HAWAI`I
STATE HOSPITAL

# HAWAII STATE HOSPITAL
# 2015 MASTER PLAN UPDATE

DAGS Job No. 12-20-2698

## Final Report | August 28, 2015

ARCHITECTS HAWAII
LIMITED

# HAWAII STATE HOSPITAL - 2015 MASTER PLAN UPDATE
# DATED AUGUST 28, 2015

The Department of Health has reviewed this document and fully supports the implementation of the Hawaii State Hospital 2015 Master Plan Update.

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# HAWAII STATE HOSPITAL – 2015 MASTER PLAN UPDATE

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# 1.0 BACKGROUND

## 1.1 INTRODUCTION

Hawaii State Hospital's last Master Plan was completed in 2005. The *2005 Master Plan*, prepared by Architects Hawaii Limited (AHL), proposed capital improvement projects, such as construction of a new 136-Bed Patient Care Facility, that were intended to address the operational issues resulting from an increasing patient population, a higher percentage of violent patients, and staffing shortages. Unfortunately, the proposed capital improvement projects were not implemented and the operational issues have not been addressed. These operational issues, and the additional operational issues listed below, led to the conclusion that the *2005 Master Plan* needed to be updated.

- The *2005 Master Plan* needed to be updated and improved to ensure that the Department of Health (DOH) has a Master Plan that meets the Hospital's short-term and long-term needs.
- The DOH needed a Master Plan to guide the future construction of facilities that would be:
  - Specifically designed to provide care for high-risk patients.
  - Safer for patients and staff.
  - Safer for the community.
  - More economical to operate and maintain.
- The *2005 Master Plan* provided for increasing the Hospital's total bed count from 178 to 244 beds. The DOH needed a Master Plan that could accommodate more significant, long-term increases in the Hospital's bed count to:
  - Respond to large, long-term increases in patient census resulting from the projected growth of Hawaii's population.
  - Maximize the use of the land under the DOH's control.
  - Ensure the Hospital's long-term operational viability on its current site.
- After the *2005 Master Plan* was completed, the DOH committed to adding a Skilled Nursing Facility (SNF) on the Hospital campus. The current plan is for the SNF to be constructed on the site of the Bishop building. The facility will be independently operated by a third party.
- The DOH needed to prepare for the future demolition of the Guensberg building.
- The DOH needed a backup plan for the 40 patients currently housed at Kahi Mohala.

In 2014, the Department of Accounting and General Services (DAGS), acting as the expending agency for the DOH, commissioned AHL to update the *2005 Master Plan*. This Report describes the process,

## 1.0 BACKGROUND

findings and recommendations of the *2015 Master Plan Update*. The Executive Summary below provides a brief summary of the ways in which the *2015 Master Plan Update* addresses the issues described above. The *2015 Master Plan Update* is described in greater detail in Section 2.0 (2015 Master Plan Update Summary), Section 3.0 (New Goddard Patient Care Facility - Space Programs), and Section 4.0 (New Goddard Patient Care Facility – Conceptual Design). Section 5.0 (Appendix) includes the DOH-developed *Foundational Document* that projects future patient capacity requirements, a *Conceptual Design Cost Estimate*, and other supporting information.

## 1.2 EXECUTIVE SUMMARY – 2015 MASTER PLAN UPDATE

The *2015 Master Plan Update* addresses the operational issues described Section 1.1 and provides an overall framework for future development. The Plan includes short-term and long-term development options for responding to increases in patient population and implementing other needed campus improvements.

### Planning Zones

Based on discussions with DOH, Hospital, and DAGS staff the Hospital campus was divided into fifteen Planning Zones (see P. 2-15). Each Planning Zone is reserved for the one or more specific uses that were identified as being the most appropriate use(s) for that area of the Hospital campus. The Planning Zones guided development of the Long-Term Master Plan and the Short-Term Master Plan to ensure:

- Maximum (i.e. highest and best) use of all land under the DOH's control.
- Maximum operational efficiency.
- Improved patient, staff, and public safety.
- Long-term viability of Hospital operations at the Kaneohe campus.
-

### Long-Term Master Plan

The Long-Term Master Plan (see P. 2-17) provides a flexible "road map" that will guide the Hospital's development for decades to come. Key features of the Long-Term Master Plan include:

- The Hospital's capacity can be increased from 178 beds to 516 beds to accommodate long-term increases in patient census.

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- The bed count can be increased incrementally (i.e. in phases).
- The facility improvements will improve patient, staff, and public safety.
- The Long-Term Master Plan provides a framework for implementing the additional campus improvements described on the Planning Zones drawing (see P. 2-15).

### Short-Term Master Plan

The development envisioned in the Short-Term Master Plan (see P. 2-19) has the following key features that address the issues of patient capacity, increased safety, and improved operational efficiency:

- A new 144-Bed Patient Care Facility will be built on the site of the Goddard building. The new facility will be specifically designed to house high-risk patients and will include a Rehab Mall and Dining Room exclusively for high-risk patients. The ability to separate high-risk patients from the remainder of the Hospital's patient population (the *2005 Master Plan* called this planning approach the "2-Hospital" Concept) will result in increased safety for patients and staff. A highly secure exterior wall, combined with a high security fencing system, will reduce the risk of patient elopement, and contribute to increased safety for the surrounding community.
- Existing Patient Care Buildings E, F, H, and I (108 beds total) will remain in operation and be used to house low-risk and medium risk patients. The patients in these buildings will use the existing Rehab Mall facilities located in Buildings A, B, and C.
- The 252 beds (144 new, 108 existing) provided in the Short Term Master Plan will address the Hospital's current and short-term patient capacity needs and allow Guensberg to be demolished. The increased number of beds will also allow the 40 patients currently housed at Kahi Mohala to be moved to the Hospital campus.
- The design of the 144-Bed Goddard Patient Care Facility will be similar to the design of a behavioral health facility located in Pueblo, Colorado. The Colorado facility was also referenced in the *2005 Master Plan*. William May, the current HSH Administrator, was the Administrator of the Colorado facility before he joined the HSH staff in 2014. Mr. May has indicated that he believes the Colorado facility is an appropriate model on which to base the conceptual design of future Hawaii State Hospital patient care facilities. The design provides clear sight lines from a

central Nurse Station that will reduce the risk of patients harming themselves, harming other patients, or assaulting Hospital staff.

- The 144-Bed Goddard Patient Care Facility will include "off-stage" areas for certain staff functions (offices, conference rooms, break room, etc.). Access to the "off-stage" areas will be controlled to ensure that patients cannot enter these areas. This design feature will give Hospital staff a respite area and further reduce the risk of their being assaulted patients.
- The existing Dietary service in Building B will prepare the food for all patients. Food for the patients in the 144-Bed Goddard Patient Care Facility will be delivered to a Serving Kitchen on the Ground Floor, or to the nursing units when required. The process for providing food to patients in the existing Rehab Mall and Buildings E, F, H, and I will not change.
- Construction of the 144-Bed Goddard Patient Care Facility will generate the need for approximately 272 additional parking spaces (see Preliminary Parking Study, Appendix 5.3). Some of the additional spaces (98+/-) will be located adjacent to the new building. The remaining 174 spaces will need to be located in Planning Zones 7, 8, 10, 14, or 15).
- With the exception parking as indicated above, the Short-Term Master Plan does not include any development in Planning Zones 2, 3A, 3B, 4A, 4B, 5, 6, 7, 8, 9A, 9B, 10, 11, 12, 13,14, or 15.

## 1.3 HAWAII STATE HOSPITAL – EXISTING CONDITIONS

### History and Mission

The Hawaii State Hospital dates back to 1932 when it opened at its present site in Kaneohe. The Hospital was originally constructed and operated by the Territory of Hawaii. It is currently operated by the Adult Mental Health Division of the DOH. According to a Hospital website its Mission is *"to provide safe, integrated, evidence-based psychiatric assessment, treatment, and rehabilitation to individuals suffering from brain, medical and behavioral disorders who are primarily court ordered to Hawaii State Hospital"*. Hawaii State Hospital is the only hospital in the State that is *"dedicated solely to serving patients with serious mental illnesses"*. The judiciary court system orders patients from all islands to the Hawaii State Hospital for evaluations, care, and custody. The Hospital provides a safety net for forensic patients (see definitions) because, by law, it must accept them. Forensic patients can only be discharged following a complex evaluation process and a Judge's written authorization. This combination of factors has been described as a *"wide open front door"* combined with a *"narrow*

*back door"*. The Hospital's inability to control its patient population results in occasional overcrowding and serious operational challenges.

The Existing Site Plan (see P. 1-12) is provided to supplement and clarify the following information.

**Patient Capacity**

Patients are currently housed in Guensberg and Buildings E, F, H, and I. These patient care facilities were designed to house a total of 178 patients.

| | |
|---|---|
| Guensberg | 70 beds |
| Building E | 36 beds |
| Building F | 28 beds |
| Building H | 20 beds |
| Building I | 24 beds |
| | 178 beds |

Due to the lack of bed capacity at the Hospital an additional 40 patients are housed at the independently-operated Kahi Mohala facility in Ewa Beach. The beds at Kahi Mohala are not included in the Hospital's current bed count indicated above.

**Site Characteristics**

The Hospital's 103-acre (+/-) site is located at the base of the Koolau mountain range in Kaneohe. The site has an elevation change of approximately 225' from its lowest point near the Kaneohe District Courthouse to its highest point adjacent to Interstate H-3. The significant elevation change presents challenges for moving patients and staff around the site. However, the offsetting benefits of the topography include magnificent views of Kaneohe and Kailua Bays, as well as exposure to the prevailing trade winds.

## 1.0 BACKGROUND

### Site Context

When the Hospital opened in 1932 it was located in a rural, primarily agricultural area. The site is still zoned for agricultural uses (AG-2). Kaneohe has grown significantly during the eight decades since the Hospital opened. The areas to the east and west of the Hospital have been developed as residential neighborhoods. Windward Community College (WCC) occupies the area adjacent to the northeast side of the Hospital campus, on land that was formerly under Executive Order to the DOH. The State Department of Transportation's (SDOT) Maintenance Facility and Base Yard are located adjacent to the Hospital entrance, on land that was formerly under Executive Order to the DOH.

### Existing Hospital Buildings

The Space Program Summary (Section 3.2) provides the following information for each existing building on the Hospital campus:

- Total Net Floor Area
- Total Gross Floor Area
- Year Opened
- Departments or services located in the building

## 1.4 DEFINITIONS

The following definitions are provided to ensure a common understanding of certain terms and abbreviations that are used in this Report.

| | |
|---|---|
| Central Campus | The mid-elevation of the Hospital campus. Patient Care Units E, F, H, and I; as well as Cooke, Haloa, Iolani, Hale Imua, and Buildings A, B, C, G, K, L, and Q are located in this area. See Existing Site Plan on P. 1-12 for location. |
| Civil Patient: | A patient who has been voluntarily committed to the Hospital. At the present time few, if any, Hospital patients fall into this category. |
| Forensic Patient: | A patient whose admission to the Hospital has been ordered by the judicial court system. At the present time the Hospital's census consists almost entirely of forensic patients. |

## 1.0 BACKGROUND

| | |
|---|---|
| Gross Area | A term used in space and functional programming to indicate the total area of a building as measured to the outside face of the exterior walls. |
| GSF | Gross Square Feet (i.e. the Gross Area). |
| High-Risk Patient: | A patient who presents a high risk of behaving violently. |
| Low-Risk Patient: | A patient who presents a low risk of behaving violently. |
| Lower Campus | The lowest elevation of the campus (location of Bishop, Hospital main entrance, Guard Shack, Hina Mauka, the SDOT Maintenance Facility and Base Yard). See Existing Site Plan on P. 1-12 for location. |
| Master Plan: | A Master Plan is intended to guide the short-term and long-term growth and renewal of an institution. A well-developed Master Plan ensures that the changes that occur over time are implemented in a manner that is functionally, operationally, and fiscally optimal. It should be noted that a Master Plan does not include detailed planning and design of the future projects it envisions. However, the Master Plan can, and should, inform and shape future projects. |
| Medium-Risk Patient: | A patient who presents a medium risk of behaving violently. |
| Net Area | A term used in space and functional programming to indicate the floor area of a room. Net area excludes the area occupied by walls, corridors, stairs, elevators, mechanical shafts, etc. |
| NSF | Net Square Feet (i.e. the Net Area) |
| Patient Care Facility: | A building and its associated site area that includes one or more Patient Units (see definition below), Rehab Mall functions (Rehab Therapy, Occupational Therapy, Recreational Therapy, Dining and Servery), staff support, materials management, loading dock, and a central plant that provides primary mechanical and electrical services. |
| Patient Unit: | The primary component(s) of a Patient Care Facility. Patient units are designed to meet the needs of specific sectors of the overall patient population. Patient units include bedrooms, toilets and showers, living areas, patient support areas (counseling, laundry, etc.), and staff support areas (offices, conference rooms, break room, etc.). |

## 1.0 BACKGROUND

Upper Campus — The highest elevation of the campus (location of Goddard and Guensberg). See Existing Site Plan on P. 1-12 for location.

## 1.5 EXECUTIVE SUMMARY - 2005 MASTER PLAN

The *2005 Master Plan* was published in four Volumes. Volumes I and II were dated April 16, 2004. Volumes III and IV were dated April 29, 2005. For clarity this Report refers to the entire earlier plan as the *2005 Master Plan*. The following overview of the four Volumes provides information to assist the reader in understanding the areas where the *2015 Master Plan Update* and the *2005 Master* Plan are similar, and the areas where they differ. The major similarities and differences between the two Master Plans are addressed in Section 2.0. To further assist in the comparison a full copy of the *2005 Master Plan* is included in CD-format – see Appendix 5.8

**Volume 1: Facility Analysis / Maintenance Plan**

This Volume included three major components:

- A detailed summary of all existing buildings on the Hospital campus was provided. The summary included factors such as age, floor area, and an analysis of physical conditions. The analysis of physical conditions addressed architectural, structural, mechanical, and electrical system conditions and issues.
- A site analysis covered the conditions of roadways and site utilities such as domestic water, sanitary sewer, and storm drainage. The existing landscape features were also analyzed.
- The analysis of building and site physical conditions was used to prepare recommendations for needed repairs and maintenance. In some cases budgetary (i.e. rough) estimates of the probable costs of the repairs were provided.

Much of the information in Volume I is still applicable and useful for future planning efforts. The scope of work for the *2015 Master Plan Update* did not include updating Volume I.

**Volume II: Functional Analysis / Space Programming**

This Volume included four major components:

- An Existing Space Inventory provided the following information:

- A list of the services located in each existing Hospital building.
- The total net area occupied by each service or department.
- The total gross area of each building on the Hospital campus.
- A detailed list of all rooms in each building, including functions and net areas.

- Space Programs for a proposed new 136-Bed Forensic Patient Care Facility consisting of a 16-Bed Admissions Patient Care Unit and five 24-Bed Typical Patient Care Units.
- Space Programs for proposed additions and renovations to existing buildings and services.
- Detailed Floor Plans, color-coded to assist in identifying various functions.

**Volume III: Master Site and Facility Development Plan**

In Volume III the Project Vision was essentially defined as increasing the Hospital's existing 178-bed capacity to 244 beds. The 244-bed capacity was based on the number of beds approved by the Hospital's Certificate of Need (CON). Volume III included seven Site Development Concepts identified as 1-A, 1-B, 2-A, 2-B, 2-C, 3-A, and 3-B. Each Site Development Concept provided an alternative vision for achieving the desired 244-bed capacity. Several factors were common to all seven Concepts:

- All Concepts included the construction of a new 136-Bed Forensic Patient Care Facility intended to house the Hospital's high-risk patients in a highly secured, self-contained environment.
- All Concepts assumed that the 108 beds located in existing Buildings E, F, H, and I would be retained and used to house low-risk and medium-risk patients.
- All Concepts assumed that the 40 patients housed at the independently operated Kahi Mohala facility in Ewa Beach would be returned to the Hawaii State Hospital campus.
- Additional common factors included a new main campus entry and guard station, moving Plant Operations to the Hospital campus, a new covered walkway connecting the upper campus to the central campus, a new emergency water supply tank, additional parking, and roadway improvements.

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Two primary variable factors distinguished the seven Site Development Concepts:

- "1-Hospital Concept" vs. "2-Hospital Concept"
  - The "1-Hospital Concept" proposed to centralize all Rehab Mall functions in a single, new building. In this concept the single Rehab Mall would serve the entire patient population (high-risk, medium-risk, and low-risk patients).
  - The "2-Hospital Concept" proposed a decentralized campus. One area of the campus would be developed for high-risk patients and a separate area would be designated for low-risk and medium-risk patients. Each area would have its own Rehab Mall to ensure that high-risk patients would be separated from the remainder of the patient population.
- Location
  - Site Development Concepts 1-A, 1-B, 2-A, 2-B, and 2-C located the new 136-Bed Forensic Patient Care Facility on the upper campus. These Concepts required both the Goddard and Guensberg Buildings to be demolished.
  - Site Development Concepts 3-A and 3-B located the new 136-Bed Forensic Patient Care Facility on the lower campus. These Concepts preserved Goddard and Guensberg, but required demolition of Bishop.

Additional recommendations were provided for campus-wide civil, mechanical, electrical, and landscape improvements that were generally common to all seven Site Development Concepts.

**Volume IV: Planning and Design Guidelines**

This Volume included guidelines intended to ensure that future projects would be developed in a consistent and coherent manner. The guidelines address the following issues:

- Design Intent
- Architectural Character
- Appearance / Aesthetics
- Outdoor Signage, Lighting, and Furniture
- Landscaping
- Roadways, Water, Sewers, Storm Drainage, Grading, and Soils

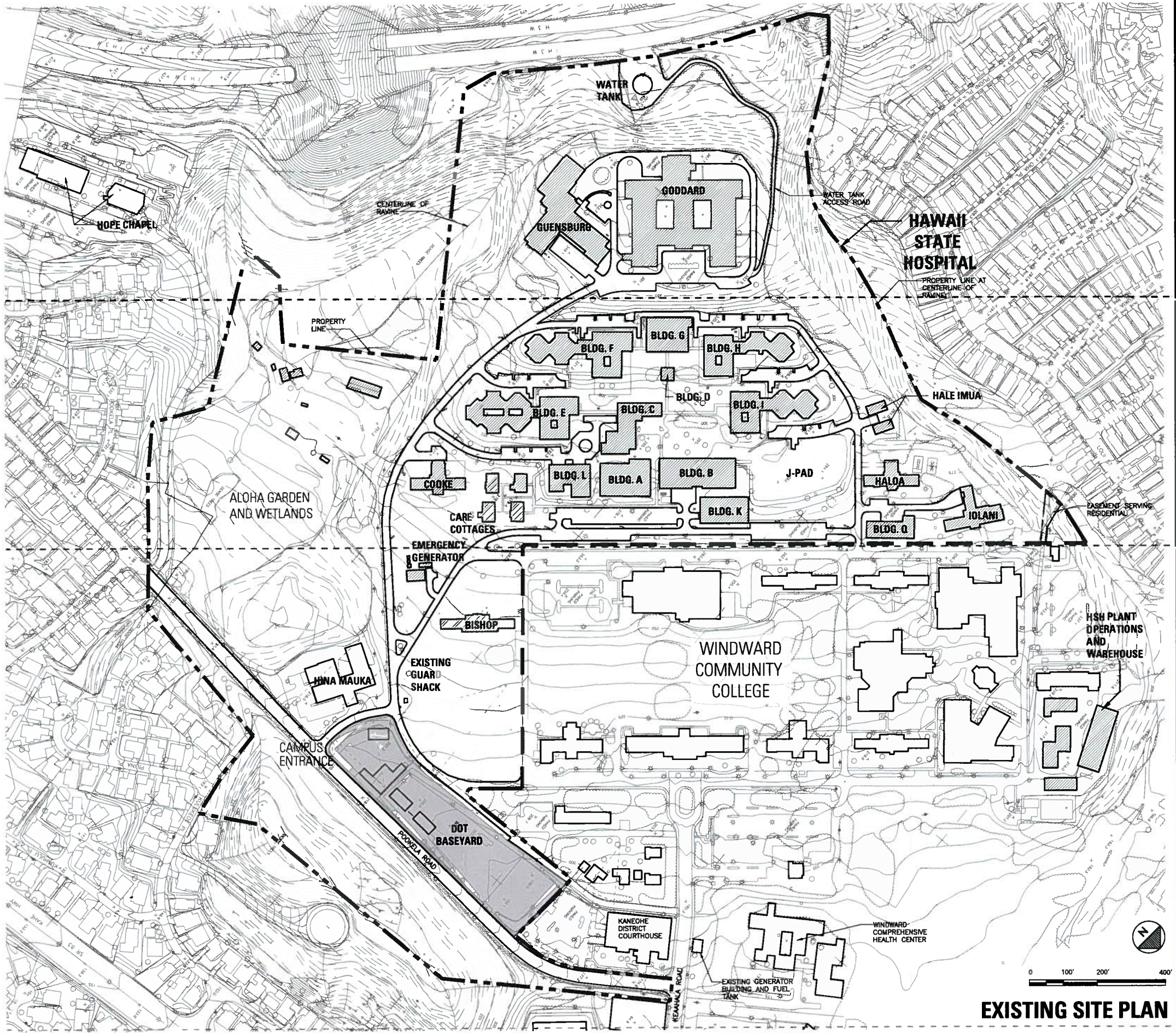
## 1.0 BACKGROUND

The 2005 Planning and Design Guidelines remain valid and should be considered in connection with future campus development.

