility and the main warehouse.

Bulk food is delivered to Building No. 138 via trucks to the general loading dock at the rear of the building. Food must then pass through general circulation areas prior to arriving at the tray make-up area. From the tray area, food is transported on general use elevators to all the patient units in this building.

Dietitians offices do not exist near to the majority of the patient population being served.

Building No. 16's dietetic unit lacks a functional work flow that makes for an inefficient tray assembly unit.

### Functional Analysis (Intradepartmental)

The dispersion of dietetic services leads to excessive staffing and because of the time delay through inefficient delivery, meals can reach patients at a temperature that is not conducive to an appetite.

### Functional Analysis (Interdepartmental)

Bulk food is delivered to Building no. 16 where trays are assembled for delivery to patient units in Building No. 15, 16 and 17. Elevator availability is a problem since only two elevators serves all buildings and they must also be utilized by the public, patients, staff and materials distributing. The time delay incurred in delivery critically alters the optimum eating period for patients. Trayed food stays appetizing and hot for approximately 30 minutes.

Building No. 122 is located in the approximate center of the campus. Five to 20 minutes are required to reach the facility by its major user groups. No enclosed connecting passageways exist, which exposes patients to inclement weather. An exterior ramp provides handicap access to the main entrance.

Dietitian office space necessary on acute nursing units where diets are an integral part of patient treatment do not exist.

### Environment

Neither the main kitchen in Building No. 122 nor its satellites are air conditioned.

### Equipment/Systems

Overall, the equipment has been well maintained. Some equipment in Building No. 122 will be replaced during the downsizing of the area and all items in Building No. 16 will be replaced during the renovation of this area.

### Five Year Facility Plan (FY 1988 - FY 1992)

The Medical Center has a 1988 minor project for \$1,633,000 to renovate Dietetic Service Area. The renovation of 26,000 net square feet will correct deficiencies in the heating and exhaust ventilation systems, work flow congestion, poor illumination and provide air conditioning. The project is scheduled for FY 88 completion.

The Dietetic area in Building No. 16 (2300 net square feet) will be renovated to provide a new tray assembly line, improved lighting, new ceiling and floors and modernizes offices and rest rooms. This project is requested in FY 88 under a Minor Miscellaneous category for \$194,000.

### General Comments/Conclusions

The major deficiency of the Dietetic Service revolves on the delivery system from the main kitchen and the satellite units to the patients. A proposed minor project has been funded to downsize Building No. 122 which will functionally resolve this unit's present deficiencies.



2.3.10

i	<u>DEPARTMENT/SERVICE</u>	ELECTROENCEPHALOGRAPHY (EEG) LABORATORY
	<u>Location</u>	Building No. 124 Second Floor
	<u>Building Construction Date</u>	1943
	<u>Utilization Index</u>	N/A
	<u>Present Total Sq. Ft.</u>	Net - 665 Gross - 730
	<u>% of Req'd. NSF Available (Exist.)</u>	90%
	<u>Projected Required Sq. Ft. (FY 2000)</u>	Net - 660 Gross - 990
	<u>% of Req'd. NSF Available (Projected)</u>	100%

Description of Service

Part of the Diagnostic and Treatment Services, this program provides electroencephalography testing and examination for the diagnosis of epilepsy, trauma, tumor and other brain diseases. The equipment and facilities for this function are fixed, not portable, with visitation by patients mandatory.

Space Analysis

Spaces presently allocated to this service consist of an EEG instrument and workroom, a physician's reading room and male toilet room.

Functional Analysis (Intradepartmental)

Functional relationships are sufficient, however, space for records storage and patient waiting space is desirable.

Functional Analysis (Interdepartmental)

Present location (within the Diagnostic and Treatment Core) is adequate, yet, closer adjacencies to Medical Nursing Units and, most important, to the ICU would be appropriate.

Environment

The working conditions are acceptable.

Equipment/Systems

The equipment is adequate at present.

2.3.10

j. DEPARTMENT/SERVICE

Location

Building Construction Date

Utilization Index

Present Total Sq. Ft.

% of Req'd. NSF Available (Exist.)

Projected Required Sq. Ft.  
(FY 2000)

% of Req'd. NSF Available (Projected)

ENGINEERING SERVICE

Building No. 41, 51, 52,  
53, 54, 58, 76, 97, 138-3  
170 and T516

No. 41 - 1895  
Transportation Unit  
No. 51 - 1914  
Maintenance & Repair  
No. 52 - 1914  
Administration/Project  
Section/Maintenance &  
Repair  
No. 53 - 1914  
Maintenance & Repair  
No. 54 - 1905  
Maintenance & Repair  
No. 58 - 1902  
Ground & Labor  
No. 76 - 1934  
Boiler Plant  
No. 78 - 1934  
Boiler Plant  
No. 97 - 1899  
Maintenance & Repair  
No. 120 - 1936  
Maintenance & Repair  
No. 127 - 1947  
Maintenance & Repair  
No. 135 - 1951  
Maintenance & Repair  
No. 137 - 1958  
Maintenance & Repair  
No. 138 - 1958  
Biomedical Engineering  
No. 170 - 1983  
Fire Department  
No. T516 - 1947  
Maintenance & Repair

N/A

Net - 36,581  
Gross - 47,555  
(Includes Fire Station)

255%

Net - 12,247  
Gross - 15,921 (C.F. 1.3)

298%

## Description of Service

The Engineering Service includes the following functions: Administration, Biomedical Engineering Repair/Development, Boiler Plant; Fire Protection Services, Ground/Maintenance, Maintenance/Repair Shops, Engineering Control Center, Transportation Unit, and the Supplies, Equipment/Tools Storage. The service is responsible for the daily operations of all systems and protection programs for the Medical Center.

## Space Analysis

Overall the present space is appropriate for the functional activities of this service. The majority of the areas complies with, or exceeds, VA space criteria. Minimal deficiencies exist in some areas, as follows: transportation unit requires space for offices and a locker room, overall space needs to be dedicated for support activities and secured general storage.

## Functional Analysis (Intradepartmental)

The internal functional relationships of the majority of the component's of this service range from acceptable to very good. The areas where problems now exist are as follows: the layout of the engineering offices is poor and creates functional inefficiencies, deficiencies exist with the corridor system in the Project Section, the transportation unit needs an efficient office suite and the Maintenance and Repair Unit requires separate work areas for painting and wheelchair repair to be developed.

## Functional Analysis (Interdepartmental)

Due to the support functions provided by this service, it must be situated convenient to all other areas on the campus. This service is one of the few which has been functionally zoned. It has convenient access to all services (buildings) on the campus. The component parts of this service are grouped near one another. The route for service vehicles coming to this area is direct. The placement of the Biomedical Unit adjacent to the Intensive Care Unit is ideal. The boiler plant has the capacity and is well situated to provide its services to all other sections of the Medical Center. The grounds and transportation units are centralized. The Administrative Offices are centralized which provides for the appropriate level of control. The fire station satisfies both its internal and external required relationships.

## Environment

An overall upgrading of finishes in all work areas would be desirable. The exposure to natural lighting is desirable and task lighting requires upgrading.

No central air conditioning is provided. Window air conditioning units and individual building systems are employed to provide the appropriate levels of cooling. Cooling and ventilation deficiencies exist in the transportation unit and maintenance areas.

#### Equipment/Systems

The equipment is in good to excellent condition. Vehicles used are replaced on a life expectancy schedule. All fixed and moveable equipment are well maintained and are served on a regularly scheduled basis.

A boiler replacement evaluation has been scheduled. The status and possible replacement of this equipment will be determined based upon these recommendations.

The existing telephone system does not satisfy the requirements of this service. The number of lines available are inadequate and the system is frequently out of service. The transportation unit employees a two-way radio system to assist with its emergency transport.

#### Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled that will effect the functional operation of this project.

#### General Comments/Conclusions

A projected move to B-165 is pending for the Transportation Unit. When accomplished, the cited deficiencies will be rectified.

A FY 87 project will modify the telephone system and will rectify existing deficiencies.

The Engineering Service is well situated on the campus to satisfy its required functional adjacencies. The department has adequate space with only minor functional modifications required. Equipment has been well maintained and a high level of service is provided to all areas of the Medical Center. A current project will correct the office layout problems.

2.3.10

k	<u>DEPARTMENT/SERVICE</u>	EYE, EAR, NOSE and THROAT CLINIC
	<u>Location</u>	Building No. 124 Second Floor
	<u>Building Construction Date</u>	1943
	<u>Utilization Index</u>	N/A
	<u>Present Total Sq. Ft.</u>	Net - 448 Gross - 560
	<u>% of Req'd. NSF Available (Exist.)</u>	70%
	<u>Project Required Sq. Ft. (FY 2000)</u>	Net - 555 Gross - 888 (C.F. 1.6)
	<u>% of Req'd. NSF Available (Projected)</u>	81%

Description of Service

The EENT (Eye, Ear, Nose and Throat) Clinics includes the necessary accommodations and equipment to provide ophthalmologic, orthionlaryngogologic examination and treatment for both inpatients and outpatients.

Space Analysis

The existing clinic is one large volume of space that lacks the necessary compartmentalization required for the proper functioning of these clinics. In addition, this area also provides space for the dermatology clinic.

Functional Analysis (Intradepartmental)

The present situation is unacceptable for the efficient and proper treatment of patients with EENT disorders. In clinics of this size it is common to unite them and share like functions such as waiting, receptions, files, etc. However, each clinic has distinct needs that require specific space and functional relationships such as the eye exam/treatment room which has critical dimensions for the use of optical mirrors. Patient confidentiality is compromised by the open arrangement.

Functional Analysis (Interdepartmental)

The EENT clinic supports in and outpatients, and therefore must be convenient to both. As located the clinic serves this role, but the additional square footage needed to met year 2000 criteria could cause relocation.

### Environment

The ventilation and cooling systems are substandard. Window air-conditioners are in place but are not sufficient. Air exchange is poor and dust control is inadequate. Illumination is below necessary levels.

### Equipment/Services

Equipment has been well maintained. All items are on a regular replacement schedule. The telephone service is frequently out of service.

### Five Year Facility Plan (FY 1988 - FY 1992)

As part of the FY 1988 project, renovate Building No. 138, to consolidate all ambulatory care clinics, the Eye, Ear, Nose and Throat Clinic will be moved from the second floor of Building No. 124.

### General Comments/Conclusions

The EENT clinic is operating in inadequate space. Distinct rooms for specific needs are required.

2.3.10

<b>1</b>	<b><u>DEPARTMENT/SERVICE</u></b>	<b>FISCAL</b>
	<b><u>Location</u></b>	Building No. 138 First Floor Building No. 15 First Floor
	<b><u>Building Construction Date</u></b>	Building No. 138 - 1958 Building No. 15 - 1929
	<b><u>Utilization Index</u></b>	N/A
	<b><u>Present Total Sq. Ft.</u></b>	Net - 2244 Gross - 2973
	<b><u>% of Req'd. NSF Available (Exist.)</u></b>	195%
	<b><u>Projected Required Sq. Ft.</u></b> <b>(FY 2000)</b>	Net - 990 Gross - 1188
	<b><u>% of Req'd. NSF Available (Projected)</u></b>	226%

**Description of Service**

Fiscal service is responsible for providing budget, accounting, payroll, voucher processing, employee travel and cashier functions.

**Space Analysis**

The overall space available to this service exceeds criteria requirements. The program is split between two buildings with most of the department on the first floor of Building No. 138. The agent cashier, waiting area and travel office located in the first floor of Building No. 15.

**Functional Analysis (Intradepartmental)**

The intradepartmental relationships of this service are acceptable with the exception of the agent cashier and travel office located in Building No. 15.

**Functional Analysis (Interdepartmental)**

Fiscal and personnel work in tandem in payroll functions and with supply service in the procurement of supplies and services. Presently, Supply is located in a separate building approximately 1/3 mile from Fiscal, and Personnel is at the opposite end of Building No. 138. A closer interdepartmental relationship between these three programs would increase functional effectiveness of the Fiscal Service program as well as the other services.

### Environment

The overall appearance and HVAC quality/quantity is adequate.

### Equipment/Systems

No deficiencies were noted.

### Five Year Facility Plan (FY 1988 - FY 1992)

This service will be consolidated with all administrative functions as proposed under the FY 1990 Phase II Renovate Building No. 124.

### General Comments/Conclusions

This service exceeds criteria for the projected program requirements for the Year 2000. Current and future Fiscal Service requirements need to be evaluated and a more functional layout both in terms of space utilization and interdepartmental relationships is desirable.



2.3.10

m	<u>DEPARTMENT/SERVICE</u>	HOSPITAL DIRECTOR'S SUITE
	<u>Location</u>	Building No. 138 First Floor
	<u>Building Construction Date</u>	1958
	<u>Utilization Index</u>	N/A
	<u>Present Total Sq. Ft.</u>	Net - 2278 Gross - 3415
	<u>% of Req'd. NSF Available (Exist.)</u>	50%
	<u>Projected Required Sq. Ft. (FY 2000)</u>	Net - 4920 Gross - 6888 (C.F. 1.4)
	<u>% of Req'd. NSF Available (Projected)</u>	46%

Description of Service

The Hospital Director's Suite is responsible for the administration of the Medical Center facilities and staff.

Space Analysis

This department consists of offices for the Hospital Director, Associate Director, Chief of Staff, Assistant Chief of Staff, and Administrative Assistant as well as their respective secretaries. There is also two staff toilet rooms and a storage room. The existing space although 50% deficient in area functionally meets current needs.

Functional Analysis (Intradepartment)

Though located in the same general area, the separation of Chief of Staff and the Administrative Assistant plus their respective secretaries hampers intradepartmental relationships. Conference space for the program is located on the second floor.

Functional Analysis (Interdepartmental)

Present adjacency to services such as Fiscal Services, Nursing Service Administration, Lobby and Medical Administration Service is desirable and convenient.

Environment

Environmental systems and the interior appearance is adequate.

### Equipment/Systems

No specific equipment and systems support this service.

### Five Year Facility Plan (FY 1988 - FY 1992)

The Hospital Director's Suite will be relocated under FY 1990 Minor project, Renovate Building No. 124, as part of the administration consolidation.

### General Comments/Conclusions

Though presently separated into two areas, the Hospital Director's Suite and the present overall space allocated to the program is adequate.

This program would have difficulty meeting projected criteria due to space availability and configuration.

2.3.10

n	<u>DEPARTMENT/SERVICE</u>	LABORATORY
	<u>Location</u>	Building No. 124 First Floor
	<u>Building Construction Date</u>	1943
	<u>Utilization Index</u>	FY 86 Lab Tests 151,419
	<u>Present Total Sq. Ft.</u>	Net - 2620 Gross - 3668
	<u>% of Req. NSF Available (Exist.)</u>	50%
	<u>Projected Required Sq. Ft.</u> <u>(FY 2000)</u>	Net - 4584 Gross - 6418 (C.F. 1.4)
	<u>% of Reqd. NSF Available (Projected)</u>	57%

Description of Services

The Laboratory Service provides a wide range of clinical and anatomic pathology services which are necessary to carry out tests and procedures for diagnostic use in patient care. Both inpatients and outpatients utilize this service.

Space Analysis

The space is only 50% VA criteria. The open laboratory concept has not been achieved. The numerous partitions plus the splitting of the department by a public corridor make for small, crowded and inefficient labs, connected by excessive circulation routes. Inadequate space exists for the following areas: laboratory, patient waiting, offices, storage, glasswash and staff facilities. The bench layout within the labs does not provide for sufficient bench length and open floor space for portable equipment is minimal. The autopsy suite is deficient in space. Currently, no satellite labs exist on the station. All services are provided from the main laboratory.

Functional Analysis (Intradepartmental)

Inefficiencies and disruptions are frequent because the circulation corridor splits the related components of this service. Therefore, the necessary functional adjacencies and work flow cannot occur. The office/staff support areas are remote from the laboratories creating poor supervision. Chemistry and microbiology are segregated from the other laboratory space, patient waiting (only 50% of criteria) takes place within the blood drawing room. Handicapped patients and staff from buildings other than 124, 15, 16 and 17 can only reach the laboratory through Building No. 15.

## Functional Analysis (Interdepartmental)

This department serves all patient units on the station. The acute care beds which generate the bulk of workload are in Building No. 138. The remainder and majority of patients are not convenient. The laboratory is adjacent to the outpatient clinic. Transport of cadavers to the autopsy suite often occurs in public corridors. Delivery of supplies and movement of patients and staff is congested by the presence of only one elevator within Building No. 124.

## Environment

The ventilation and cooling systems are substandard. Window air-conditioners are in place but are not sufficient. Air exchange is poor, dust control and temperature regulation are presently impossible. Illumination in most areas is inadequate.

## Equipment/Systems

Condition of equipment and the supply of medical gases are adequate. Distribution of hot water is sporadic and requires a prolonged period to reach proper temperature. The phone system is frequently out of service and the number of lines available is inadequate.

## Five Year Facility Plan FY 1988 - FY 1992

As part of a larger Minor project scheduled for FY 88 at \$1.9 million, the laboratory will be moved to Building No. 138 - second floor and given the proper square footage. This is a domino move dependent upon the relocation of the NHCU.

An FY 1987 \$29,000 NRM project will replace the existing autopsy cold room.

## General Comments/Conclusions

There is no adjacent space in which to expand to meet current criteria. The impact of increasing computerization of this service may impact its space requirements. Safety concerns for the storage of hazardous chemicals requires multiple exit routes and adjacency to perimeter walls.

This service is currently deficient in space for its functional program. The configuration of the building which houses this service does not lend itself to the functional activities taking place within. If this services is to comply with projected VA criteria it will require additional floor area in a new setting. Also, necessary functional relationships with other services must be maintained with others being strengthened.

## 2.3.10

<u>DEPARTMENT/SERVICE</u>	<u>LIBRARY</u>
<u>Location</u>	Building No. 49 - Patient & Medical Basement, First and Second Floor
<u>Building Construction Date</u>	1915
<u>Utilization Index</u>	N/A
<u>Present Total Sq. Ft.</u>	Net - 2398 Gross - 2878
<u>% of Req'd. NSF Available (Exist.)</u>	50%
<u>Projected Required Sq. Ft. (FY 2000)</u>	Net - 4066 Gross - 4880 (C.F. 1.3)
<u>% of Req'd. NSF Available (Projected)</u>	58%

### Description of Service

The Library Service has two main components, Health Science and Patient Libraries. The Health Science Library is used primarily by physicians, dentists, nurses and to a lesser degree by clinical and administrative support staff. The Library Service facility provides service to all patients and may also be utilized by facility staff.

### Space Analysis

The Library Service occupies all Building No. 49. The basement level provides a general use conference room along with space for the buildings mechanical equipment. The first floor contains the reading rooms, librarians office and the lobby. All areas except the office have criteria deficiencies. The second floor consists of the Health Science component. Toilet facilities lack proper square footage and do not meet handicap accessibility.

### Functional Analysis (Intradepartmental)

The Library Service cannot meet the needs of the present patient population. This is based, in part, on the current volume of print material available. To achieve maximum control over resources, there should be only one point of entry, visually controlled by the circulation desk. The card catalog is not visible upon entry. Current periodicals are not contiguous to bound periodicals. Library seating is not arranged conveniently to the shelving areas. The Medical Center has erected an elevator to service all floors but it is not handicap accessible.

### Functional Analysis (Interdepartmental)

Building No. 49 is not easily accessible to its users. Patients must expose themselves to the weather and if handicapped or disabled require staff assistance to make use of the patient library. This leads to under utilization of the service and inefficient staff use. The Health Science library, although near the long term psychiatric buildings, must support a medical staff that for primarily is located on the west side of the campus.

### Environment

The structural system does not comply with floor loading requirements. No air conditioning or ventilation systems are provided. Task lighting in most areas is inadequate.

### Equipment/Systems

Limited existing systems are adequate. Present furniture is antiquated and requires replacement.

### Five Year Facility Plan (FY 1988 and FY 1992)

No work scheduled, after the completion of the current Minor Miscellaneous project that will consolidate both functions.

### General Comments/Conclusions

Building No. 49 is a free-standing structure, wholly dedicated to library service that with additions could meet existing needs. The entire library service, although newly consolidated, should be relocated to an area that provides; ample square footage; maximum convenience and accessibility by patients and staff; and an environment that will encourage a higher level of utilization.

2.3.10

<b>p</b>	<b><u>DEPARTMENT/SERVICE</u></b>	<b>MEDICAL ADMINISTRATION</b>
	<b><u>Location</u></b>	Building No. 138 Basement and First Floor
	<b><u>Building Construction Date</u></b>	1958
	<b><u>Utilization Index</u></b>	N/A
	<b><u>Present Total Sq. Ft.</u></b>	Net - 5442 Gross - 7201
	<b><u>% of Req'd. NSF Available (Exist.)</u></b>	60%
	<b><u>Projected Required Sq. Ft. (FY 2000)</u></b>	Net - 7487 Gross - 8984 (C.F. 1.2)
	<b><u>% of Req'd. NSF Available (Projected)</u></b>	72%

**Description of Service**

The Medical Administration Service is responsible for a multiplicity of functions for both inpatients and outpatients, including: reception, scheduling, admission and discharge, medical information, record storage, physicians' workroom, mail, reproduction, telecommunications, telephone switchboard, information, ward activities and other control center activities.

**Space Analysis**

Contained in the basement level of Building No. 138 are the medical records storage room, office of the medical information chief and medical information clerks. The first floor contains the telephone operator, teletype room, M.A.S. offices for administration, (the director, ward administration, secretaries), detail clerks, as well as two reproduction rooms, a publication room, mail room and supplies storage. The space is adequate for current demands but will not meet projected needs.

**Functional Analysis (Intradepartmental)**

The overall layout of this department is adequate, yet there is a lack of space, particularly in the medical records area, reproduction, publication and mail rooms.

Patient's medical records must be hand carried from Records Storage Room in the basement of 138 to the Admission/Discharge area located on the first floor of Building No. 124. The distance involved, plus the staff required to locate and transport a file is a problem especially during off-hours and weekends.

### Functional Analysis (Interdepartmental)

The location of this department in relation to other services, such as Fiscal Service and Admissions/Discharges areas is adequate and convenient. However, Medical Records should be contiguous to Admissions or have a direct mechanical, method of transport for patient files.

### Environment

Ventilation throughout Building No. 138 is poor. Control of the heating system is difficult. The phone system is overloaded and inadequate, but scheduled for replacement.

### Equipment

The equipment presently in use is adequate and has been replaced when needs occurred.

### Five Year Facility Plan FY 1988 - FY 1992

All admissions and filing functions will be consolidated and relocated to Building No. 138 under the FY 1989 Minor project, Renovate Building No. 138.

### General Comments/Conclusions

Replacement of the telephone system and installation of computer terminal would increase operational effectiveness of this department.

Lack of space is an ongoing problem with this constantly changing and growing department. Due to the diversified nature of the services provided by this department, close proximity to most areas is not necessary yet, close proximity to the Fiscal Service is convenient. Medical records must be directly accessible to Admissions either by location or mechanical transport. In order to meet projected criteria, additional space will be required if this program were to expand in place.



2.3.10

q	<u>DEPARTMENT/SERVICE</u>	MEDICAL MEDIA PRODUCTION
	<u>Location</u>	Building No. 60 First Floor
	<u>Building Construction Date</u>	1899
	<u>Utilization Index</u>	N/A
	<u>Present Total Sq. Ft.</u>	Net - 270 Gross - 320
	<u>% of Reqd. NSF Available (Exist.)</u>	85%
	<u>Project Required Sq. Ft. (FY 2000)</u>	Net - 340 Gross - 442 (C.F. 1.3)
	<u>% of Reqd. NSF Available (Projected)</u>	79%

Description of Service

This service provides audio-visual aids for the medical, dental specialities, and education. These aids include drawings, paintings, moulages, models, charts, graphs, still photographs, and motion pictures in monochrome and full color, sound and video recordings, projecturals and similar material used as individual items or as collection for teaching, records, study, research, documentation, demonstration publication and exhibition.

Space Analysis

The administration area plus all graphics are done within one space. With the minimal amount of production required, this space is sufficient for current needs.

Functional Analysis (Intradepartmental)

Although the workload on this service is nominal, the need for a separate lightproof room for film processing, and contact and projection printing is warranted.

Functional Analysis (Interdepartmental)

The only close interdepartmental relationship that medical media requires is with library service. Its present location is convenient to both the medical and the patient library in Building 49.

Environment

The existing conditions are acceptable.

Equipment/Services

The equipment is adequate.

Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will affect the functional operation of this department.

General Comments/Conclusions

With the relocation of the administration area of the Chaplain Service, this service could expand and meet current criteria. The working relationship and Library Service should be maintained therefore the library's position will dictate this service's location. Space for a processing unit plus an adequate graphic illustration work area is needed.

2.3.10

r	<u>DEPARTMENT/SERVICE</u>	NURSING ADMINISTRATION
	<u>Location</u>	Building No. 138 First Floor Building No. 13
	<u>Building Construction Date</u>	1958
	<u>Utilization Index</u>	N/A
	<u>Present Total Sq. Ft.</u>	Net - 1355 Gross - 1568
	<u>% of Reqd. NSF Available (Exist.)</u>	40%
	<u>Projected Required Sq. Ft. (FY 2000)</u>	Net - 2980 Gross - 3874 (C.F. 1.3)
	<u>% of Reqd. NSF Available (Projected)</u>	45%

Description of Service

The Nursing Service Administration is responsible for the administration, operation, training and education of the nursing staff for the Medical Center.