### 2005 Master Plan Implementation

As noted above, most of the improvements envisioned in the *2005 Master Plan* were not implemented.

- Capital Improvement Projects: The capital improvement projects envisioned in the *2005 Master Plan*, including the new 136-Bed Forensic Patient Care Facility, were not constructed.
- Repairs and Maintenance: According to Hospital staff some, but not all, of the repairs recommended in the *2005 Master Plan* have been implemented. Volume 1 of the *2005 Master Plan* is still a useful guide for any of the repairs that are still needed. However, it should be noted that the budgetary estimates included in the *2005 Master Plan* for the costs of these repairs are no longer valid. Also, because it has been more than a decade since the *2005 Master Plan* was completed it is likely that additional repairs are required. The scope of work for the *2015 Master Plan Update* did not include an updated evaluation of repair and maintenance issues.




## EXISTING SITE PLAN

HAWAII STATE HOSPITAL

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**HAWAII STATE HOSPITAL | 2015 MASTER PLAN UPDATE**

AUGUST 28, 2015 | DAGS JOB NO. 12-20-2698

# 2.0 MASTER PLAN SUMMARY

## 2.1 PLANNING PROCESS

The process for developing the *2015 Master Plan Update* included:

- Establishing Goals and Priorities to guide the planning process.
- Gathering information to ascertain the Hospital's current and future program requirements.
- Comparing the current Goals, Priorities and program requirements to similar factors that were included in the *2005 Master Plan*.
- Determining if any of the *2005 Master Plan* recommendations are still valid.
- Determining if any of the *2005 Master Plan* recommendations are no longer valid, or need to be modified to respond to current requirements.
- Preparing a new Long-Term Master Plan and a new Short-Term Master Plan that respond to current and projected future needs, and retain any valid *2005 Master Plan* recommendations.
- A highly productive collaboration between DOH, Hospital, DAGS, and Architects Hawaii staff.

The planning process included the following meetings with DOH, Hospital, and DAGS staff:

| | |
|---|---|
| May 9, 2014 | Project Initiation Meeting |
| July 22, 2014 | Master Plan Kick-Off Meeting (Present Process, Goals and Priorities to Hospital staff) |
| August 14, 2014 | Steering Committee* Meeting 1 |
| August 21, 2014 | Steering Committee Meeting 2 |
| August 28, 2014 | User Groups Meetings (Nurses, Clinical Services, Rehab Mall, Dietary, Facilities) |
| September 19, 2014 | Steering Committee Meeting 3 |
| September 26, 2014 | Steering Committee Meeting 4 |
| October 10, 2014 | Steering Committee Meeting 5 |
| October 24, 2014 | Steering Committee Meeting 6 |
| March 27, 2015 | Master Plan Closing Meeting with Hospital staff (present results, discuss future planning recommendations) |

* Comprised of DAGS, DOH, Hospital, and AHL Group Leaders

## 2.0 MASTER PLAN SUMMARY

Two meetings were also scheduled with the Kaneohe Neighborhood Board (a planning meeting and a full Board meeting). The results of those meetings are discussed in Section 2.7.

## 2.2 MASTER PLAN GOALS AND PRIORITIES

Eleven Goals and Priorities were established by DOH and DAGS prior to the start of the planning process. AHL's responses are listed below each of the Goals.

### 1. The *2005 Master Plan* shall be used as a reference/re-start point.

AHL began the planning process with a careful review of the *2005 Master Plan*. This review allowed AHL staff to understand the goals, priorities, and program requirements that shaped that plan. When those factors were compared to current goals, priorities, and program requirements (determined through meetings with DOH, Hospital, and DAGS staff) AHL determined that some features of the *2005 Master Plan* were still valid and should be retained.

Key features from the *2005 Master Plan* that were incorporated in the *2015 Master Plan Update* include:

- Both plans provide additional short-term bed capacity (244 beds in 2005 / 252 beds in 2015).
- The first new patient care facility envisioned in both plans is located on the Goddard site.
- Both plans set the stage for the future replacement of Guensberg.
- Patient Care Buildings E, F, H, and I are used for low-risk and medium-risk patients.
- Plant Operations and Warehouse facilities move from WCC to the Hospital campus.
- A new Hospital main entrance is developed on Pookela Street.

Key differences between the *2005 Master Plan* and *2015 Master Plan Update* include:

- The *2015 Master Plan Update* more clearly addresses the DOH's need to retain control of all areas of the Hospital campus (see Goal 3 below).
- The *2015 Master Plan Update* provides for long-term, incremental growth to as many as 516 beds. The *2005 Master Plan* did not provide for growth beyond 244 beds.

## 2.0 MASTER PLAN SUMMARY

- The *2015 Master Plan Update* reserves the J-Pad site for a future Patient Care Facility. In the *2005 Master Plan* the J-Pad site is identified as the future location of the Hospital's Plant Operations and Warehouse facility.
- The Preliminary Parking Study (Appendix 5.3) included in the *2015 Master Plan Update* addresses the substantial increases in parking capacity that will be required as the Hospital's bed capacity increases. The *2005 Master Plan* did not address the issue of additional parking requirements.
- The *2015 Master Plan Update* provides for developments that could not have been foreseen in 2005 (i.e. an independently-operated Skilled Nursing Facility on the Bishop site).

**2. Determine whether a new Certificate of Need (CON) is required.**

In 1986 the State Health Planning & Development Agency (SHPDA) approved a CON that allows the Hospital to have a maximum census of 244 patients. Future construction of the proposed 144-Bed Goddard Patient Care Facility described in this Report will increase the Hospital's census to 252 patients. Therefore, a new CON will be required. AHL's discussions with DOH staff suggest that getting a new CON to authorize a census of 252 patients will probably not be an issue. The *Foundational Document* (Appendix 5.1) issued by the DOH in September 2014 clearly supports the need for additional beds.

**3. Show future development needs/options for all areas under DOH control, including non-Hospital related facilities.**

This Goal is intended to show other State agencies that the DOH's needs are great, and that it must retain control of the entire campus area for future patient and support facilities. AHL addressed this Goal by developing fifteen Planning Zones (see P. 2-15) that establish the recommended use(s) for all areas of the site.

## 2.0 MASTER PLAN SUMMARY

4. **Identify future facilities that could be located at the Hawaii State Hospital campus (other than those required to provide the required number of beds).**

   In the *2015 Master Plan Update* AHL reserved specific areas (see 2.4 Planning Zones) for:

   - An independently-operated Skilled Nursing Facility (Planning Zone 5).
   - A Behavioral Stability Facility (Planning Zone 7).
   - Aloha Garden improvements (Planning Zone 9A).
   - A landscape buffer between the Hospital and WCC campuses (Planning Zone 13).

5. **Incorporate current projects and planned future projects in the planning process.**

   AHL included the areas previously reserved for development of new emergency generator and switchgear facilities in the *2015 Master Plan Update*.

6. **Relocate the Hospital's Base Yard, Warehouse, Plant Operations, and related parking from the Windward Community College campus to the Hospital campus.**

   In the *2015 Master Plan Update* AHL recommends relocating the Hospital facilities listed above to the area where the Iolani and Haloa buildings are currently located. The existing buildings would be demolished to allow these important support facilities to be located much closer to the Hospital, which would improve operational efficiency. The Iolani/Haloa location differs from the *2005 Master Plan*, which recommended that the support facilities be located on the J-Pad site. AHL concluded that it would be better to reserve the J-Pad site for long-term bed growth because of its adjacency to the existing patient care units.

7. **Remove the State Department of Transportation's Base Yard from Hospital campus.**

   It should be noted that, until November 14, 2014, the current SDOT Base Yard was under the DOH's management and control under Executive Order No. 3504. The removal of the SDOT Base Yard and "reacquisition" of this area would be similar to returning the land back to the DOH's management and control.

## 2.0 MASTER PLAN SUMMARY

The DOH's rationale for this Goal is that the Hospital's future building and parking needs will require expansion of the Hospital campus. The SDOT Base Yard area is the most viable, and one of the last, options to accommodate the Hospital's needs within the boundaries of its previously defined campus.

Another option would be to acquire land from the Windward Community College. (It is believed that this option would be contentious.)

Another option would be to acquire land from an adjacent private landowner (or landowners). (It is believed that pursuing this option would be less sensible because the acquired land would not be easily accessible from the existing Hospital campus.)

The SDOT's Base Yard is comprised of their construction and maintenance facilities (permanent and portable buildings). The Base Yard is located adjacent to Pookela Street in the area identified as Planning Zones 6 and 7 (see P. 2-15). On October 18, 2014 Governor Abercrombie signed Executive Order No. 4470 giving management and control of that area to the SDOT. See Appendix 5.7.1 for a November 14, 2014 letter from the Department of Land and Natural Resources (DLNR) to the DOH, including an attached copy of Executive Order No. 4470.

Prior to receiving the above letter DOH wrote a letter to DLNR requesting that they not issue the Executive Order. The DOH letter, dated September 23, 2013, states that the Hospital *"must retain all of its property for use as a hospital"*. The letter also states that *"it would be a severe hardship for the DOH to secure an alternative location where the HSH will be welcome"*. See Appendix 5.7.2 for a copy of this letter.

In the 2015 Master Plan Update, AHL recommends removing the SDOT facilities from Planning Zones 6 and 7 to support the following future developments:

- Planning Zone 7 is an ideal location for Hospital uses such as the additional staff parking required in connection with increases in the Hospital's patient census, a Behavioral Stability Facility, relocation of the Transitional Care Cottages, or a public education center/museum.
- Planning Zone 6 is the ideal location for a new and improved Hospital main entrance (see Goal 8 below).

**8. Study options for a new, improved main entrance to the Hospital campus.**

The Hospital's primary access is from Pookela Street. The Kaneohe District Court, WCC, Hina Mauka, and the DOT's Base Yard and Maintenance facility occupy most of the frontage along Pookela Street, which makes the Hospital entrance difficult to find. There is a long-standing desire to develop a new entrance that would be consistent with the Hospital's important stature, and easier to find. In the *2015 Master Plan Update* AHL responded to this Goal by developing a prominent Hospital entrance (Planning Zone 6, P. 2-15) consisting of in and out lanes separated by a landscaped median strip. The Guard Shack would be moved from its current location to median strip. Signage, lighting, and landscaping features would effectively move the Hospital entrance out to Pookela Street and make it easier to find. This development will require that at least a portion of the DOT Base Yard, which was previously under Executive Order to the DOH, be returned to the Hospital.

**9. Develop a campus theme or vision that is consistent with the desired treatment philosophy.**

The development envisioned in the *2015 Master Plan Update* will allow the Hospital to respond to one if its most significant challenges: providing safe, effective care for high-risk patients. The *2015 Master Plan Update* also provides the desired capability to separate high-risk patients from low-risk and medium-risk patients. Thus, from a functional/operational point of view, the 2015 Master Plan Update develops a campus vision that is consistent with the desired treatment philosophy.

## 2.0 MASTER PLAN SUMMARY

The *2015 Master Plan Update* does not develop a campus vision from a design/aesthetic point of view. AHL recommends that the Planning and Design Guidelines (Volume IV of the 2005 Master Plan) be considered during the design phases of future Hospital facilities.

**10. Determine if there is a need to demolish any existing buildings. Provide a justification if demolition is needed.**

In the *2015 Master Plan Update AHL* identifies the short-term need to demolish Goddard and Bishop. It also identifies the long-term future need to demolish Guensberg, Building I, Haloa, Iolani, Cooke, and the Transitional Care Cottages. The demolition of these facilities is justified for the following reasons:

- Goddard must be demolished to construct the initial new 144-Bed Goddard Patient Care Facility. The Department of Land and Natural Resources, State Historic Preservation Division (SHPD) has already approved the demolition of Goddard.
- Bishop will have to be demolished prior to the construction of an independently-operated Skilled Nursing Facility that the DOH has been planning since 2007. The *2005 Master Plan* envisioned Bishop being rehabilitated for use as a public information/education facility and its demolition has not been approved by SHPD. See Appendix 5.4 for correspondence between the DOH and SHPD regarding the demolition of Bishop. The mitigation process (Intensive Level Survey) required by SHPD in order to demolish Bishop is not included in the scope of the *2015 Master Plan Update*. The mitigation process will need to be handled separately by the DOH.
- Guensberg will need to be demolished in order to construct a future, second 144-Bed Patient Care Facility for high-risk patients. The Guensberg site is the appropriate location for this facility because it can be functionally and operationally linked to the 144-Bed Goddard Patient Care Facility.
- Building I (20 beds) will need to be demolished in the long-term future in order to complete construction of a third 144-Bed Patient Care Facility on the J-Pad site.

- Haloa (currently vacant) and Iolani will need to be demolished in order to move the Hospital's Base Yard, Warehouse, and Plant Operations from the WCC campus to Hospital campus.
- Cooke and the Transitional Care Cottages (22 beds) will need to be demolished in the long-term future to make room for additional administration and/or parking in the Central Campus area. AHL recommends that the Transitional Care Cottages be relocated to Planning Zone 7 in the future. AHL also recommends that the Grounds Maintenance facilities currently located in Cooke be moved to the relocated Plant Operations area in Planning Zone 4A.

**11. Coordinate planning with adjacent "owners" and "site users" that impact the Department of Health's property (Windward Community College, Windward Community College's tenants, Hina Mauka, Hope Chapel, CARE cottages, Hale Imua cottages).**

AHL addressed this Goal by incorporating the following features in the *2015 Master Plan Update*:

- WCC will regain control of a portion of its site when the Hospital's Base Yard, Warehouse, and Plant Operations are relocated to the Hospital campus. WCC's use of Iolani will need to be discontinued prior to the future construction of this project.
- The boundary between the Hospital and WCC campuses will be defined by a landscape buffer.
- The developments envisioned in the 2015 Master Plan Update do not affect Hina Mauka, Hope Chapel, or Hale Imua.
- The Transitional Care Cottages (currently in Planning Zone 8) can remain in place for the foreseeable future. In the long term they will need to be relocated, potentially to Planning Zone 7, to facilitate development of additional administration or parking in Planning Zone 8.

The property owners and site users listed above will receive a copy of the *2015 Master Plan Update.*

## 2.0 MASTER PLAN SUMMARY

### Additional Goals and Priorities

During the master planning process the following additional Goals and Priorities were identified.

12. **Address the issue that the existing patient care units were not designed to provide care for high-risk patients.**

    The *2015 Master Plan Update* provides a plan for incrementally replacing the Hospital's existing patient care facilities with facilities that are designed to provide safe, efficient care for high-risk patients. The conceptual design of the new patient care facilities (see Section 4.0) is based on a proven approach (a State of Colorado behavioral health facility) that was incorporated in the *2005 Master Plan*, and further refined in the *2015 Master Plan Update*. The conceptual design also incorporates the "2-Hospital Concept", which improves safety by separating high-risk patients from medium-risk and low-risk patients.

13. **Provide increased short-term bed capacity to allow the 40 patients currently housed in leased space at Kahi Mohala to be moved to the Hospital campus.**

    Construction of the new 144-Bed Goddard Patient Care Facility will increase the Hospital's current 178-bed capacity to 252 beds. The increased bed count will allow the patients at Kahi Mohala to be moved to the Hospital. Consolidating all of the Hospital's patients at one site will increase efficiency and reduce operational costs.

14. **Provide increased short-term bed capacity to prepare for the future demolition of Guensberg.**

    Guensberg is sixty years old, in need of substantial repairs, and its configuration is not appropriate for the Hospital's increasing percentage of high-risk patients. Construction of the new 144-Bed Goddard Patient Care Facility will provide the bed capacity needed to relocate the 70 patients in Guensberg and prepare for its demolition. The Guensberg patients can be relocated based on their risk levels – either to the new Goddard Patient Care Facility, or to one of the existing patient care units.

15. **Plan for long-term, incremental increases in the Hospital's patient census.**

Based on discussions with Hospital and DOH staff, and the information contained in the *Foundational Document* (Appendix 5.1), AHL realized that the Long-Term Master Plan needed to provide for substantial growth. The *2015 Master Plan Update* provides the ability to increase Hospital's census from the current 178 patients to 516 patients. This substantial growth can be implemented in four (or more) phases as the needs are justified. This approach ensures that the Hospital can remain operational on its current site far into the future.

16. **The Short-Term Master Plan should include some patient rooms designed to provide care for patients with medical issues.**

The Short-Term Master Plan identifies one 24-Bed Patient Unit on the Second Floor of the Goddard Patient Care Facility as the Medical Unit (see P. 4-7). The specific features (medical gases, medical equipment, etc.) included in this patient care unit will be determined during the future design phases. AHL recommends that the design of the medical unit be as close as possible to the design of the typical patient units. This approach will allow well patients to be housed on the medical unit when the census of sick patients is low.

17. **The Short-Term Master Plan should include a "hardened" patient care unit designed to provide care for extremely high-risk patients.**

The Short-Term Master Plan identifies one 24-bed Patient Unit on the First Floor of the Goddard Patient Care Facility as the Hardened Unit (see P. 4-6). In order to minimize uncontrolled patient interaction each patient room will have its own toilet and shower (unlike the other patient units where two rooms typically share a toilet and shower).

18. **The capacity of the Admissions Patient Care Unit should be increased.**

The *2005 Master Plan* included a 16-Bed Admissions Patient Care Unit. The current Hospital staff felt that 16 beds would not be adequate to meet their needs. The Short-Term Master Plan

responds to the staff's concern by increasing the capacity of the Admissions Patient Care Unit (see P. 4-6) to 24 beds.

**19. The 2015 Master Plan Update must address the goal of providing increased safety.**

The *2015 Master Plan Update* provides for increased public, patient, and staff safety as follows:

Public Safety: The future patient facilities will be designed specifically for high-risk patients and will be surrounded by high-security fences. Patient, staff, and public access to, and egress from, the future facilities will be controlled by sally ports. These features will increase public safety by reducing opportunities for patients to elope into the surrounding community.

Patient Safety: The conceptual design of the future patient care facilities (see Section 4.0) is based on a plan layout that provides clear sight lines from a central nursing station. This feature, in combination with security cameras, will reduce the risk of patients harming themselves, or other patients.

Staff Safety: The conceptual design of the future patient care facilities includes "off stage" areas for functions such as staff offices, locker rooms, and conference rooms. Access to the "off-stage" areas will be controlled to prevent patients from entering. This feature, in combination with the visibility features indicated above, will reduce the risk of staff being assaulted by patients.

**Issues Not Addressed in 2015 Master Plan Update**

At the time the master planning process started several proposed new programs were under discussion. The DOH issued the following directives regarding those programs:

- An adult substance abuse forensic treatment facility will not be considered at this time.
- Additional 1/4-Way transitional housing will not be provided. The 22 beds in the Transitional Care Cottages will remain.
- Additional 1/4-Way transitional housing will not be provided. The 16 beds in Hale Imua will remain.
- A joint Department of Public Safety (PSD) / DOH forensic facility will not be accommodated on the Hospital site.

## 2.0 MASTER PLAN SUMMARY

### 2.3 GROWTH IN PATIENT CENSUS

As indicated in Section 1.4, the capital improvement projects recommended in the *2005 Master Plan* were not implemented. Therefore, two of the primary issues that shaped the *2005 Master Plan* (i.e. increases in patient population and the increasing percentage of high-risk patients) have not been addressed. These issues continue to present significant operational challenges. William May, the current Hospital Administrator, recently made the following statement: "The hospital was built as a 178-bed facility to treat severely chronic mentally ill and acute criminally-committed patients, but census figures today have grown to more than 200 patients and continue to rise". The makeshift accommodations required to house the extra patients, combined with the increasing percentage of high-risk patients, results in operational challenges and increased safety risks.

In September 2014 the DOH issued a statistical analysis that provides an estimate of the number of patient beds likely to be required each month; starting in August 2014 and ending in January 2019. The analysis shows the forecasted monthly average patient census continuing to rise, reaching 265 patients in 2019. The DOH statistical analysis, identified as the *Foundational Document*, is included in the Appendix 5.1. Hawaii's population will continue to grow in the years beyond 2019 resulting in an even greater demand for patient capacity.

The *2015 Master Plan Update* provides options that address the census growth through 2019 as projected in the *Foundational Document*. It also provides a "road map" for addressing the substantial further increases in census that are likely to occur in the years beyond 2019.

### 2.4 LONG-TERM MASTER PLAN

The Long-Term Master Plan provides a flexible plan for incrementally responding to all of the established Goals and Priorities over time. The Long-Term Master Plan is illustrated by two drawings:

- Planning Zones (see P. 2-15)
- Long-Term Master Plan (see P. 2-17)

## 2.0 MASTER PLAN SUMMARY

### Planning Zones

The Planning Zones drawing (see P. 2-15) provides a broad overview of the Long-Term Master Plan. The fifteen Planning Zones respond to Goal 3 by establishing clear, logical uses for all areas of the Hospital site. The use(s) identified for each Planning Zone were established by consensus of the DOH, Hospital, DAGS, and AHL planning participants. The development(s) envisioned for each Planning Zone are described in the Keynotes on the right side of the drawing. Except for Zone 1, the Planning Zone numbers do not imply a sequence of implementation. As stated elsewhere in this Report, the project(s) in each Planning Zone can be implemented when the needs can be justified and when funding is available. The following summary identifies the Planning Goal(s) for the future development in each zone.

| | |
|---|---|
| **Zone 1** | Reserved for future 144- Bed Goddard Patient Care Facility (see Short-Term Master Plan for details) |
| **Zone 2** | Reserved for future 144- Bed Patient Care Facility (current Guensberg site). Construction of this facility will result in the need to add approximately 482 new parking spaces (see Preliminary Parking Study, Appendix 5.3). Prior to construction the DOT Base Yard will probably need to be relocated from Planning Zone 7 to another location (not on DOH land). |
| **Zone 3A** | Reserved for future 72-Bed Patient Care Facility (current J-Pad site) |
| **Zone 3B** | Reserved for future 72-Bed Patient Care Facility (current Building I site) |
| **Zone 4A** | Reserved for future relocation of Hospital Plant Operations, Warehouse, Base Yard |
| **Zone 4B** | Current Hospital Plant Operations, Warehouse, and Base Yard on WCC campus |
| **Zone 5** | Reserved for future independently-operated Skilled Nursing Facility |
| **Zone 6** | Reserved for future main Hospital entrance improvements. This area is currently under SDOT management and control per Executive Order No. 4470. |
| **Zone 7** | Reserved for future development options such as additional staff parking required in connection with future increases in the Hospital's patient census, a Behavioral Health Stability facility, relocating the Transitional Care Cottages, Housing, or a Hospital history museum. This area is currently under SDOT management and control per Executive Order No. 4470. |

## 2.0 MASTER PLAN SUMMARY

| | |
|---|---|
| **Zone 8** | Reserved for future expansion of Hospital administration, or additional parking |
| **Zone 9A** | Reserved for future Aloha Garden improvements |
| **Zone 9B** | Reserved for protection of watershed |
| **Zone 10** | Reserved for future development such additional staff parking |
| **Zone 11** | Reserved for continued use by Hina Mauka |
| **Zone 12** | Reserved for water tanks and emergency ingress to / egress from Hospital site |
| **Zone 13** | Future landscape buffer at Hospital/WCC property line |
| **Zone 14** | Reserved for future development of additional parking |
| **Zone 15** | Reserved for future development of additional parking |

## 2.0 MASTER PLAN SUMMARY

### Long-Term Master Plan

The Long-Term Master Plan (see P. 2-17) provides a detailed illustration of the future development options for Zones 2, 3A, 3B, and 4A. In all other respects the Long-Term Master Plan is identical to the Planning Zones drawing.

**Zone 2** **(Orange)** This future Patient Care Facility on the Guensberg site will provide 144 additional beds (six 24-bed patient units) and expanded Rehab Mall capacity. Construction of this facility will increase the Hospital's capacity to 396 beds. The facility design is anticipated to be similar to the previously constructed Goddard Patient Care Facility. The two projects will be capable of operating as a single, integrated facility. The Guensberg building, vacant after construction of the 144Bed Goddard Patient Care Facility in Zone 1, will be demolished prior to construction.

**Zone 3A** **(Green)** This future Patient Care Facility on the J-Pad site will provide 72 additional beds (three 24 bed units). Construction of this facility will increase the Hospital's capacity to 468 beds. The facility design is anticipated to be similar to one-half of the 144-bed patient care facilities constructed earlier in Zones 1 and 2. Building I (24 beds) can remain in operation during construction of this facility.

**Zone 3B** **(Brown)** The future Patient Care Facility in Zone 3B will provide 72 additional beds (three 24 bed units). Construction of this facility will increase the Hospital's capacity to 516 beds. This facility will likely be joined to the patient care facility to create an integrated 144-bed patient care facility. Building I, which will be quite old by the time this project is implemented, will need to be demolished prior to construction.

**Zone 4** **(Purple)** The plan shown in Zone 4 is a conceptual configuration for the future Hospital Plant Operations and Warehouse (relocated from the WCC campus). A conceptual plan for this facility is included in the Appendix (Item 5.6)

## 2.0 MASTER PLAN SUMMARY

### 2.5 SHORT-TERM OVERALL MASTER PLAN

The Short-Term Master Plan (see P. 2-19) follows the development approach established by the Planning Zones. It proposes construction of a new 144-Bed Patient Care Facility in Planning Zone 1 – the Goddard site. Construction of the 144-Bed Goddard Patient Care Facility, in combination with the 108 existing beds (Buildings E, F, H, and I), will increase the Hospital's capacity to 252 beds. The Short-Term Master Plan specifically responds to the following Goals and Priorities:

- Goal 12: Provides facilities designed to provide safe, efficient care for high-risk patients.
- Goal 13: Provides additional beds needed to move 40 patients from Kahi Mohala to Hospital.
- Goal 14: Provides new beds to replace the 70 beds in Guensberg.
- Goal 15: Provides a long-term plan for incrementally increasing the Hospital's patient census.
- Goal 16: Provides a 24-Bed Medical Patient Care Unit.
- Goal 17: Provides a 24-Bed Hardened Patient Care Unit for extremely high-risk patients.
- Goal 18: Provides a 24-Bed Admissions Patient Care Unit.
- Goal 19: Provides increased safety for patients, staff, and the public.

For a detailed description of the proposed new 144-Bed Goddard Patient Care Facility please refer to Section 3.0 Space Programs and Section 4.0 Conceptual Design. A Conceptual Design Cost Estimate for the 144-Bed Goddard Patient Care Facility is included in the Appendix (Item 5.2).

## 2.0 MASTER PLAN SUMMARY

### 2.6 FUNCTIONAL RELATIONSHIPS

The Functional Relationship Diagram (see P. 2-21) is a supplement to the Short-Term Master Plan. It provides a diagrammatic view of the Hospital's future state in the time period:

- Following completion of the new 144-Bed Goddard Patient Care Facility.
- Prior to future implementation of the projects in Planning Zones 2 – 15.

The diagram uses color coding to identify:

- Building and land use categories.
- Major vehicular circulation routes for patient transport, service vehicles, staff, and visitors.

The Functional Relationship Diagram also illustrates certain key functional considerations that are covered in more detail in Sections 3.0 and 4.0:

- The new 144-Bed Goddard Patient Care Facility will have its own dedicated Rehab Mall (the *2005 Master Plan* called this approach the "2-Hospital Concept").
- The Guensberg building can remain in operation while the new Goddard Patient Care Facility is being built, thus avoiding any reduction in patient care capacity.
- A pedestrian bridge and elevators will connect the new Goddard Patient Care Facility to the existing patient care units and services located on the central campus, which is approximately 25' lower in elevation.
- The new Goddard Patient Care Facility will be surrounded by a high-security fence, and will be accessible only via dual-gated sally ports.
- Approximately 98 parking spaces will be provided immediately adjacent to the new Goddard Patient Care Facility (see Conceptual Site Plan, P. 4-4). The Preliminary Parking Study (Appendix 5.3) estimates that 272 new spaces will be required following completion of the 144-Bed Goddard Patient Care Facility. The additional 174 spaces will need to be located in Planning Zone 7, 8, 10, 14, or 15. The specific location for the additional required parking will need to be determined as part of the future design process for the 144-Bed Goddard Patient Care Facility.

## 2.0 MASTER PLAN SUMMARY

### 2.7 KANEOHE NEIGHBORHOOD BOARD

DOH, Hospital, DAGS, and AHL staff attended two Kaneohe Neighborhood Board (KNB) meetings. These meetings were intended to:

- Give KNB members and the Kaneohe community a preview of the *2015 Master Plan Update.*
- Provide an opportunity for the Board and community to comment on the *2015 Master Plan Update.*
- Set the stage for continuing dialogue as the projects envisioned in the *2015 Master Plan Update* are implemented in the future.

The first KNB meeting occurred on May 5, 2015. This meeting, also referred to as a planning meeting, is typically attended only by Board members. The meeting was intended to give the Board members an advance look at the materials to be presented at the public meeting on May 21, 2015. William May, the Hospital Administrator, and Gary Marshall (AHL) gave a summary of the key features of the *2015 Master Plan Update.*

The second meeting, which was the official KNB public meeting, occurred on May 21, 2015. William May made the presentation, which focused on the ways in which the *2015 Master Plan Update* addresses the major challenges the Hospital is facing:

- Improving safety for staff, patients, and the Kaneohe community.
- Providing additional patient beds to meet current needs and long-term growth projections.
- Providing new patient care facilities designed specifically to care for high-risk patients.

In his presentation Mr. May made the following points:

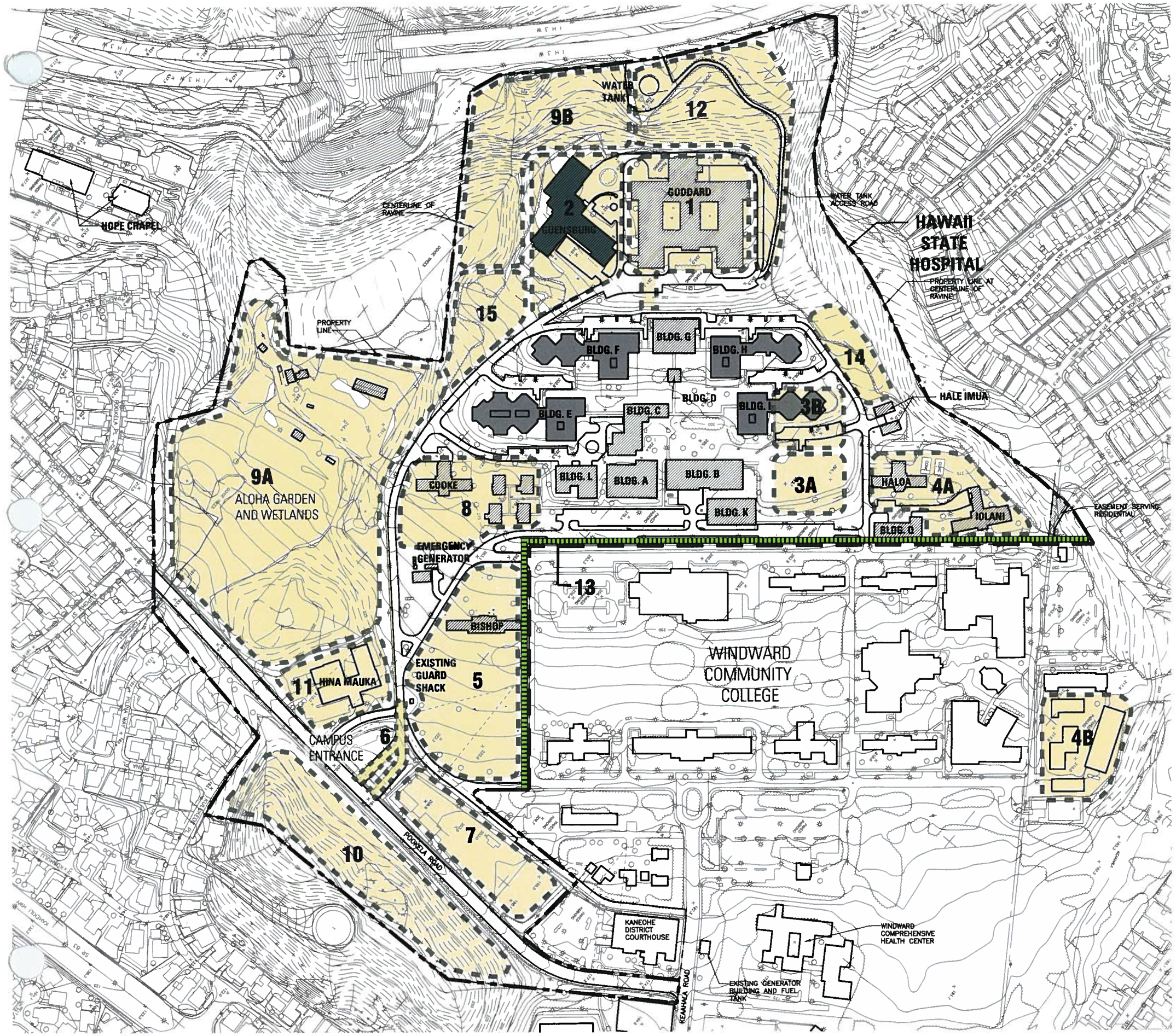
- The development envisioned in the *2015 Master Plan Update* occurs mainly within the boundaries of the existing Hospital site. Some of the development (in Planning Zones 6 and 7) is shown on lands currently managed by the SDOT. These lands were previously managed and controlled by the DOH under Executive Order No. 3504.
- The vacant Goddard building will be demolished and the 144-Bed Goddard Patient Care Facility will be constructed in that location. This is a short-term project that DOH hopes to complete within 7 – 10 years.

## 2.0 MASTER PLAN SUMMARY

- The vacant Bishop building will be demolished and an independently-operated 150-Bed Skilled Nursing Facility (SNF) will be constructed in that location. The timetable for this project is not certain, but it is intended to be a relatively short-term project.
- The remaining development envisioned in the *2015 Master Plan Update* consists of long-term projects that will be implemented over a period of many years.

Following the presentation the following issues were discussed:

- Dr. Dykstra, the WCC Chancellor, stated that WCC has previously offered to exchange the land in Planning Zone 5 (the Bishop site) for a comparable sized property near the Windward Comprehensive Health Center. He said that WCC would like to work with a charter school to renovate Bishop, and would also like to construct a new building adjacent to Bishop. It was noted that the requested exchange of lands would constitute a significant departure from the Hospital's *2015 Master Plan Update* and the issue was not discussed further at the KNB meeting. Resolution of this issue was subsequently handled by the DOH in a June 22, 2015 letter to John Morton, the Vice President of Community Colleges. See Appendix 5.4.3 for a copy of the letter.
- A Kaneohe resident asked how the SNF beds are going to paid for. Mr. May replied that the beds will be financed by Medicaid and other funding mechanisms. Another resident stated that Medicaid will probably not cover all of the expenses.
- Brian Isa (DAGS) stated that the *2015 Master Plan Update* process is not finished. He mentioned that further planning, including an Environmental Assessment, is required and there will be additional opportunities for public comments. He also mentioned that construction of the 144-Bed Goddard Patient Care Facility will require additional appropriations from the Hawaii State Legislature.
- KNB Chair Radke asked if the Environmental Assessment will be presented to the KNB when it is completed. Brian Isa indicated that the appropriate environmental process will be followed.
- KNB member San Nicholas asked if the Master Plan includes safe zones for patients and the community. William May replied that the new patient care facilities will include high-security perimeter fencing.




## LEGEND

- PLANNING ZONES (SEE KEYNOTES BELOW)
- EXISTING HSH BUILDINGS: ADMINISTRATION, SUPPORT, REHAB MALL, THERAPY, DINING & KITCHEN
- EXISTING HSH BUILDINGS: PATIENT CARE UNITS

## KEYNOTES

**1** Zone reserved for new 144-Bed "Goddard" Patient Care Facility. This facility will require demolition of the existing Goddard building.

**2** Zone reserved for future 144-Bed Patient Care Facility. This facility will require demolition of the existing Guensberg building.

**3A** Zone reserved for future 72-Bed Patient Care Facility. This facility will be located on the "J-Pad".

**3B** Zone reserved for future 72-Bed Patient Care Facility. This facility will require demolition of the existing Building I Patient Care Facility (24 beds).

**4A** Zone reserved for future HSH Plant Operations and Warehouse Facility. The existing Haloa building (currently abandoned) and the existing Iolani building (currently used by WCC under an agreement with DOH) will be demolished.

**4B** Existing HSH Plant Operations and Warehouse Facility will be turned over to WCC after construction of the new facility in Zone 4A.

**5** Zone reserved for future development (by others) of an independently operated Skilled Nursing Facility. Demolition of Bishop will be by others. Existing Guard Shack to remain.

**6** Zone reserved for future HSH main entrance improvements. This plan will require moving the SDOT Base Yard to another site (off HSH's campus).

**7** Zone reserved for future development such as a Behavioral Stability Facility, relocation of Transitional Care Cottages (22 beds), or additional parking (320 Spaces, surface or parking structure). This plan will require moving the SDOT Base Yard to another site (off HSH's campus).

**8** Zone reserved for future expansion of HSH Administration or additional parking (220 spaces, surface or parking structure). This plan will require demolition of Cooke (currently used by Security and Grounds Maintenance) and relocation of Transitional Care Cottages (22 beds in 4 cottages).

**9A** Zone reserved for Aloha Garden improvements.

**9B** Zone reserved for watershed.

**10** Zone reserved for future development such as additional parking (200 spaces, surface).

**11** Zone reserved for continued use by Hina Mauka (an independently operated drug treatment facility) on the HSH campus.

**12** Zone reserved for water tanks, access road, emergency ingress to / egress from HSH site.

**13** Zone reserved for future landscape buffer.

**14** Zone reserved for future development such as additional parking (60 spaces, surface).

**15** Zone reserved for future development such as additional parking (110 spaces, surface).

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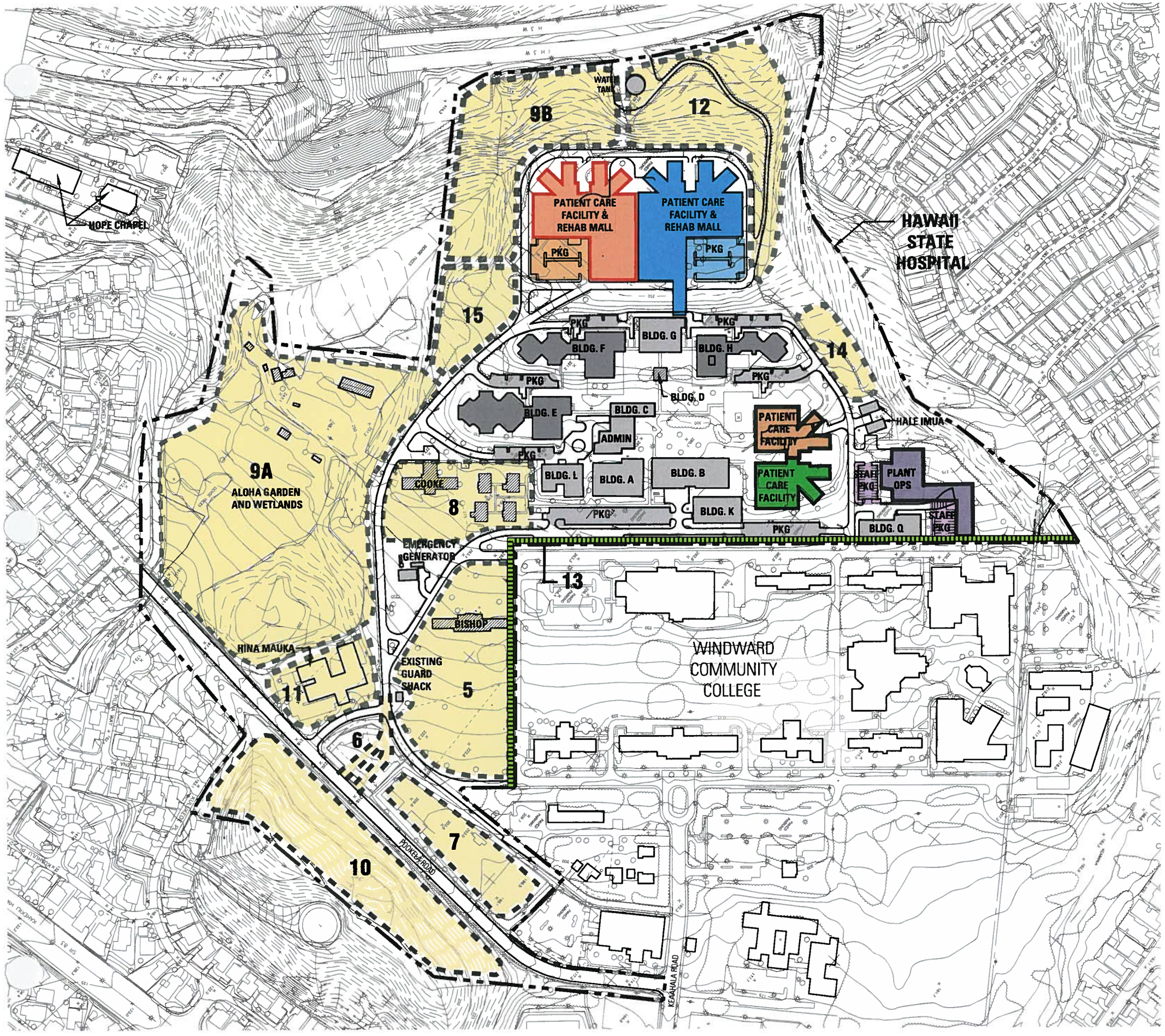
## PLANNING ZONES

HAWAI'I STATE HOSPITAL

ARCHITECTS HAWAII LIMITED




## LEGEND

- PROPERTY LINE
- PLANNING ZONES (SEE KEYNOTES BELOW)
- NEW GODDARD PATIENT CARE FACILITY (144 BEDS), REHAB MALL, PEDESTRIAN BRIDGE TO LOWER CAMPUS, AND PARKING (42 SPACES)
- FUTURE PATIENT CARE FACILITY (144 BEDS), REHAB MALL, AND PARKING (42 SPACES)
- FUTURE PATIENT CARE FACILITY (24-72 BEDS)
- FUTURE PATIENT CARE FACILITY (24-72 BEDS)
- FUTURE PLANT OPERATIONS, WAREHOUSE, AND PARKING (25 SPACES)
- EXISTING ADMINISTRATION, FACILITY SUPPORT, PATIENT SUPPORT, REHAB MALL, THERAPY, DINING & KITCHEN, TRANSITIONAL CARE COTTAGES (22 BEDS), AND PARKING
- EXISTING PATIENT CARE UNITS (84 BEDS TOTAL)

## KEYNOTES

**5** Zone reserved for future development (by others) of an independently operated Skilled Nursing Facility. Demolition of Bishop will be by others. Existing Guard Shack to remain.