Space Analysis

This department is composed of the Nursing Service Administration offices containing the office of the chief of nursing, assistant chief of nursing, an administrative assistant, timekeeping, nursing service office, staff toilet, storage room and kitchenette as well as nursing facilities on the nursing unit. The current space is undersized for the present workloads and will be less than half what is required for FY 2000.

Functional Analysis (Intradepartmental)

The internal layout of the Administrative Offices is confusing and the space is undersized. Nursing education is poorly supervised and poorly attended because of its location on the other side of the Medical Center in Building No. 13, remote from both administrator and the majority of nursing personnel it must support.

Functional Analysis (Interdepartmental)

Due to the campus nature of the Medical Center, adjacency of this service to all nursing unit is not possible. The present location allows for adequate interdepartmental relationships with the personnel service and some nursing units.

### Environment

Ventilation throughout Building No. 138 and 13 is poor. Control of the heating system is difficult, and air conditioning in Building No. 13 is not available.

### Equipment/Systems

The phone system is inadequate, yet scheduled for replacement. Computer terminals have been installed in some nursing units.

### Five Year Facility Plan (FY 1988 - FY 1992)

As a result of the current project to consolidate the library service, Nurses' Education will capture all of Building No. 13 when the medical library is relocated.

### General Comments/Conclusions

With the relocation of the Health Science Library to Building No. 49, space is available in Building No. 13 to consolidate both administration and education to meet current needs. However, it would put the entire department remote from the personnel it support. In order to meet projected criteria, this service would require additional space which is not presently available at its present locations. Appropriately designed spaces as well as consolidation of the administration and education unit is desirable. This service should be located within reasonable distance to all nursing units for timely and effective interaction and operation.

2.3.10

s(1) DEPARTMENT/SERVICE

INTERMEDIATE CARE NURSING  
UNIT

Location

Building No. 15  
Second Floor - Unit B

Building Construction Date

1929

Utilization Index

31 Beds

Present Total Sq. Ft.

Net - 5,821  
Gross - 9,264

% of Req'd. NSF Available (Exist.)

80%

Projected Required Sq. Ft.  
(Typical 36 Bed Unit for  
FY 2000)

Net - 8,455  
Gross - 14,374 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

68%

Description of Service

This is a medical unit requiring an intermediate level of nursing care. The unit is responsible for the treatment and continued care of patients, the majority of whom are ambulatory and carry a psychiatric diagnosis with secondary medical problems. Length of stay ranges from 30 to 180 days.

Space Analysis

The unit occupies the entire second floor. The sleeping areas consist of 4 two-bed rooms, 1 three-bed room and 5 four-bed rooms. Many patient rooms are undersized, do not meet VA criteria or handicapped requirements. The predominant four-bed room mix differs from that of the preferred VA standard which calls for a majority of one and two-bed rooms. An isolation room is required. None exist. It is desirable for all patient rooms to have access to private or shared bath/toilet facilities. Again, none exist. The congregate bath and toilet room is deficient in space and the number and location of some fixtures may have to be altered to meet accessibility standards. The dayroom meets VA space criteria, however with its use for other functions such as dining, visitor lounge and conferences, it is undersized. The nurse station is only 65% of criteria and is further compromised by the storage of SPD and Pharmacy carts. The medication room has become a general store room prohibiting its designated design function. One office, a demonstration/classroom and staff lockers which are required criteria functions, do not exist.

### Functional Analysis (Intradepartmental)

The unit is divided by the cross corridor that connects Building No. 16 and 17 to 124 and 138. The dayroom and certain staff functions are separated from the rest of the unit. Placement of equipment/furniture in patient rooms and the congregate bath restricts movement, resulting in a impedance of normal activities and handicap accessibility. Access to supervised outdoor activity area is desirable. Four bedrooms are more than 90 feet from the nurse's station.

### Functional Analysis (Interdepartmental)

The characteristics of intermediate patients indicate that as many as 50% could be classified as non-ambulatory, therefore proper elevator service is essential. All vertical deliveries of supplies and patient movement to and from this nursing unit is via either of the single elevators in Building No. 16 and 17.

### Projected Bed Loss (Current Criteria)

This unit will lose a minimum 4 beds in order to provide two 1-bed room with private baths and two other bedrooms with private toilets. This will create a ward of 27 beds with the VA standard being 40 optimum and a minimum of 30 beds.

### Environment

There is no central air conditioning system in the building. Window air conditioning units are used in the patient rooms and dayroom. The radiator system is difficult to regulate. More daylight is desirable in patient space.

### Equipment/Systems

The telephone system is frequently out of service and the number of lines is inadequate. No phone service is available in the unit, for patient use. A nurse call system and medical gas system (oxygen, vacuum, and compressed air) are present and adequate.

### Five Year Facility Plan FY 1988 - FY 1992

No work scheduled that will effect the functional operation of this unit.

### General Comments/Conclusions

Minor modifications could improve some of the functional shortcomings, however, the shortage of space can only be resolved with the addition of floor area. Transport and accessibility problems for Building No. 15 improved with the addition of elevators. Additional floor area would be necessary to resolve the space deficiencies and meet VA criteria. If additional floor area is proposed, Buildings No. 16 and 17 should be considered in the planning with a solution for all three.

## 2.3.10

s(1) DEPARTMENT/SERVICEINTERMEDIATE CARE  
NURSING UNITLocationBuilding No. 16  
First Floor Unit ABuilding Construction Date

1929

Utilization Index

23 Bed Step-down Unit

Present Total Sq. Ft.Net - 4,371  
Gross - 9,2654% of Req'd. NSF Available (Exist.)

80%

Projected Required Sq. Ft.  
(36 Bed Unit typical for Yr. 2000  
Program)Net - 8,455  
Gross - 14,374 (C.F. 1.7)% of Req'd. NSF Available (Projected)

52%

Description of Service

Currently this nursing unit is serving as a step-down (transition) facility. Patients have been transferred from an acute medical unit and are either awaiting discharge or transfer to other nursing units. The majority of these patients are ambulatory and carry a primary psychiatric diagnosis with secondary medical problems. Close supervision and daily maintenance of all patients is required. Length of stay varies with the patients diagnosis.

Space Analysis

The unit occupies a portion of the first floor. The sleeping areas consist of 1 one-bed room, 2 three-bed rooms and 4 four-bed rooms. Bed rooms are undersized, not handicapped accessible, and do not conform to program criteria. The predominate three and four bed room mix differ from the VA Standards, which calls for a majority of 1 and 2-bed rooms. There is only one private bedroom. No isolation or private bathing/toilets are provided. Congregate bathrooms have only 50% of the space required and do not satisfy handicapped accessibility requirements. The dayroom is undersized and acts as a dining and activity area.

Space deficiencies exist in the following areas: medication room, general/wheelchair storage, office space and support areas. The unit lacks space for the following: clean/soiled utility rooms, conference rooms, dining area, facilities for visitors and an exam room.

### Functional Analysis (Intradepartmental)

Handicapped accessibility is restricted within certain areas by lack of net square footage. The congregate bath/toilet is deficient in the number and type of fixtures, plus accessibility by the handicapped. The storage of equipment and supplies in the nurse station space creates functional inefficiencies and congestion. The dayroom functions not only as an activity area but also as a dining, conference and visitor facility. A main outside entrance to the building penetrates the bed unit which compromises patient privacy and the security of the unit.

### Functional Analysis (Interdepartmental)

Rehabilitation medicine (physical and corrective therapy) which are directly involved with patient treatment are located immediately adjacent to this unit. The Pharmacy, Laboratory and Dental service can all be reached through an indirect system of connecting corridors. Patient transport to other treatment areas is impeded due to the deficient elevator system. This system involves both a limited number of cabs and a slow response time. Handicapped accessibility to this building and unit, being on ground level, is good. Entry is by means of an external ramp located adjacent to the building.

### Projected Bed Loss (Current Criteria)

A minimum of 2 beds plus one office would be lost to achieve two 1-bed room with private baths and two other bedrooms with private toilets. The unit would consist of 21 beds.

### Environment

The unit experiences deficiencies in its cooling, heating and ventilation system. Window air conditioning units are utilized in the patient rooms and the dayroom. Control of the heating and ventilating system is poor and no individual room controls are provided. Ventilation is inadequate in the support areas and in the congregate bathing spaces. The distribution of hot water to the unit is unreliable.

### Equipment/Systems

The nurse call system is operational and adequate for user needs. A medical gas system (oxygen, vacuum and compressed air) supplies all patient rooms. The telephone system is inadequate, has limited available lines and is frequently out of service.

### Five Year Facility Plan (FY 1988 - FY 1992)

No funded project is scheduled that will effect the functional working of this unit.



### General Comments/Conclusions

The Unit has both space and functional deficiencies. Minor space modifications could improve some of the functional deficiencies. The shortages of critical required space cannot be resolved within the present parameters of the unit. Additional floor space would be necessary as the only means to achieving a resolution of both the existing space deficiencies and to satisfy the projected criteria requirements. If addition floor area is proposed, Buildings No. 15 and 17 should be considered in the planning with a coordinated solution for all three.

2.3.10

s(8) DEPARTMENT/SERVICE

ACUTE PSYCHIATRIC -  
LOCKED UNIT

Location

Building No. 11  
First & Second Floor

Building Construction Date

1889

Utilization Index

40 Bed

Present Total Sq. Ft.

Net - 9,401  
Gross - 14,290

% of Req'd. NSF Available (Exist.)

100%

Projected Required Sq. Ft.  
(Typical 31 Bed Unit for  
FY 2000)

Net - 8,250  
Gross - 14,290 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

114%

Description of Service

The Acute Psychiatric Unit is responsible for admission, treatment, and continued care of psychiatric patients with suicidal or assaultive behavior. These patients have limited discharge potentials.

Space Analysis

The first floor contains most of the patient activity and support areas as well as 2 four-bed rooms. The activity areas consist of two dayrooms, a game room, quiet room and a multipurpose room. Support areas consist of a nurse's station, medication room, visitor's lounge, staff locker and toilet room, staff offices and congregate toilet bathing facilities. The second floor includes 8 four-bed rooms supported by offices, a staff lounge and congregate toilet and bathing facilities.

The present net sq. ft. - 9401 is 1151 sq. ft. larger than the projected net sq. ft. - 8250. The existing program contains a total of 40 beds while the projected has a total of 31 beds. The total distribution of space available by room does not meet program criteria. The nurse's station's total space seems excessive, yet, the charting, nourishment, physician's dictation and clerk functions operate here also resulting in a crowded condition. The predominant four-bed room mix differs from that of the preferred VA standard which calls for a majority of one-bed and two-bed rooms. The visitor's lounge is adequate, yet, no toilet facilities are available. There is a shortage of office, staff support and general storage space.

Functional Analysis (Intradepartmental)

Splitting this unit on two floors makes patient supervision difficult.

### Functional Analysis (Interdepartmental)

Building No. 11 is interconnected by a conditioned corridor to Buildings No. 8 (Gymnasium), 9 (Rehabilitation Services) and Bed Buildings 7, 10, 18. For at least 2/3 of the patients, their meals are eaten in Building No. 122, Diagnostic and Treatment services which should be convenient are located in buildings quite distant. Escort services as well as vehicular transport during inclement weather is required when using these functions.

### Projected Bed Loss (Current Criteria)

To provide the required seclusion rooms, two offices must be forfeited or at a minimum less of two beds a 4-bed room must be converted. Toilet facility requirements can be achieved without loss of beds. Even with a loss of 2 beds, this unit will be 8 beds over the optimum standard for psychiatric nursing units.

### Environment

The Building has no central air conditioning system, however, all patient rooms are equipped with window units. Ventilation in the dayroom, smoking area and multipurpose room is extremely poor due to the inadequacy of existing smoke abatement devices. As a result of this, the odor of stale tobacco products is a continuous problem. Toilets and bathing facilities are also poorly ventilated, and have a humidity problem.

### Equipment/Systems

At present, there is no nurse call system in the building. The phone system is frequently out of service; in addition, the number of lines available is inadequate. The phone system is presently scheduled for replacement. No medical gases exist in this building.

### Five Years Facility Plan FY 1988 - FY 1992

No work is scheduled that will effect the functional operation of this unit.

### General Comments/Conclusions

Improvement have and can be achieved, yet, if this nursing unit and treatment program is to meet VA criteria, the facilities provided by Building No. 11 would not be suitable for patient care.

2.3.10

s(9) DEPARTMENT/SERVICE

**EXTENDED PSYCHIATRIC  
NURSING UNIT**

<u>Location</u>	Building No. 10 First & Second Floor
<u>Building Construction Date</u>	1898
<u>Utilization Index</u>	48 Beds
<u>Present Total Sq. Ft.</u>	Net - 9,899 Gross - 15,572
<u>% of Req'd. NSF Available (Exist.)</u>	75%
<u>Projected Required Sq. Ft.</u> (Typical 31 Bed Unit for FY 2000)	Net - 8,250 Gross - 14,025 (C.F. 1.7)
<u>% of Req'd. NSF Available (Projected)</u>	120%

Description of Service

The extended psychiatric nursing unit is responsible for providing admission, treatment and continued care of its patients. Approximately 25 to 30 of the patients are also included in a long term care alcohol rehabilitation program.

Space Analysis

The first floor includes most of the patient activity and support areas as well as 4 four-bed rooms. The activity areas consist of a dayroom, dining/multipurpose room and a smoking area. Support services consist of a nurse's station, charting/nourishment room, medication room, observation room, exam room and staff offices. Toilet facilities are in a congregate arrangement. There are no bathing facilities or a female toilet on this floor. On the second floor, the patient sleeping areas consist of 8 four-bed rooms, supported by congregate toilet and bathing facilities, offices and staff lounge.

The present net sq. ft. -9899 is greater than the projected net sq. ft. -8250; however, the present 48 beds is 17 beds greater than the projected number of beds. The present distribution of space available by room does not meet program requirements. The nurse station is undersized and crowded. The medication room is approximately two-thirds its required size. There are no facilities for visitors. Many patient rooms are undersized. The predominate four-bed room mix differ from that of the preferred VA standard which calls for a combination of private and semi-private rooms. There is a shortage of office space and the exam room though available, is approximately one half its required size.

### Functional Analysis (Intradepartmental)

Splitting this unit on two floors makes patient supervision difficult. Vertical access between floor is limited to stairs and a single elevator.

### Functional Analysis (Interdepartmental)

Building No. 10 is interconnected to Buildings, 8 and 9, by a conditioned corridor. This corridor system provides patients access to the Gymnasium and Rehabilitation Services. Diagnostic and Treatment Clinics which should be convenient are located in buildings quite distant, requiring regular escort services as well as enclosed vehicular transport during inclement weather.

### Projected Bed Loss (Current Criteria)

The minimum toilet/bath requirements can be met without loss of beds and at a minimum loss of 3 beds the required seclusion rooms can be obtained. It must be noted that although split on two floors this is one nursing unit of 48 beds - 18 beds above the optimum standard.

### Environment

There is no central air conditioning system in the building. Window units exist in the patient rooms plus the dayroom and other areas on the first floor. None are provided on the second floor. The radiator system is difficult to regulate. Humidity in the congregate bathing area is a constant problem. Illumination in most areas is poor.

### Equipment/Systems

There is no nurse call system in the patient rooms. The phone system is frequently out of service and the number of lines available is inadequate. No medical gases exist in this building.

### Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will effect the functional operation of this unit.

### General Comments/Conclusions

Numerous deficiencies with this building make it unsuitable for inpatient psychiatric care. In order to provide an appropriate facility for this nursing unit, extensive renovations would be necessary.

2.3.10

s(10) DEPARTMENT/SERVICE

**ALCOHOL DEPENDENCY  
TREATMENT PROGRAM &  
NURSING UNIT**

Location

Building No. 12  
Basement, First &  
Second Floors

Building Construction Date

1889

Utilization Index

34 Bed

Present Total Sq. Ft.

Net - 13,320  
Gross - 22,792

% of Reqd. NSF Available (Exist.)

150%

Projected Required Sq. Ft.  
(Typical 31 Bed Unit -  
FY - 2000)

Net - 8,250  
Gross - 14,025 (C.F. 1.7)

% of Reqd. NSF Available (Projected)

162%

Description of Service

The Alcohol Dependency Treatment Program, a 34 bed unit, provides medical care and rehabilitation services for patients suffering various levels of alcohol dependency. A variety of treatment methods are employed including individual and group therapy, counseling and social and vocational rehabilitation techniques.

Space Analysis

The basement consists of 2 dayrooms/game rooms, clothing storage, mechanical/electrical equipment, a patient lounge and a coffee room.

The first floor has offices for the head nurse, an aftercare coordinator, a psychologist, two social workers, the ADTP coordinator and his secretary, and a physician. A nurse's station and medication room as well as a staff toilet/lounge support the staff. Patient treatment areas include a meeting room, three counseling offices, a group therapy area plus congregate toilet facilities for males only.

The second floor contains all of the patient sleeping quarters consisting of 6 four-bed rooms, 2 three-bed rooms, 1 semi-private bed room and 2 private bed rooms. Toilet and bathing facilities are in congregate arrangement. The predominate four-bed room mix differs from the preferred VA standard of semi-private and private rooms. No seclusion room or private bath/toilets exist.

### Functional Analysis (Intradepartmental)

This building's configuration plus separation of the program on two floors make supervision and observation of patients difficult. A handicap ramp is available to allow direct access from the exterior.

### Functional Analysis (interdepartmental)

Convenience to Diagnostic and Treatment function located in Buildings No. 138 and 124 is reasonable but the two are not physically connected. Dietary, Recreation and Rehabilitation Medicine services on the other hand are located in distant buildings. This physical separation of these functions requires the use of daily escort services as well as vehicular transport during inclement weather.

### Projected Bed Loss (Current Criteria)

With a minimum loss of 3 beds, all VA standards concerning toilets and seclusion rooms can be met. This loss of beds would also put the nursing unit at the optimum level.

### Environment

Building No. 12 recently renovated, was provided with a central air conditioning system in 1985 and proper environmental control system.

### Equipment/Systems

All equipment in this building is new due to recent renovation of the facility.

### Five Year Facility Plan FY 1988 - FY 1992

A proposed project to erect a connecting corridor to Building No. 138 is budgeted for FY 1991 under a Minor Miscellaneous for \$450,000.

### General Comments/Conclusions

Though recently renovated, Building No. 12 continues to pose problems for both staff and patients. Handicap accessibility is impossible without elevator service and most important, control, supervision and observation of patients is extremely difficult. To meet Yr. 2000 projections, Building No. 12 is deemed not suitable for patient care unless extensive renovations and additional square footage is provided.

2.3.10

s(11) DEPARTMENT/SERVICE

**GERO-PSYCHIATRIC AND  
INTENSIVE CARE  
PROGRAMS**

Location

Building No. 25  
First & Second Floor

Building Construction Date

1930

Utilization Index

71 Beds

Present Total Sq. Ft.

Net - 20,434  
Gross - 33,411

% of Reqd. NSF Available (Exist.)

120%

Projected Required Sq. Ft.  
(Typical 60 Bed Unit  
FY 2000)

Net - 14,551  
Gross - 24,736 (C.F. 1.7)

% of Reqd. NSF Available (Projected)

140%

Description of Service

The Gero-Psychiatric and Intensive Care Programs are divided into four teams:

Team A is an 18 bed assessment program through which patients transferred to Building No. 25 are admitted into order to assess their needs.

Team B is an 18 bed program which prepares patients for discharge to community nursing homes and residential care programs.

Team C is an 18 bed long term care program for chronic gero-psychiatric regressed patients.

Team D is an 17 bed long term care program for chronic gero-psychiatric patients with assaultive history.

Space Analysis

The first floor contains Team A and Team B programs. The Team A program consist of 2 one-bed rooms, 1 two-bed room, 2 three-bed rooms and 2 four-bed rooms as well as a physical therapy-hydrotherapy area. A dayroom/dining room also doubles as the occupational therapy area.



Toilet and bathing facilities are in a congregate arrangement. The nurse's station and medication/utility room are shared with Team B program. Team B consists of 10 one-bed rooms and 2 four-bed rooms as well as a visitor's/smoking room (no toilet), offices for the head nurse, a physician, a nurse's station, medication/utility room and a dayroom/dining which also doubles as the occupational therapy area.

The second floor is occupied by the other two teams. Two one-bed rooms, 1 two-bed rooms, 2 three-bed rooms and 2 four-bed rooms as well as a multipurpose/dining room and a dayroom which doubles as the occupational therapy area make up Team C. Team D consist of 9 one-bed rooms, and 2 four-bed rooms as well as a dayroom/multipurpose room. Toilet and bathing facilities are in congregate arrangement. The shower room is also utilized as the soiled linen holding room. The present net sq. ft. - 20,434 is greater than the projected net sq. ft. - 14,551. The total count of patient beds - 72 exceeds the projected beds - 60. A shortage of staff offices and general storage space exists. Most patient rooms do not meet VA criteria. The nurse's stations are approximately 60% below criteria which act as head nurse office and nourishment station. The projected program calls for a majority of two-bed rooms, yet, the existing unit has predominately one-bed and four-bed rooms. The visitors waiting is undersized and doubles as the patients smoking area.

#### Functional Analysis (Intradepartmental)

With the four units self-contained and evenly split among two floors, they function adequately, however additional space as programmed cannot be accommodated in the existing space.

#### Functional Analysis (Interdepartmental)

Food service is provided through a tray cart system to both floors. Although some physical and corrective therapy is provided in the units, patients requiring more extensive Rehabilitation Medicine Services must be escorted and during inclement weather be transported for treatment.

#### Projected Bed Loss (Current Criteria)

The minimum requirements can be met with a minimum bed loss of 2. However this still would put the unit 10 beds over the maximum allowable bed total.

#### Environment

There is no central air conditioning system in the building. All patient rooms are equipped with window units. The ventilation system is generally poor, particularly in the dayrooms and visitors lounge. The radiator system is difficult to regulate. Humidity in the congregate bathing area is a constant problem. Illumination in most areas is poor.

### Equipment/Systems

There is no nurse call system in the building. The phone system is inadequate, but scheduled for replacement. This entire building has but one elevator. No medical gases exist in this building.

### Five Year Facility Plan FY 1988 FY 1992

An FY 1988 NRM project for \$75,000 will install a nurse call system. This project has received top priority from District 15.

As a domino move created by the FY 1988, Minor project to Renovate Building No. 138, the NHCU now housed on floor 2 of 138 will be moved to Building No. 25 bumping the Geropsychiatric patients to the now vacant Building No. 7 and ward 16C.

### General Conditions

Ongoing installation of computer terminals and implementation of various programs will improve quality and efficiency in many areas such as scheduling, laboratory, test results, pharmacy and supply services. Replacement of the phone system will also greatly improve the communication systems.

Most of the problems and deficiencies noted in the units contained in this building are directly associated with the total number of beds versus the total space available. A reduction in both the number of units and total bed count; down to two - thirty bed units could potential solve space requirements and a proper functional layouts can be provided.

2.3.10

t

<u>DEPARTMENT/SERVICE</u>	OUTPATIENT PSYCHIATRIC
<u>Location</u>	Building No. 6 First Floor Building No. 15 First Floor
<u>Building Construction Date</u>	No. 6 - 1898 No. 15 - 1929
<u>Utilization Index</u>	FY 1986      FY 2000 20,716
<u>Present Total Sq. Ft.</u>	Net - 5,068 Gross - 8,656
<u>% of Req'd. NSF Available (Exist.)</u>	85%
<u>Projected Required Sq. Ft.</u> (FY 2000)	Net - 5,171 Gross - 7,756 (C.F. 1.5)
<u>% of Req'd. NSF Available (Projected)</u>	98%

Description of Service

The Outpatient Psychiatric Service is responsible for providing outpatients all the modalities of modern psychiatric treatments which have general medical acceptance. In addition, examination for hospital admission, compensation and pension and insurance services are conducted. Under the Outpatient Psychiatric Service are the Mental Hygiene and the Day Treatment Programs which provides day care treatment for patients for 2, 3, or 5 days per week plus Alcohol Abuse Clinic. This service is responsible for promoting, improving and educating patients in independent living skills, group interaction and community living.

Space Analysis

The Outpatient Psychiatric Clinic located on the first floor of Building No. 15 consists of reception/clerk, waiting area, female toilet, kitchenette, group room and offices for a psychologist, psychiatrist, clinical nurse specialist and social worker. The Day Treatment Program located on the first floor of Building No. 6 consists of a dayroom, smoking area, two group rooms, an alcohol abuse room, nurse's station, interview room, music room, congregate toilet facilities and staff offices. The present net sq. ft. - 8484 exceeds projected net sq. ft. criteria at - 5171. This difference in square footage is due to the existing Day Treatment Program which is a self contained department and not a part of the outpatient clinic. In order to evaluate this service, the Outpatient Psychiatric Clinic and the Day Treatment Program though in separate buildings have to be considered as one service. Based on this, there is a lack of offices for staff. The present distribution of space by room, although it exceeds projected criteria, does not meet program requirements.

### Functional Analysis (Intradepartmental)

The present separation of this service in two buildings greatly reduces efficient and proper utilization of space and produces inefficient utilization of staff. Under VA criteria, the staff assigned to the Outpatient Psychiatric Service interacts between the various programs offered by this service.

### Functional Analysis (Interdepartmental)

The Outpatient Psychiatric Clinic and Day Treatment Program's effectiveness is adversely affected by the travel distance and lack of centralization. A great deal of staff and patient time is expended in getting from one function to another.

### Environment

There is no central air conditioning system in either building. Ventilation and lighting levels are poor. The heating system is difficult to regulate.

### Equipment/Systems

There is no fixed equipment assigned to this service. The phone system is constantly out of service and the number of lines is inadequate.

### Five Year Facility Plan FY 1988 - FY 1992

FY 1988 has a minor miscellaneous project of \$44,900 to refurbish Building No. 2. The work involves 15,900 net square feet including removal of interior walls, rest rooms, showers, etc. and construction of therapy rooms, activity areas, offices, etc. The Day Treatment will relocate and Building No. 6 will be renovated for a Halfway House in FY 1989 by a Minor project of \$1,250,000. The remodeling will include an elevator, central air-conditioning and updated patient quarters.

The consolidation of administration functions as proposed in the FY 1988 Minor project, would include the movement of O.P. Psychiatric Administration to this area.

### General Comments/Conclusions

The Outpatient Psychiatric Services and programs offered by the service (Day Treatment and Mental Hygiene) should be consolidated at one location with appropriately designed spaces that would meet projected program requirements.

2.3.10

<u>DEPARTMENT/SERVICE</u>	<u>PERSONNEL</u>
<u>Location</u>	Building No. 138
<u>Building Construction Date</u>	1958
<u>Utilization Index</u>	N/A
<u>Present Total Sq. Ft.</u>	Net - 1879 Gross - 2066
<u>% of Reqd. NSF Available (Exist.)</u>	100%
<u>Projected Required Sq. Ft.</u> (FY 2000)	Net - 1735 Gross - 2255 (C.F. 1.3)
<u>% of Reqd. NSF Available (Projected)</u>	108%

Description of Service

The activities of Personnel Service relate to recruitment, placement, training, classification and pay administration, supervisor-employee relations and labor management administration. Personnel Service provides staff assistance to all levels of management and service to employees in situations having personnel management implications.

Space Analysis

This service has more than sufficient space for present and future needs. Deficiencies noted are due to the functional layout and distribution of space available to this service.

Functional Analysis (Intradepartmental)

Separation of this service by two main corridors reduces communication within the department and decreases supervising effectiveness.

Functional Analysis (Interdepartmental)

Close proximity to the Nursing and Fiscal services as well as accessibility to the outside public is desirable.

Environment

The working conditions are acceptable.

### Equipment/Systems

No specific equipment and systems support this service.

### Five Year Facility Plan FY 1988 - FY 1992

Personnel will move with all administrative functions to Building No. 124 as part of the proposed FY 1988, Phase I Minor project to Renovate Building No. 124.

### General Comments/Conclusions

It is desirable to reconfigure this service in order to optimize present space available and increase functional effectiveness and at the same time maintain a close interdepartmental relationship with the Nursing and Fiscal services.

## 2.3.10

v	<u>DEPARTMENT/SERVICE</u>	PHARMACY
	<u>Location</u>	Building No. 15 First floor
	<u>Building Construction Date</u>	1929
	<u>Utilization Index</u>	FY 1986 O.P. Prescriptions 53,669 FY 2000 O.P. Prescription 96,604
	<u>Present Total Sq. Ft.</u>	Net - 1,400 Gross - 1,800
	<u>% of Req'd. NSF Available (Exist.)</u>	15%
	<u>Projected Required Sq. Ft. (FY 2000)</u>	Net - 7,594 Gross - 9,872 (C.F. 1.3)
	<u>% of Req'd. NSF Available (Projected)</u>	18%

### Description of Service

Pharmacy Service is responsible for the controlled dispensing of all drugs required in the delivery of health care. Controlled dispensing includes the compounding of parenteral and other sterile admixtures, radio-pharmaceuticals, and the total drug utilization review process required to maintain a high quality of health care. This process provides information on prescribing patterns, drug consumption, frequency of individual drug and therapeutic categories, medication regimen costs and adverse drug actions. The service also provides drug information and consultation before, during and after prescribing process to the patient and all members of the health care team.

### Space Analysis

The department is separated by a major public corridor creating elongated work spaces. The pharmacy has numerous space deficiencies in the dispensing, preparation areas, office space, waiting and storage. Many functional elements, as identified in VA criteria, are forced to share space with noncompatible activities.

### Functional Analysis (Intradepartmental)

The separation of the service by a public corridor prevents the necessary work flow relationships. The outpatient waiting room is not visible from the main dispensing window. The preparation areas have internal circulation routes which bisect and disrupt work flow. Bench lengths and their layout are inadequate and do not satisfy user requirements. Support space occupies an area in the center of the unit creating a functional barrier to efficient work flow.

## Functional Analysis (Interdepartmental)

Pharmacy service relates directly to both inpatients and outpatients. All inpatient prescriptions are transported by pharmacy personnel. A remote warehouse facility holds all the pharmacies' drugs and supplies. Pharmacy personnel must travel to the warehouse in order to obtain these materials which creates security/control problems. The outpatient clinic, 150 yards away in Building No. 124, is reached by means of an indirect corridor system.

## Environment

The cooling and ventilation systems are inadequate. Systems are not zoned and therefore are difficult to regulate. Window air conditioning units are being utilized to provide cooling. Basic illumination in most areas is poor.

## Equipment/Systems

Equipment has been well maintained. All items are on a regular replacement schedule. A closed circuit TV security system is in place. The telephone system is frequently out of service. A computer system is proposed for this service. The existing fume hoods experience occasional exhaust deficiencies.

## Five Year Facility Plan FY 1988 - FY 1992

As proposed for FY 1989, the Pharmacy Department will be relocated to Building No. 138 as part of the Renovate Building 138 project.

There is no "soft" area adjacent to the pharmacy that could be captured to help diminish the critical space deficiency that now exists.

## General Comments/Conclusions

The pharmacy service has major space and functional deficiencies. Outpatient pharmacy must be close to ambulatory care.

The future impact of computerization on this service is an unknown element. For the service to comply with projected criteria, it will be required to expand its facilities which is not possible in its current location.



2.3.10

w	<u>DEPARTMENT/SERVICE</u>	PODIATRY
	<u>Location</u>	Building No. 124
	<u>Building Construction Date</u>	1943
	<u>Utilization Index</u>	Visits FY 1986 2,401
	<u>Present Total Sq. Ft.</u>	Net - 1,727 Gross - 3,724
	<u>% of Regd. NSF Available (Exist.)</u>	N/A
	<u>Projected Required Sq. Ft. (FY 2000)</u>	No program supplied
	<u>% of Regd. NSF Available (Projected)</u>	N/A

Description of Service

This clinic serves both in and outpatients with an emphasis on outpatients. The clinic provides specialized care of the feet, especially with the treatment and prevention of foot disorders.

Space Analysis

The clinic functions in recently renovated space of what used to be the operating suite. The three operating rooms serve as treatment space, with adjoining scrub rooms. The chief of Podiatry and his assistant have large individual offices. In addition, there is a post-op and storage room. The service space is unnecessarily large for the current and projected workload.

Functional Analysis (Intradepartmental)

The department, although oversized, is unified and not split by any through corridors. The treatment rooms are clustered with support convenient.

Functional Analysis (Interdepartmental)

As currently located, the Podiatry clinic is consolidated with the Outpatient Clinics, accessible by elevator and situated in Building No. 124 between the majority of inpatients housed in 138 and 15, 16 and 17.

Environment

The overall quality of space is adequate. Heating and cooling as well as the lighting levels are acceptable.

### Equipment/Systems

All fixed and moveable equipment is in good condition.

### Five Year Facility Plan FY 1988 - FY 1992

The proposed consolidation of ambulatory care functions that is scheduled to occur with a FY 1988 Minor project (Renovate Building No. 138) will include the relocation of this service.

### General Comments/Conclusions

The relationship with ambulatory care and the ease of accessibility to inpatients must be maintained. Space must be appropriate for FY 2000 staffing and workload.

## 2.3.10

x	<u>DEPARTMENT/SERVICE</u>	PSYCHIATRIC
	<u>Location</u>	Building No. 124 Third Floor
	<u>Building Construction Date</u>	1943
	<u>Utilization Index</u>	N/A
	<u>Present Total Sq. Ft.</u>	Net - 380 Gross - 494
	<u>% of Req'd. NSF Available (Exist.)</u>	65%
	<u>Projected Required Sq. Ft.</u> (FY 2000)	Net - 510 Gross - 663 (C.F. 1.3)
	<u>% of Req'd. NSF Available (Projected)</u>	75%

### Description of Services

This facility provides for all the administrative and clerical functions for the psychiatric service.

### Space Analysis

Space provided are the chief's office, secretary/clerical area and a shared conference room. All spaces satisfy criteria. The following spaces are not provided for: assistant chief's office and an interview/exam room. Office space is also provided in the outpatient clinic and a psychiatrist's office should be provided for on each psychiatric unit.

### Functional Analysis (Intradepartmental)

The administrative suite is bisected by a public corridor which creates disruptions. An internal circulation route should be located within the suite. On the wards, the psychiatrist's offices are not readily accessible to their related patient units. Office space should also be in proximity to the clerical staff to best utilize their services.

### Functional Analysis (Interdepartmental)

The Administrative Suite relates to the medical administrative area, but does not require a close proximity.

### Environment

Quality of the office spaces is acceptable. Finishes need upgrading. Natural light is available to the majority of the offices. Cooling system is deficient.

### Equipment/Systems

The majority of the office equipment is in good condition. Additional storage units and furniture is necessary. The telephone system is deficient and available lines are limited.

### Five Year Facility Plan (FY 1988 - FY 1992)

The proposed Minor project for FY 1990, Phase II of Renovation of Building No. 124, will relocate psychiatry from the third floor to the second.

### General Comments/Conclusions

This administrative element has minor space and functional deficiencies. Limited additional space is available adjacent to the suite. An adequate communications link with the offices on the units is required.

2.3.10

y	<u>DEPARTMENT/SERVICE</u>	PSYCHOLOGY
	<u>Location</u>	Building No. 6 Second Floor
	<u>Building Construction Date</u>	No. 6 - 1889 No. 124 - 1943
	<u>Utilization Index</u>	N/A
	<u>Present Total Sq. Ft.</u>	Net - 1242 Gross - 1360
	<u>% of Req'd. NSF Available (Exist.)</u>	70%
	<u>Projected Required Sq. Ft. (FY 2000)</u>	Net - 1550 Gross - 2170 (C.F. 1.4)
	<u>% of Req'd. NSF Available (Projected)</u>	80%

Description of Service

The Psychology Service is responsible for the administration and implementation of programs which provide psychological examination, testing and counseling.

Space Analysis

Located on the second floor of Building No. 6 are two technicians and a clerk who provide support services to six psychologists assigned to each Psychiatric Nursing Unit in Buildings 1 through 6. The Chief, Assistant Chief and a conference room for the service are located on the third floor of Building 124. Office space is generally adequate, however, group testing space is non-existent.

Functional Analysis (Intradepartmental)

The close proximity of support services such as the clerk and technician to the psychologists in Buildings No. 1 through 6 is convenient, however, the separation of the clerical area from the offices of the Chief and Assistant Chief is inefficient. Administration, control and supervision of this service is extremely difficult.

Functional Analysis (Interdepartmental)

Location of this service convenient to Buildings No. 1 through 6 which house Psychiatric Nursing Units is necessary in order to provide timely services to both staff and patients.

Environment

Ventilation and general lighting is poor.

Equipment/Systems

Adequate.

Five Year Facility Plan (FY 1988 - FY 1992)

The proposed FY 1990 Minor project, Phase II Renovate Building No. 124, will relocate Psychology Service from the third floor to the second.

General Comments/Conclusions

No additional square footage can be acquired to relieve the space deficiency that now exists. At present, this program does not meet criteria. Consolidation of all required functions within appropriately designed spaces and adjacent to the Psychiatric Nursing Units is needed.

## 2.3.10

<b>z</b>	<b><u>DEPARTMENT/SERVICE</u></b>	<b>RADIOLOGY</b>
	<b><u>Location</u></b>	Building No. 124 Second Floor
	<b><u>Building Construction Date</u></b>	1943
	<b><u>Utilization Index</u></b>	FY 1986 Total Exam - 9,563 FY 2000 Total Exam - 12,428
	<b><u>Present Total Sq. Ft.</u></b>	Net - 1,401 Gross - 2,242
	<b><u>% of Req'd. NSF Available (Exist.)</u></b>	30%
	<b><u>Projected Required Sq. Ft.</u></b> <b>(FY 2000)</b>	Net - 4,050 Gross - 6,480 (C.F. 1.6)
	<b><u>% of Req'd. NSF Available (Projected)</u></b>	35%

### **Description of Services**

The Radiology Service provides all radiological facilities for both inpatients and outpatients. Some services are utilized by outside facilities (VA-Ft. Wayne and by the Grissom Air Force Base). This suite provides all diagnostic rooms and all direct support facilities. No satellite Radiology suites exist at the station.

### **Space Analysis**

The Radiology service has less than 30% of its current required space. Existing facilities all undersized include two - general procedure rooms, two offices and a storage room. The following areas do not exist: support office space, staff facilities, procedure suites (Chest, R/F, and special procedure), prep area, waiting space, dressing rooms, clean/soiled utility, conference room, toilets and equipment storage. The configuration of the area does not lend itself to an efficient operation with radiology rooms currently clustered about the service core.

### **Functional Analysis (Intradepartmental)**

Because of the constricted layout and deficiency of space, treatment time is lengthened and thus the number of patients scheduled per day is limited. Access to the film processing area disrupts treatment activities. Traffic patterns overlap and control is inadequate. The inefficiency of this service is caused by its location, layout and space.

### Functional Analysis (Interdepartmental)

The Radiology Suite does not have a direct relationship to the Ambulatory care area. The relationship to the main user group, the acute nursing units in Building 138 is acceptable, but not ideal. Both relationships are impacted because of the lack of appropriate elevator service. Nursing service provides for the transportation of all patients to and from the radiology department, which results in inefficient staff utilization.

### Environment

Heating and air-conditioning systems are deficient. The appropriate amount, level and control of environmental systems are difficult to achieve. Illumination in most is inadequate.

### Equipment/Systems

The radiology equipment ranges from eight to eleven years of service. The phone system is frequently out of service and the number of lines is restricted.

### Five Year Facility Plan FY 1988 - FY 1992

As part of an \$1.9 million minor project scheduled for FY 1988, the radiology suite will be moved to the second floor of Building No. 138. This move is contingent on the construction of new 240-Bed Geropsychiatric facility.

### General Comments/Conclusions

The current facilities are outdated and require additional space. Poor layout results in functional inefficiencies and undesirable work flow. The building layout prohibits any possible in place expansion. Because acute beds will be reduced in FY 2000 to just 44, the primary load on radiology will come from ambulatory care. A location adjacent to the outpatient clinic is necessary but accessibility from the acute beds must be maintained.



2.3.10

aa DEPARTMENT/SERVICE

RECREATION

Location

Building No. 8 (Gymnasium)  
 Building No. 20 (Leisure  
 Clinic)  
 Building No. 47 (Theatre &  
 Music Therapy Clinic)  
 Building No. 138  
 (Recreation Clinic)  
 Outdoor Areas (Softball  
 field, driving range,  
 miniature golf, horse  
 shoe pits)

Building Construction Date

No. 8 - 1924  
 No. 20 - 1890  
 No. 47 - 1891  
 No. 138 - 1958

Utilization Index

N/A

Present Total Sq. Ft.

Net - 27,043\* +  
 \*No Data Available  
 for Building No. 20  
 Gross - 30,457

% of Req'd. NSF Available (Exist.)

378%

Projected Required Sq. Ft.  
 (FY 2000)

Net - 7190  
 Gross - 9347 (C.F. 1.3)

% of Req'd. NSF Available (Projected)

324%

Description of Service

Recreation Service provides a therapeutic program to improve the quality of patients' lives and to assist in their transition to community living. The program is appropriately provided as an integral part of health care delivery.

Recreation therapists utilize a variety of modalities such as physical exercise, art, music, bowling or psychodrama to treat the physical, mental, emotional and social handicaps of individual patients, groups and families. These treatment programs concentrate on: 1) sensory integration, 2) ambulation, 3) diminishing emotional stress, 4) (community entry, 5) reality orientation, 6) muscular dysfunction reorientation, 7) treatment of psychosocial dysfunction, 8) providing a sense of achievement and progress and 9) channeling energies into acceptable forms of behavior.

### Space Analysis

Building No. 8 has the gymnasium on the first floor with a bowling alley and exercise room on the basement level.

A game room, multipurpose room and popcorn machine area as well as staff and patient rest room facilities are on the first floor of Building No. 20.

Building No. 47 contains both the theatre and music therapy clinic while in Building No. 138, contains the recreation clinic area with capacity for 30 to 75 patients. There are also additional outdoor recreation areas such as a softball field, driving range, miniature golf course and horse shoe pit throughout the campus grounds.

### Functional Analysis (Intradepartmental)

The overall Recreation Service facilities available to the Medical Center are extremely generous with the only major deficiency being the lack of wheelchair or handicapped accessibility to the Music Therapy Clinic located in Building No. 47.

### Functional Analysis (Interdepartmental)

The recreation areas receive maximum utilization when within reasonable distance to patient building. Building No. 20 and the miniature golf course because of their distant location to patient buildings are not used frequently.

### Environment

There is poor ventilation in the Recreation Clinic, Gymnasium, and Music Therapy Clinic. No air conditioning system is available for Building No. 47 as well as poor insulation and heating during the winter months in the Music Therapy Clinic.

### Equipment/Systems

All equipment except for the bowling alley pin setter system are working and receive regular maintenance. The pin setter has been a constant maintenance problem but if the bowling activity is to be continued, it is essential to repair the equipment to a state efficiency where minimal maintenance is required.

### Five Year Facility Plan FY 1988 FY 1992

If a new Geropsychiatric building is erected as proposed, the bulk of Recreation Service is planned to be located within or adjacent to this facility.

### General Comments/Conclusions

Though the variety of activities provided by Recreation Service are extensive, all patients utilizing recreation areas are forced to use escort services. This is due to the separation of this service into various activities. All contained in different buildings of which some are quite distant from the Nursing Units.

The ideal situation would be to consolidate all indoor recreation service activities into one area which would be reasonably close and with good access to patient units, yet in an environment like this campus, ideals are difficult to meet. Integration, as much as possible in order to maximize usage and minimize patient travel distances, should be evaluated.

2.3.10

bb(1) DEPARTMENT/SERVICE

REHABILITATION MEDICINE -  
CORRECTIVE THERAPY

Location

Buildings No. 8, 16A,  
25B and 138-4

Building Construction Date

No. 8 - 1924  
No. 16 - 1929  
No. 25 - 1925  
No. 138 - 1958

Utilization Index

N/A

Present Total Sq. Ft.

Space is currently shared  
with other departments  
of the rehabilitation  
service

% of Regd. NSF Available (Exist.)

200% Total Rehab Service

Projected Required Sq. Ft.  
(FY 2000)

Net - 2,980  
(16,256 total rehab net)  
Gross - 4,172 (C.F. 1.4)  
(22,758 total rehab gross)

% of Regd. NSF Available (Projected)

231% (total rehab service)

Description of Service

This component of the Rehabilitation Medicine Service provides for the corrective therapy treatment programs for all inpatients and outpatients at the station.

Space Analysis

Clinic spaces are scattered in four locations about the campus, positioned close to patients requiring treatment. Existing space does not satisfy criteria and the physical parameters of the majority of the areas is not appropriate to this functions. This program shares the main gymnasium (the only area available for open ambulation) with Physical Therapy and Recreation Services. Previously this activity took place within public corridors. Handicapped accessibility requires circulation through adjacent buildings.

The Clinic space in Building No. 16 on the first floor is 60% of criteria. This deficiency is compounded by the joint use of the space with Physical Therapy. Patients must wait in the treatment area since no dedicated waiting room is provided. Deficient treatment space restricts access to the equipment and ambulation therapy is forced to occur in the adjacent public corridor. The narrow width of the room and limited wall space restricts equipment use.

The Clinic in Building No. 25 is in the basement level. The overall space available satisfies criteria, but the L-shaped spaces restricts placement of equipment, visual control of patients and certain treatment activities.

A corrective therapy clinic is located on a portion of the fourth floor of Building No. 138. The clinic is within 90% of VA criteria. The L-shape of the available space restricts the utilization of the treatment equipment and lessens visual control of patients during treatment. No waiting/holding space is provided.

#### Functional Analysis (Intradepartmental)

The majority of this service's space is below criteria. The activities take place in areas which are functionally deficient. The relationship of usable floor space to available wall surface is not sufficient resulting in poor use of their equipment.

Building No. 8 provides a large group therapy space. In Building No. 16, because the clinic is lacking proper square footage, ambulation takes place in corridors. Patient supervision in Building no. 25 is compromised by its configuration which also impacts use of equipment and limits number of patients treated.

#### Functional Analysis (Interdepartmental)

The clinics are close to the patient groups whom they serve but poor vertical transport systems create delays and require indirect travel routings. The gymnasium is remotely situated from the majority of its users. Handicapped accessibility is inadequate based upon these transport system problems.

#### Environment

There is no central air conditioning system in these areas. Fans and window air conditioning units are used to provide cooling. Ventilation is inadequate. Heating systems are difficult to regulate. Task lighting is not sufficient for the activities.

#### Equipment/Systems

Equipment is in good condition and is maintained on a regularly scheduled basis. Most equipment is wall mounted or portable. The total amount of treatment equipment required is deficient due to the large amount of nonfunctional floor space. Communications are inadequate because of frequent problems with the telephone system.

#### Five Year Facility Plan FY 1988 - FY 1992

If the proposed FY 1989 Major project, Psychiatric Care Unit is approved, a majority of Rehabilitation Service would be consolidated in this structure.

### General Comments/Conclusions

The space and functional criteria, for these treatment programs, are deficient. Major modifications would be required in order to improve the functional inadequacies. The wide dispersal of patients about the station requires a number of treatment clinics to be established. The internal treatment space should be sized and planned to insure a high degree of functional utilization. The transportation systems fail to adequately move patients to the clinics and also restrict handicapped accessibility.

2.3.10

bb(2) DEPARTMENT/SERVICE

REHABILITATION MEDICINE -  
EDUCATIONAL THERAPY

Location

Buildings No. 9, 60, 62 and  
118

Building Construction Date

No. 9 - 1923  
No. 60 - 1890  
No. 62 - 1892  
No. 118 - 1906

Utilization Index

N/A

Present Total Sq. Ft.

Space is currently shared  
with other departments of  
the rehabilitation service

% of Reqd. NSF Available (Exist.)

N/A

Projected Required Sq. Ft.  
(FY 2000)

Net - 1,050  
Gross - 1,470 (C.F. 1.4)

% of Reqd. NSF Available (Projected)

N/A

Description of Service

This component of the Rehabilitation Medicine Service provides activity space for the delivery of educational therapy treatment for all inpatients and outpatients on the station. All applicable patients receive treatment on a scheduled basis. Specific activities vary by patient, dependent upon the individual's medical treatment program and physical condition.

Space Analysis

This service is used by the entire patient population. The four buildings presently housing this service are located along the eastern perimeter of the site. The first floor of Building No. 9 contains the print shop which has adequate space. Building No. 60 has (a classroom, a testing room and a study on the second floor).

Functional Analysis (Intradepartmental)

Building No. 9, although having an abundance of space, does not have a functional laid out. Patient and staff work flow suffer from the extensive circulation patterns. Visual control of patients is limited. The placement of the equipment in the print shop creates a congested work environment.

The internal plan of the facilities within Building No. 60 result in low functional utilization. The placement of treatment areas in relation to support spaces result in user conflicts and work flow deficiencies. Inconveniences and distractions also result for the patients in this receiving therapy.

### Functional Analysis (Interdepartmental)

The transport of patients from Buildings No. 10, 11, 18 and 25 to the treatment area in Building No. 9 presents numerous problems. Sixty percent of these patients must be escorted to the facility. Patients from Building No. 25 are exposed to the weather. No elevator in the building negates treatment of non-ambulatory patients on the second floor.

Building No. 60 is remote from the majority of the patient care units. Patients are exposed to the elements when they come for treatment. Often it is necessary to visit the wards and schedule patients on an individual basis to assure that the patient will receive treatment. This results in the under utilization of the E.T. facility and its staff. No elevator service denies handicapped accessibility to the unit.

The new greenhouse is positioned adjacent to an open space for planting purposes. However, it is remote in relation to all the existing patient units.

### Environment

All facilities have deficiencies in their ventilation systems. No central air conditioning is available. Control of heating equipment is difficult to regulate.

### Equipment/Systems

All equipment is in good operating condition. The telephone system has numerous deficiencies and is frequently non-operational.

### Five Year Facility Plan FY 1988 - FY 1992

If the proposed FY 1989 Major project is approved, the majority of the Rehabilitation Service will be consolidated in this structure.