**6** Zone reserved for future HSH main entrance improvements. This plan will require moving the SDOT Base Yard to another site (off HSH's campus).

**7** Zone reserved for future development such as a Behavioral Stability Facility, relocation of Transitional Care Cottages (22 beds), or additional parking (320 spaces, surface or parking structure). This plan will require moving the SDOT Base Yard to another site (off HSH's campus).

**8** Zone reserved for future expansion of HSH Administration or additional parking (220 spaces, surface or parking structure). This plan will require demolition of Cooke (currently used by Security and Grounds Maintenance) and relocation of Transitional Housing (22 beds in 4 cottages).

**9A** Zone reserved for Aloha Garden improvements.

**9B** Zone reserved for watershed.

**10** Zone reserved for future development such as additional parking (200 spaces, surface).

**11** Zone reserved for continued use by Hina Mauka (an independently operated drug treatment facility) on the HSH campus.

**12** Zone reserved for water tanks, access road, emergency ingress to / egress from HSH site.

**13** Zone reserved for future landscape buffer.

**14** Zone reserved for future development such as additional parking (60 spaces, surface).

**15** Zone reserved for future development such as additional parking (110 spaces, asurface).

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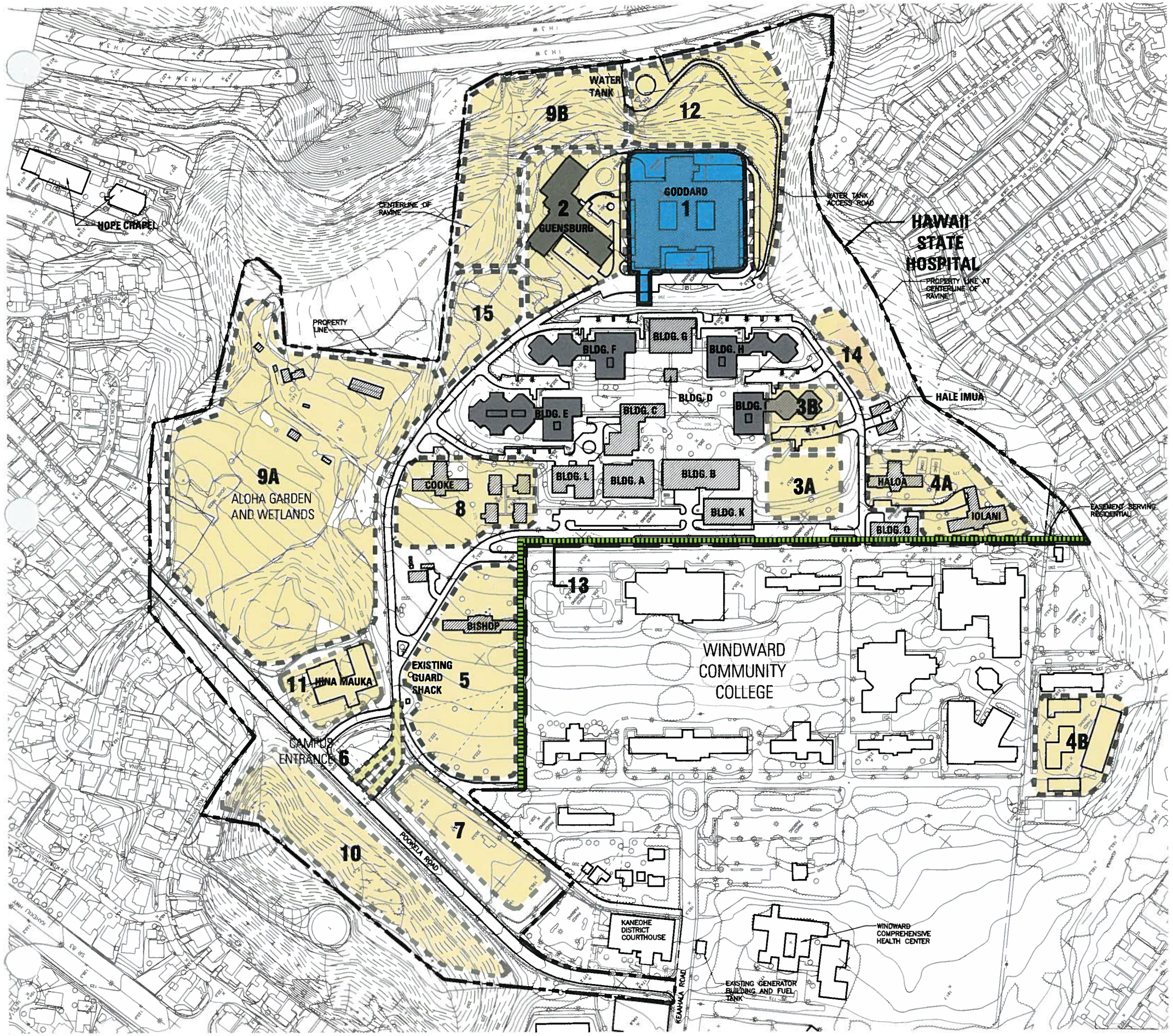
## LONG-TERM MASTER PLAN




## LEGEND

- NEW GODDARD PATIENT CARE FACILITY
- PLANNING ZONES (SEE KEYNOTES BELOW)
- EXISTING HSH BUILDINGS: ADMINISTRATION, SUPPORT, REHAB MALL, THERAPY , DINING & KITCHEN
- EXISTING HSH PATIENT CARE UNITS (108 BEDS TOTAL)

**1** New 144-Bed "Goddard" Patient Care Facility. This facility will require demolition of the existing Goddard building.

**2** Guensberg demolished or abandoned upon completion of the new "Goddard" Patient Care Facility in Zone 1. Zone 2 reserved for future 144-Bed Patient Care Facility.

**3A** Zone reserved for future 72-Bed Patient Care Facility. This facility will be located on the "J-Pad".

**3B** Zone reserved for future 72-Bed Patient Care Facility. This facility will require demolition of the existing Building I Patient Care Facility (24 beds).

**4A** Zone reserved for future HSH Plant Operations and Warehouse Facility. The existing Haloa building (currently abandoned) and the existing Iolani building (currently used by WCC under an agreement with DOH) will be demolished.

**4B** Existing HSH Plant Operations and Warehouse Facility will be turned over to WCC after construction of the new facility in Zone 4A.

**5** Zone reserved for future development (by others) of an independently operated Skilled Nursing Facility. Demolition of Bishop will be by others. Existing Guard Shack to remain.

**6** Zone reserved for future HSH main entrance improvements. This plan will require moving the SDOT Base Yard to another site (off HSH's campus).

**7** Zone reserved for future development such as a Behavioral Stability Facility, relocation of Transitional Care Cottages (22 beds), or additional parking (320 spaces, surface or parking structure). This plan will require moving the SDOT Base Yard to another site (off HSH's campus).

**8** Zone reserved for future expansion of HSH Administration or additional parking (220 spaces, surface or parking structure). This plan will require demolition of Cooke (currently used by Security and Grounds Maintenance) and relocation of Transitional Care Cottages (22 beds in 4 cottages).

**9A** Zone reserved for Aloha Garden improvements.

**9B** Zone reserved for watershed.

**10** Zone reserved for future development such as additional parking (200 spaces, surface).

**11** Zone reserved for continued use by Hina Mauka (an independently operated drug treatment facility) on the HSH campus.

**12** Zone reserved for water tanks, access road, emergency ingress to / egress from HSH site.

**13** Zone reserved for future landscape buffer.

**14** Zone reserved for future development such as additional parking (60 spaces, surface).

**15** Zone reserved for future development such as additional parking (110 spaces, surface).

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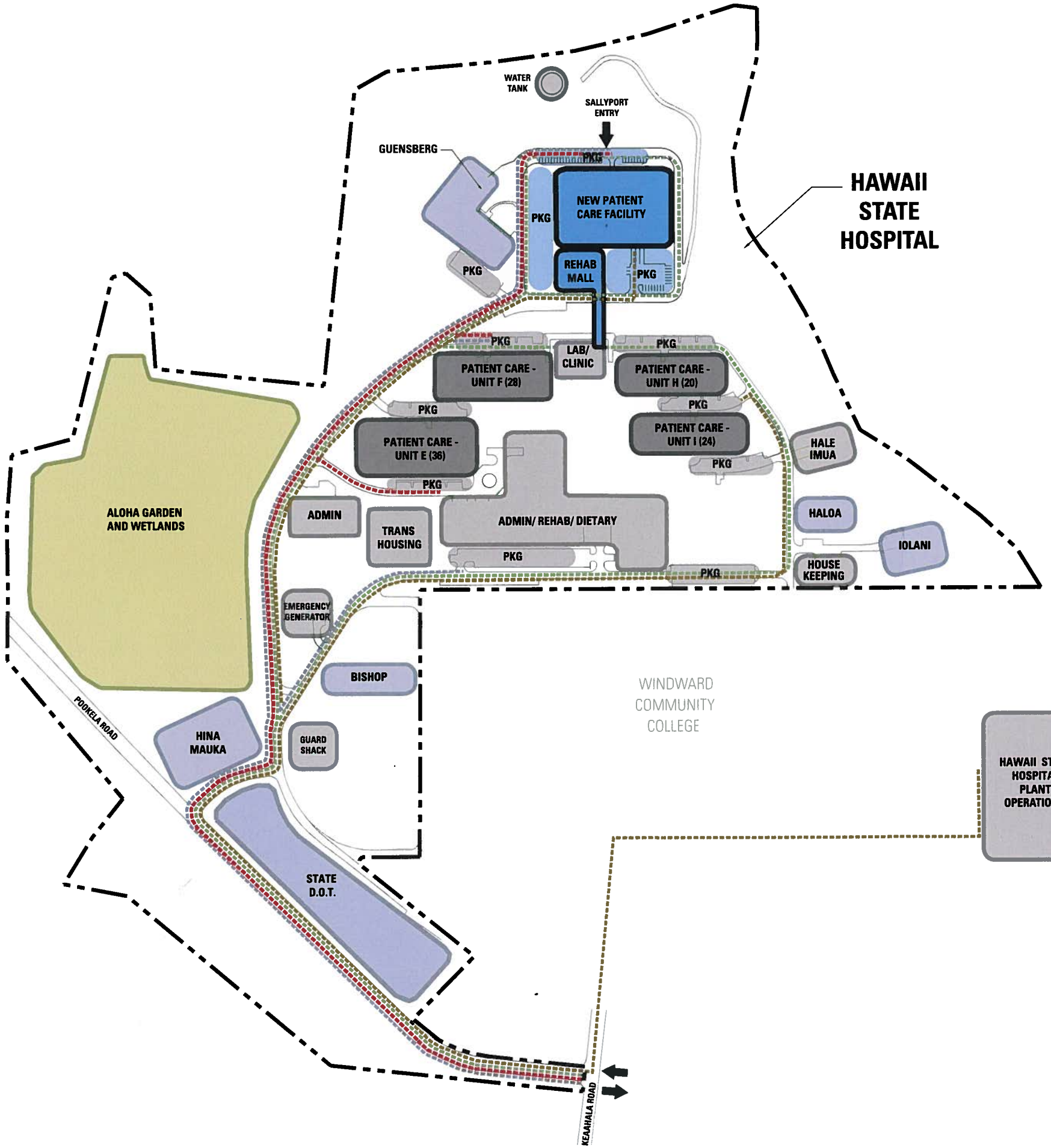
# SHORT-TERM MASTER PLAN

HAWAI`I STATE HOSPITAL

ARCHITECTS HAWAII LIMITED




## LEGEND

- PROPERTY LINE
- NEW GODDARD PATIENT CARE FACILITY (144 BEDS), REHAB MALL, PEDESTRIAN BRIDGE TO LOWER CAMPUS AND PARKING
- EXISTING PATIENT CARE UNITS (108 BEDS)
- EXISTING ADMINISTRATION, FACILITY SUPPORT, PATIENT SUPPORT, REHAB MALL, THERAPY, DINING & KITCHEN, TRANSITIONAL HOUSING (22 BEDS), AND PARKING
- EXISTING BUILDINGS OR ZONES OCCUPIED BY OTHERS OR UNOCCUPIED
- ALOHA GARDEN AND WETLANDS

## VEHICULAR CIRCULATION

- PATIENTS
- ADMIN / STAFF
- SERVICE
- PUBLIC / VISITORS

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**FUNCTIONAL RELATIONSHIP DIAGRAM**

HAWAII STATE HOSPITAL

ARCHITECTS HAWAII LIMITED

**HAWAII STATE HOSPITAL | 2015 MASTER PLAN UPDATE**

AUGUST 28, 2015 | DAGS JOB NO. 12-20-2698

# 3.0 NEW GODDARD PATIENT CARE FACILITY – SPACE PROGRAMS

## 3.1 Introduction

In the 2015 Master Planning effort, user groups comprised of key personnel from major departments were instrumental to re-define the future needs of the Hospital Campus. Six user groups were involved with the master planning process: Administrative, Clinical Services, Dietary, Nursing, Facilities, and Rehab Treatment Mall. Each group reviewed the 2005 functional space programs and confirmed the applicability of room types, sizes, and space deficiencies. They also reviewed and provided key campus functional relationships and preferred adjacencies to address safety and security.

During the 2015 Master Planning process, it was determined based on several hospital user group discussions that the New Goddard Patient Care Facility and Rehab Mall Space Programs would need to be revised to reflect a "2-Hospital Concept" so that the New Goddard Patient Care Facility and Rehab Mall on the upper campus has a distinct high-security zone, separate from central campus functions. The New Goddard Patient Care Facility would completely separate the interaction of high risk patients with other types of patients on campus.

The New Goddard Patient Care Facility includes six 24-Bed Patient Care Units for a total of 144 beds. There are four typical 24-Bed Patient Care Units, one of which will be modified to care for patients with medical issues. The remaining two 24-Bed Patient Care Units will be dedicated for Admissions and High-Risk patients. Bold red text in subsequent sections 3.3 – 3.6 indicates information that was revised or added during the 2015 Master Plan Update process due to user group input.

The 2015 Master Plan update does not address future changes that may need to occur to the existing space programs for the patient care units, administrative, and facility support buildings as a direct result of the New Goddard Patient Care Facility and Rehab Mall being built. It will be necessary to reevaluate the space program in these existing buildings as the Hospital's bed count continues to increase in the future. Section "3.2 Space Program Summary" separates the subtotal area of the New Goddard Patient Care Facility from other existing building areas on campus in order to distinguish new space requirements from existing.

## 3.2 SPACE PROGRAM SUMMARY

| NEW GODDARD PATIENT CARE FACILITY | NSF | GSF | Remarks |
|---|---|---|---|
| **24-Bed Typical Patient Care Unit** | 9,479 | 17,062 | Three 8-bed wings, patient support functions, and staff support functions. |
| **24-Bed Typical Patient Care Unit** | 9,479 | 17,062 | Three 8-bed wings, patient support functions, and staff support functions. |
| **24-Bed Typical Patient Care Unit** | 9,479 | 17,062 | Three 8-bed wings, patient support function, and staff support functions. |
| **24-Bed Typical Patient Care Unit (Medical)** | 9,479 | 17,062 | Similar to a typical 24-Bed Patient Care Unit, modified to provide care for patients with medical issues. |
| **24-Bed Admissions Patient Care Unit** | 11,031 | 19,856 | Similar to a typical 24-Bed Patient Care Unit, also includes a dedicated Rehab Mall used only by the patients on this unit. |
| **24-Bed High-Risk Patient Care Unit** | 10,194 | 18,349 | Similar to a typical 24-Bed Patient Care Unit, modified to provide care for high-risk patients. |
| **Rehab Mall** | 23,160 | 41,688 | Dedicated for use by patients in the New Patient Care Facility. Patients in Buildings E, F, H, and I will continue to use the existing Rehab Mall facilities. |
| **Support Services** | 16,460 | 29,628 | Allowance for Materials Management, Covered Loading Dock, General Storage, and Central Plant |
| **Area - Patient Care Facility** | **98,761** | **177,770** | |

| EXISTING BUILDINGS[1] | NSF[2] | GSF[2] | Opened[2] | Remarks / Services [3] |
|---|---|---|---|---|
| **Patient Care Unit - Building E** | 19,327 | 28,411 | 1992 | Designed to house 36 patients. |
| **Patient Care Unit - Building F** | 15,954 | 23,452 | | Designed to house 28 patients. |
| **Patient Care Unit - Building H** | 11,560 | 16,993 | 1992 | Designed to house 20 patients. |
| **Patient Care Unit - Building I** | 12,546 | 18,443 | 1992 | Designed to house 24 patients. |
| **Patient Care Unit - Guensberg Building** | 35,909 | 48,993 | 1955 | After the New Patient Care Facility is completed Guensberg will not be used for patient care. |
| **Building A** | 19,926 | 25,422 | 1992 | Business Office, HSH Administration, Consumer Representation, Medical Records, Telecommunications, MIS, Rehab Mall, Nursing Office, Staff Development, Housekeeping, Shared Facilities |
| **Building B** | 21,386 | 24,651 | 1992 | Dietary, Housekeeping, Rehab Mall, Shared Facilities. The existing Dietary department will also prepare food for the New Patient Care Facility. |

## 3.2 SPACE PROGRAM SUMMARY

| EXISTING BUILDINGS[1] | NSF[2] | GSF[2] | Opened[2] | Remarks / Services [3] |
|---|---|---|---|---|
| **Building C** | 6,623 | 7,830 | 1992 | Rehab Mall, Kau Kau Café, Safety Officer, Consumer Representation, Volunteer Services, Nursing Office, Housekeeping, Shared Facilities |
| **Building D** | 970 | 1,152 | 1992 | Elevator and stairs connecting the site level where Buildings A, B, C, E, L, and I are located to the site level where Buildings F, G, and H are located. |
| **Building G** | 7,884 | 10,726 | 1992 | Lab, Medical Services, Pharmacy, Central Medical Supply, Shared Facilities |
| **Building K** | 5,914 | 8,069 | 1992 | Occupational Therapy, Recreational Therapy |
| **Building L** | 5,347 | 7,568 | 1992 | MIS, Utilization Management, Personnel / HR, Volunteer Services, Housekeeping, Shared Facilities |
| **Buildings M, N, O, and P - CARE Cottages** | 4,000 | 5,000 | 1992 | Transitional housing. Areas approximate - dimensioned drawings not available. |
| **Building Q** | 6,783 | 7,614 | 1992 | Housekeeping/Laundry, Plant Operations |
| **Bishop Building** | 6,485 | 8,100 | 1932 | Vacant. Will be demolished prior to construction of a planned, new Skilled Nursing Facility. Areas approximate - dimensioned drawings not available. |
| **Cooke Building** | 7,950 | 10,568 | 1932 | Security (PSD), QI / Risk Management, RN / QI, CPSU, Standards and Compliance, Rehab Mall. |
| **Goddard Building** | 88,000 | 110,000 | 1947 | Vacant -scheduled to be demolished under a separate project. Both the 2005 Master Plan and the 2015 Master Plan Update identify the Goddard site as the preferred location for the New Patient Care Facility. Areas approximate. |
| **Haloa Building** | 6,988 | 8,735 | 1932 | Currently vacant. Areas approximate - dimensioned drawings not available. |
| **Iolani Building** | 13,881 | 17,351 | 1932 | Currently used by Windward Community College under an agreement with DOH. Areas approximate - dimensioned drawings not available. |
| **Cottages (Hale Imua)** | 1,682 | 2,103 | 2001 | Areas approximate - dimensioned drawings not available. |

## 3.2 SPACE PROGRAM SUMMARY

| EXISTING BUILDINGS[1] | NSF[2] | GSF[2] | | |
|---|---|---|---|---|
| Area - Existing Buildings | 299,115 | 391,181 | | |

| | | | | |
|---|---|---|---|---|
| Area - New Patient Care Facility and Existing Buildings | 397,876 | 568,951 | | |

**Footnotes:**

1. The New Goddard Patient Care Facility project does not include renovations or repairs in any of the existing buildings.

2. The areas (net and gross) and year each existing building opened are taken from the 2005 Hawaii State Hospital Master Plan.

3. The services located in the existing buildings are taken from the 2005 Hawaii State Hospital Master Plan.

## 3.3 SPACE PROGRAM: TYPICAL 24-BED PATIENT CARE UNITS [1][2]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.

**Bold red text: Indicates information that was revised or added during the 2015 Master Plan Update process.**

| Dept. | | Space Name | Existing Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Dorm Wing | 1 | Patient Bedroom | NA | 1 | 110 | 22 | 2,420 | |
| | 2 | Toilet & Shower - Shared | NA | ~ | 65 | 11 | 715 | Shared - 1 per 2 patient rooms |
| | 3 | Isolation Patient Room | NA | ~ | 110 | 2 | 220 | |
| | 4 | Isolation Toilet & Shower | NA | ~ | 65 | 2 | 130 | |
| Day Wing | 5 | Seclusion Room | NA | 1 | 80 | 3 | 240 | |
| | 6 | Toilet & Shower | NA | ~ | 65 | 1 | 65 | **Shared by Seclusion rooms** |
| | 7 | Ante Room | NA | ~ | 55 | 1 | 55 | |
| | 8 | Consultation / Visitor | NA | ~ | 120 | 3 | 360 | 2 should be joinable |
| | 9 | Quiet / Visitor Room | NA | ~ | 100 | 1 | 100 | |
| | 10 | Tub Room | NA | ~ | 120 | 1 | 120 | |
| | 11 | Grooming Room - Men | NA | ~ | 120 | 1 | 120 | |
| | 12 | Grooming Room - Women | NA | ~ | 120 | 1 | 120 | |
| | 13 | Social Space - Quiet Activities | NA | 12 | 40 | 1 | 480 | Multi-Use for Group Therapy and Dining. Can be joined with the other social space. |
| | 14 | Social Space - Noisy Activities | NA | 12 | 40 | 1 | 480 | Multi-Use for Group Therapy and Dining. Can be joined with the other social space. |
| | 15 | Group Therapy | NA | ~ | 225 | 1 | 225 | |
| | 16 | Patient Restroom - Women | NA | ~ | 55 | 1 | 55 | |
| | 17 | Patient Restroom - Men | NA | ~ | 55 | 1 | 55 | |
| | 18 | Patient Laundry | NA | ~ | 130 | 1 | 130 | |
| | 19 | Patient Belonging Storage | NA | 22 | 7 | 1 | 154 | |
| | 20 | Extra Storage | NA | 2 | 15 | 1 | 30 | |
| | 21 | Equipment Storage | NA | ~ | 160 | 1 | 160 | |
| | 22 | Clean Linen | NA | ~ | 100 | 1 | 100 | |
| | 23 | Soiled Utility | NA | ~ | 80 | 1 | 80 | |
| | 24 | Nurse Station | NA | 8 | 30 | 1 | 240 | **Centrally located with clear sightlines to all areas accessible by patients** |
| | 25 | Medication Room | NA | ~ | 100 | 1 | 100 | Visible from nursing station |
| | 26 | Treatment Room | NA | ~ | 120 | 1 | 120 | |
| | 27 | MD Charting Room | NA | 3 | 30 | 1 | 90 | |

## 3.3 SPACE PROGRAM: TYPICAL 24-BED PATIENT CARE UNITS [1][2]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.

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| Dept. | | Space Name | Existing Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Day Wing | 28 | Conference/Treatment Planning[3] | NA | 15 | 20 | 1 | 300 | **Locate with Office Wing functions** |
| | 29 | Emergency Equipment | NA | ~ | 20 | 1 | 20 | |
| | 30 | Nourishment / Kitchen | NA | ~ | 220 | 1 | 220 | |
| | 31 | Entry Vestibule | NA | ~ | 75 | 1 | 75 | **Sallyport** |
| | 32 | Telephone Booth | NA | ~ | 10 | 2 | 20 | |
| Office Wing | 33 | Office - Psychiatrist[3] | NA | ~ | 120 | 2 | 240 | |
| | 34 | Office - Psychologist[3] | NA | ~ | 100 | 2 | 200 | |
| | 35 | Office - Social Worker[3] | NA | ~ | 100 | 2 | 200 | |
| | 36 | Office - Head Nurse[3] | NA | ~ | 120 | 1 | 120 | |
| | 37 | Office - Other Clinical[3] | NA | ~ | 100 | 2 | 200 | |
| | 38 | Staff Lounge[3] | NA | 10 | 25 | 1 | 250 | |
| | 39 | Staff Toilet / Shower / Lockers[3] | NA | 10 | 22 | 2 | 440 | 30 Male, 30 Female (3-Tier configuration) |
| Shared | 40 | Housekeeping Closet | NA | ~ | 30 | 1 | 30 | |
| Exterior | 41 | Covered Lanai | NA | ~ | **TBD** | **2** | | 1 Smoking, 1 Non-Smoking |
| | 42 | Covered Loading Stall | NA | ~ | | | | **Not required at typical patient units** |
| | 43 | Outdoor Recreation | NA | ~ | **TBD** | **1** | | **Provide controlled access to secure outdoor recreation areas.** |

| | |
|---|---|
| **Total Net SF (NSF) per Typical 24-Bed Patient Care Unit** | **9,479** |
| **Estimated Total Gross SF for (1) Typical Patient Care Unit = 1.8 x Total NSF** | **17,062** |
| **Total NSF for 4 Typical Patient Care Units** | **37,916** |
| **Estimated Total Gross SF for (4) Typical Patient Care Units = 1.67 x Total NSF** | **68,249** |

**Footnotes:**

**1. The New Patient Care Facility will have (4) 24-bed Typical Patient Care Units.**

**2. One of the four Typical Patient Care Units will be modified to care for patients with medical issues. The program specific modifications required to provide medical services will need to be determined in the detailed planning phase.**

**3. Co-locate these functions in an area that has controlled access (i.e. an "offstage"area not available to patients)**

## 3.4 SPACE PROGRAM: 24-BED ADMISSIONS PATIENT CARE UNIT [1]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.

**Bold red text: Indicates information that was revised or added during the 2015 Master Plan Update process.**

| Dept. | | Space Name | Existing Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Dorm Wing | 1 | Patient Bedroom | NA | ~ | 110 | **22** | 2,420 | **Increased from 14 rooms to 22** |
| | 2 | Toilet & Shower - Shared | NA | ~ | 65 | **11** | 715 | Shared - 1 per 2 patient rooms |
| | 3 | Isolation Patient Room | NA | ~ | 110 | 2 | 220 | |
| | 4 | Isolation Toilet & Shower | NA | ~ | 65 | 2 | 130 | |
| Day Wing | 5 | Seclusion Room | NA | ~ | 80 | 3 | 240 | |
| | 6 | Toilet & Shower | NA | ~ | 65 | 1 | 65 | **Shared by Seclusion Rooms** |
| | 7 | Ante Room | NA | ~ | 55 | 1 | 55 | |
| | 8 | Triage Room | NA | ~ | 110 | 3 | 330 | |
| | 9 | Toilet & Shower | NA | ~ | 65 | 1 | 65 | **Shared by Triage rooms** |
| | 10 | Ante Room | NA | ~ | 75 | 1 | 75 | |
| | 11 | Classroom | NA | ~ | 350 | 1 | 350 | |
| | 12 | Classroom / OT Office | NA | ~ | 350 | 1 | 350 | |
| | 13 | Classroom / RT Office | NA | ~ | 350 | 1 | 350 | |
| | 14 | Classroom / Interview | NA | ~ | 200 | 2 | 400 | |
| | 15 | Consultation / Visitor | NA | ~ | 120 | 2 | 240 | 2 should be joinable. |
| | 16 | Quiet / Visitor Room | NA | ~ | 100 | 1 | 100 | |
| | 17 | Tub Room | NA | ~ | 120 | 1 | 120 | |
| | 18 | Grooming Room - Men | NA | ~ | 120 | 1 | 120 | |
| | 19 | Grooming Room - Women | NA | ~ | 120 | 1 | 120 | |
| | 20 | Social Space - Quiet Activities | NA | 8 | 40 | 1 | 320 | Multi-Use for Group Therapy and Dining. Can be joined with the other social space. |
| | 21 | Social Space - Noisy Activities | NA | 8 | 40 | 1 | 320 | Multi-Use for Group Therapy and Dining. Can be joined with the other social space. |
| | 22 | Group Therapy | NA | ~ | 225 | 1 | 225 | |
| | 23 | Patient Restroom - Women | NA | ~ | 55 | 1 | 55 | |
| | 24 | Patient Restroom - Men | NA | ~ | 55 | 1 | 55 | |
| | 25 | Patient Laundry | NA | ~ | 130 | 1 | 130 | |
| | 26 | Patient Belonging | NA | 14 | 7 | 1 | 98 | |
| | 27 | Extra Storage | NA | 2 | 15 | 1 | 30 | |
| | 28 | Equipment Storage | NA | ~ | 160 | 1 | 160 | |
| | 29 | Clean Linen | NA | ~ | 100 | 1 | 100 | |
| | 30 | Soiled Utility | NA | ~ | 80 | 1 | 80 | |
| | 31 | Nurse Station | NA | 8 | 30 | 1 | 240 | **Centrally located with clear sightlines to all areas accessible to patients** |
| | 32 | Medication Room | NA | ~ | 100 | 1 | 100 | Visible from nursing station. |
| | 33 | Treatment Room | NA | ~ | 120 | 1 | 120 | |
| | 34 | MD Charting Room | NA | 3 | 30 | 1 | 90 | |

## 3.4 SPACE PROGRAM: 24-BED ADMISSIONS PATIENT CARE UNIT [1]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.

**Bold red text: Indicates information that was revised or added during the 2015 Master Plan Update process.**

| Dept. | | Space Name | Existing Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Day Wing | 35 | Conference/Treatment Planning[2] | NA | 15 | 20 | 1 | 300 | **Locate with Office Wing functions** |
| | 36 | Emergency Equipment | NA | ~ | 20 | 1 | 20 | |
| | 37 | Nourishment / Kitchen | NA | ~ | 150 | 1 | 150 | Stove / oven located in staff lounge |
| | 38 | Entry Vestibule | NA | ~ | 75 | 1 | 75 | **Sallyport** |
| | 39 | Telephone Booth | NA | ~ | 10 | 2 | 20 | |
| Office Wing | 40 | Office - Psychiatrist[2] | NA | ~ | 120 | 2 | 240 | |
| | 41 | Office - Psychologist[2] | NA | ~ | 100 | 2 | 200 | |
| | 42 | Office - Social Worker[2] | NA | ~ | 100 | 2 | 200 | |
| | 43 | Office - Head Nurse[2] | NA | ~ | 120 | 1 | 120 | |
| | 44 | Office - Substance | NA | 2 | 70 | 1 | 140 | |
| | 45 | Office - Steno Clerk[2] | NA | ~ | 100 | 1 | 100 | |
| | 46 | Copy / Fax / Mail Room[2] | NA | ~ | 120 | 1 | 120 | |
| | 47 | Staff Lounge[2] | NA | 10 | 20 | 1 | 200 | |
| | 48 | Staff Toilet / Shower / Lockers[2] | NA | 12 | 22 | 2 | 528 | 30 Male, 30 Female (3-Tier configuration) |
| Shared | 49 | Housekeeping Closet | NA | ~ | 30 | 1 | 30 | |
| Exterior | 50 | Covered Lanai | NA | ~ | **TBD** | **2** | | 1 Smoking, 1 Non-Smoking |
| | 51 | Covered Loading Stall | NA | ~ | **TBD** | 1 | 0 | **Required for Admissions Unit** |
| | 52 | Outdoor Recreation | NA | ~ | **TBD** | **1** | | **Provide controlled access to a secure outdoor recreation area for use only by Admissions Unit patients** |
| | | | | | **Total Net SF (NSF)** | | **11,031** | |
| | | | | | **Total Estimated Gross SF = 1.8 x Total NSF** | | **19,856** | |

**Footnotes:**

1. **The New Patient Care Facility will have one 24-bed Admissions Patient Care Unit. The 2005 Master Plan included a 16-bed Admissions unit.**
2. **Co-locate these functions in an area that has controlled access (i.e. an "offstage" area not available to patients)**

## 3.5 SPACE PROGRAM: HIGH-RISK 24-BED PATIENT CARE UNIT [1][2]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.

**Bold red text: Indicates information that was revised or added during the 2015 Master Plan Update process.**

| Dept. | | Space Name | Existing Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Dorm Wing | 1 | Patient Bedroom | NA | 1 | 110 | 22 | 2,420 | |
| | 2 | Toilet & Shower | NA | ~ | 65 | **22** | **1,430** | **Not Shared** |
| | 3 | Isolation Patient Room | NA | 1 | 110 | 2 | 220 | |
| | 4 | Isolation Toilet & Shower | NA | ~ | 65 | 2 | 130 | |
| Day Wing | 5 | Seclusion Room | NA | 1 | 80 | 3 | 240 | |
| | 6 | Toilet & Shower | NA | ~ | 65 | 1 | 65 | **Shared by Seclusion rooms** |
| | 7 | Ante Room | NA | ~ | 55 | 1 | 55 | |
| | 8 | Consultation / Visitor | NA | ~ | 120 | 3 | 360 | 2 should be joinable |
| | 9 | Quiet / Visitor Room | NA | ~ | 100 | 1 | 100 | |
| | 10 | Tub Room | NA | ~ | 120 | 1 | 120 | |
| | 11 | Grooming Room - Men | NA | ~ | 120 | 1 | 120 | |
| | 12 | Grooming Room - Women | NA | ~ | 120 | 1 | 120 | |
| | 13 | Social Space - Quiet Activities | NA | 12 | 40 | 1 | 480 | Multi-Use for Group Therapy and Dining. Can be joined with the other social space. |
| | 14 | Social Space - Noisy Activities | NA | 12 | 40 | 1 | 480 | Multi-Use for Group Therapy and Dining. Can be joined with the other social space. |
| | 15 | Group Therapy | NA | ~ | 225 | 1 | 225 | |
| | 16 | Patient Restroom - Women | NA | ~ | 55 | 1 | 55 | |
| | 17 | Patient Restroom - Men | NA | ~ | 55 | 1 | 55 | |
| | 18 | Patient Laundry | NA | ~ | 130 | 1 | 130 | |
| | 19 | Patient Belonging | NA | 22 | 7 | 1 | 154 | |
| | 20 | Extra Storage | NA | 2 | 15 | 1 | 30 | |
| | 21 | Equipment Storage | NA | ~ | 160 | 1 | 160 | |
| | 22 | Clean Linen | NA | ~ | 100 | 1 | 100 | |
| | 23 | Soiled Utility | NA | ~ | 80 | 1 | 80 | |
| | 24 | Nurse Station | NA | 8 | 30 | 1 | 240 | **Centrally located with clear sightlines to all areas accessible by patients** |
| | 25 | Medication Room | NA | ~ | 100 | 1 | 100 | Visible from nursing station |
| | 26 | Treatment Room | NA | ~ | 120 | 1 | 120 | |
| | 27 | MD Charting Room | NA | 3 | 30 | 1 | 90 | |
| | 28 | Conference/Treatment Planning[3] | NA | 15 | 20 | 1 | 300 | **Locate with Office Wing functions** |
| | 29 | Emergency Equipment | NA | ~ | 20 | 1 | 20 | |
| | 30 | Nourishment / Kitchen | NA | ~ | 220 | 1 | 220 | |
| | 31 | Entry Vestibule | NA | ~ | 75 | 1 | 75 | **Sallyport** |
| | 32 | Telephone Booth | NA | ~ | 10 | 2 | 20 | |

## 3.5 SPACE PROGRAM: HIGH-RISK 24-BED PATIENT CARE UNIT [1][2]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.

**Bold red text: Indicates information that was revised or added during the 2015 Master Plan Update process.**

| Dept. | | Space Name | Existing Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Office Wing | 33 | Office - Psychiatrist[3] | NA | ~ | 120 | 2 | 240 | |
| | 34 | Office - Psychologist[3] | NA | ~ | 100 | 2 | 200 | |
| | 35 | Office - Social Worker[3] | NA | ~ | 100 | 2 | 200 | |
| | 36 | Office - Head Nurse[3] | NA | ~ | 120 | 1 | 120 | |
| | 37 | Office - Other Clinical[3] | NA | ~ | 100 | 2 | 200 | |
| | 38 | Staff Lounge[3] | NA | 10 | 25 | 1 | 250 | |
| | 39 | Staff Toilet / Shower / Lockers[3] | NA | 10 | 22 | 2 | 440 | 30 Male, 30 Female (3-Tier configuration) |
| Shared | 40 | Housekeeping Closet | NA | ~ | 30 | 1 | 30 | |
| Exterior | 41 | Covered Lanai | NA | ~ | **TBD** | **2** | | 1 Smoking, 1 Non-Smoking |
| | 42 | Covered Loading Stall | NA | ~ | | | | **Not required** |
| | 43 | Outdoor Recreation | NA | ~ | **TBD** | **1** | | **Provide controlled access to a secure outdoor recreation area for use only by patients on the High-Risk Unit** |
| | | **Total Net SF (NSF) per Typical 24-Bed Patient Care Unit** | | | | | **10,194** | |
| | | **Estimated Total Gross SF = 1.8 x Total NSF** | | | | | **18,349** | |

**Footnotes:**

1. **The New Goddard Patient Care Facility will have one 24-bed High-Risk Patient Care Unit. High-Risk patients will not use the Rehab Mall.**
2. **Program similar to a Typical 24-bed Patient Care Unit, except each Patient Bedroom has its own Toilet / Shower. Additional program modifications may be required - this should be addressed during the detailed planning phase.**
3. **Co-locate these functions in an area that has controlled access (i.e. an "offstage"area not available to patients)**

## 3.6 SPACE PROGRAM: REHAB MALL[1]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.

**Bold red text: Indicates information that was revised or added during the 2015 Master Plan Update process.**

| Dept. | | Space Name | Existing[2] Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Operations Center | 1 | Office | 228 | 1 | 120 | **1** | **120** | **Reduced from 2 offices.** Overlooking Mall area. |
| | 2 | Open Work Stations | 283 | **3** | 60 | 1 | **180** | **Reduced from 5 workstations.** Overlooking Mall area. |
| | 3 | Copy Room | 170 | 1 | 100 | 1 | 100 | |
| Rehab Therapy | 4 | Chart Work Area | NA | **12** | 15 | 1 | **180** | **Reduced from 15 occupants. Two** conference tables for **10 -12** visiting staff. |
| | 5 | Chart Work Room | NA | **6** | 40 | 1 | **240** | Chart space for each 24-bed nursing unit **(six total).** |
| | 6 | Classroom[3] | NA | **24** | **480** | **4** | **1,920** | **One classroom per 24-bed nursing unit. Excludes Intake Unit (has dedicated Rehab Mall) and High-Risk Unit (patients don't go to Rehab Mall). See Footnote 3.** |
| | 7 | Classroom | NA | ~ | 300 | **0** | **0** | **Delete from Phase 1. Additional Classrooms will be provided in Phase 2.** |
| | 8 | Interview / Treatment Planning | 378 | ~ | 100 | **3** | **300** | **Reduced from 4 rooms** |
| | 9 | Restraint Bays | 218 | **2** | 80 | 1 | **160** | **Reduced from 3 bays to 2 bays.** One room w/ solid partitions forming bays. |
| | 10 | Restraint Ante Room | 71 | ~ | 80 | 1 | 80 | With small storage closet for equipment. |
| | 11 | Quiet Room / Interview | 75 | ~ | 100 | 1 | 100 | |
| | 12 | Timeout Room | 130 | ~ | 100 | 1 | 100 | Single violent patient, provide vision panels. |
| | 13 | Refusal Room | 228 | ~ | 120 | **1** | **120** | **Reduced from 2 rooms to 1 room.** Multiple non-violent patients, provide vision panels. |
| | 14 | Med Room | 105 | ~ | 120 | 1 | 120 | |
| | 15 | Sick Bay | 150 | **2** | 80 | 1 | **160** | **Reduced from 3 bays to 2 bays.** One room w/ solid partitions forming bays. |
| | 16 | Sick Call Exam Room | 127 | ~ | **120** | 1 | **120** | **Reduced from 140 NSF** |

## 3.6 SPACE PROGRAM: REHAB MALL[1]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.
**Bold red text: Indicates information that was revised or added during the 2015 Master Plan Update process.**

| Dept. | | Space Name | Existing[2] Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Occupational Therapy | 17 | Office - Director | 149 | 1 | **120** | 1 | **120** | **Reduced from 150 NSF** |
| | 18 | Office - Secretary | 136 | 2 | 60 | 1 | 120 | Shared |
| | 19 | Office - Music Therapist | 130 | ~ | 200 | 1 | 200 | Adjacent to Auditorium. Includes ~~some~~ **instrument** storage. |
| | 20 | Office - Occupational Therapists | 561 | 2 | 60 | **2** | **240** | **Reduced from 4 offices.** Shared. |
| | 21 | Conference / Lounge | 242 | ~ | **150** | 1 | **150** | **Reduced from 240 NSF** |
| | 22 | Auditorium | 1,344 | 140 | 10 | 1 | 1,400 | Sub-dividable **(may be difficult to sub-divide an auditorium with a stage)** |
| | 23 | Stage (in Auditorium) | 546 | ~ | **500** | 1 | **500** | **Reduced from 550 NSF** |
| | 24 | Storage | 475 | ~ | 100 | **3** | **300** | **Reduced from 5 rooms to 3 rooms** |
| | 25 | Greenhouse | NA | ~ | **400** | 1 | **400** | **Reduced from 450 NSF** |
| | 26 | Auto Detailing Garage | NA | ~ | **600** | 1 | **600** | **Reduce from 4 stalls to 2 stalls - can add more stalls in Phase 2. Includes office.** |
| | 27 | Storage | NA | ~ | 100 | 1 | 100 | **Storage for Garage and Greenhouse** |
| | 28 | Grounds Care Shop | 2,000 | ~ | **800** | 1 | **800** | **Reduced from 1,100 NSF. Includes office.** |
| | 29 | Patient Incentive Program Store | 342 | ~ | **250** | 1 | **250** | **Reduced from 400 NSF** |
| | 30 | Storage | 128 | ~ | 100 | 1 | 100 | |
| | 31 | Office | 158 | **1** | 60 | 1 | **60** | **Reduced to one office staff** |
| | 32 | Print Shop | 226 | ~ | **180** | 1 | **180** | **Reduced from 240. Capacity = 8-10 patients** |
| | 33 | Sheltered Workshop | 730 | ~ | **450** | 1 | **450** | **Capacity = 20-25 persons. Reduced from 730 NSF.** |
| | 34 | Patient Computer Lab | 236 | ~ | **160** | 1 | **160** | **Reduced from 240. Capacity = 8-10 patients.** |
| | 35 | Patient Library | 362 | ~ | **250** | 1 | **250** | **Reduced from 350 NSF.** At perimeter, accessible after Mall hours. |
| | 36 | Internet Café | 168 | ~ | **125** | 1 | **125** | **Reduced from 170 NSF.** At perimeter, accessible after Mall hours. |
| | 37 | Classroom - Laundromat | 249 | ~ | 350 | **0** | **0** | **Deleted: Every Patient Unit has a dedicated Laundromat.** |