### General Comments/Conclusions

A new greenhouse facility, housing the entire Horticultural Therapy Program has recently replaced the split program that was contained by the adjacent Buildings No. 118 and 62. However, the remoteness of this function still hinders its total utilization. The therapy treatment areas should be located adjacent to long term psychiatric patients and to the nursing home care unit. The transport of patients to the buildings and the accessibility to the individual designated treatment spaces are the major problem areas.



2.3.10

bb(3) DEPARTMENT/SERVICE

REHABILITATION MEDICINE -  
OCCUPATIONAL THERAPY

Location

Building No. 4, 9, 16 and  
138-4

Building Construction Date

No. 4 - 1889  
No. 9 - 1923  
No. 16 - 1929  
No. 138 - 1958

Utilization Index

N/A

Present Total Sq. Ft.

Space is currently shared  
with other departments of  
the rehabilitation service

% of Reqd. NSF Available (Exist.)

N/A

Projected Required Sq. Ft.  
(FY 2000)

Net - 3,245  
Gross - 4,543 (C.F. 1.4)

% of Reqd. NSF Available (Projected)

N/A

Description of Service

This component of the Rehabilitation Medicine Service provides for the delivery of all occupational therapy programs to both inpatients and outpatients. All patients undergoing treatment are brought to the clinic, the majority of whom are in wheelchairs.

Space Analysis

This service is utilized by the entire patient population. Building No. 9 contains the major portion of these facilities. Other sub-clinic treatment areas are disbursed about the VAMC, near the patients who are receiving treatment.

The clinic in Building No. 9 exceeds criteria requirements. Some storage and offices have space deficiencies. One room is occupied on the first floor and two rooms are on the second floor.

Clinics in Buildings No. 4 and 16 have space deficiencies. Each is approximately 70% of criteria. The O.T. space within each building is located on their respective first floors.

The O.T. Clinic occupies a number of adjacent rooms on the fourth floor of Building No. 138. This satellite facility has space deficiencies of approximately 50%. These deficiencies occur in the following areas: patient treatment, offices, waiting/wheelchair holding and storage.

### Functional Analysis (Intradepartmental)

The majority of the spaces have functional utilization levels which are below VA criteria. Treatment work areas are not clearly defined and often overlap. This results in undesirable conflicts and improper work flow. Circulation routes often disrupt treatment activities.

### Functional Analysis (Interdepartmental)

The clinic within Building No. 4 treats all patients housed within the building. The lack of an elevator restricts patient access to the facility.

Patients from Buildings No. 10, 11, 18 and 25 receive treatment in Building No. 9. There is no enclosed corridor system for patients from No. 25. Because the staff must escort 60% of the patients, professional treatment time is reduced.

The satellite clinic within Building No. 16 provides treatment to inpatients in Buildings No. 15, 16, 17 and 124. Scheduled outpatients are also seen in this clinic.

The clinic facility within Building No. 138 treats all that buildings patients.

### Environment

The clinic buildings are not centrally air conditioned and most become uncomfortable in warm weather. Ventilation systems are inadequate in the majority of the spaces.

### Equipment/Systems

Equipment is in good operational condition and are maintained on a regularly scheduled basis. Communications are inadequate because of deficiencies in the telephone system.

### Five Year Facility Plan FY 1988 - FY 1992

If the proposed FY 1989 Major project, Psychiatric Care Unit is approved, a majority of Rehabilitation Service would be consolidated in this structure.

### General Comments/Conclusions

Space and functional deficiencies exist in the majority of the clinical treatment areas. Work spaces are not zoned for specific functional activities. Patient transportation is a major problem. Elevators are not provided in all areas. Travel distances required to reach some clinics are unacceptable. Centralization of the service would be the ideal solution if consolidation of patients can be achieved. Upgrading of the vertical transport system is necessary to improve levels of utilization and efficiency.

2.3.10

bb(4) DEPARTMENT/SERVICE

REHABILITATION MEDICINE -  
PHYSICAL THERAPY AND  
INCENTIVE THERAPY

Location

Buildings No. 8, 16, 17,  
25 and 138-4A

Building Construction Date

No. 8 - 1924  
No. 16 - 1929  
No. 17 - 1929  
No. 25 - 1925  
No. 138 - 1958

Utilization Index

N/A

Present Total Sq. Ft.

Space is currently shared  
with other departments of  
the rehabilitation  
service

% of Reqd. NSF Available (Exist.)

N/A

Projected Required Sq. Ft.  
(FY 2000)

Therapeutic Pool  
Net - 4,753  
Gross - 6,654  
Incentive Therapy  
Net - 554  
Gross - 776  
Physical Therapy  
Net - 1,397  
Gross - 1,956

Total

Net - 6,704  
Gross - 9,386 (C.F. 1.4)

% of Reqd. NSF Available (Projected)

N/A

Description of Service

This component of the Rehabilitation Medicine Service provides physical therapy treatment for all inpatients and outpatients. Treatment programs are conducted in various clinic locations scattered about the station and also at the patient's bedside.

Space Analysis

Clinic functions are scattered about the campus. The clinics are located in close proximity to the majority of the patients they service. Areas do not satisfy space criteria projections and the physical layout of the units is not conducive for proper treatment.

This service shares use of the gymnasium (Building No. 8) with the Recreation Clinic. The gymnasium has space deficiencies in the: shower/toilets, offices and storage areas. No patient holding is available. This clinic provides service primarily to patients housed in Buildings No. 7, 11, 18, 24 and 25, but is also utilized by all other patients at the Medical Center.

The clinic on the first floor of Building No. 16 provides services to patients housed in Building No. 15 and 16 and all scheduled outpatients. Patients are ambulatory, or in wheelchairs (some patients are treated at bedside). Space is shared with corrective therapy and is approximately 60% of criteria. Patient ambulation and treatment space is undersized. No waiting/holding area is available. Due to the units narrow width and limited open wall surfaces, treatment programs are restricted; equipment is not accessible, ambulation routes are forced to occur in public corridors and circulation routes disrupt treatment areas.

The clinic on the first floor of Building No. 17, whose patients it treats, was created from an existing sun porch. The ten foot width of the room restricts functional activities. Placement of equipment within the room leaves only limited work and circulation space. No patient waiting space is provided.

The first floor P.T. Clinic in Building No. 25 provides service for patients in Building No. 10, 11, 18 and 25. Space for treatment, storage and toilets is inadequate. No waiting space is provided.

The P.T. Clinic located on a portion of the fourth floor of Building No. 138 provides services for inpatients from Building No. 1, 2, 3, 4, 5, 6, and 138. The Clinic space is deficient based upon criteria for this service. There is no designated space for exercising and ambulation. No holding area for patients or wheelchairs is provided. The narrow and elongated space does not adequately house this service creating activity areas that overlap.

#### Functional Analysis (Intradepartmental)

The physical layouts of all clinics are awkward making access to equipment and their proper use difficult. Ambulation and waiting functions frequently occur in public corridors. Visual control of treatment areas and handicapped accessibility is restrictive in some rooms. Existing hydrotherapy areas are located in Buildings No. 138 and 25.

#### Functional Analysis (Interdepartmental)

Building No. 8 is remote for the majority of the patient population who use its facilities. The patients have unacceptable walking times, many are not provided shelter during inclement weather, and in most cases must be escorted.

Building No. 16 has a poor proximity to the outpatient clinic areas. Inpatients housed within Buildings 15, 16 and 17 are brought by nursing staff to the clinic. These two cabs provide transport for Buildings No. 15, 16 and 17. Scheduled treatments are delayed by this overcrowded elevator that must deliver the majority of patients to the clinic. Many supplies are manually carried to the area by staff members.

The clinic in Building No. 17 is adjacent to one patient unit and only one floor away from the remainder of its service population. The absence of an elevator delays the delivery of patients. Some patients receive treatment at their bedside.

Approximately 80% of the patients treated in the clinic, within Building No. 25, are housed there. The other 20% are housed in adjacent buildings.

The clinic area within Building No. 138 treat patients from this building as well as from Buildings No. 1 through 6. Patients walk or are escorted to the unit, some patients are treated at bedside. The deficient vertical transport system creates delays in the delivery of patients to the clinic. Supplies are delivered directly to this unit.

### Environment

There are no central air conditioning systems in these areas. Window air conditioning units are used to provide cooling. Heating systems are difficult to regulate due to a lack of controls. Hydrotherapy areas suffer from high levels of humidity. Ventilation systems are inadequate, especially in the areas containing physical activities. Lighting levels provide undesirable illumination.

### Equipment/Systems

Equipment is in good condition and regularly scheduled for maintenance or replacement. The telephone system is subject to frequent down periods and its limited capacity provides restricted service.

### Five Year Facility Plan FY 1988 - FY 1992

If the proposed FY 1989 Major project, Psychiatric Care Unit is approved, a majority of Rehabilitation Service would be consolidated in this structure.

### General Comments/Conclusions

Both space and functional criteria, for these treatment programs, are inadequate. Major space modifications would be necessary to improve these functional deficiencies. The locations of many of the clinics are remote. Travel flow is undesirable due to the excessive distances and the inadequate vertical transportation systems. All clinics are not handicapped accessible.

In the future, both a therapeutic pool and a incentive therapy program are to be components of this department.

2.3.10

cc	<u>DEPARTMENT/SERVICE</u>	RESPIRATORY CARE PROGRAM
	<u>Location</u>	Building No. 138 Third Floor
	<u>Building Construction Date</u>	1958
	<u>Utilization Index</u>	N/A
	<u>Present Total Sq. Ft.</u>	Net - 1402 Gross - 3192
	<u>% of Req'd. NSF Available (Exist.)</u>	108%
	<u>Projected Required Sq. Ft. (FY 2000)</u>	Net - 1296 Gross - 1814 (C.F. 1.4)
	<u>% of Req'd. NSF Available (Projected)</u>	93%

Description of Service

The Respiratory Care Program is responsible for providing complete assessment of pulmonary function and the evaluation of the physiologic derangement produced by pulmonary diseases as well as the treatment of patients throughout the health care facility by the administration of therapeutic aerosols and gases and IPPB (intermittent positive pressure breathing).

Space Analysis

Located on the third floor of Building No. 138, this program consists of an inhalation therapy and storage area, EKG room, exam room, gas storage, pulmonary testing and blood gases area, offices for a physician and the supervisor for respiratory therapy as well as a storage room which also serves as the staff locker room. The present sq. ft. - 1402 is comparable to the projected net sq. ft. -1296. Most areas associated with this program meet program requirements and are adequate for program functions.

Functional Analysis (Intradepartmental)

The containment of this program within a suite is convenient and allows for optimum space utilization. All services offered by the program are readily accessible to both patients and staff.

Functional Analysis (Interdepartmental)

The location of this service immediately adjacent to the Respiratory Care Nursing Unit is both desirable and convenient for both patients and staff.

Environment

Poor ventilation is characteristic of all areas in Building No. 138.

Equipment/Systems

Equipment and systems are acceptable.

Five Year Facility Plan FY 1988 - FY 1992

No construction is under way or planned for this department.

General Comments/Conclusions

This service meets VA standards and criteria.

2.3.10

<u>dd</u>	<u>DEPARTMENT/SERVICE</u>	<u>SECURITY</u>
	<u>Location</u>	Building No. 114
	<u>Building Construction Date</u>	1938
	<u>Utilization Index</u>	N/A
	<u>Present Total Sq. Ft.</u>	Net - 516 Gross - 682
	<u>% of Req'd. NSF Available (Exist.)</u>	80%
	<u>Projected Required Sq. Ft.</u> <u>(FY 2000)</u>	Net - 625 Gross - 813 (C.F. 1.3)
	<u>% of Req'd. NSF Available (Projected)</u>	83%

Description of Service

The Security Service develops and complements policies and procedures related to the Medical Center's security and law enforcement operations. Functions of the service include the protection of patients, visitors and employees; the protection of property; and the maintenance of law and order on property under the charge and control of the VA.

Space Analysis

The existing space is 20% deficient but operates in an acceptable manner. All functionally required spaces, except for a holding room, are provided but short of proper square footage.

Functional Analysis (Intradepartmental)

The security service is consolidated and occupies the entire building. This eliminates cross traffic from other departments allowing optimum supervision and control. Its isolation also permits security in retention of unruly suspects. Ample parking spaces for police vehicles are located convenient to the department.

Functional Analysis (Interdepartmental)

Although Building No. 114 is just off the main access road and close to the main entrance, it is remote from all patients and the majority of buildings. This can create unacceptable response time to emergencies. Campus layouts are difficult to patrol and at VAMC Marion with its haphazard road system the problems is aggravated.



### Environment

The working conditions are acceptable.

### Equipment/Systems

The current telephone service is inadequate and can extend an already critical response time to emergencies.

### Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled for this department.

### General Comments/Conclusions

The on-going project to upgrade the telephone system should help alleviate the response time to emergencies. The service should be situated in the heart of the campus close to patients and the majority of buildings. Control of the main gate could be achieved by erecting a manned control point. Relocation of Building No. 105 would make use of this vacant but historical significant building and provide a community recognized focal point at the main entrance.

2.3.10

<u>DEPARTMENT/SERVICE</u>	<u>SERVICE ORGANIZATIONS</u>
<u>Location</u>	Off the Medical Center
<u>Building Construction Date</u>	N/A
<u>Utilization Index</u>	N/A
<u>Present Total Sq. Ft.</u>	N/A
<u>% of Req'd. NSF Available (Exist.)</u>	N/A
<u>Projected Required Sq. Ft. (FY 2000)</u>	N/A
<u>% of Req'd. NSF Available (Projected)</u>	N/A

Description of Service

Office space is provided for national service organizations recognized by the Administrator of Veterans Affairs. The service organizations staff these offices with volunteers who set their own hours. Their purpose is to assist the veteran with any problem he or she might have.

Space Analysis

Currently no space is allocated in the Medical Center for these organizations. The FY 2000 program includes space for this function at the Medical Center.

Functional Analysis (Intradepartmental)

N/A

Functional Analysis (Interdepartmental)

N/A

Environment

N/A

Equipment/Systems

N/A

Five Year Plan FY 1988 - FY 1992

N/A

General Comments/Conclusions

The program for FY 2000 should include space for this service. This function can offer invaluable service to the veteran and his family. A location that is central to all patients is required.

## 2.3.10

ff	<u>DEPARTMENT/SERVICE</u>	SOCIAL WORK
	<u>Location</u>	Building No. 6 Second Floor
	<u>Building Construction Date</u>	No. 6 - 1889 No. 124 - 1943
	<u>Utilization Index</u>	Case Studies FY 86 - 9711
	<u>Present Total Sq. Ft.</u>	Net - 2265 Gross - 3600
	<u>% of Req'd. NSF Available (Exist.)</u>	140%
	<u>Projected Required Sq. Ft.</u> (FY 2000)	Net - 1400 Gross - 1820 (C.F. 1.3)
	<u>% of Req'd. NSF Available (Projected)</u>	162%

### Description of Service

The Social Work Service is responsible for the administration and implementation of programs which provide examination, treatment and counseling for both inpatients and outpatients.

### Space Analysis

Located on the second floor of Building No. 6 are offices for five social workers, 2 clerks and a supervisor and social worker for the residential community placement program. This area also provides support services for 7 social workers located on the Psychiatric Nursing Units in Buildings 1 through 6. The Chief of Social Work Services, his secretary and two additional social workers are located in Building No. 124. The present net square feet - 2265, exceeds the projected net square feet - 1440.

### Functional Analysis (Intradepartmental)

Ideally this service should be centrally located with individual social workers dispersed throughout the patients' nursing units. Marion's current system is acceptable.

### Functional Analysis (Interdepartmental)

All programs and services requiring Social Work Services are adequately served.

### Environment

Ventilation and lighting levels are poor. Heating and cooling is adequate, yet in some areas, difficult to regulate.

### Equipment/Systems

No fixed equipment is assigned to this service. Some areas have either inadequate or no communication systems.

### Five Year Facility Plan (FY 1988 - FY 1992)

The proposed FY 1990 Minor project, Phase II Renovate Building No. 138, will consolidate Social Work Service on the second floor.

### General Comments/Conclusions

Under projected criteria, this service should be consolidated and at one location, however, due to the campus nature, separation of this service is convenient in order to provide adequate services.

### 2.3.10

#### gg(1) DEPARTMENT/SERVICE

#### SUPPLY - ADMINISTRATION

##### Location

Building No. 42

##### Building Construction Date

1905

##### Utilization Index

N/A

##### Present Total Sq. Ft.

Net - 2345  
Gross - 2804

##### % of Reqd. NSF Available (Exist.)

75%

##### Projected Required Sq. Ft. (FY 2000)

Net - 2660  
Gross - 3458 (C.F. 1.3)

##### % of Reqd. NSF Available (Projected)

88%

##### Description of Service

Administrative space for all Supply Service functions which includes Supply, Processing and Distribution and Warehouse.

##### Space Analysis

The total space available is sufficient for current needs and approaches the programmed square footage for the Year 2000. However, because this service is located in a former residence, many of the rooms are not of proper size or configuration to provide appropriate work space.

##### Functional Analysis (Intradepartmental)

Split on three floors with no handicap access into or within the building compromises the efficiency and staff utilization of this function. The administration area is remote from its two main components, SPD and warehouse which in themselves are located on opposite sides of the campus.

##### Functional Analysis (Interdepartmental)

Although convenient to outside vendors and contractors, its internal relationships are remote and isolated making supervision of functions such as delivery of material, accurate accounting of supplies received and dispersed and the proper handling of supplies difficult.

##### Environment

The working conditions are acceptable.

### Equipment/Service

No fixed or serviceable equipment is assigned to this space. The telephone service, a critical element with a fragmented department is frequently out of service.

### Five Year Facility Plan FY 1988 - FY 1992

Building No. 42 is being remodeled under NRM project in FY 1987 at \$60,000 which will include extensive remodeling and enclosure of porches for additional space. The following year all windows will be replaced under another NRM.

### General Comments/Conclusions

The administration area should be relocated closer to Fiscal Service and if possible the warehouse function. Additional space should be acquired and made handicap accessible.

2.3.10

gg(2) DEPARTMENT/SERVICE

**SUPPLY - SUPPLY PROCESSING  
AND DISTRIBUTION**

Location

Building No. 138  
Basement

Building Construction Date

1958

Utilization Index

N/A

Present Total Sq. Ft.

Net - 3,937  
Gross - 4,188

% of Req'd. NSF Available (Exist.)

75%

Projected Required Sq. Ft.  
(FY 2000)

Net - 4,514  
Gross - 5,868 (C.F. 1.3)

% of Req'd. NSF Available (Projected)

87%

Description of Service

Supply Processing and Distribution provides the Medical Center with medical supplies, equipment and instrumentation as may be required. SPD is responsible for the distribution of clean and sterile supplies, their collection and reprocessing if appropriate. Supplies are replenished twice weekly to the patient care areas in Building No. 138 using an exchange cart/modular system. All other users, including diagnostic and treatment areas and the patient wards in detached or remote buildings, are replenished once per week on a par level/bulk system. The ICU, in Building No. 138, is replenished 3 times per week. Modular, moveable storage units, by Herman Miller are utilized as exchange carts. Each nursing unit has an average of 3 modules with back-up held in SPD. Soiled reprocessible are collected from users only two or three times per week. SPD requisitions supplies from the Supply Service warehouse and transfers the supplies to in-house pallets. Decasing is accomplished in an adjoining corridor and then supplies are brought into the processed stores area of SPD.

Space Analysis

SPD area is deficient in project space requirements by 577 sq. ft. Each functional area, including office space is deficient.

Functional Analysis (Intradepartmental)

Functional areas are decentralized throughout the basement of Building No. 138. Cart washing is across the corridor from Decontamination. Decontamination is split in two areas. Efficient work flow is hampered due to poor layout and cramped spaces. Also utilization of exchange carts, which consume valuable space, further reduces the functionality of the department.



### Functional Analysis (Interdepartment)

The movement of supplies outside of Building No. 138 presents logistical problems, as such, replenishment or collection, must be limited to a twice weekly basis. The disbursement of patients and buildings hamper supply movements.

### Environment

Specific problems within SPD cannot be quantified. Poor circulation and high temperatures generated by the terminal sterilizers detract from the working environment.

### Equipment/Systems

As noted, supply replenishment is accomplished by exchange cart/modules within Building No. 138. The par level system of replenishment to outlying buildings is aided by the use of light utility vehicles. The condition of processing equipment cannot be quantified at this time. There is no automation of the distribution function. All items are manually transported in carts or hand carried.

### Five Year Facility Plan FY 1988 - FY 1992

A current project is replacing the HVAC system and removing and/or encapsulating asbestos. This replacement will rectify the cited deficiencies.

### General Comments/Conclusions

The overall configuration and total space available to SPD for support of the Medical Center is inadequate.

SPD would be in a better position to service VAMC-Marion if the department elements could be consolidated and if the department were more centrally located on campus. Building No. 138 is adequately serviced by SPD, but investigation should be made as to the efficiency of maintaining two different replenishment systems (par and exchange cart).

2.3.10

gg(3) DEPARTMENT/SERVICE

SUPPLY - WAREHOUSE

Location

Building No. 55  
Basement and First Floor

Building Construction Date

1900 - addition 1978

Utilization Index

N/A

Present Total Sq. Ft.

Net - 23,976  
Gross - 30,836

% of Req'd. NSF Available (Exist.)

180%

Project Required Sq. Ft.  
(FY 2000)

Net - 11,315  
Gross - 12,446 (C.F. 1.1)

% of Req'd. NSF Available (Projected)

211%

Description of Service

The warehouse is responsible for the storage and distribution of supplies and equipment. The total physical distribution system (for warehousing only) includes those areas needed to receive, store, and distribute supplies to the consumer unit within a facility.

Space Analysis

The existing warehouse has approximately 24,000 net square feet, nearly double what is programmed for year 2000. Even deleting the basement area, which currently has a moisture problem and is inaccessible except for hand carried items, the remaining square footage would still be sufficient to meet all projected requirements.

Functional Analysis (Intradepartmental)

The building has ample square footage and is adequately laid out. The floor of the original building is not structured for heavy loads. The basement is unusable due to a moisture problem, limited ceiling height, and no elevator. Delivery trucks must penetrate the entire site to reach the warehouse. Truck accessibility to the loading platforms is good.

Functional Analysis (Interdepartmental)

It would be ideal if the two services, SPD and dietetics, that demand direct access could be serviced by interior circulation. However, the campus design precludes this circumstance. Pharmacy another service that for security reasons would benefit from direct, close support is on the opposite side of the medical center. These distances create problems with supervision and timeliness of deliveries.

### Environment

The working conditions are acceptable.

### Equipment/Service

The mobile equipment is regularly maintained. The fixed equipment is in good condition.

### Five Year Facility Plan FY 1988 - FY 1992

To eliminate the excessive moisture in the basement; an FY 1987, \$90,000 NRM project is proposed to provide ample ventilation to correct this problem.

### General Comments/Conclusions

Although placed deep into the medical center, trucks have dedicated access with minimum conflict from other traffic except for staff vehicles. The building has enough square footage to meet year 2000 criteria and if the moisture problem existing in the basement could be corrected and a freight elevator provided additional space could be obtained. The warehouse should be maintained.

2.3.10

hh DEPARTMENT/SERVICE VETERANS ASSISTANCE UNIT

<u>Location</u>	Building No. 124 Second Floor
<u>Building Construction Date</u>	1943
<u>Utilization Index</u>	N/A
<u>Present Total Sq. Ft.</u>	Net - 352 Gross - 390
<u>% of Req'd. NSF Available (Exist.)</u>	111%
<u>Projected Required Sq. Ft.</u> (FY 2000)	Net - 270 Gross - 324 (C.F. 1.3)
<u>% of Req'd. NSF Available (Projected)</u>	130%

Description of Service

The Veteran's Assistance Unit is responsible for providing counseling, information, advice and assistance relating to veterans' benefits under laws administered by the VA and other agencies and assisting in the preparation of claims for the benefits.

Space Analysis

The Veterans Assistance Unit consists of two benefits counseling offices located on the second floor of Building No. 124.

Functional Analysis (Intradepartmental)

The internal relationships are appropriate and functional.

Functional Analysis (Interdepartmental)

The location is acceptable but ideally should be closer to the Main Lobby and Information Area.

Environment

The working conditions are acceptable.

Equipment/Systems

No fixed equipment is assigned to this service.

Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled that will affect the functional operation of this service.

General Comments/Conclusions

Though adequate in most respects, the Veterans Assistant Unit would best serve the veteran if located adjacent to the Service Organizations and within reasonable access to the Main Lobby and Information Area.

2.3.10

ii	<u>DEPARTMENT/SERVICE</u>	<b>VOLUNTARY</b>
	<u>Location</u>	Building No. 60
	<u>Building Construction Date</u>	1899
	<u>Utilization Index</u>	FY 86 Manhours - 39,645
	<u>Present Total Sq. Ft.</u>	Net - 2,092 Gross - 2,719
	<u>% of Req'd. NSF Available (Exist.)</u>	130%
	<u>Project Required Sq. Ft. (FY 2000)</u>	Net - 1,362 Gross - 1,634
	<u>% of Req'd. NSF Available (Projected)</u>	154%

Description of Service

The Voluntary Service is composed of non-patient veterans, members of community service organizations, plus caring citizens. They perform critical services for the patients such as escort duty, letter writing, and all the personal necessities that help make a patient's stay as comfortable as possible.