## 3.6 SPACE PROGRAM: REHAB MALL[1]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.

**Bold red text: Indicates information that was revised or added during the 2015 Master Plan Update process.**

| Dept. | | Space Name | Existing[2] Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Occupational Therapy | 38 | Classroom - Adult Literacy[3] | 470 | ~ | 300 | 1 | 300 | Capacity = 15-20 patients. See Footnote 3. |
| | 39 | Adult Literacy Resource Room | 153 | ~ | 100 | 1 | 100 | Reduced from 150 NSF |
| | 40 | Adult Literacy Offices | 294 | 2 | 60 | 1 | 120 | Reduced from 2 offices to 1 office. |
| | 41 | Classroom - Kitchen | 205 | ~ | 150 | 1 | 150 | Reduced from 300 NSF. Capacity = 5 patients plus staff. Adjacent to Dining CR. |
| | 42 | Classroom - Dining | 254 | ~ | 120 | 1 | 120 | Capacity = 8 persons (5 patients, 3 staff). Adjacent to Kitchen CR. |
| | 43 | Classroom - Art | 509 | ~ | 500 | 1 | 500 | |
| | 44 | Kiln | 99 | ~ | 100 | 1 | 100 | Adjacent to Art Classroom |
| | 45 | Classroom - Various Programs[3] | 615 | ~ | 400 | 1 | 400 | Reduced from 615 NSF. Capacity = 20-25 patients. See Footnote 3. |
| Recreational Therapy | 46 | Office - Director | 131 | ~ | 120 | 1 | 120 | Reduced from 150 NSF |
| | 47 | Office - Recreational Therapists | 700 | 2 | 60 | 3 | 360 | Reduced from 5 offices to 3 offices |
| | 48 | RT Staff Shower - Female | 25 | ~ | 65 | 1 | 65 | Combine female RT staff toilet, shower and lockers in one room. Locate adjacent to gymnasium. |
| | 49 | RT Staff Toilet - Female | 66 | ~ | 60 | 1 | 60 | |
| | 50 | RT Staff Lockers - Female | 144 | ~ | 100 | 1 | 100 | |
| | 51 | RT Staff Shower - Male | NA | ~ | 65 | 1 | 65 | Combine male RT staff toilet, shower and lockers in one room. Locate adjacent to gymnasium. |
| | 52 | RT Staff Toilet - Male | NA | ~ | 60 | 1 | 60 | |
| | 53 | RT Staff Lockers - Male | NA | ~ | 100 | 1 | 100 | |
| | 54 | Large Gymnasium | 7,196 | ~ | 6,000 | 1 | 6,000 | Sized for 50' x 90' basketball court |
| | 55 | Small Gymnasium | NA | ~ | 3,200 | 0 | 0 | Defer to later phase. Adjacent to large |
| | 56 | Weight Room | 304 | ~ | 200 | 1 | 200 | Reduced from 300 NSF. Adjacent to gyms. |
| | 57 | RT Clinic | 559 | ~ | 0 | | 0 | |
| | 58 | RT Equipment Storage | 115 | ~ | 125 | 1 | 125 | Reduced from 200 NSF |
| Dining | 59 | Dining Room | NA | 120 | 15 | 1 | 1,800 | Capacity = 96 patients plus 24 staff |
| | 60 | Serving Kitchen | NA | ~ | 500 | 1 | 500 | Food will be prepared in the existing Kitchen |

## 3.6 SPACE PROGRAM: REHAB MALL[1]

Black text: Indicates information that is identical to the 2005 Master Plan Space Program.
**Bold red text: Indicates information that was revised or added during the 2015 Master Plan Update process.**

| Dept. | | Space Name | Existing[2] Total NSF | Proposed Occ. | Proposed NSF | Proposed No. | Proposed Total NSF | Remarks |
|---|---|---|---|---|---|---|---|---|
| Legal | 61 | **Video Courtroom** | NA | **25** | **500** | **1** | **500** | **Finishes, furniture and equipment similar to a typical small courtroom** |
| Patient Restrooms | 62 | **Female Patient Restroom** | NA | **48** | **215** | **1** | **215** | **Centrally located restroom for all female patients. Provide fixture count per UPC for 48 females (1/2 of 96 max. patients in Phase 1 Rehab Mall)** |
| | 63 | **Male Patient Restroom** | NA | **48** | **215** | **1** | **215** | **Centrally located restoom for all male patients. Provide fixture count per UPC for 48 males (1/2 of 96 max. patients in Phase 1 Rehab Mall)** |
| Staff Restrooms | 64 | **Female Rehab Therapy and OT Staff Restroom** | NA | **24** | **160** | **1** | **160** | **Centrally located restroom for female staff (except Recreational Therapy). Provide fixture count per UPC for 24 female staff.** |
| | 65 | **Male Rehab Therapy and OT Staff Restroom** | NA | **24** | **160** | **1** | **160** | **Centrally located restroom for male staff (except Recreational Therapy). Provide fixture count per UPC for 24 male staff.** |
| Shared | 66 | **Housekeeping Closet** | NA | **~** | **60** | **1** | **60** | **Centrally located** |
| | | Total | 22,184 | | **Total Net SF (NSF)** | | **23,160** | |
| | | | | | **Estimated Total GSF = 1.8 x Total NSF** | | **41,688** | |

**Footnotes:**

1. **This Rehab Mall will only serve the patients in the new 144-bed Patient Care Facility.**
2. The existing Rehab Mall functions are located in Buildings A, B, C, K, Cooke, and the Garden. **After the New Goddard Patient Care Facility is completed the existing Rehab Mall functions will continue to serve the lower risk patients that will be housed in Buildings E, F, H, and I.**
3. **Ideally all general purpose classrooms (shaded gray) should be co-located to facilitate sharing by Rehab Therapy, Occupational Therapy, and Recreational Therapy.**

# 4.0 NEW GODDARD PATIENT CARE FACILITY – CONCEPTUAL DESIGN

## 4.1 Introduction

The conceptual design of the 144-Bed Goddard Patient Care Facility is based on The Colorado Mental Health Institute in Pueblo, Colorado. Its unique architectural form promotes intensive treatment, patient privacy, and high security. The new facility includes six, 24-bed Patient Care Units and a dedicated Rehab Mall. Each patient has three wings – each with eight private bedrooms and a shared shower room. With the exception of the Hardened Patient Care Unit (see 4.4), two patient bedrooms share a toilet room. Each patient care unit includes three seclusion rooms, located within a secure, separate area. Each patient care unit also includes areas for socialization, consultation, and treatment. A nourishment kitchen and patient laundry are provided on each unit. The patient unit configuration promotes safety by providing direct, line of sight observation of each corridor from a centralized nurse station. Rooms that are not visible from the nurse station, such as staff support services, are located in controlled access, "off stage" areas. Most rooms will also be video monitored.

The Preliminary Parking Study (Appendix 5.3) estimates that 272 additional parking spaces will be needed on the Hospital campus to support the 144-Bed Goddard Patient Care Facility. Approximately 98 of the additional spaces are located adjacent to the new facility (see Site Plan, P. 4-4). Potential locations for the remaining 174 spaces are indicated on the Planning Zones drawing (see P. 2-15).

## 4.2 Site Plan

The Site Plan (see P. 4-4) shows that the new Goddard Patient Care Facility will be strategically located within the footprint of the existing Goddard building. This location for the new facility allows Guensberg to remain operational during construction. The road that loops around the existing Goddard building will be re-constructed. Patients and visitors will enter the First Floor through a sally port located on the Mauka side of the facility. The service entrance and loading dock are located on the Ground Floor on the Makai side of the facility. Approximately 98 parking spaces are located adjacent to the new facility. A pedestrian bridge and stair/elevator tower will link the new Goddard Patient Care facility to the central campus, which is approximately 25' lower in elevation..

## 4.0 NEW GODDARD PATIENT CARE FACILITY – CONCEPTUAL DESIGN

### 4.3 Ground Floor Plan

The Rehab Mall on the Ground Floor (see P. 4-5) provides spaces for Rehabilitation Therapy, Occupational Therapy, and Recreational Therapy. A centrally-located Operations Center will oversee and control patient activities on the Ground Floor. Patients will typically spend a good part of each day on this floor so a Dining Room is also provided. Courtyards and a recreational yard provide opportunities for outdoor activities, and bring daylight into interior areas.

A secure perimeter will separate the facility support functions (loading dock, materials management, storage, central plant) on the northwest side of the Ground Floor from the Rehab Mall.

### 4.4 First Floor Plan

The First Floor of the new Goddard Patient Care Facility (see P. 4-6) includes the main patient and visitor entrance. A bank of elevators and a stair adjacent to the main entrance facilitates connections to the Ground Floor below, and the Second, and Third Floors above. The First Floor includes two patient care units:

- Most patients will be admitted to the 24-Bed Admissions Patient Care Unit, and will stay there during their initial evaluation period. The Acute Rehab Mall located in the center of the First Floor will be used by the patients on this unit. Except for the addition of the Acute Rehab Mall, the design of this unit is similar to a 24-Bed Typical Patient Care Unit.
- The other unit on the First Floor is a 24-Bed Hardened Patient Care Unit. This unit was added during the *2015 Master Plan Update* process and is intended to house patients who present an extremely high-risk of adverse behavior. The patient rooms in this unit will not share a toilet room – each room will have its own toilet, lavatory, and shower.

Portions of the Ground Floor roof that extend beyond the perimeter of the First Floor create private, secure outdoor recreational yards.

## 4.0 NEW GODDARD PATIENT CARE FACILITY – CONCEPTUAL DESIGN

### 4.5 Second Floor Plan

The Second Floor (see P. 4-7) includes two, 24-Bed Typical Patient Care Units. One of the units will be modified to provide care for patients with medical issues. The details of those modifications (medical gases, medical equipment, etc.) will be determined during the future design phases. However, it is important to note that the design of the "medical" patient care unit should be as close as possible to the design of a typical patient care unit. This approach will allow the medical unit to be used by other patients when the census of sick patients is low.

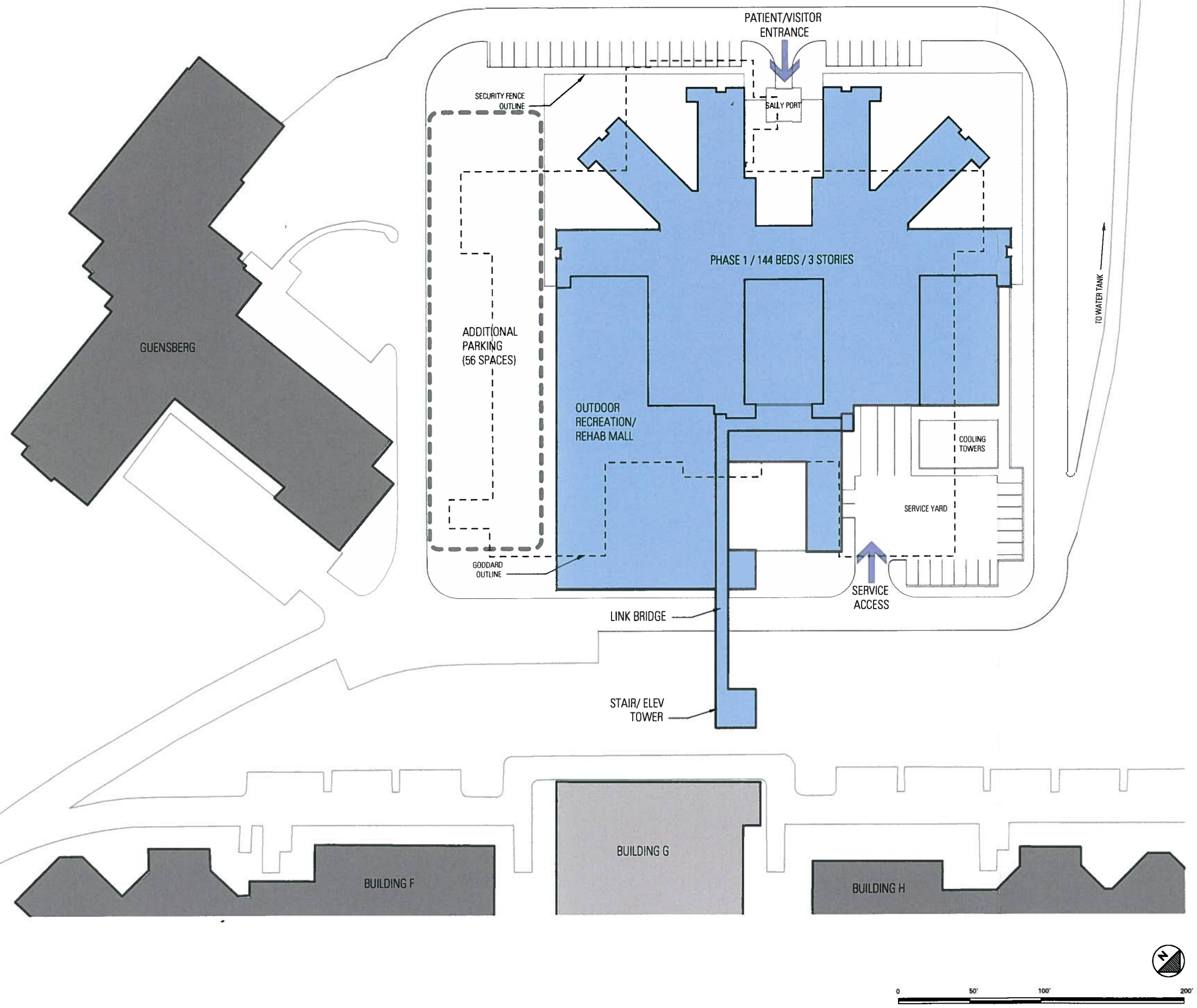
### 4.6 Third Floor Plan

The Third Floor (see P. 4-8) includes two, 24-Bed Typical Patient Care Units.

### 4.7 Building Section

The Building Section (see P. 4-9) illustrates how the design of the new Goddard Patient Care Facility adapts to the existing topographic conditions. The four-story structure is built into the sloping site in order to reduce its apparent height and volume. Because of the elevation change the Makai side of the Ground Floor is mostly above grade, giving it access to natural daylight. The Building Section also illustrates the pedestrian bridge and elevators that are required because of the elevation difference (25' +/-) between the upper campus and the central campus.

Three floors of patient care units are required in order to get the desired capacity (144 beds) on the Goddard site. This results in a building that exceeds the 25' AG-2 zoning height limit. This issue will need to be addressed during the future Plan Review Use (PRU) Permit process.




## SITE PLAN - NEW GODDARD PATIENT CARE FACILITY


## GROUND FLOOR PLAN - NEW GODDARD PATIENT CARE FACILTY

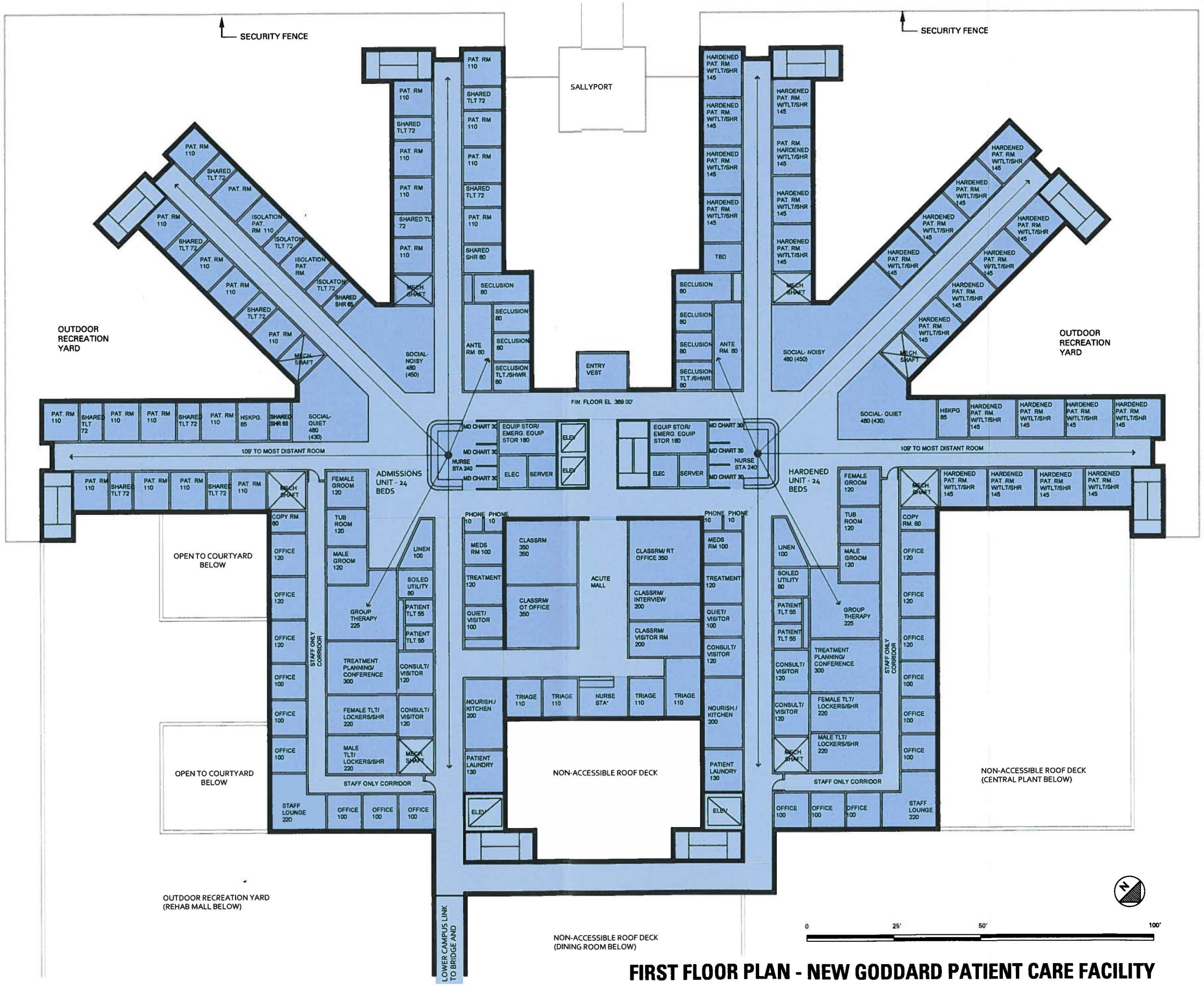
59,600 GSF

HAWAII STATE HOSPITAL

ARCHITECTS HAWAII LIMITED

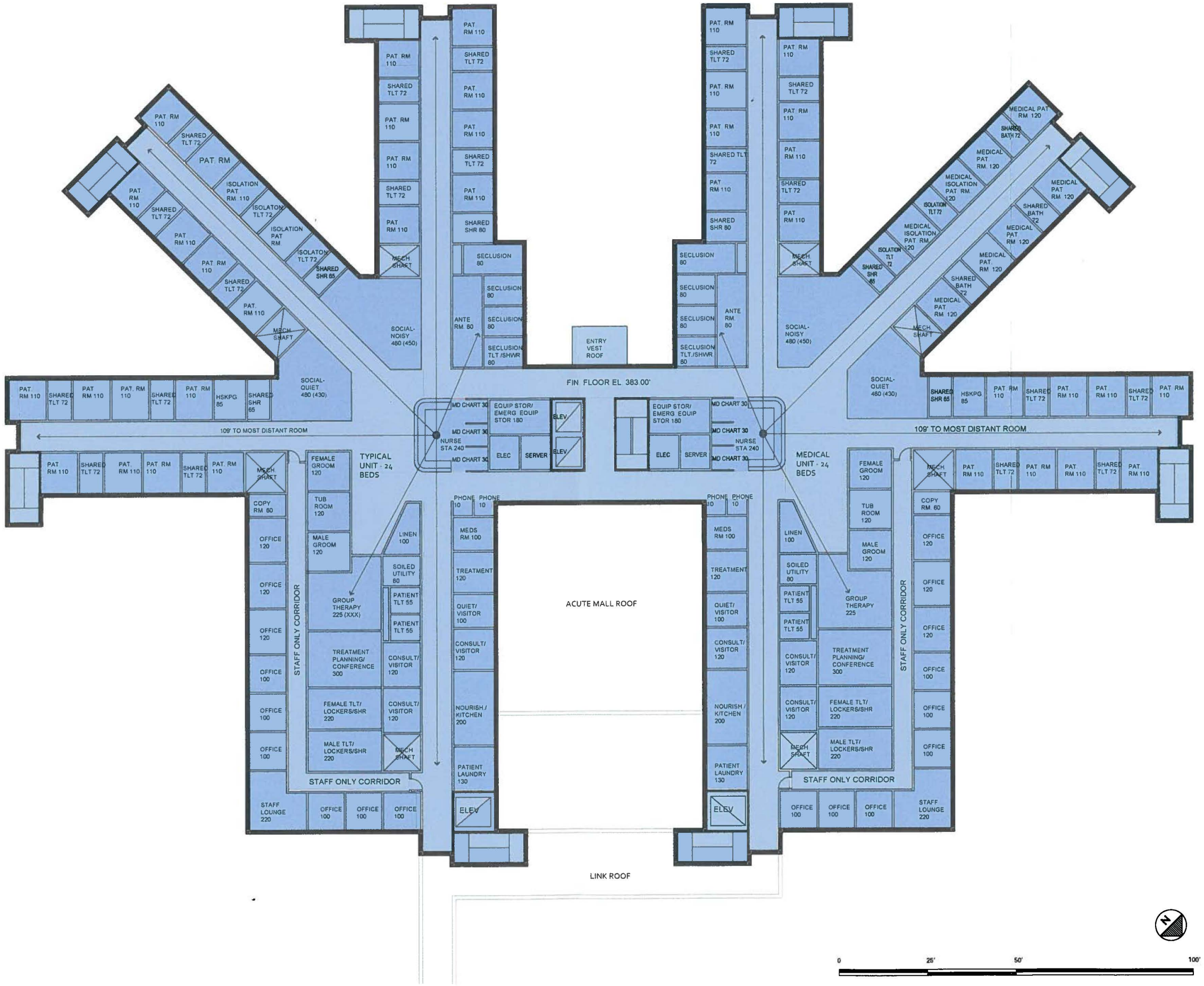
**HAWAII STATE HOSPITAL | 2015 MASTER PLAN UPDATE**

AUGUST 28, 2015 | DAGS JOB NO. 12-20-2698



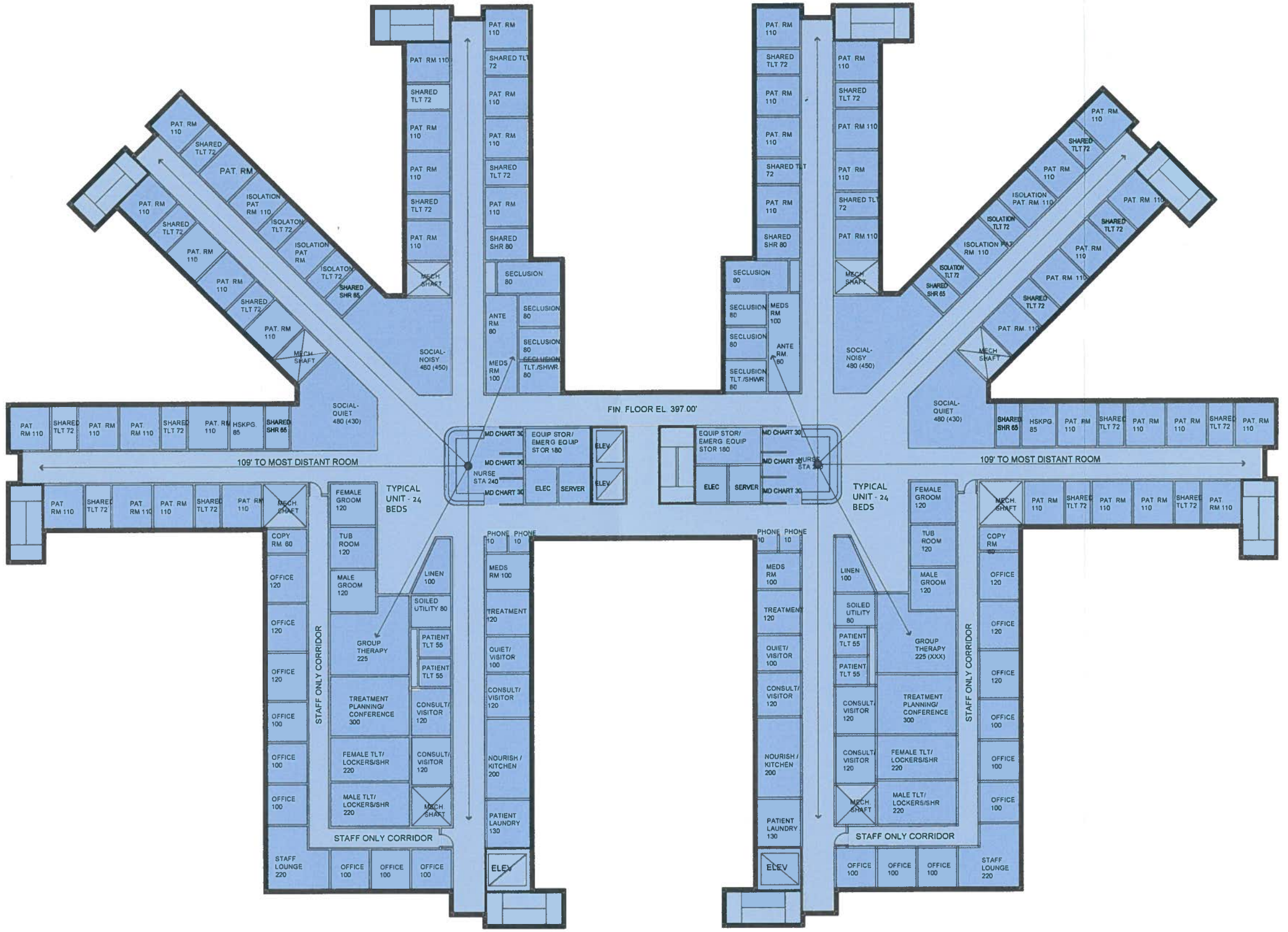

## FIRST FLOOR PLAN - NEW GODDARD PATIENT CARE FACILITY

41,770 GSF




## SECOND FLOOR PLAN - NEW GODDARD PATIENT CARE FACILITY

37,400 GSF

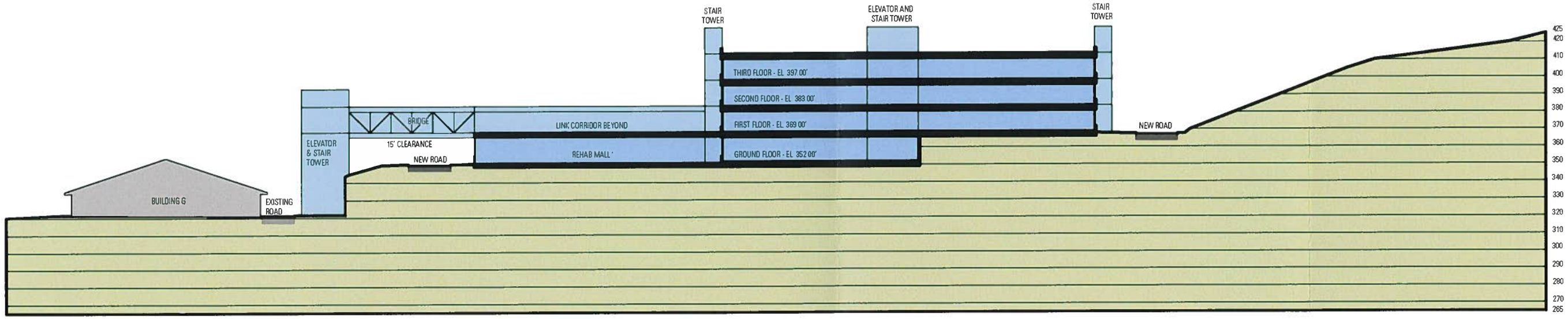


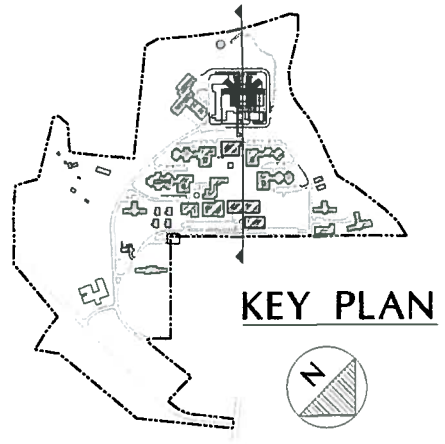

## THIRD FLOOR PLAN - NEW GODDARD PATIENT CARE FACILITY

37,400 GSF

HAWAII STATE HOSPITAL

ARCHITECTS HAWAII LIMITED




**BUILDING SECTION - NEW GODDARD PATIENT CARE FACILITY**

5.1 Foundational Document

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

**STATE OF HAWAII**
**DEPARTMENT OF HEALTH**
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

September 17, 2014

Foundational Document used by DAGS in estimating hospital capacity requirements.

TO: The Honorable Dean H. Seki
Comptroller
Department of Accounting and General Services

FROM: Linda Rosen, M.D., M.P.H. Linda Rosen MD MPH
Director of Health

SUBJECT: Estimating Capacity Requirements for Hawaii State Hospital (HSH) Master Plan Activities

Please use the attached as foundational documents in estimating the capacity requirements for inpatient programs for the HSH Master Plan activities.

As we learn of other source materials, we will make these available to you.

If you have any questions, please call Mark A. Fridovich, Ph.D., M.P.A, Administrator, Adult Mental Health Division (AMHD) at 586-4770.

Thank you.

Attachment

Foundational Document used by DAGS in estimating hospital capacity requirements.

Why does Hawaii have to have a State Hospital?

There are two main reasons –
1. To provide for the inpatient clinical (mental health or psychiatric) treatment of individuals (adults and children) where there is no other willing provider (state functions as treatment provider of last resort). This is similar to the State's role with respect to HHSC.

2. To receive court ordered forensic commitments of individuals ordered into the custody of the Director of Health.

Although there is some degree of overlap of these two reasons, during Fiscal 2012 HSH received only forensic commitments; no civil admissions occurred.

The Director of Health has the authority to designate another place, via the contracting process, to receive and treat these patients. The DOH assessment is that there is little, if any, additional available inpatient capacity for purchase and there does not appear to be other providers willing to assume the clinical responsibility and liability for providing these services. Other suitable facilities would have to provide forensic services including access to courts, defense attorneys, forensic examiners, specialized programming to address the legal issues, and community reintegration opportunities, must be accredited and licensed, have the ability to integrate mental and physical health treatment, meet applicable forensic requirements (e.g. custody), and be able to deliver services consistent with state and federal law.

If Hawaii has to provide inpatient hospital services – What is the right number of beds?

There is a relationship between state operated or funded inpatient beds that is approximately inverse to the availability of community inpatient psychiatric beds. In other words, to the degree more inpatient and other levels of care are available in community placements, there is lower demand for state operated inpatient placements; when less community capacity is available, the demand for state placements increases. During the course of FY 2012, a number of individuals were committed to HSH who have acute medical or long term care needs; they were committed to HSH because there was no other available place to provide for their physical health or long term care in the community. The utilization of capacity at the HSH is diminished when there is availability and willingness of other inpatient and long term care settings to admit these individuals. In the absence of adequate community capacity, demand for state hospital beds is higher.

The question has been raised as to whether Hawaii has an adequate number of inpatient beds. The State Health Planning and Development Agency (SHPDA) reported (attachment 5) that Hawaii has 16 % fewer acute beds than the US average (2.3 per 1000 for Hawaii, compared to 2.7 per 1000 nationally). This report was completed before the bankruptcy and closure of Hawaii Medical Center in January 2012.

The question has also been raised as to whether Hawaii has an adequate number of long term care beds. According to a 2006 SHPDA report (attachment 5) Hawaii ranks 48th among the states in number of long term care beds. Both HSH and Healthcare Association of Hawaii (HAH) members report discharge delays due to lack of available bed for the placement of individuals in acute hospitals who require long term care; it is known that a number of admissions to HSH are related to the limited availability of long term care.

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Is there truly inadequate capacity at HSH? If it is crowded and over census, does that mean there are too few beds?

The observation that many people currently in HSH do not require an inpatient level of care doesn't necessarily mean that Hawaii has enough inpatient capacity. It is possible there is a number of potential patients who are not currently referred (for instance, because HSH does not take civil admits or civil transfers) who would be appropriate candidates for transfer if HSH had space available for civil patients who would be more effectively treated there than in community facilities.

What is the optimal size for the State Hospital for Psychiatric Services?

A number of authors have proposed benchmarks to be used in calculating the appropriate amount of public sector, inpatient psychiatric capacity needed for state operated hospitals. These benchmarks range from 14 (beds)/100,000 adult population to 50/100,000. Some benchmarks are empirical; for example, these represent the average of current capacity found across the United States. Some benchmarks make explicit assumptions about potentially offsetting factors (e.g. publicly financed inpatient treatment available in private, private not for profit, or community hospitals; numbers of individuals with severe mental illnesses in jails) and others do not. Drawing conclusions based upon these benchmarks without a clear understanding of the assumptions may lead to incorrect assessments of needed capacity. This report is primarily intended to describe a method for calculating the "optimal" size of the public sector provided inpatient capacity. The scope of the SAT is for Hawaii's adult population, although the methods may be useful in estimating the optimal size of public sector capacity needed for children and adolescents.

Definitions

Optimal size – the level above or below which some significant over utilization, underutilization, or other cost is incurred. The costs incurred could be calculated (cost difference between a hospital and community residential bed) or estimated (e.g. increased probability of a negative outcome associated with inability to hospitalize a person, quantifying risk).

Factors

Population factors (i.e., the higher number of adults at risk of admission, the higher the number of beds needed at the optimal level). This is relatively straightforward to measure.

Socioeconomic Status (SES) adjustment to population (i.e., a lower SES is correlated with an increased risk of having a Severe and Persistent Mental Illness (SPMI), and a higher risk of hospitalization).

There is no reason to believe that prevalence of Serious Mental Illness, or SPMI, is any different in Hawaii than in the rest of the US, after adjusting for SES. There is no reason to believe that the individuals who require hospitalization at HSH present with fundamentally different assessment or treatment challenges than in the rest of the US.

Availability of private sector, community based inpatient services (i.e., a greater availability of community inpatient services is associated with a reduced need for public sector inpatient services).

Availability of private sector, community based outpatient services (i.e., a greater availability of community outpatient services is associated with a reduced need for public sector inpatient capacity).

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**While HSH and state funded adult inpatient utilization is at or over capacity, private sector and HHSC adult inpatient psychiatric utilization is underutilized relative to available capacity. It is possible, or even likely, that a disproportionate responsibility for inpatient services to adults has been shifted to the state operated facility.**

Foundational Document used by DAGS in estimating hospital capacity requirements.

# Forecasting Hawaii State Hospital bed capacity

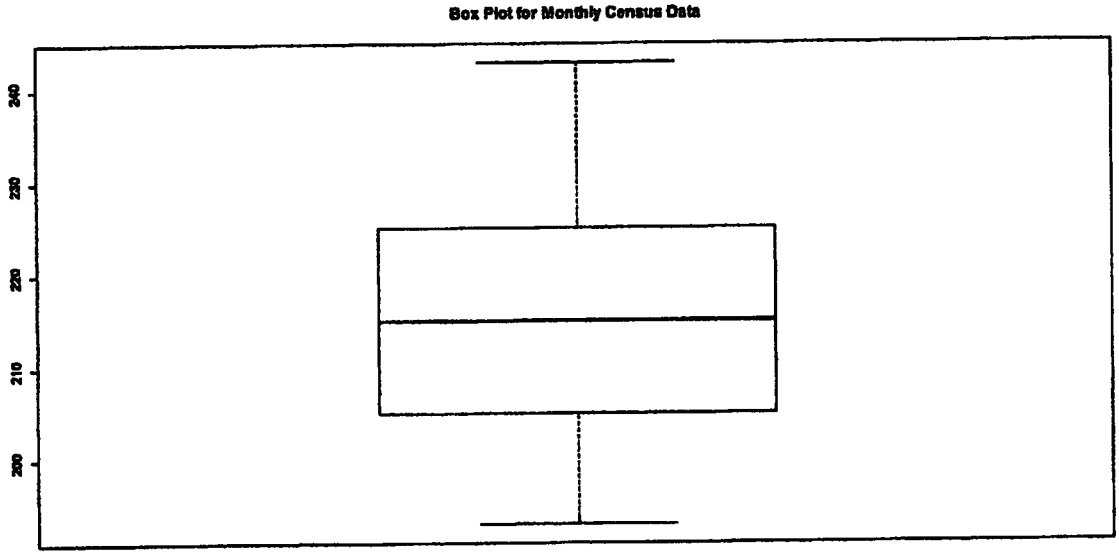
**Partha Bolla**
**Utilization and Management Department**
**March 24, 2014**

## Introduction:

The data consist of monthly average census of patients from Hawaii State Hospital and Kahi-Mohala Behavioral Center. The final data available after formatting for analysis is from July 1, 2004 to January 1, 2014 for 115 months. For better understanding of the data, the results of the exploratory data analysis are presented below.

| *Table1: Descriptive Statistics Monthly Average Census* | |
|---|---|
| Mean | 215 |
| Standard Error | 1 |
| Median | 215 |
| Mode | 200 |
| Standard Deviation | 11.80 |
| Range | 50 |
| Minimum | 193 |
| Maximum | 243 |
| Count | 115 |

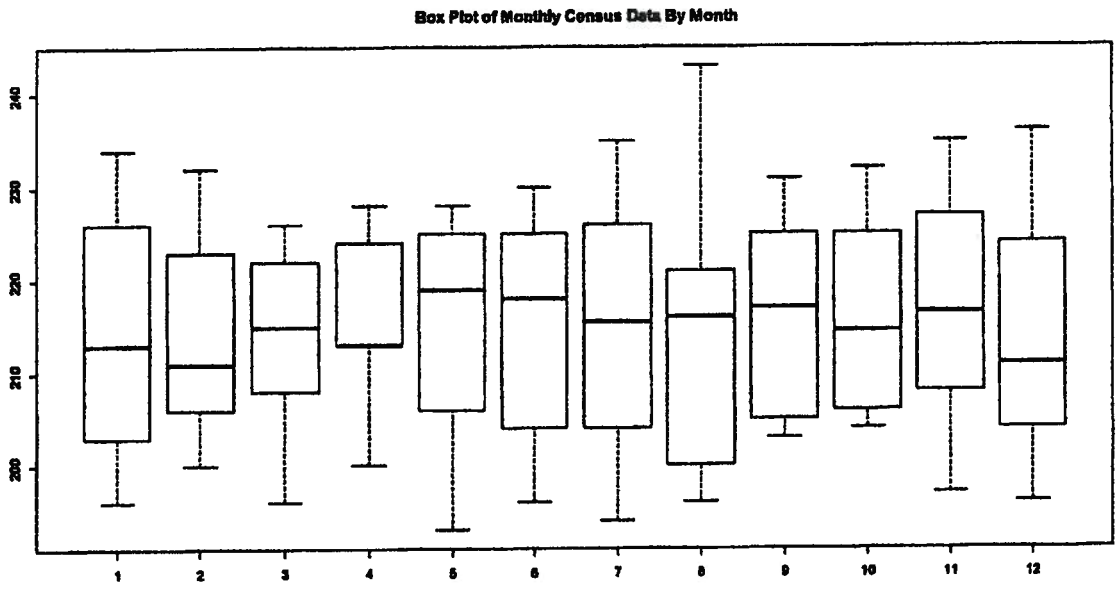
## Figure 1:



Foundational Document used by DAGS in estimating hospital capacity requirements.

The presence of outliers can affect the estimate of the mean, trend or seasonality. From the Table1, The mean and median have same values, showing the symmetrical nature of the distribution. The values of standard Error, standard deviation, and range explain that the data have no any unusual values or outliers. Figure 1: Box Plot also did not show any outliers except the whisker on the top is slightly longer than the bottom one implying positive Skewness and this is not an issue and hence the data is set for analysis.

**Figure 2:**




The Box Plot in the Figure 2, comparing twelvemonths for average monthly census of patients, shows that there is significant variation within and between months in the data.