Space Analysis

As exists, there is more square footage used than necessary. Even the projected program area falls well within the current space allotted.

Functional Analysis (Intradepartmental)

The appropriate functions are provided and consolidated in one area.

Functional Analysis (Interdepartmental)

Volunteer Service is adjacent to the long-term psychiatric patients and close to the dining, canteen and other support functions. However, the Nursing Home Care and Intermediate patients, those individuals that experience has shown the volunteers have the strongest interaction with, are located on the opposite side of the campus.

Environmental

The working conditions are acceptable.

Equipment/Systems

There is no fixed equipment assigned to this service. Telephone service, critical to the functioning of this department, is frequently out of service.

Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will effect the functional operation of this service.

General Comments/Conclusions

As presently staffed and housed, the Voluntary service exceeds criteria, and will do so for the projected program. Location will be the critical issue, with easy access to all patients a must.

2.3.10

**jj** DEPARTMENT/SERVICE

**STAFF QUARTERS**

Location

Building No. 26-38

Building Construction Date

Building No. 26-1928  
 Buildings No. 27-31-1921  
 Building No. 32-1897  
 Building No. 33-1896  
 Building No. 34-1896  
 Building No. 35-1908  
 Building No. 36-1903  
 Building No. 37-1916  
 Building No. 38-1904

Utilization Index

N/A

Present Total Sq. Ft.

Net-Building No. 26-4,800  
 Building No. 27-4,800  
 Building No. 28-4,800  
 Building No. 29-4,800  
 Building No. 30-4,800  
 Building No. 31-4,800  
 Building No. 32-3,245  
 Building No. 33-4,415  
 Building No. 34-4,096  
 Building No. 35-2,255  
 Building No. 36-2,276  
 Building No. 37-1,883  
 Building No. 38-1,826  
 Gross - 48,796

% of Req'd. NSF Available (Exist.)

N/A

Project Required Sq. Ft.  
 (FY 2000)

N/A

% of Req'd. NSF Available (Projected)

N/A

Description of Service

These structures offer residential quarters for the Medical Center staff, especially persons such as the Director, Chief of Engineering, Chiefs of Services, etc., who are essential to the operation of the Medical Center on a 24 hour basis.

Space Analysis

All quarters have appropriate square footage for residential use.



Functional Analysis (Intradepartmental)

All the quarters are fine period examples of residential architecture and have been maintained.

Functional Analysis (Interdepartmental)

N/A

Environment

All houses are well maintained and kept up-to-date.

Equipment/Service

N/A

Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will affect the functional operation of these quarters.

General Comments/Conclusion

The residences should be maintained and utilized to the fullest. Although individually they are not historically significant, as a set they form a cluster of period architecture that can provide significant architectural impact.

2.3.10

s(1) DEPARTMENT/SERVICE

INTERMEDIATE CARE  
NURSING UNIT

Location

Building No. 16  
Second Floor Unit B

Building Construction Date

1929

Utilization Index

25 Beds

Present Total Sq. Ft.

Net - 4,580  
Gross - 7,786 (C.F. 1.7)

% of Req'd. NSF Available (Exist.)

80%

Projected Required Sq. Ft.  
(36 Bed Unit Typical for  
FY 2000)

Net - 8,455  
Gross - 14,374 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

54%

Description of Service

This unit is responsible for the treatment and continued care of patients who are ambulatory and carry a primary psychiatric diagnosis with secondary medical problems. Close supervision and daily maintenance of all patients is required. Length of stay ranges from 30 to 180 days.

Space Analysis

The unit occupies the entire second floor. The floor is intersected by a corridor utilized by the general public. This passageway separates the dayroom from the remainder of the unit. The sleeping areas consist of 1 one-bed room, 1 two-bed room, 6 three-bed rooms and 1 four-bed rooms. Many patient rooms are undersized (only 75% of criteria) thus do not meet program/handicapped criteria. The predominant three-bed room mix differs from that of the preferred VA Standard, which calls for a majority of one and two bed rooms. No isolation beds or private bathing/toilets are currently provided. The existing congregate bathroom/toilet is below criteria in space, number of fixtures and handicapped accessibility. Space deficiencies exist for the following areas: nurse's station, medication area, storage and staff support space. The unit lacks space for the following: clean/soiled utility, exam room, office space, dining, conference room and visitor facilities.

### Functional Analysis (Intradepartmental)

The linear configuration of the unit along with the separation of the dayroom by a public corridor imposes operational deficiencies. Placement of both furniture/equipment in patient rooms restricts utilization and accessibility. Support space, linen and storage facilities are remotely situated. The unit does not have access to an outdoor activity area.

### Functional Analysis (Interdepartmental)

Clinical support services for patients in this unit is near but is accessed through a system of interconnected public corridors. Additional impediments are placed before the patient and materials movement due to the presences of just one elevator.

Handicapped accessibility to this building is limited to access from Building No. 15 and 138.

### Projected Bed Loss (Current Criteria)

A minimum 3 beds will be lost to provide, per VA Standard, 2 private rooms with individual baths plus 2 bedrooms with private toilets. The ward is reduced to 22 beds minimum, 8 beds below minimum standards.

### Environment

The unit experiences deficiencies in its cooling, heating and ventilation systems. Control of the systems are inadequate and no individual room controls are provided. Window air conditioning units are in all patient rooms to supplement the cooling systems. Humidity in the congregate bathing/toilet facility is a continual problem. The dispersion of hot water to the unit is sporadic and suffers from prolonged delays.

### Equipment/Systems

The nurse call system is operational and adequate for user needs. A medical gas system (oxygen, vacuum and compressed air) supplies all patient rooms. The telephone system is inadequate and subject to frequent down periods. Patient equipment has been well maintained and is in good physical condition.

### Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will effect the functional operation of this unit.

### General Comments/Conclusions

The space and functions of this nursing unit do not satisfy VA criteria for adequate intermediate medical patient care. Minor space modifications could improve some of the functional inefficiencies but the shortages of critical required space cannot be resolved within the present parameters of the unit. Additional floor space would be necessary as the only means towards achieving a resolution to the existing space deficiencies and to fulfill projected criteria requirements. If additional floor area is considered, Buildings No. 15 and 17 should be considered in the planning with a coordinated solution for all three.

2.3.10

s(1) DEPARTMENT/SERVICE

INTERMEDIATE CARE  
NURSING UNIT

Location

Building No. 16  
Third Floor Unit C  
(Closed)

Building Construction Date

1929

Utilization Index

25 Bed

Present Total Sq. Ft.

Net - 5,695  
Gross - 9,682 (C.F. 1.7)

% of Req'd. NSF Available (Exist.)

95%

Projected Required Sq. Ft.  
(36 Bed Unit typical for  
FY 2000)

Net - 8,455  
Gross - 14,374 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

67%

Description of Service

The unit is responsible for the treatment and continued care of patients with a primary psychiatric diagnosis with secondary medical problems. All patients require supervision and daily maintenance programs. Length of stay ranges from 30 to 180 days.

Space Analysis

The unit occupies the entire third floor facility. The existing net square footage complies to only 75% of VA space criteria. The sleeping areas consist of 1 one-bed room, 3 two-bed rooms and 6 three-bed rooms. The patient rooms occupy two-thirds of the unit with the dayroom and nurse's station in the other third. Many patient rooms are undersized, nor do they provide handicapped accessibility. The predominant three-bed room mix differs from the preferred VA standard which calls for a majority of one and two-bed rooms. No isolation beds or private bathing/toilets are provided. The congregate bath/toilet has numerous space and accessibility deficiencies. The dayroom is compromised by its multiple functional use as an activity, dining, storage and conference space. The nurse station complies to only 70% of criteria, and the space is further compromised by its utilization as storage space for supply and medication carts. Additional space deficiencies exist in the following areas: equipment storage, support space and office facilities. The unit lacks space for the following activities: clean/soiled utility rooms, dedicated dining and activity areas.

### Functional Analysis (Intradepartmental)

The linear configuration of the unit with the nurse station/dayroom located at one end with the patient rooms stretched along a spinal corridor hinders supervision. Five of the bedrooms are more than 90 feet from the nurse's station. The contrasting activities occurring in the dayroom creates unwanted noise and confusion. The congregate bath/toilets are poorly situated and their layouts do not permit the required accessibility. Patient rooms due to the placement of furniture and equipment have low efficiency and accessibility is restricted.

### Functional Analysis (Interdepartmental)

Related support and treatment services are convenient to the unit, but access to them must be by elevator. Only one elevator serves the floor and must also provide access for delivery of supplies, meals and staff.

### Projected Bed Loss (Current Criteria)

A minimum of 3 beds will be lost to conform to minimize VA standards requiring 2 private bedrooms with individual baths and two other bedrooms with private toilets. The total beds are reduced to 22, 8 beds below minimum VA standards.

### Environment

The unit experiences deficiencies in its cooling, heating and ventilation systems. Control of the systems is poor since no individual room controls are provided. There is no central air conditioning system in the building. Window air conditioning units are in use in all patient rooms and the dayroom. Humidity control in the congregate bathing space is a continual problem. Hot water for the unit is sporadic and suffers from prolonged delays.

### Equipment/Systems

The nurse call system is operational and adequate for user needs. A medical gas system (oxygen, vacuum and compressed air) supplies all patient rooms. The telephone system is inadequate and subject to frequent down periods. Patient equipment has been well maintained and is in good physical condition.

### Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will effect the functional operation of this unit. However, if a plan to convert this unit into a Geropsychiatric Unit in a couple of years is formalized, then work for this conversion will be necessary.

### General Comment/Conclusions

The unit now temporarily closed, has both space and functional deficiencies. Minor space modifications could offer some relief. However, the shortage of critical square footage and required space cannot be resolved within the present parameters of the unit. Additional floor area would be necessary as the only means to achieving a resolution to the existing space deficiencies and to satisfy for VA criteria projections. If additional area is proposed, Buildings No. 15 and 17 should be considered in the planning with a coordinated solution for all.

### 2.3.10

#### s(1) DEPARTMENT/SERVICE

#### INTERMEDIATE CARE NURSING UNIT

##### Location

Building No. 17  
First Floor Unit A

##### Building Construction Date

1929

##### Utilization Index

30 Beds

##### Present Total Sq. Ft.

Net - 6,065  
Gross - 10,310

##### % of Req'd. NSF Available (Exist.)

85%

##### Projected Required Sq. Ft. (36 Bed Unit typical for FY 2000)

Net - 8,455  
Gross - 14,374 (C.F. 1.7)

##### % of Req'd. NSF Available (Projected)

72%

##### Description of Service

The patients on this unit require an intermediate level of nursing care. The unit is responsible for the continued care and treatment of patients who are ambulatory and carry a psychiatric diagnosis with secondary medical problems. Many patients require close supervision and daily maintenance. Length of stay varies from 30 to 180 days.

##### Space Analysis

The unit occupies the entire first floor. The dayroom/dining area along with support space are located at one end of the unit. Patient rooms are along a central corridor on the remainder of the elongated unit. The sleeping areas consist of 4 one-bed rooms, 1 two-bed rooms and 8 three-bed rooms. The majority of the bed rooms are undersized and 50%, as required, do not meet handicapped standards. The predominate three-bed room type mix differs from that of the preferred VA standard, which calls for only one and two-bed rooms. Also, criteria requirements for isolation beds and private baths/toilets do not exist. One patient room is being utilized for isolation purposes but this does not satisfy criteria requirements. The present congregate bathroom/toilet is below space criteria and does not provide for adequate accessibility. Space deficiencies exist in the following areas: congregate bathrooms, nurse's station, dayroom, medication room, storage, dining, support space and offices. The unit lacks space for the following functional activities: clean/soiled utility rooms, office space, conference rooms, and activity areas. The dayroom space would be adequate but for the fact it also doubles as the unit's dining room.



### Functional Analysis (Intradepartmental)

The configuration of the unit along an elongated central corridor imposes functional limitations. The placement of the nurse's station restricts visual control of the unit and the 4 furthest bedrooms are greater than 90 feet away. The patient rooms' configuration cause inefficient placement of furniture and equipment through restricting access. The congregate bath/toilet area has limited accessibility. The multi-functions occurring within the dayroom limits its utilization and access to the elevator encroach on the dayroom space. A direct access routes to the exterior is possible but is not accessible to the handicapped.

### Functional Analysis (Interdepartmental)

Except for physical therapy which is adjacent, all support services are remotely located. Horizontal movement by patients to necessary treatment is by a corridor system that is circuitous and bisects discrete departments. Handicapped accessibility to this building and unit is possible only from Buildings No. 15 and 138.

### Projected Bed Loss (Current Criteria)

A minimum of 1 bed will be lost to achieve VA standards of 2 private bedrooms with private baths and 2 other bedrooms adjacent to private toilets. The unit will consist of 29 beds, 1 under the minimum.

### Environment

The unit experiences deficiencies in its cooling, heating and ventilation systems. Control of the systems is poor since individual room controls are not provided. Window air conditioning units are in all patient rooms since no central system exists. Humidity is a continual problem in the congregate bath area. Delivery of hot water to the unit is sporadic and suffers from prolonged delays.

### Equipment/System

The nurse call system is operational and adequate for user needs. A medical gas system (oxygen, vacuum and compressed air) supplies all patient rooms. The telephone system is inadequate and subject to frequent down periods. Patient equipment has been well maintained and is in good physical condition.

### Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will effect the functional operation of this unit.

### General Comments/Conclusions

The functional and space available on this unit do not satisfy VA criteria projections for adequate intermediate patient care. The shortages of critical space cannot be resolved within present space parameters. Additional area would be necessary as the only means towards satisfying criteria requirements. If additional floor is proposed, Buildings No. 15 and 16 should be considered in the planning with a coordinated solution for all three.

### 2.3.10

#### s(1) DEPARTMENT/SERVICE

#### INTERMEDIATE CARE NURSING UNIT

##### Location

Building No. 17  
Second Floor - Unit B

##### Building Construction Date

1929

##### Utilization Index

33 Beds

##### Present Total Sq. Ft.

Net - 6,195  
Gross - 10,515

##### % of Req'd. NSF Available (Exist.)

80%

##### Projected Required Sq. Ft. (36 Bed Unit Typical for FY 2000)

Net - 8,455  
Gross - 14,374 (C.F. 1.7)

##### % of Req'd. NSF Available (Projected)

73%

##### Description of Service

This is a medical unit requiring an intermediate level of nursing care. Most patients are ambulatory and carry psychiatric diagnosis with secondary medical problems. Close supervision and daily maintenance of all patients is required. Length of stay ranges from 30 to 180 days.

##### Space Analysis

The unit occupies the entire second floor of Building No. 17. The sleeping areas consist of 2 two-bed rooms, 7 three-bed rooms and 2 four-bed rooms. Numerous patient rooms are undersized and do not meet either program or handicapped criteria. The predominant three and four bed room mix differ from that of the preferred VA Standard which calls for a majority of one and two bed rooms. No facilities for isolation or private bath/toilets currently exist. The congregate bathroom/toilet is below space criteria, lacks required fixtures and does not provide adequate accessibility for the handicapped. The dayroom square footage would be adequate if it did not double as the unit's dining room. Circulation routes and access to offices, the elevator and to the public corridor criss-cross the dayroom. Limited available space in the nurse's station compromises the staff work area and the Medications and SPD supplies are openly stored there. Additional space deficiencies exist in the following areas: medication room, storage, support space and offices. The unit lacks space for the following functional activities: clean/soiled utility rooms, office space, dining, conference room, exam room and outdoor activity area.

### Functional Analysis (Intradepartmental)

The configuration of the unit along an elongated central corridor imposes functional limitations. The grouping of the patient units away from both the nurse's station and activity areas results in inadequate work flow and restricts supervision. The remote dayroom, utilized for many diverse functions, has uncontrolled access to two points of exit. General support, treatment and storage facilities are remote to the patient areas. Also, the congregate bath/toilet does not satisfy program criteria and movement through it is restrictive to the handicapped.

### Functional Analysis (Interdepartmental)

The unit is near major related treatment modalities. Patient circulation is restricted to one elevator which provides all vertical transport. This results in inefficient operations and requires intensified staffing. Handicapped accessibility to this building and unit is restricted, with entry provided from only Buildings No. 15 and No. 138. Dietary and Pharmacy services are delivered via the elevator and connecting corridor from Building No. 16. SPD carts are delivered from Building No. 138 in the same pattern.

### Projected Bed Loss (Current Criteria)

A minimum of 4 beds must be lost to meet VA standards of 2 private bedrooms with private baths and two bedrooms accessible to private toilets. The minimum of 30 beds preferred by the VA will be deficient by one bed.

### Environment

Overall appearance of the unit requires upgrading to enhance the quality of the space. The unit experiences deficiencies in its cooling, heating and ventilation systems. Control of the systems is poor and no individual room controls are provided. Window air conditioning units are in all patient rooms since no central cooling system is provided. Humidity control in the congregate bathing spaces is a continual problem. The disbursement of hot water to the unit suffers from prolonged delays.

### Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled that will effect the functional operation of this unit.

### Equipment/Systems

The nurse call system is not currently operational. A medical gas system (oxygen, vacuum and compressed air) supplies all patient rooms. The telephone system is inadequate and subject to frequent down periods. Patient equipment has been well maintained.

### General Comments/Conclusions

The unit has both space and functional deficiencies. Minor space modifications could improve some of the functional deficiencies. The shortages of critical required space cannot be resolved within the present parameters of the unit. Additional floor area would be necessary as the only means towards achieving a resolution of the existing space deficiencies and to satisfy projected criteria requirements. If additional floor area is proposed, Buildings No. 15 and 16 should be considered in the planning with a coordinated solution for all three.

2.3.10

s(1) DEPARTMENT/SERVICE

INTERMEDIATE CARE -  
LOCKED NURSING UNIT

Location

Building No. 18  
First and Second Floor

Building Construction Date

1896

Utilization Index

34 Bed

Present Total Sq. Ft.

Net - 8,412  
Gross - 12,492

% of Reqd. NSF Available (Exist.)

105%

Projected Required Sq. Ft.  
(Typical 36 Bed Unit -  
FY - 2000)

Net - 8,455  
Gross - 14,374 (C.F. 1.7)

% of Reqd. NSF Available (Projected)

100%

Description of Service

This unit is responsible for admission, treatment and continued care of patients with long term psychiatric problems. Most patients are ambulatory. Two-thirds are confused and disoriented, thus requiring placement in a locked ward to insure personal safety and prohibit wandering. Approximately 12 patients are included in the Patients Approaching Release Program (PAR).

Space Analysis

The first floor contains patient activity areas consisting of a dayroom, a dining room with an adjoining kitchen and a group room plus 2 four-bed rooms and 1 three-bed room with a congregate toilet and bathing facilities. These are supported by a nurse's station, medication room, staff offices and a visitors lounge. There is also a serving line and dining area.

The second floor houses the remainder of the patient sleeping areas comprised of 5 four-bed rooms and 1 three-bed room with congregate toilet and bathing facilities. Support consists of a staff lounge/toilet room, offices for a psychologist and social worker.

The present net sq. ft. - 8412 is comparable to the projected net sq. ft. - 8455. However, the distribution of space available by room does not meet program requirements. The dayroom is oversized by 45%. The nurse's station total space seems excessive, yet, charting and physician's dictation use this area resulting in a crowded condition.

Many patient rooms are undersized and do not meet program criteria. The predominant four-bed room mix differs from that of the preferred VA standard which calls for a combination of private and semi-private rooms. Facilities for the visitors are undersized and inadequate. There is a shortage of office, staff support and general storage space.

A kitchenette and laundry room, necessary functions for patients in the PAR program, are not available.

#### Functional Analysis (Intradepartmental)

Splitting this unit on two floors makes patient supervision difficult.

#### Projected Bed Loss (Current Criteria)

A minimum of 6 beds would be lost to achieve VA standards of 2 private bedrooms with private baths and 2 bedrooms with private toilets. The total would be reduced 28 beds, 2 below minimum standards for intermediate nursing units.

#### Functional Analysis (Interdepartmental)

Building No. 18 is interconnected by a conditioned corridors to Buildings No. 8 (Gymnasium), 9 (Rehabilitation Services) and Bed Buildings No. 7 and 11. Additional services such as Diagnostic and Treatment services which, ideally, should be located adjacent and readily available to this program are located across campus requiring escort services as well as vehicular transport during inclement weather. This building unlike most does contain its own kitchen and tray service area.

#### Environment

There is no central air conditioning system in the building. Window units exist in all patient rooms plus the dayroom and other areas on the first floor. None, other than patient rooms are provided on the second floor. The radiator system is difficult to regulate. Humidity in congregate bathing areas is a constant problem. Illumination in most areas is poor. No medical gases exist in this building.

#### Equipment/Systems

There is no nurse call system in patient rooms. Existing locations are the congregate bathing and toilet rooms as well as two locations in the second floor corridor. The phone system is frequently out of service and the number of lines available is inadequate. The phone service for patients is limited to a single pay phone located in the lobby with no privacy and requiring patient escort by staff members.

Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled that will effect the functional operation of this unit.

General Comment/Conclusions

If this nursing unit and treatment program is to meet both current and projected VA criteria, the space provided by Building No. 18 is not suitable. Extensive renovation and a major addition would be required to correct this deficiency in area.



2.3.10

s(2) DEPARTMENT/SERVICE

NURSING HOME CARE UNIT

Location

Building No. 138  
Second Floor

Building Construction Date

1958

Utilization Index

69 Beds

Present Total Sq. Ft.

Net - 13,824  
Gross - 24,418

% of Regd. NSF Available (Exist.)

90%

Projected Required Sq. Ft.  
(Typical 60 Bed Unit for  
FY 2000)

Net - 14,551  
Gross - 21,826 (C.F. 1.5)

% of Regd. NSF Available (Projected)

95%

Description of Services

The Nursing Home Care Unit is a specialized nursing facility designed to care for patients with long term illness requiring preventive, therapeutic and rehabilitative nursing care services. Nursing, medical and related care is provided in a homelike environment with specialized clinical and diagnostic services available at the hospital facilities. The patient age group ranges from 36 to 95 years of age. Their levels of ambulation may range from those essentially unencumbered to approximately 25% of them being wheelchair bound.

Space Analysis

The Nursing Home Care Unit is a 69 bed unit with a bed distribution as follows: 9 four-bed rooms, 6 three-bed rooms, 4 semi-private rooms and 7 private bed rooms. Except for the private rooms and a few of the semi-private, none meet or exceed the criteria. Only 25% of the beds are handicap accessible. VA standards require 100%. Also missing but required are two extra large two-bed rooms for severely handicapped. Only one patient room has a private toilet. All other patients must use congregate facilities - 1 toilet and 1 bathing unit per units C and B. The toilet and bathing congregates do not adjoin and a hopper area for severely handicapped patients is omitted. The two nurses stations are so located as to provide adequate supervision of the majority of rooms, but no control of either the dayroom or dining rooms. The staff support areas are acceptable in space.

### Functional Analysis (Interdepartmental)

Although the configuration of Building No. 138 creates long linear units, this does not generate a critical functional problem with the nursing home. The entire floor is a dedicated Nursing Home Unit and, though not staff efficient, the two nursing stations provide acceptable supervision. Dedicated Physical and Occupational Therapy units per VA criteria are not provided, forcing patients to be escorted off the unit for these treatments. No female patient facilities exist. Private toilet rooms except for one are non-existent. The patients have no direct access to the exterior.

### Functional Analysis (Interdepartmental)

Most necessary patient services such as Physical Therapy and Occupational Therapy are in Building No. 138 and even though escort service is required, vertical transportation is available and accessible. The convenience of elevators also make deliveries of materials and food possible in a timely manner.

### Projected Bed Loss (Current Criteria)

MEDIPP projections for FY 2000 calls for 60 beds, a net loss of 9 beds. The space gained from this reduction will allow the required toilet/bath compliment to be met.

### Environment

Poor ventilation is characteristic of all areas in Building No. 138. It is particularly noticeable in patient toilet and bathing facilities, staff rest rooms, soiled utility rooms and storage areas. The dayrooms are overwhelmed with smoke even with the use of smoke eaters, window air conditioning units and exhaust fans. Several patient rooms and offices show evidence of water damage.

Because of a patient's length of stay on this unit, additional amenities such as built-in closets and dressers, more exterior light in the day rooms, etc. should be provided.

### Equipment/Systems

This unit is equipped with a nurse call system though it is outdated, works poorly and does not include seven of the 69 beds. At present, there is no oxygen system available to the unit. Equipment storage is extremely limited.

### Five Year Facility Plan (FY 1988 - FY 1992)

A necessary part of a FY 88 Minor project is the relocation of the NHCU to Building No. 25. Indications are that the move will proceed regardless of the FDP finding.

### General Comments/Conclusions

The Nursing Home Care Unit does not meet VA standards for handicap accessibility or private patient toilet facilities. To adhere to the standards and still remain in its present location would mean a large loss in beds, whereas the projection is for an increase. A totally renovated space would compromise the function of the unit. Therefore, the use of the second floor of Building No. 138 is not recommended.

2.3.10

s(3) DEPARTMENT/SERVICE

INTENSIVE CARE UNIT

Location

Building No. 138  
Third Floor - Unit A

Building Construction Date

1958

Utilization Index

6 Beds

Present Total Sq. Ft.

Net - 1208  
Gross - 1820

% of Req'd. NSF Available (Exist.)

45%

Projected Required Sq. Ft.  
(Typical 6 Bed Unit  
FY 2000)

Net - 2747  
Gross - 4669 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

44%

Description of Services

This is a specialized nursing unit designed for all categories of patients too acutely ill to be placed in a conventional nursing unit. These patients require highly skilled care, continuous observation and a concentration of specialized equipment.

Space Analysis

This entire program is contained within four rooms. The general patient care area (recently renovated) contains 5 beds enclosed with curtains for privacy and a sixth bed enclosed by glass partitions. The space per bed is not generous, but functionally acceptable. Because there is no ante room, the enclosed bed cannot be considered for isolation purposes. Support space deficiency is significant. There is no dedicated clean and soiled utility rooms. The patient bath doubles as the soiled utility room. Visitors must share a lounge with patients for the respiratory care unit, and staff related areas such as a lounge and appropriate offices do not exist.

Functional Analysis (Intradepartmental)

The patient beds are arranged to allow easy accessibility with a good line of sight from the nurse's station. The lack of proper support facilities compromises the function of the unit. This includes the lack of dedicated HAC. However, the location and configuration of the I.C.U. plus the competing need for space by adjacent services will make further improvements difficult.

### Functional Analysis (Interdepartmental)

All acute beds that support this unit are located within Building No. 138 with direct elevator access. Pharmacy, laboratory and bio-engineering are located conveniently and, although the emergency unit is remote, patient transfer from this area is rare.

### Projected Bed Loss (Current Criteria)

Anticipated as the majority of space deficiency is attributable to support space.

### Environment

There is no central air conditioning system, but individual window units provided acceptable cooling in all patient rooms. Ventilation throughout Building No. 138 is poor and inadequate.

### Equipment/Systems

The PBPU's monitoring equipment are relatively new and operational. The phone system is inadequate but scheduled for replacement. The Code Blue system is reported to be unreliable, but planned for upgrading.

### Five Year Facility Plan (FY 1988 - FY 1992)

No work is scheduled that will effect the functional operation of this unit.

### General Comments/Conclusions

Though the present space occupied by this program has recently been upgraded in order to make the best use of the limited available space, in order for this program to meet criteria for the projected requirements, relocation of the service would be needed. At its present location, there is an evident lack of additional space.

2.3.10

s(4) DEPARTMENT/SERVICE

GENERAL MEDICINE UNIT

Location

Building No. 138  
Third Floor - Unit B

Building Construction Date

1958

Utilization Index

18 Bed

Present Total Sq. Ft.

Net - 4725  
Gross - 7808

% of Reqd. NSF Available (Exist.)

128%

Projected Required Sq. Ft.  
(Typical 38 Bed Unit -  
FY 2000)

Net - 8,217  
Gross - 13,969 (C.F. 1.7)

% of Reqd. NSF Available (Projected)

58%

Description of Service

This nursing unit is dedicated for inpatient accommodations and delivery of direct health care with pertinent supportive facilities to patients diagnosed to have cardiac structural and functional disorders.

Space Analysis

The bed mix of this 18 bed unit consists of 4 three-bed rooms, 2 semi-private bed rooms, 1 private bed room and one complete isolation suite. The square footage for each of the bed rooms is appropriate, but the spatial configuration of some, make placement of beds and furniture difficult, if proper access is to be maintained. Except for the isolation unit, none of the patient bed rooms have access to contiguous private or shared toilet/bathing facilities. Toilet and bathing functions are accommodated by separate and not adjoining congregates. The number of fixtures and handicap accessibility requirements meet standards.

Functional Analysis (Intradepartmental)

The unit is compact with ample space in necessary support functions. The nurse's station is centrally located with good control and line of sight observation. Private toilet/bathing facilities are needed especially for female patients. Relocation of the social workers and dietitians offices would eliminate unwanted noise and traffic from penetrating the unit. This relocation would also free up additional space that the unit could absorb.

### Functional Analysis (Interdepartmental)

Necessary support functions are available and convenient. Several functions that assist not only the cardiac unit but the ICU and Respiratory unit on the third floor have space within the Cardiac Suite. These include the offices for two dietitians, two social workers, the chief of medical services with his secretary and a physician/exam room. In addition, the soiled linen chute for the third floor is contained on this unit. Auxiliary support from Pharmacy, Laboratory and Radiology is easily accessible.

### Projected Bed Loss (Current Criteria)

No bed loss is required to meet VA standards regarding minimum room sizes and toilet facilities. However, 18 beds is 22 beds below the optimum and 12 below the minimum ward size as required for medical units.

### Environment

Ventilation throughout Building No. 138 is poor. Control of the heating system is difficult due to various thermostats throughout the unit. There are poor lighting levels needed for medical procedures.

### Equipment/Systems

Systems such as medical gases and nurse call system are available. The nurse call system is inadequate, but due for replacement at a later date.

### Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled that will affect the functional operation of this unit.

### General Comments/Conclusions

The treatment and care for patients of this unit is well served by its location and layout. However, private patient toilets/baths must be added. Functions not dedicated to this unit must be relocated and if more beds could be added, the unit would become better utilized and more staff efficient.

2.3.10

s(5) DEPARTMENT/SERVICE

NURSING UNIT -  
20 BED RESPIRATORY  
CARE UNIT AND  
PULMONARY MEDICINE

Location

Building No. 138  
Third Floor - Unit C

Building Construction Date

1958

Utilization Index

20 Beds

Present Total Sq. Ft.

Net - 3,751  
Gross - 5,863

% of Req'd. NSF Available (Exist.)

90%

Projected Required Sq. Ft.  
(Typical 38 Bed Unit)

Net - 8,217  
Gross - 13,969 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

46%

Description of Service

This nursing unit is a dedicated area for the inpatient accommodations and the delivery of direct health care with proper support to patients afflicted with respiratory ailments and disorders. The pulmonary function laboratory is designed for routine procedures encompassing inhalation therapy and stress testing.

Space Analysis

The unit is compact with the nursing station centrally located and having acceptable observation and supervision. Private toilet/bathing facilities are needed. Monitored beds are available and act as back-up to the ICU. The patient sleeping areas consist of 1 four-bed room, 4 three-bed rooms, 1 semi-private room and 2 private bed rooms. Both of the single rooms are designed and can operate as isolation facilities. The support services consist of a nurse's station, medication room, nourishment station, SPD storage, soiled utility, a visitor's lounge which is shared with the ICU, patient storage, clean linen, male and female staff rest rooms and office for the head nurse, offices for a physician and the supervisor of respiratory therapy. Also directly associated with this department is an inhalation therapy area, storage room, an EKG room, a pulmonary and blood gases areas, gas storage and respiratory therapy storage room.

Functional Analysis (Intradepartmental)

Supervision and observation of the unit patient areas as well as entry point is inadequate. There is no dayroom available for patients on this unit. Equipment storage is minimal or nonexistent.



### Functional Analysis (Interdepartmental)

Having most of the required services associated with this program either within the unit or immediately adjacent, provides efficient and timely services to the patients as well as the staff. Other diagnostic and treatment needs are also located within reasonable distance but requires escort services by the nursing staff.

### Projected Bed Loss (Current Criteria)

No bed loss is required to meet VA Standards regarding minimum room sizes and toilet facilities.

### Environment

As previously noted on sections of this report dealing with Building No. 138, the ventilation system throughout is poor, there is no central air conditioning system and control of the heating system is difficult. Adequate cooling is obtained through the use of existing window units in patient rooms. General illumination in the patient rooms and corridors is inadequate.

### Equipment/Systems

PBPU's and medical gases systems are available and adequate. The telephone system is inadequate. The nurse call system is adequate.

### Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled that will affect the functional operation of this unit.

### General Comments/Conclusions

The respiratory care nursing unit's adjacency to respiratory care, inhalation therapy and pulmonary functions such as the laboratory and EKG room is ideal, yet, the overall space available is limited and crowded.

The present location of this unit in the midst of an acute medical facility is necessary in order to provide treatment to patients in an efficient and timely manner, yet, the units present location within the physical structure is inadequate due to the limited space available. More appropriately designed spaces that maintain the present interdepartmental relationships and provide the unit with all areas needed to meet criteria and optimum functional levels are needed.

2.3.10

s(6) DEPARTMENT/SERVICE

GERIATRIC  
EVALUATION UNIT

Location

Building No. 138  
Fourth Floor - Unit B

Building Construction Date

1958

Utilization Index

22 Bed

Present Total Sq. Ft.

Net - 4,961  
Gross - 7,802

% of Req'd. NSF Available (Exist.)

85%

Projected Required Sq. Ft.  
(Typical 31 Bed Unit  
FY 2000)

Net - 8,250  
Gross - 14,025 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

60%

Description of Service

This 22 Bed Geriatric Evaluation Unit provides evaluation and general admission of patients generally over 65 years of age. The unit has a 9 bed female wing and 13 bed male unit. The length of stay of this unit ranges from 7 to 10 days.

Space Analysis

The patient sleeping areas for the unit consist of 1 three-bed rooms, 2 two-bed rooms and 2 private bed rooms. The male unit contains 3 three-bed room, and 2 semi-private rooms. The female and male units each have dedicated congregate toilets, but most share bathing facilities. Additional patient and staff areas consist of a patient lounge on the female wing, patient storage, clean linen, staff lockers, female staff toilet, soiled utility, SPD storage, equipment storage, a staff lounge, visitor's lounge, nurse's station, medication room and offices for 2 physicians and the community health nurse.

Functional Analysis (Intradepartmental)

Functional and space requirements for this unit are adequate due to a recent remodeling and bed reduction. Handicap accessibility is acceptable for all patient areas. The dayroom and visitor's lounge are small, yet, adequate for patients served. There are no toilet facilities for visitors.

### Functional Analysis (Interdepartmental)

The unit is adjacent to O.T. and P.T. functions and though an escort is necessary, it is convenient to Diagnostic and Treatment areas in Building No. 138 via the elevator.

### Projected Bed Loss (Current Criteria)

A 1-bed room will be lost because of handicap inaccessibility, but unless a dedicated 1-bed room for the male unit is required the nursing wing can meet VA standards with minimal disruption. This unit is currently 8 beds below the optimum number.

### Environment

Ventilation throughout Building No. 138 is generally poor. There is no central air conditioning system, but individual window units provide adequate cooling in all patient rooms and patient areas. Control of the heating system is difficult. The general appearance of the unit since it was recently remodeled is good.

### Equipment/Systems

A linen chute is available. The nurse call system as well as medical gases and PBPU's are also adequate. The telephone system is inadequate and scheduled for replacement.

### Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled that will effect the functional operation of this unit.

### General Comments/Conclusions

The replacement of the telephone system as well as the recently installed computer terminal will greatly increase efficiency and performance of this unit.

The present location of this unit in the midst of an acute medical facility is proper in order to provide treatment to patients in an efficient and timely manner. The physical location and space available for this unit is acceptable. This program is to increase by 3 beds. Although a small increase, these 3 beds will make the present location marginal.

2.3.10

s(7) DEPARTMENT/SERVICE

REHABILITATION  
MEDICINE NURSING  
UNIT

<u>Location</u>	Building No. 138 Fourth Floor - Unit C
<u>Building Construction Date</u>	1958
<u>Utilization Index</u>	17 Bed
<u>Present Total Sq. Ft.</u>	Net - 5163 Gross - 7808
<u>% of Reqd. NSF Available (Exist.)</u>	110%
<u>Projected Required Sq. Ft.</u> (Typical 20 Bed Unit for FY 2000)	Net - 5651 Gross - 9606 (C.F. 1.7)
<u>% of Reqd. NSF Available (Projected)</u>	91%

Description of Service

This nursing unit is a dedicated area for inpatient accommodations and delivery of direct health care with specific supportive facilities concerned with the rehabilitation of veterans requiring physical, occupational and corrective therapy.

Space Analysis

The patient sleeping areas for this unit consist of 4 three bed-rooms, 1 two-bed room and 3 private rooms. The congregate bathing facility contains a shower room with an adjoining dressing/changing and toilet. The congregate toilet facility, which does not abut the congregate shower, contains 3 sinks, 2 water closets and 2 urinals. Additional patient and staff support areas consist of a nurse's station, dictation, medication room, dayroom, nourishment station, clean linen, soiled utility, patient storage, visitor's lounge, staff lounge, staff toilets for male and female personnel, equipment storage, SPD storage, a classroom, an exam room and offices for the head nurse and a physician.

Functional Analysis (Intradepartmental)

Except for the lack of toilet facilities for visitors and a dedicated toilet for female patients, this newly remodeled unit appears to have adequate space and good functional relationships. Handicap accessibility is acceptable in all patient areas.

### Functional Analysis (Interdepartmental)

The close adjacency of this unit to Physical, Occupational and Social Service Programs located on the same floor are convenient. Other Diagnostic and Treatment Services are accessible by elevator but require patient escort by the nursing staff.

### Projected Bed Loss (Current Criteria)

No bed reduction is necessary to meet minimum VA standards.

### Environment

Ventilation throughout Building No. 138 is generally poor. There is no central air conditioning system, but individual window units in all patient bedrooms provide adequate cooling. Control of the heating system is difficult. The general appearance of the unit since it was recently remodeled is good.

### Equipment/Systems

A linen chute for the entire fourth floor is located on the unit. The nurse call system as well as medical gases and PBPUs are also adequate. The telephone system is inadequate and scheduled for replacement.

### Five Year Facility Plan FY 1988 - FY 1992

No work is scheduled that will effect the functional operation of this unit.

### General Comments/Conclusions

The replacement of the telephone system as well as the recently installed computer terminal will greatly increase efficiency and performance of this unit.

The present location of this unit in the midst of an acute medical facility is convenient and necessary in order to provide treatment to patients in an efficient and timely manner. This program to meet criteria for the year 2000 will have to expand which will not be possible in its present location.

2.3.10

s(8) DEPARTMENT/SERVICE

ACUTE PSYCHIATRIC -  
LOCKED NURSING UNIT

Location

Building No. 1  
First & Second Floors

Building Construction Date

1889

Utilization Index

31 Beds

Present Total Sq. Ft.

Net - 7,954  
Gross - 13,480

% of Req'd. NSF Available (Exist.)

95%

Projected Required Sq. Ft.  
(Typical 31 Bed Unit -  
FY 2000)

Net - 8,250  
Gross - 14,025 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

96%

Description of Service

The Acute Psychiatric Unit is responsible for admission, treatment, and continued care of psychiatric patients with suicidal or assaultive behavior. The average length of stay is approximately 30 days.

Space Analysis

The first floor contains most of the patient activity and support areas, consisting of a dayroom, music room, smoking area, visitors lounge and adjoining toilet. There are also staff offices, two group/multipurpose rooms, a quiet room, staff lounge, staff locker room and toilet. The exam/treatment room has multiple functions such as the nourishment station, clean supply storage and emergency equipment storage. Similarly, the soiled utility room includes patient's storage and the ice machine. Toilet facilities are only available to male patients. The second floor has 1 private bed room, 1 two-bed room with a toilet room, and 7 four-bed rooms. The support areas consists of two clean linen rooms and congregate toilet and bathing facilities.

The present net square feet - 7954 approaches the projected net square feet - 8250. However, the distribution of space available by room does not meet program requirements. The dayroom is oversized by 45%. the nurse's station total space seems excessive, yet, it also supports the charting function and physician's dictation area, resulting in a crowded condition. The medication room is approximately one-half its required size. Many patient rooms are undersized and do not meet VA

criteria. The predominant four-bed room mix differs from the preferred VA standard, which calls for a combination of private and semi-private rooms. Facilities for the visitors are inadequate. There is a shortage of office, staff support and general storage space.

#### Functional Analysis (Intradepartmental)

Splitting this department on two floors makes supervision of patients difficult. There is no provision for handicapped accessibility. There is no elevator in this building. All vertical travel must be by stairs. The building will not meet UFAS standards. Also delivery and retrieval of all essential supplies must be manually transported via the stairs.

#### Functional Analysis (Interdepartmental)

Rehabilitation Medicine, Recreation Therapy and Diagnostic and Treatment Clinics are directly involved with patient treatment. At Marion, these services are, in other buildings, quite distant (300 to 600 feet). This requires escort service for many patients; and without connecting enclosed corridors, vehicular transport during extreme weather is needed. Distribution from SPD, Supply, Linen and Pharmacy to and within this building is difficult due to the absence of docks, ramps and elevators.

#### Projected Bed Loss (Current Criteria)

A minimum of 2 beds would be lost to provide the required amount of seclusion rooms plus the correct number of private toilets and baths. The unit would be reduced to 29 beds just one under the VA optimal size.

#### Environment

There is no central air conditioning system in the building. Window units exist in the patient rooms plus the dayroom and other areas on the first floor. None, except in the patient rooms, are provided on the second floor. The radiator system is difficult to regulate. Humidity is a problem in the congregate bathing areas. Illumination in most areas is poor.

#### Equipment/Systems

The nurse call system is limited to the congregate bathing and toilet rooms and two locations in the second floor corridor; it is not extended to the patient rooms as required by VA criteria. The phone system is frequently out of service and the number of lines available is inadequate. A patient/public phone is located in the lobby where there is no privacy. This location requires patients to be escorted by staff. No medical gases exist in this building.

### Five Year Facility Plan FY 1988 - FY 1992

An FY 1988 NRM project will erect a loading dock area. Planned for FY 1992 is a Minor project for \$600,000 to centrally air condition and install an elevator.

### General Comments/Conclusions

Numerous deficiencies with this building make it unsuitable for inpatient psychiatric care. In order to provide an appropriate facility for this nursing unit, extensive renovations and a major addition would be necessary.



2.3.10

s(8) DEPARTMENT/SERVICE

ACUTE PSYCHIATRIC  
ALCOHOL TREATMENT  
UNIT

Location

Building No. 2  
Basement, First & Second  
Floors

Building Construction Date

1889

Utilization Index

31 Beds

Present Total Sq. Ft.

Net - 9,829  
Gross - 15,227

% of Req'd. NSF Available (Exist.)

120%

Projected Required Sq. Ft.  
(Typical 31 Bed Unit for  
FY 2000)

Net - 8,250 (C.F. 1.7)  
Gross - 14,025

% of Req'd. NSF Available (Projected)

120%

Description of Service

The Alcohol Treatment unit is responsible for providing patients suffering from alcohol dependency problems, with a 28 day treatment program. Patients enter the program on a voluntary basis. This is an open treatment unit.

Space Analysis

The basement contains a coffee room, a TV/exercise and game lounge for patients, as well as, building management storage, housekeeping storage and mechanical/electrical equipment. The first floor consists of the patient activity and support areas as well as a three-bed room and the one four-bed room. The activity area consists of a dayroom with an adjoining porch utilized as a smoking area. Support areas consist of the nurse's station, medication room, offices for staff members and toilet facilities for male patients. There are no toilet facilities for female patients. The second floor includes additional activity, support, and patient sleeping areas. The patient sleeping areas consist of 6 four-bed rooms. Support services on the floor consist of four staff offices and congregate toilet and bathing facilities. Patient group therapy is also held on this floor though no designated room(s) is available. Group therapy is held in the corridor.

The present net sq. ft. - 9829 exceeds the projected net sq. ft. - 8250. However, the distribution of space available by room does not always meet program requirements. Though some patient activity space is provided in the basement, this area is drab with exposed pipes, and not accessible to handicapped patients. The dayroom is oversized by 50%. The nurse's station, undersized by 50%, also doubles as the

nourishment station and staff lounge. Many patient rooms are undersized and do not meet VA criteria. The predominant bed room mix differs from that of the preferred VA standard which calls for a combination of private and semi-private rooms. Facilities for the visitors are non-existent. There is a shortage of office, staff support and general storage space.

#### Functional Analysis (Intradepartmental)

Splitting this unit on three floors makes patient supervision difficult. There is no elevator in this building. All vertical travel must be by stairs. The building will not meet UFAS standards. Also, delivery and retrieval of all essential supplies must be manually transported via the stairs.

#### Functional Analysis (Interdepartmental)

Rehabilitation Medicine, Recreation Therapy and Diagnostic and Treatment Clinics are directly involved with patient treatment. At Marion, these services located in other buildings, are in most instances quite distant (300 to 600 feet). This requires escort service for many patients and without enclosed connecting corridors, vehicular transport during extreme weather is needed. Distribution from SPD, Supply, Linen and Pharmacy to and within this building is difficult due to the absence of docks, ramps and elevators.

#### Projected Bed Loss (Current Criteria)

At present, no seclusion rooms are available as required. In order to correct this deficiency, two solutions are possible. First, create 2 private bedrooms out of social workers' office on the second floor. If the office cannot be relocated then a minimum of loss of 3 beds would be needed to meet the standards. Bathroom requirement can be met with no further loss of beds.

#### Environment

There is no central air conditioning system in the building. Window units exist in the patient rooms plus in the dayroom and other areas on the first floor. None except in the patient rooms are provided on the second floor. The radiator system is difficult to regulate. Humidity in the congregate bathing areas is a constant problem. Illumination in most areas is poor.

#### Equipment/Systems

The nurse call system is limited to the congregate bathing and toilet rooms and two locations in the second floor corridor; it is not extended to the patient rooms as required by VA criteria. The phone system is frequently out of service and the number of lines available is inadequate. A patient public phone is located in the lobby where there is no privacy requiring patients to be escorted by staff member. No medical gases exist in this building.

Five Year Facility Plan FY 1988 - FY 1992

No work scheduled that will effect the functional operation of this department.

General Comments/Conclusions

Numerous deficiencies with this building make it unsuitable for inpatient psychiatric care. In order to provide an appropriate facility for this nursing unit, extensive renovations and a major addition would be necessary.

## 2.3.10

### s(8) DEPARTMENT/SERVICE

### ACUTE PSYCHIATRIC - OPEN UNIT

<u>Location</u>	Building No. 3 First & Second Floors
<u>Building Construction Date</u>	1889
<u>Utilization Index</u>	31 Beds
<u>Present Total Sq. Ft.</u>	Net - 8,086 Gross - 13,230
<u>% of Regd. NSF Available (Exist.)</u>	100%
<u>Projected Required Sq. Ft.</u> (Typical 31 Bed Unit - FY - 2000)	Net - 8,250 Gross - 14,025 (C.F. 1.7)
<u>% of Regd. NSF Available (Projected)</u>	98%

### Description of Service

This unit is responsible for the admission, treatment and continued care of female psychiatric patients.

### Space Analysis

The first floor contains most of the patient activity and support areas, consisting of a dayroom, game room, smoking area, visitors lounge and adjoining toilet. There are also staff offices, two group/multipurpose rooms, a quiet room, staff lounge, locker room and toilet. The exam/treatment room has multiple functions such as the nourishment station, clean supply storage and emergency equipment storage. Similarly, the soiled utility room includes patient's storage and the ice machine. The second floor contains additional support services and all patient sleeping areas. The sleeping areas consist of 1 private bed room, 1 semi-private bed room with toilet room and 7 four-bed rooms. The support areas consist of two clean linen rooms and congregate toilet and bathing facilities.

The present net square feet - 8086 approaches the projected net square feet - 8250. However, the distribution of space available by room does not meet program requirements. The dayroom is oversized by 45%. The nurse's station total space seems excessive, yet, it is also serves as the charting and physician's dictation area, resulting in a crowded condition. The medication room is approximately on-half its required size. Many patient rooms are undersized and do not meet VA criteria. The predominant four-bed room mix differs from that of the preferred VA bed standard which calls for a combination of private and semi-private rooms. Facilities for the visitors are inadequate. There is a shortage of office, staff support and general storage space.

### Functional Analysis (Intradepartmental)

Splitting this unit on two floors makes patient supervision difficult. There is no elevator in this building. All vertical travel must be by stairs. The building will not meet UFAS standards. Also, delivery and retrieval of all essential supplies must be transported via the stairs.

### Functional Analysis (Interdepartmental)

Rehabilitation Medicine, Recreation Therapy and Diagnostic and Treatment Clinics are directly involved with patient treatment. At Marion, these services are in other buildings quite distant (300 to 600 feet). This requires escort service for many patients and without connecting enclosed corridors, vehicular transport during extreme weather is needed. Distribution from SPD, Supply, Linen and Pharmacy to and within this building is difficult due to the absence of docks, ramps and elevators.

### Projected Bed Loss (Current Criteria)

A minimum of 1 bed would be lost in order to meet seclusion room standards. Toilet/bath requirement are obtainable with no loss of beds. Unit would be at optimal number if a bed is lost.

### Environment

There is no central air conditioning system in the building. Window units exist in the patient rooms plus the dayroom and other areas on the first floor. None, except in the patient rooms, are provided on the second floor. The radiator system is difficult to regulate. Humidity in the congregate bathing area is a constant problem. Illumination in most areas is poor.

### Equipment/Systems

The nurse call system is limited to the congregate bathing and toilet rooms and second floor corridor; it is not extended to the patient rooms as required by VA criteria. The phone system is frequently out of service and the number of lines available is inadequate. A patient public phone is located in the lobby where there is no privacy. This location requires patients to be escorted by staff. There are no medical gases in this building.

### Five Year Facility Plan FY 1988 - FY 1992

Planned for FY 1992 in the Minor project category for \$600,000 is a project to centrally air-condition and install an elevator.

### General Comments/Conclusions

Numerous deficiencies with this building make it unsuitable for inpatient psychiatric care. In order to provide an appropriate facility for this nursing unit, extensive renovations and a major addition would be necessary.

## 2.3.10

### s(8) DEPARTMENT/SERVICE

	<b>ACUTE PSYCHIATRIC - LOCKED UNIT</b>
<u>Location</u>	Building No. 4 First and Second Floors
<u>Building Construction Date</u>	1889
<u>Utilization Index</u>	25 Bed
<u>Present Total Sq. Ft.</u>	Net - 8,039 Gross - 13,230
<u>% of Req'd. NSF Available (Exist.)</u>	120%
<u>Projected Required Sq. Ft.</u> (31 Bed Unit Typical FY 2000)	Net - 8,250 Gross - 14,025 (C.F. 1.7)
<u>% of Req'd. NSF Available (Projected)</u>	97%

### Description of Service

The Acute Psychiatric Unit is responsible for admission, treatment, and continued care of psychiatric patients with suicidal or assaultive behavior. The average length of stay is approximately 30 days.

### Space Analysis

The first floor contains most of the patient activity and support areas, consisting of a dayroom, music room, smoking area, visitors lounge and adjoining toilet. There are also staff offices, two group/multipurpose rooms, a occupational therapy room, staff locker room and toilet. The exam/treatment room has multiple functions such as the nourishment station, clean supply storage and emergency equipment storage. In like manner, the soiled utility room contains patient's storage and the ice machine. The second floor contains additional support services and all patient sleeping areas. The sleeping areas consist of 6 four-bed rooms and 1 private room. The support areas consist of a staff lounge and toilet room, two clean linen rooms and congregate toilet and bathing facilities.

The present net sq. ft. - 8039 is comparable to the projected net sq. ft. - 8250. However, the distribution of space available by room does not meet program requirements. The dayroom is oversized by 45%. the nurse's station's total space seems excessive, yet, it also serves as the charting and physician's dictation area resulting in congestion. The medication room is approximately one-half its required size. Many patient rooms are undersized. The predominant four-bed room mix differs from that of the preferred VA standard which calls for a majority of one-bed and two-bed rooms. Facilities for the visitors are undersized. There is a shortage of office, staff support and general storage space.

### Functional Analysis (Intradepartmental)

Splitting this unit on two floors compromises patient supervision. There is no elevator in this building. All vertical travel must be by stairs. The building will not meet UFAS standards. Also delivery and retrieval of all essential supplies must be manually transported via the stairs.

### Functional Analysis (Interdepartmental)

Rehabilitation Medicine, Recreation Therapy and Diagnostic and Treatment are directly involved with patient treatment. At Marion, these services located in other buildings are quite distant (300 to 600 feet). This requires escort service for most patients and without enclosed connecting corridors, vehicular transport during extreme weather is needed. Distribution from SPD Supply, Linen and Pharmacy to and within the building is difficult due to the absence of docks, ramps and elevators.

### Projected Bed Loss (Current Criteria)

As with Building No. 2, two solutions are available to correct the seclusion room deficiency. Convert two social work offices to beds or lose 2 beds in the conversion of a 4-bed room to two privates. The toilet/bath requirements can be met without any loss of beds.

### Environment

There is no central air conditioning system in the building. Window units exist in the patient home plus the dayroom and other areas on the first floor. None, except in the patient rooms, are provided on the second floor. The radiator system is difficult to regulate. Humidity in the congregate bathing area is a constant problem. Illumination in most areas is poor.

### Equipment/Systems

The nurse call system is limited to the congregate bathing and toilet rooms and two locations in the second floor corridor. It is not extended to the patient rooms as required by VA criteria. The phone system is frequently out of service and the number of lines available is inadequate. A patient/public phone is located in the lobby where there is no privacy. This location requires patients to be escorted by staff members. No medical gases exist in this building.

### Five Year Facility Plan FY 1988 - FY 1992

A loading dock and area will be provided under a NRM project in FY 1988 at a cost of \$100,000. Planned for FY 1992 in the Minor category at \$100,000 is a project to provide central air-conditioning and install an elevator.

### General Comments/Conclusions

Numerous deficiencies with this building make it unsuitable for inpatient psychiatric care. In order to provide an appropriate facility for this nursing unit, extensive renovations and a major addition would be necessary.



## 2.3.10

s(8) DEPARTMENT/SERVICE

ACUTE PSYCHIATRIC  
SHORT TERM  
OPEN UNIT  
(Includes 8 Bed  
Combat Veteran  
Program)

Location

Building No. 5  
First & Second Floors

Building Construction Date

1889  
First & Second  
Floors

Utilization Index

37 Beds

Present Total Sq. Ft.

Net - 7,842  
Gross - 13,460

% of Req'd. NSF Available (Exist.)

80%

Projected Required Sq. Ft.  
(Typical 31 Bed Unit  
FY - 2000)

Net - 8,250  
Gross - 14,025 (C.F. 1.7)

% of Req'd. NSF Available (Projected)

95%

Description of Service

This 37 Bed Short Term Psychiatric Unit is responsible for providing admission, treatment and continued care of patients suffering episodic exacerbations of chronic underlying conditions.

Space Analysis

The first floor contains most of the patient activity and support areas as well as 3 four-bed rooms and an one bed observation room. The activity areas consist of a dayroom and a smoking area for patients. Support services consist of a nurse's station, medication room, nourishment/break room, staff offices and a congregate toilet room for male patients. There are no toilet facilities for female patients. The second floor sleeping areas consist of 6 four-bed rooms two of which are dedicated to the Combat Veteran Program. A small patient activity area is dedicated to the Combat Veteran Program. Support areas consist of offices and congregate toilet and bathing facilities.

The present net sq. ft. -7842 is slightly less than the projected net sq. ft. - 8250. However, the present 37 bed unit is greater than the projected count of 31 beds. The distribution of space available by room does not meet program requirements. The dayroom is oversized by 45%.

The nurse's station total space seems excessive, yet, it also serves as the charting and physician's dictation area, resulting in a crowded condition. The medication room is approximately one-half its required size. Facilities for visitor's are non-existent. Many patient rooms are undersized. The predominant four-bed room mix differs from that of the preferred VA standard which calls for a combination of private and semi-private rooms. There is a shortage of office, staff support and general storage space.

#### Functional Analysis (Intradepartmental)

Splitting this unit on two floors makes patient supervision difficult. There is no elevator in this building. All vertical travel must be by stairs. The building will not meet UFAS standards. Also delivery and retrieval of all essential supplies must be manually transported via the stairs.

#### Functional Analysis (Interdepartmental)

Rehabilitation Medicine, Recreation Therapy and Diagnostic and Treatment Clinics are directly involved with patient treatment. At Marion, these services located in other buildings are in most instances quite distant (300 to 600 feet). This requires escort service for most patients and without connecting enclosed corridors vehicular transport during extreme weather is needed. Deliveries from SPD, Supply, Linen and Pharmacy to and within the building is difficult due to the absence of docks, ramps and elevators.

#### Projected Bed Loss (Current Criteria)

One seclusion room is required on the second floor and can be acquired by capturing one social work office or conversion of a storage room. The minimal toilet standards can be achieved with no loss of beds.

#### Environment

There is no central air conditioning system in the building. Window units exist in the patient rooms plus in the dayroom and other areas on the first floor. None, except in the patient room, are provided on the second floor. The radiator system is difficult to regulate. Humidity in the congregate bathing area is a constant problem. Illumination in most areas is poor. There are no medical gases in this building.

#### Equipment/Services

The nurse call system is limited to the congregate toilet and bathing facilities and two locations in the second floor corridor. It is not extended to the patient rooms as required by VA criteria. The phone system is consistently out of service and the number of lines is inadequate.

### Five Year Facility Plan FY 1988 - FY 1992

Total renovation is proposed for FY 1989 and will be funded by a \$1,240,000 Minor project. The remodeling will include central air-conditioning, an elevator and upgrading of patient rooms.

### General Comments/Conclusions

Numerous deficiencies with this building make it unsuitable for inpatient psychiatric care. In order to provide an appropriate facility for this nursing unit, extensive renovations and a major addition would be necessary.

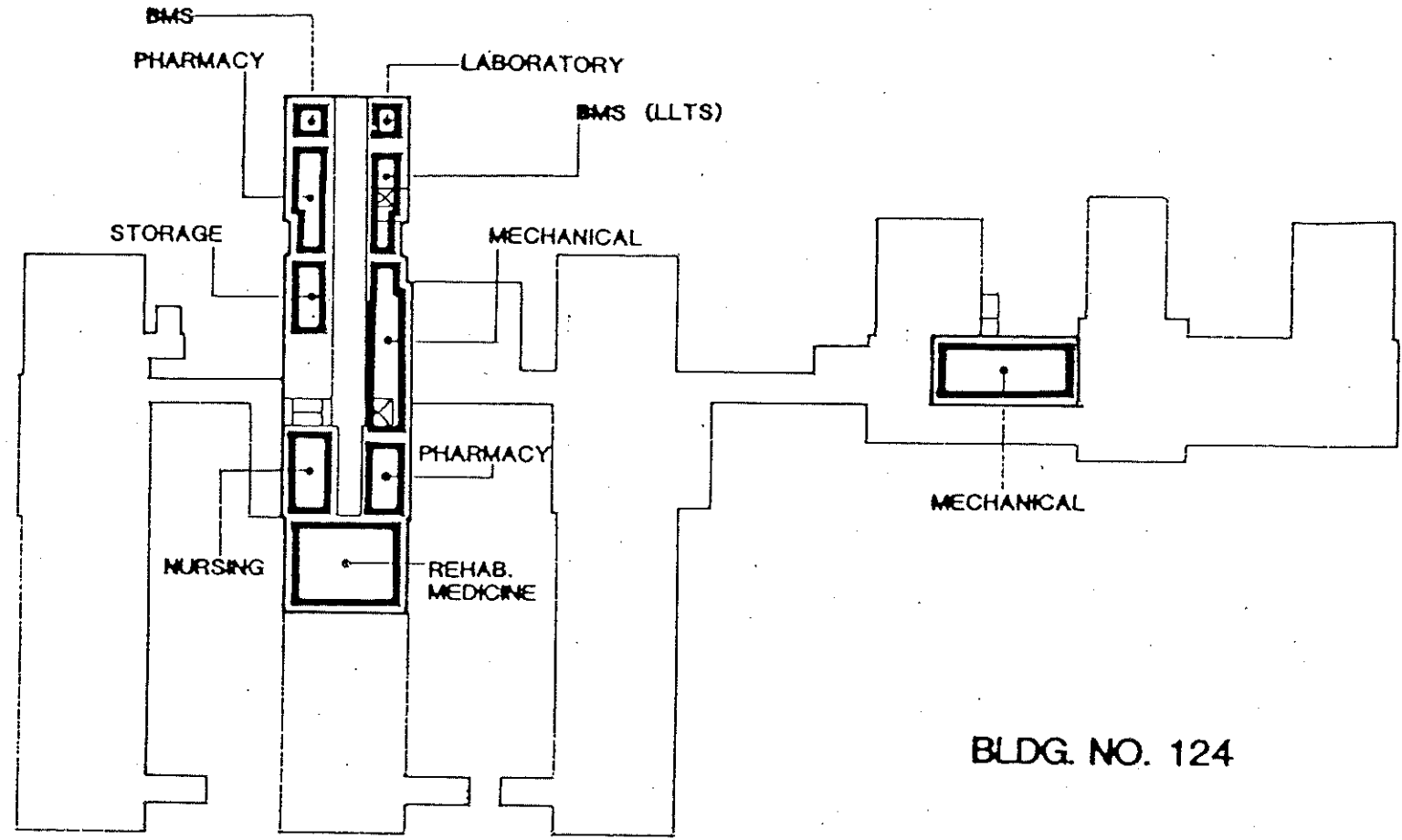
### 2.3.11 FUNCTIONAL PLANS

The functional plans that follow indicate functional zoning for all Medical Center buildings that house patients. Buildings No. 1, 2, 3, 4, 5, 10, 11, 12, 14, 15, 16, 17, 18, 25, 138 are depicted. Only major corridors and vertical access (stairs and elevators) are drawn. Typical sets of buildings are represented by one structure. The sets include Buildings No. 1 through 5 and Buildings No. 7, 10, 11 and 12. Although minor variations exist within the interior of these sets, they are not critical and do not constitute a break from the typical layout.

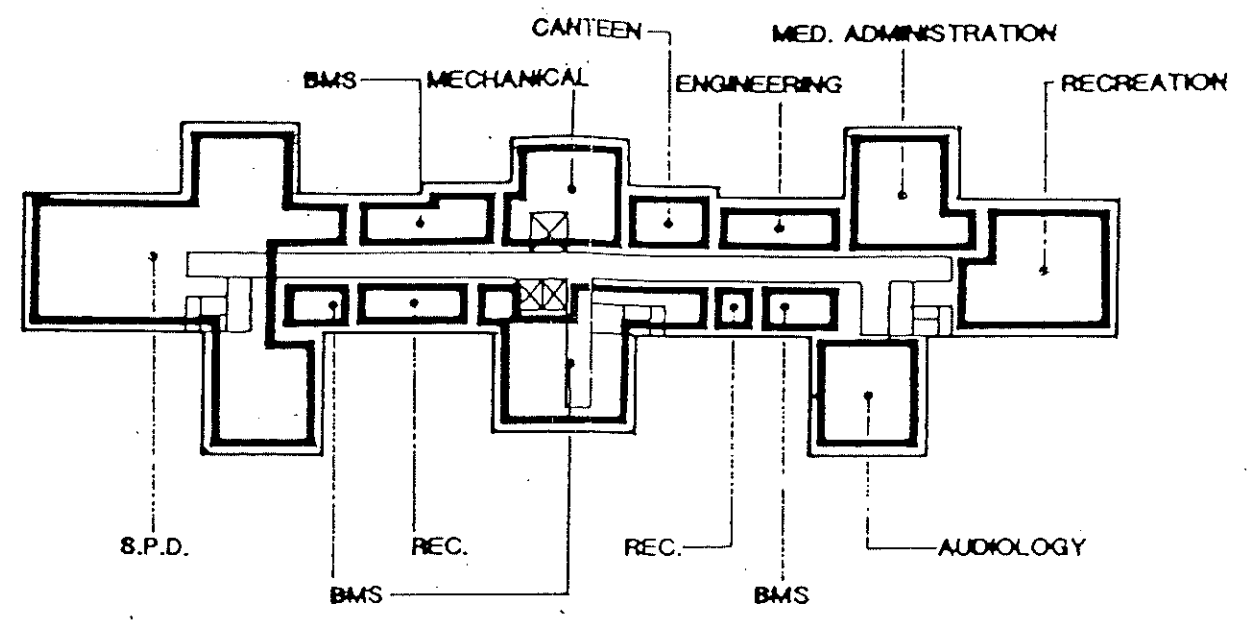
Also represented is Building No. 124 that does not house patients but does contain Ambulatory Care and Critical Clinical Support such as Radiology and Laboratory. Its strategic location and utilization designates Building No. 124 as essential to the functioning of the Medical Center.

A total overview of the functional plan for the Medical Center with respect to its zoning and land use is illustrated in Section 2.2.4.

# BUILDINGS 15,16,17,124,&138 BASEMENT



BLDG. NO. 124

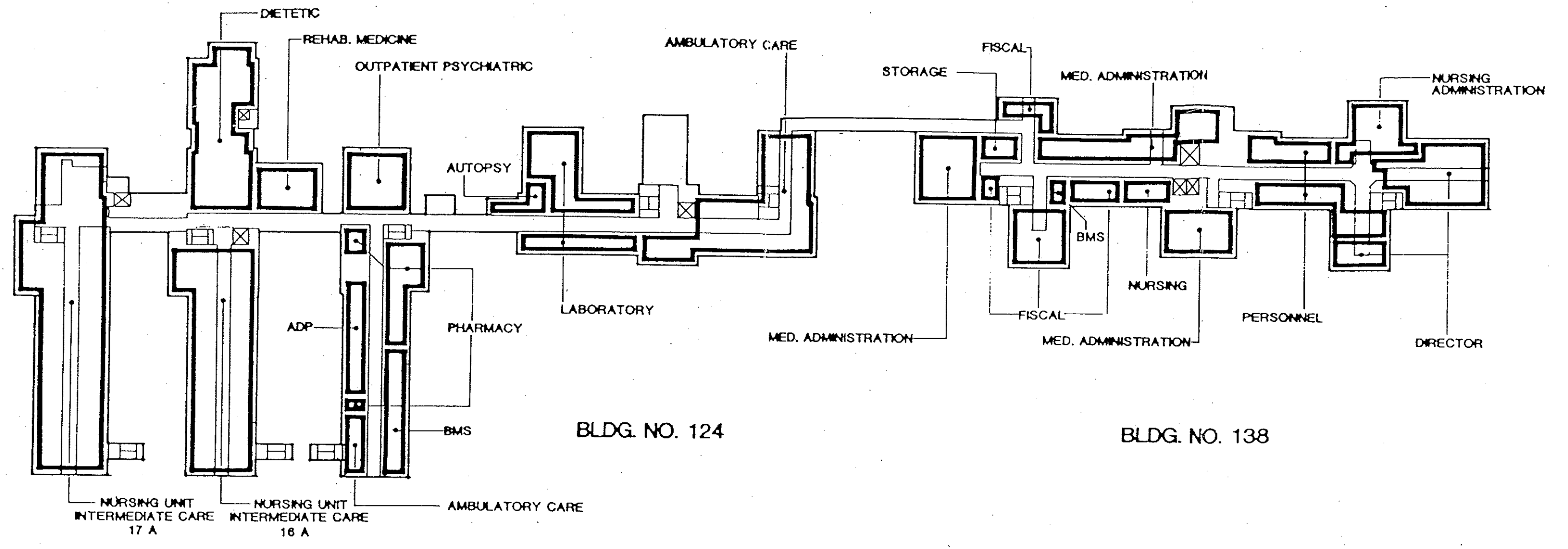


BLDG. NO. 138

BLDG. NO. 16



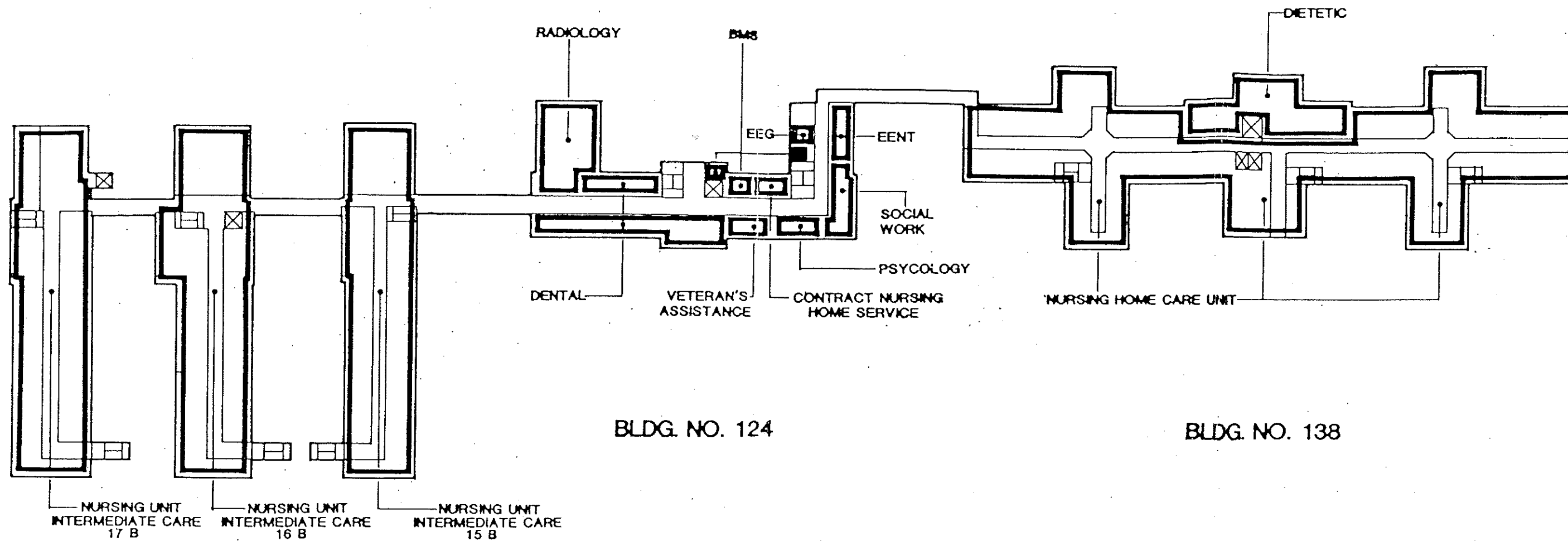
2.3.11d  
**BUILDINGS**  
**15,16,17,124,&138**  
**FIRST FLOOR**



BLDG. NO. 17    BLDG. NO. 16    BLDG. NO. 15



BUILDINGS  
15,16,17,124,&138  
SECOND FLOOR



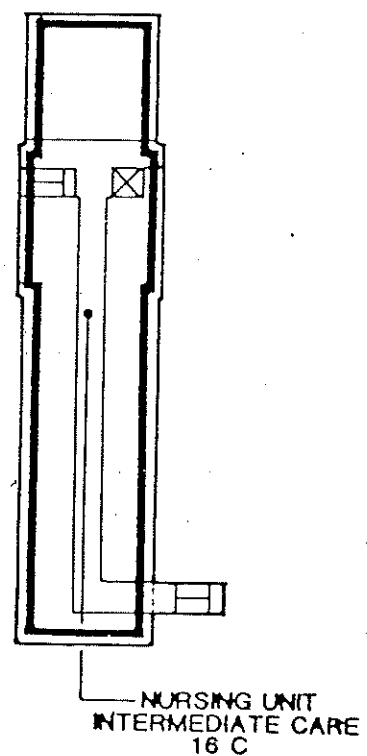
BLDG. NO. 17

BLDG. NO. 16

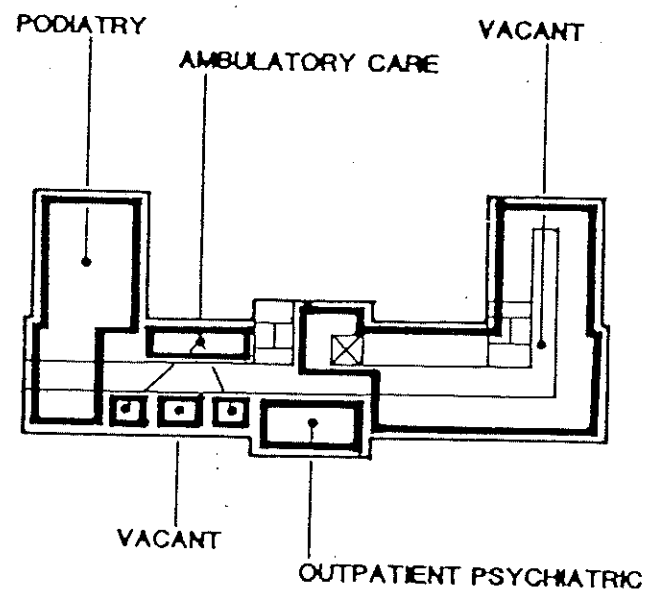
BLDG. NO. 15



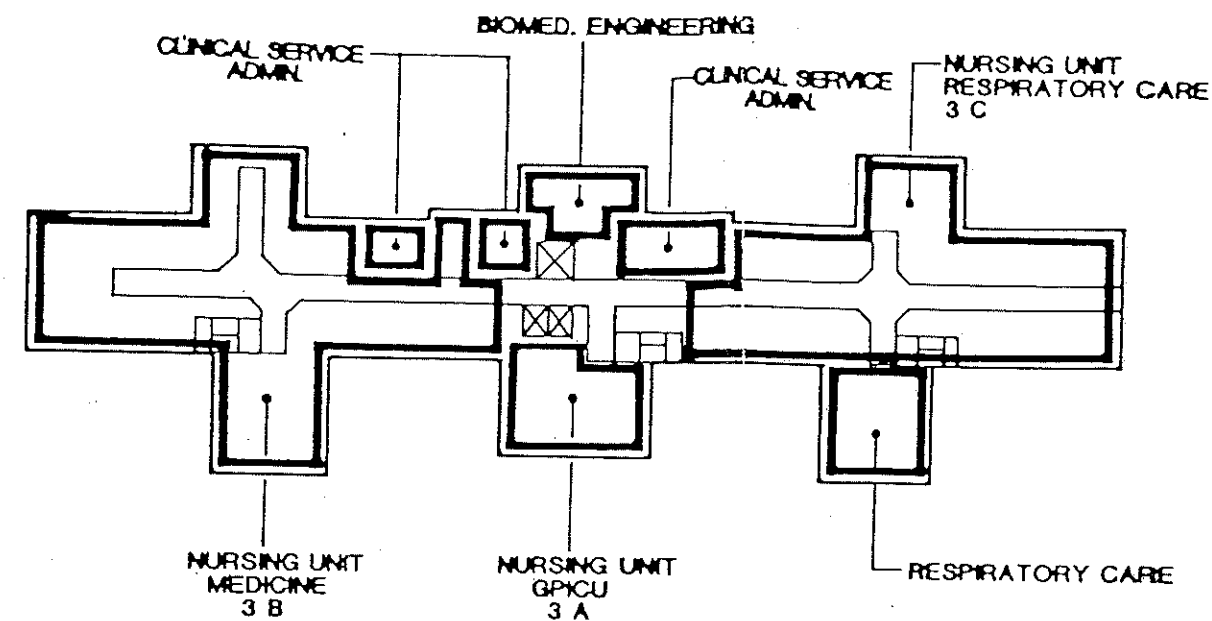
2.3.11f  
BUILDINGS  
16,124,&138  
THIRD FLOOR



BLDG. NO. 16



BLDG. NO. 124

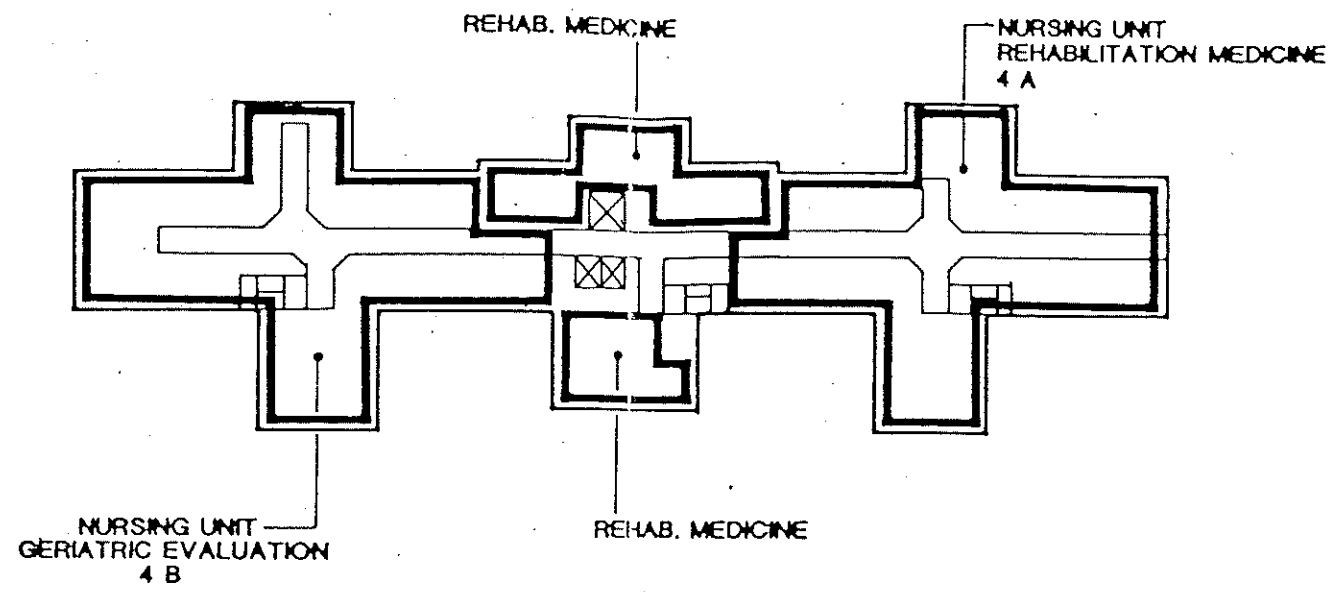


BLDG. NO. 138





BUILDING 138  
FOURTH FLOOR



BLDG. NO. 138



## 2.4 TRANSPORT/MOVEMENT ANALYSIS

- .1 General
- .2 Pedestrian Movement
- .3 Materials Movement
- .4 Information Movement
- .5 Vertical Movement

## 2.4.1

### GENERAL

The movement of patients, physicians, employees, visitors and materials throughout the hospital and the relationships of various departments to one another are important elements in a hospital's efficiency. The relationships and circulation systems of a hospital usually affect:

- o The general time and efficiency required to perform the operations of the hospital. An inefficient system usually results in an increase in both employees and equipment and thus additional cost.
- o Patients' and visitors' overall impressions of the facility.
- o The manner in which a hospital's departmental functions relate to one another. Having a smooth flow of traffic between and among departments is as important as their adjacencies.
- o The ability of a hospital to logically grow and expand in the future.

## 2.4.2 PEDESTRIAN MOVEMENT

### a. SUMMARY

Pedestrian movement throughout the campus is accomplished through an extensive system of sidewalks. Walks link most buildings which have or provide patient related services. This is true for support service and recreational buildings such as the Dietetics Building No. 122, Theatre Building No. 47, Patient Library Building No. 49, Canteen Building No. 50 and the Laundry Building No. 79. This cluster of buildings is centrally located on the campus providing a focal point for veterans, staff and visitors.

Numerous streets penetrate the campus permitting uncontrolled vehicle access. On some streets, pedestrians must share the road with vehicles. In most instances, there is a fairly well defined separation of vehicular and pedestrian traffic movements. As a campus setting, it is necessary to have a significant amount of pedestrian movement between major buildings, vehicular parking areas and controlled access into the Medical Center complex.

Pedestrian traffic consists primarily of:

Employee/Staff,  
Visitors, and  
Inpatients and Outpatients.

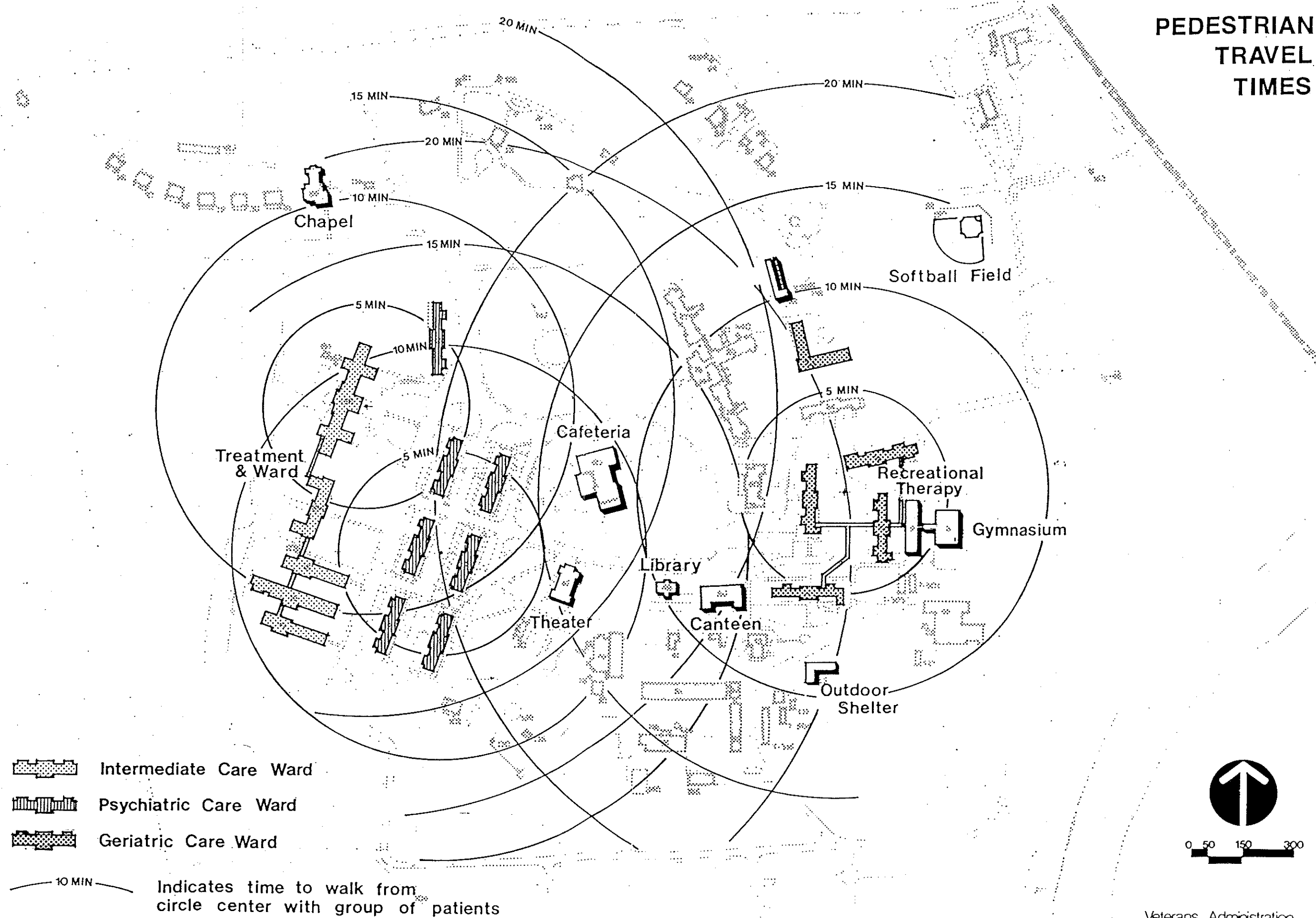
The majority of staff movements are interdepartmental which necessitates travel between buildings. Patient movements are concentrated around the service and recreation building cluster which include Dietetic Service Building No. 122, Theatre Building No. 47, Patient Library Building No. 49 and the Canteen Building No. 50. Movement patterns also include pedestrian traffic from parking areas to work stations and patient areas, Medical Center related business to Building No. 138 and other buildings on campus. This necessity and the current lack of effective vehicular controls contributes to the existence of several hazardous intersections within the complex. The travel times and distances are reflected on the accompanying chart 2.4.2b. The chart locates three centers of activity; one each on the west and east campus and the other centered amidst Buildings No. 1 through 6. Circles of 5 minutes walking times radiate from each loci.




Due to the size of the campus, the number of independent buildings and the disbursement of departments throughout the Medical Center complex, pedestrian movement is inefficient and excessive. With patient care areas on the east (geriatric) and on the west (intermediate and psychiatric), pedestrian travel to/from either area can exceed 20 minutes. The Gymnasium, Greenhouse and Occupational Therapy can be up to 30 minutes away from a patient care area on the west side of the campus. Corridor connections have been built linking patient Buildings No. 7, 10, 11, 18; Gymnasium 8; and Occupational Therapy 9. This greatly enhances pedestrian

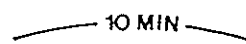
accessibility and comfort in inclement weather. It demonstrates the Medical Center's attempt to improve transportation, at least to a limited extent, on this campus. Also a variety of vehicles are provided on an as needed basis by which pedestrian and/or patient travel may be aided.

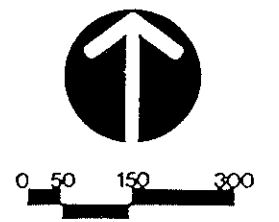
Vehicular traffic must be better controlled to limit penetration into the campus and possible conflict with pedestrians. A scheduled or continuous loop shuttle bus or bus system should be investigated, especially for use during the winter months.

# PEDESTRIAN TRAVEL TIMES



-  Intermediate Care Ward
-  Psychiatric Care Ward
-  Geriatric Care Ward

 10 MIN — Indicates time to walk from circle center with group of patients



### 2.4.3 MATERIALS MOVEMENT

#### a. SUMMARY

Material movement is a major problem at VAMC-Marion. Each major provider of materials employ separate and different methods to effect distribution and collection/retrieval (refer to Chart 2.4.3b, Distribution Paths). These include the Pharmacy, Dietetic Service, BMS Laundry, and Supply Service including SPD and the Warehouse. A relatively new warehouse provides ample storage for bulk material and equipment. All logistical/material management functions are located in different buildings throughout the campus:

<u>Building No.</u>	<u>Function/Department</u>
41	Transportation Office
42	Supply Administration
50	Canteen
55	Warehouse
79	Laundry
122	Dietetics
138	Supply Process and Distribution

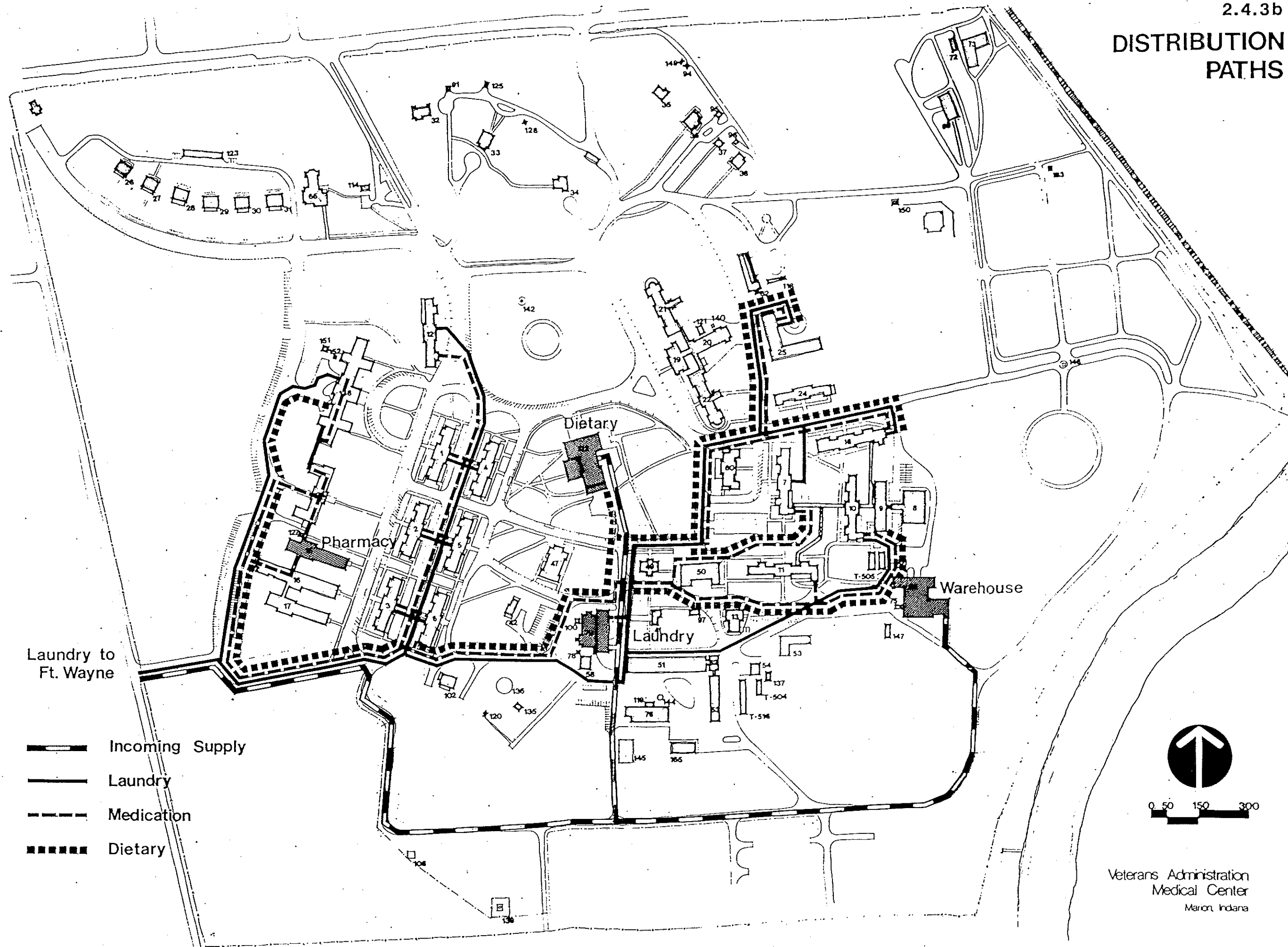
As noted, the materials management functions are decentralized as is common practice for VA facilities. The effects of decentralization are compounded by the diversity of buildings, their material handling accommodations, or lack there of, and the number of buildings which must be serviced.

With the exception of internal distribution such as SPD exchange carts within Building 138, most material movement, including patient meal distribution, is exposed to the elements.

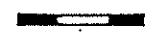



SPD and the Laundry employ dissimilar exchange carts to distribute supplies and clean linen. The Pharmacy has recently implemented a modified unit dose system for pharmaceutical distribution. Dietetics uses both bulk and tray carts for patient meal distribution. When interdepartmental travel is required, a variety of trucks, vans or light utility vehicles are used. In extreme cases, materials are hand carried.

The campus environment necessitates a high degree of labor to distribute materials. Facility improvements to include receiving docks at individual buildings should be provided for time sensitive distribution. Elevators should also be provided where materials must be distributed or collected on floors above grade.

2.4.3b  
DISTRIBUTION  
PATHS



Laundry to  
Ft. Wayne

-  Incoming Supply
-  Laundry
-  Medication
-  Dietary



0 50 150 300

Veterans Administration  
Medical Center  
Marion, Indiana



#### 2.4.4

#### INFORMATION/COMMUNICATION MOVEMENT

Written communication and information distribution is required for all departments/services in each building throughout the campus.

At the present time, all written communication and information documents including internal departmental correspondence and U.S. mail distribution must be accomplished manually. Each department may transport their own documents or may utilize the schedule service provided by MAS.

With the exception of internal building movements, communication distribution exposes the courier to the weather.

Internal correspondence or diagnostic test reporting is currently transported manually within each building. The Medical Center facilitates interdepartmental, which is interbuilding transport, of correspondence through MAS. This transport may be hand carried or aided with a variety of service vehicles.

In the near future the dissemination of information and communication will be enhanced with electronic test reporting and mail in all areas except buildings 10, 11, 12 and 18. Presently, the movement of printed information and communication is adequate, though cumbersome between buildings.

## 2.4.5 VERTICAL MOVEMENT

Vertical transport is a major functional deficiency in many buildings at VAMC-Marion. The following buildings have no conveyance by which to aide pedestrian or material movements.

<u>Building</u>	<u>Name/Use</u>
1, 2, 3, 4, 5	Psychiatric Units
6	Day Treatment and Offices
9	O.T. School
13	Nursing Education and Medical Library
60	Administration and Educational Therapy

In contrast to the above referenced buildings, the following do have one or more conveyance for vertical transport, primarily elevators that aide patient, staff or material movements.

<u>Building</u>	<u>Name/Use</u>
10	Extended Psychiatric Care
15,16,17,18	Intermediate Care
20	Storage
25	Geropsychiataric and Long Term Care
51	Engineering Shops & Stores
122	Dietetic Service
124	Administration, Laboratory, D&T
138	Administration, Medical Treatment and Nursing Home Care

The absence of elevators, or the limited availability of elevators throughout the Medical Center complex, severely limits efficient movement of patients, staff and materials. Pedestrian movement is most often accommodated using available stairs in each building. This is also true for supply distribution and soiled linen/waste collection. In Buildings 1 through 6, Alcohol Treatment; there is, in fact, no internal handicapped accessibility. In Building No. 138, which has administrative and patient care activities, elevators are present and appear to provide adequate service.

Vertical transport equipment is found in the following buildings as noted:

<u>Building No.</u>	<u>Equipment/System</u>	<u>Number</u>	<u>Floors Served</u>
10	Elevator	1	B, 1 and 2
11	Elevator	1	B, 1 and 2
12	Elevator	1	B, 1 and 2
15	Elevator	1	1 and 2
16	Elevators	2	B, 1, 2, 3 and Building No. 15
	Gravity Soiled Linen Chute	1	1,2,3 and Buildings No. 15 & 17

17	Elevator	1	B, 1 and 2
18	Elevator	1	B, 1 and 2
20	Elevator	1	1 and 2
25	Elevator	1	B, 1 and 2
	Dumbwaiter	1	1 and 2
	Dock Leveler	1	Receiving Dock
49	Elevator	1	B, 1 and 2
			Not "Handling Capacity" accessible
51	Elevataor	1	B and 1
122	Elevator	2	1 and 2
124	Elevator	1	1, 2 and 3
138	Elevator, Passenger	2	B, 1, 2, 3 and 4
	Elevator, Service	1	B, 1, 2, 3 and 4
	Gravity Soiled	1	B, 1, 2, 3 and 4
	Linen Chute		

Adequate vertical transport equipment should be provided in all multi-story buildings which provide patient care, both inpatient and outpatient. Also a thorough investigation should be made of the adequacy and condition of existing equipment.

2.5 POTENTIAL USES

- .1 General
- .2 Table: Potential Use or Reuse

## 2.5.1 SUMMARY OF TECHNICAL, FUNCTIONAL, AND HISTORIC CONSTRAINTS AND POTENTIAL REUSE

This chart summarizes and consolidates previous information in each of the three major categories - Technical, Functional and Historical - by building. Interpolating each major summary, tempering the results with first hand knowledge of the Medical Center as it exists, and considering future needs based on known projections, a potential use for each building is forecasted. It should be noted that the potential reuses are suggestions only, based on current data. The selection of priorities, the development of strategies, and the final master plan could alter the reuse of initially determined.

Building Number - Listed in sequential order, the buildings correspond to the VA numbering system employed at VAMC Marion.

Services in Building - The major functions contained within each building.

Technical - This portion reflects the ratings indicated on the chart in section 2.2.6. The numbered ratings are based on a 0 to 3 scale and retain the same definition as indicated in the 2.2.6 chart.

Functional - Similar to the Technical summary, this portion reflects a previous chart in section 2.3.8. The rating scale numbers and their definitions corresponds to the 2.3.8 chart.

Historic - This number indicates the level of historical significance of each building based on the rating system explained in Section 2.2.2.

Reuse - The categories noted in this section come from the Statement of Task and reflect major Veterans Administration departments. The solid circle ● denotes the preferred choice with the hollow circle ○ an alternate. The other portion has two columns, Lease and Demolition. With the further reduction of needed space as projected in the FY 2000 criteria, the existing excess of vacant square footage will be compounded. Therefore, buildings that contain ample square footage, have been adequately maintained, and are accessible to the public should be considered for leasing to private organizations, schools, service groups, etc. If a building cannot be reused, has no leasing potential, or cannot be leased, then demolition should be considered.

Comments - Any pertinent information that affect a building but cannot be reflected in the summaries.

POTENTIAL  
USE OR REUSE

NUMBER	BUILDING SERVICES IN BUILDING	TECHNICAL					FUNCTIONAL					HISTORIC	RE-USE							OTHER		COMMENTS								
		ARCHITECTURAL	STRUCT	HVAC	PLUMB	ELECT.	SUMMARY	SPACE	INTRA-DEPT.	INTER-DEPT.	ENVIRONMENT		EQUIPMENT/SYSTEMS	SUMMARY	BEDS	CLINIC SUPPORT/O.P. NON-CLINIC SUPPORT	ADMINIS.	EDUCATION	RESEARCH	DVB REG. OFFICE	DMA CEM FACILITY		GENERAL COUNSEL	LEASE	DEMOLISH					
1	Ward Building	1	1.5	1	1.5	2	1.4	2	0	0	0	0	.4	2				●	○											Buildings 1 through 6 are historically significant as a set.
2	Ward Building	1.5	1.5	1	1.5	2	1.5	2	0	0	0	0	.4	2				●	○											
3	Ward Building	1.5	1.5	1	1.5	2	1.5	2	0	0	0	0	.4	2				●	○											
4	Ward Building	1.5	1.5	1	1.5	2	1.5	2	0	0	0	0	.4	2				●	○											
5	Ward Building	1.5	1.5	1	1.5	2	1.5	2	0	0	0	0	.4	2				●	○											
6	Day Treatment	1.5	1.5	1	1.5	2	1.5	3	0	1	1	2	1.4	2				●	○											
7	Vacant (Ward Building)	1.8	1.5	1	1.5	2	1.5							2				●	○				●	●						
8	Gymnasium	1.5	2.8	1	1.5	1.5	1.6	2	2	2	2	2	2	1		●														Presently adequate-FDP may suggest relocation/replacement
9	O. T. School	1.5	2.8	1	2	1.5	1.7	2	2	2	2	2	2	1		●	○							●	●					Presently adequate-FDP may suggest relocation/replacement.
10	Ward Building	1.5	1.5	1	1.5	2	1.5	3	0	0	0	0	.6	2				●	○					●	●					
11	Ward Building	1.5	1.5	1	1.5	2	1.5	3	0	0	0	0	.6	2										●	●					
12	Ward Building	2.5	2	2	2.5	3	2.4	3	2	2	3	3	2.6	2	●			○						●	●					
13	Nursing Ed.	1.5	3	3	3	3	2.6	3	2	1	3	2	2.2	2				○	●					●	●					
15	Ward & Support	1.5	2.5	1	1.5	2	1.7	1	1	2	1	2	1.4	2	●															Only intermediate beds should be considered for Buildings 15, 16,
16	Ward Building	1.5	2.5	1	1.5	2	1.7	1	1	2	1	2	1.4	2	●															17. Explore alternate uses.
17	Ward Building	1.5	2.5	1	1.5	2	1.7	1	1	2	1	2	1.4	2	●	○														
18	Ward Building	1.8	1.5	1	1.5	2	1.5	3	0	1	0	0	.8	2					●					●	●					
19	Administrative Offices	1.5	1.5	1	1	1	1.2	0	2	1	2	2	1.4	3				●			○									Should retain for historical significance.
20	Recreation & Storage	1.5	1.5	1	1	1	1.2	3	0	1	1	2	1.4	2										●	●					No re-use. Lease or demolish
21	Vacant (Ward Building)	.5	1	.5	.5	.5	.6	2	0	0	0	0	.4	2				●						●	●					No patient use, alternative, lease or demolish.