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**Figure 3:**

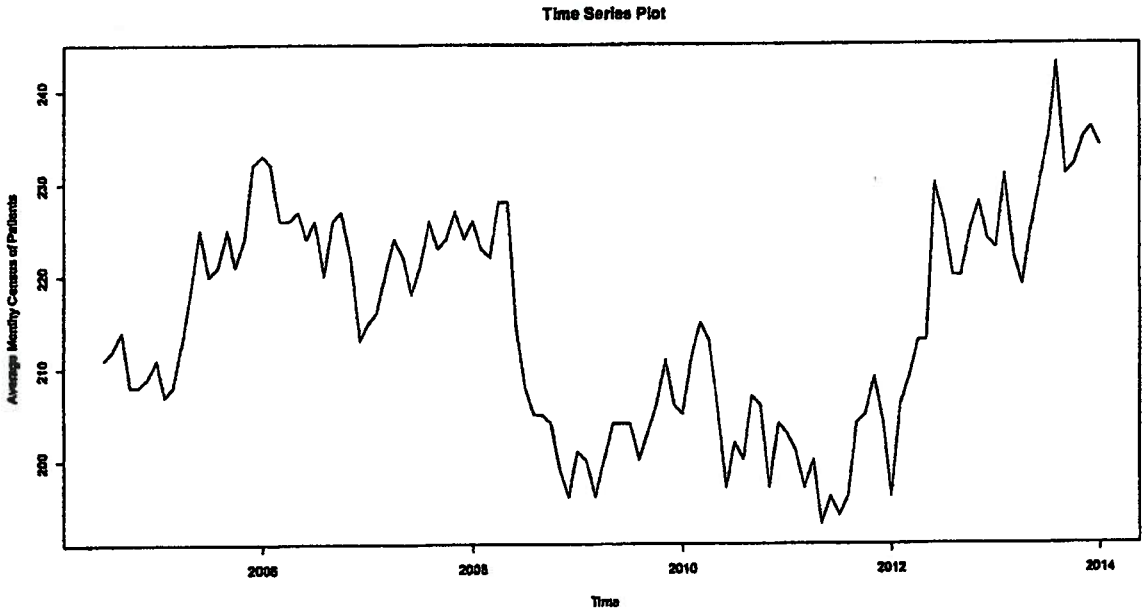
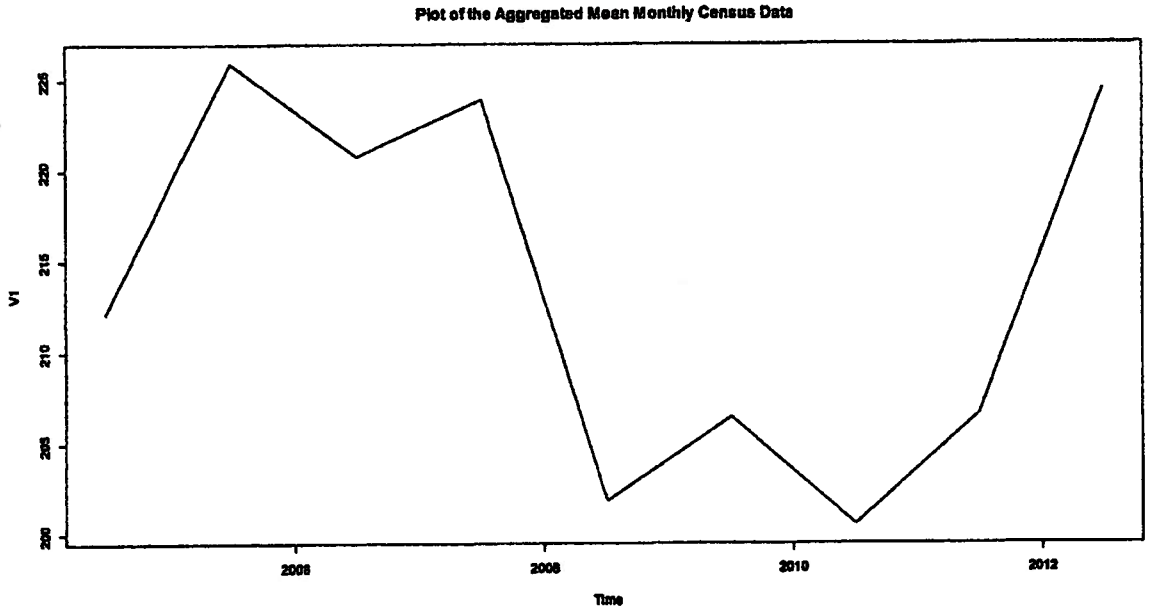



**Figure 4:**




**Model:** The goal is to extrapolate the bed capacity based on the historical data. The assumption was made that the future event would conform to the data now available. The accuracy of extrapolation is affected by two major conditions: the accuracy of the historical data and the extent to which underlying conditions will change in the future.

Foundational Document used by DAGS in estimating hospital capacity requirements.

It can be seen from the time plot (Figure 3) that this time series does not show any seasonality but it does consist of a trend component and an irregular component. It is again explained from the aggregate mean monthly plot (Figure 4) that the time series is neither stationary nor seasonal but shows irregular and trend features. That is the time series can be described as using an additive model with increasing trend and no seasonality. Holt's exponential smoothing can be used to make short-term forecasts for the data that have trend and fluctuations.

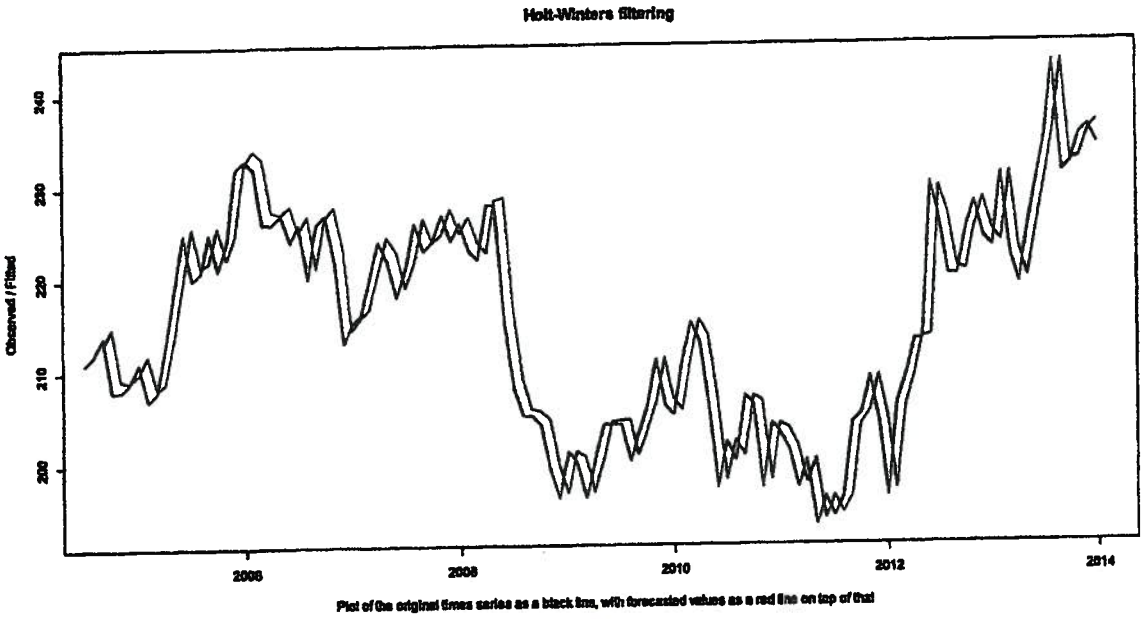
Holt's exponential smoothing estimates the level and slope at the current time point. Smoothing is controlled by two parameters, alpha, for the estimate of the level at the current time point, and beta for the estimate of the slope b of the trend component at current time point. The parameter alpha and beta have values between 0 and 1, and values that are close to 0 mean that little weight is placed on the most recent observations when making forecast of future values. HoltWinters () function in R was used to make forecasts and to fit a predictive model. The results of the model are discussed below.

**Result 1:** Holt-Winters exponential smoothing with trend and without seasonal component.
HoltWinters(x = census2ts, gamma = FALSE)
Smoothing parameters:
Alpha: 0.9382056
Beta: 0.01047498
Gamma: FALSE
Coefficients:
a 234.1545781
b 0.5151713
Sum of squares of the errors of the model
[1] 2797.408

The estimated value of alpha is 0.938 very high, explains that the current value of level is based mostly upon very recent observations in the time series. The estimated value of beta parameter is 0.011, explains that the slope of the trend component forecasts are based on both recent and less recent observations (although somewhat more weight is placed on recent observations). This makes good intuitive sense, since the level changes a lot compared to slope over time. The value of the sum-of-squared-errors for the in-sample forecast errors is 2797.4.

Foundational Document used by DAGS in estimating hospital capacity requirements.

**Figure 5:**

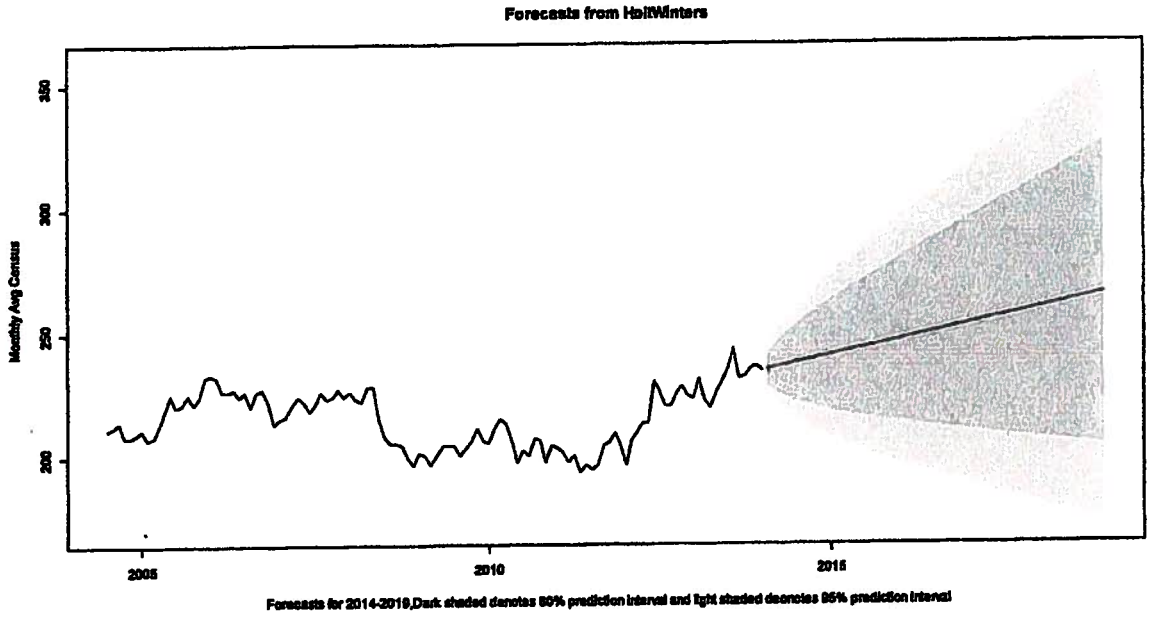



In Figure 5, the plot of the original time series as a black line, with the forecasted values as a red line on top of that is drawn. It can be seen from the picture that the in-sample forecasts agree pretty well with the observed values, although they tend to lag behind the observed values a little bit.

As for simple exponential smoothing, forecasts are made for future times not covered by the original time series by using the "forecast.HoltWinters () function in R". For this monthly census, the data available for analysis is from July 2004 to January 2014, so the predictions are made for February 2014 to January 2019, i.e., for the next five years (60 more data points), and the forecast plot is given below.

Foundational Document used by DAGS in estimating hospital capacity requirements.

**Figure 6:**



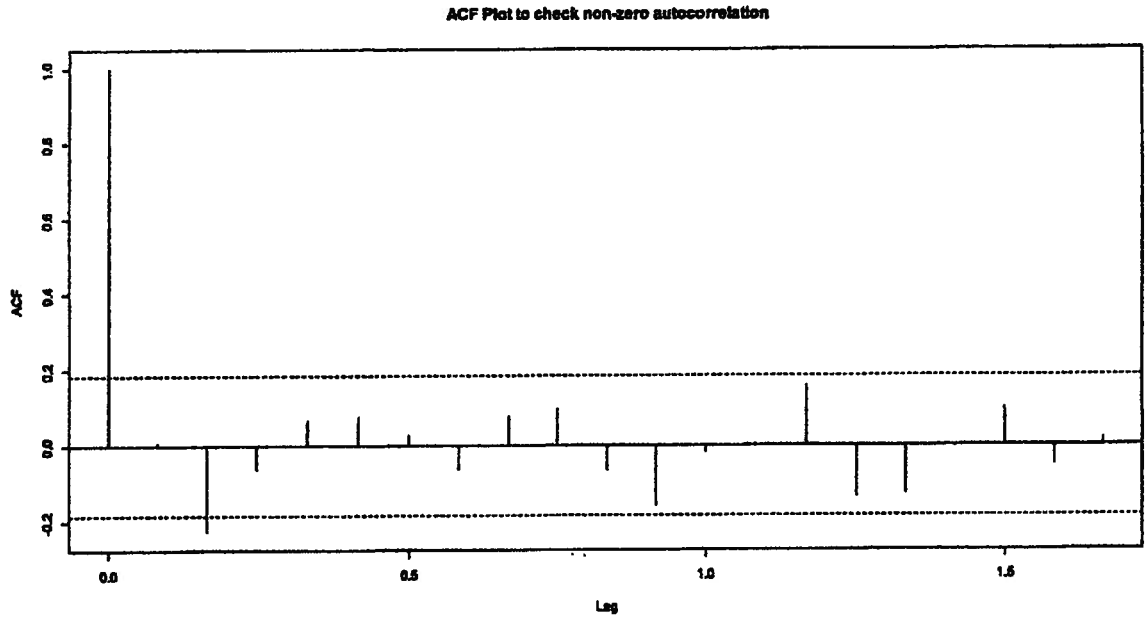

Forecast is done for five years with an 80% prediction interval, and a 95% prediction interval for the forecast. For example, the forecasted monthly average census for January 2015 is about 240 with a 95% prediction interval of (207, 274). The forecasted estimates of monthly average census for 60 months are given in the Table 2 at the end.

One measure of accuracy of the predictive model is the sum-of-squared-errors (SSE) for the in-sample forecast errors. The in-sample forecast errors are stored in the named element "residuals" of the list variable returned by "forcast.HoltWinters ()". If the predictive model cannot be improved upon, there should be no correlation between forecast errors for successive predictions. In other words, if there are correlations between forecast errors for successive predictions, it is likely that the Holt's exponential smoothing forecasts could be improved upon by another forecasting technique.

To figure out whether this is the case, Correlogram of the in-sample forecast errors for lags 1-20 is obtained and is given below.

Foundational Document used by DAGS in estimating hospital capacity requirements.

**Figure 7:**




In the Figure 7, the Correlogram shows that the sample autocorrelation for the in-sample forecast errors at lag 2 exceeds the significance bounds. However, it is expected that one in 20 of the autocorrelations for the first twenty lags to exceed the 95% significance bounds by chance alone. To test whether there is significant evidence for non-zero correlations at lags1-20, the Ljung-Box test was done and the results are given below:

**Result 2:**

**Ljung-Box test**

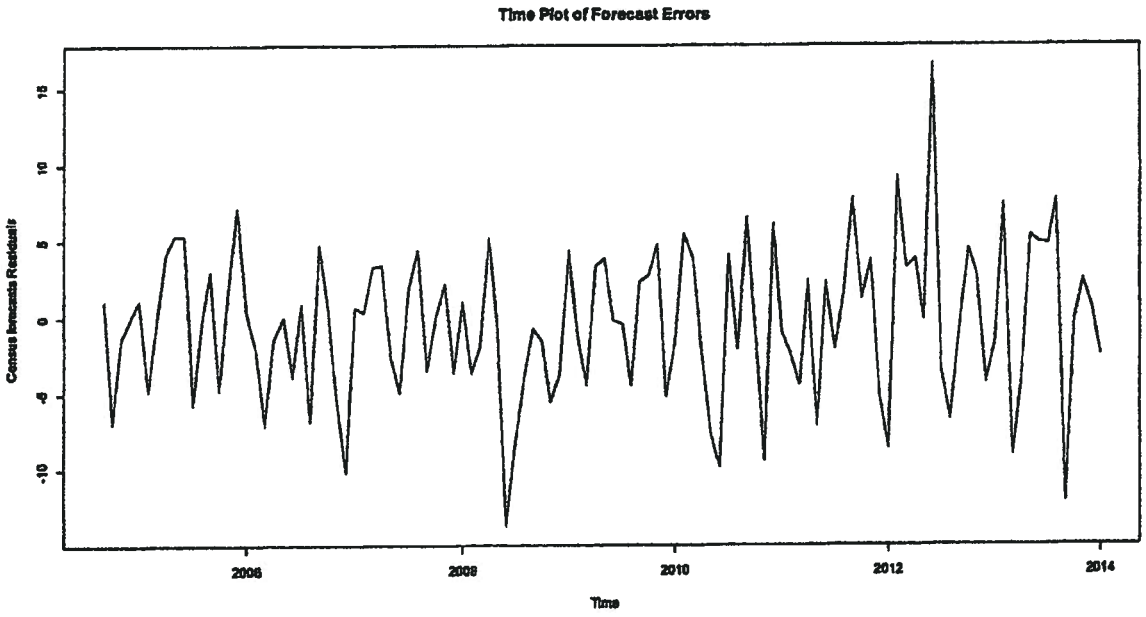
**X-squared = 23.5536, df = 20, p-value = 0.2624**

Here the Ljung-Box test statistics is 23.6 and the p-value is 0.2624, so there is little evidence of non-zero autocorrelations in the in-sample forecast errors at lags 1-20

To be sure that the predictive model cannot be improved upon, it is also a good idea to check whether the forecast errors are normally distributed with mean zero and constant variance. To check whether the forecast errors have constant variance, a time plot of the in-sample forecast errors is given below:

Foundational Document used by DAGS in estimating hospital capacity requirements.

**Figure 8:**

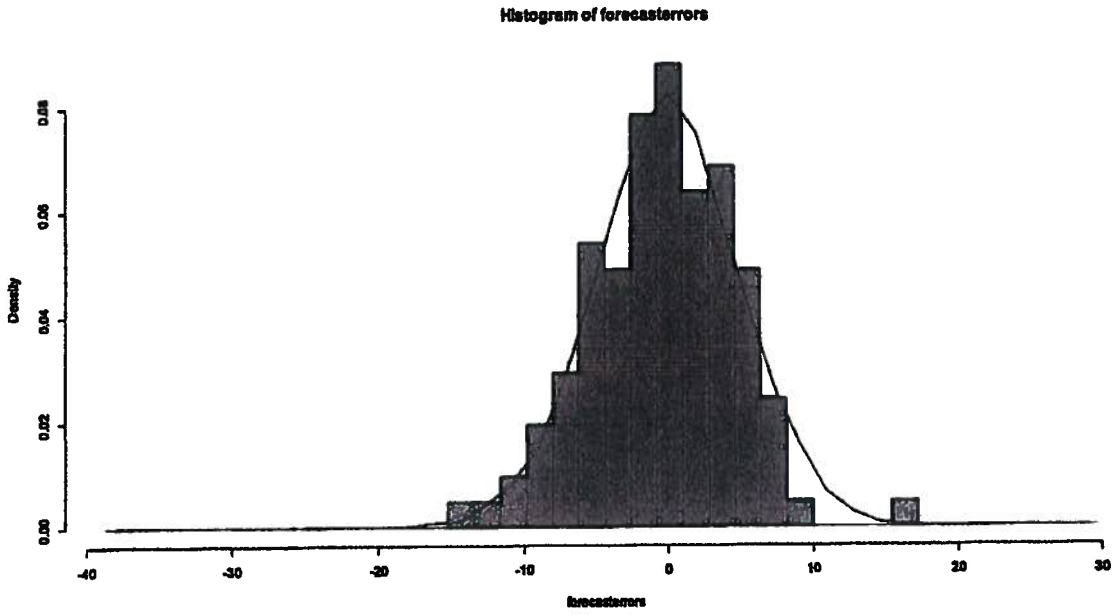



The plot shows that the in-sample forecast errors seem to have roughly constant variance over time.

To check whether the forecast errors are normally distributed with mean zero, a histogram of the forecast errors, with an overlaid normal curve that has mean zero and the same standard deviation as the distribution of forecast errors is plotted and is given below:

Foundational Document used by DAGS in estimating hospital capacity requirements.

**Figure 9:**




From the histogram of forecast errors, it seems plausible that the forecast errors are normally distributed with mean zero and constant variance.

**Conclusion:** It is observed that the ACF plot and Ljung-Box test show that there is little evidence of autocorrelations in the forecast errors, while the time plot of forecast errors and histogram of forecast errors show that it is plausible that the forecast errors are normally distributed with mean zero and constant variance. Therefore it could be concluded that Holt's exponential smoothing provides an adequate predictive model for monthly average census, which probably cannot be improved upon. Furthermore, the assumptions that the 80% and 95% predictions intervals were based upon (that there are no autocorrelations in the forecast errors, and the forecast errors are normally distributed wit mean zero and constant variance) are probably valid. These results show that the Monthly Average Census data appear to provide sufficient information for decisions regarding number of beds needed to Hawaii State Hospital.

**Table 2:**

| Month | Point.Forecast | Lo.80 | Hi.80 | Lo.95 | Hi.95 |
|---|---|---|---|---|---|
| Feb-2014 | 235 | 228 | 241 | 225 | 244 |
| Mar-2014 | 235 | 226 | 244 | 222 | 249 |
| Apr-2014 | 236 | 225 | 246 | 219 | 252 |
| May-2014 | 236 | 224 | 249 | 217 | 255 |
| Jun-2014 | 237 | 223 | 251 | 216 | 258 |
| Jul-2014 | 237 | 222 | 252 | 214 | 261 |

Foundational Document used by DAGS in estimating hospital capacity requirements.

| | | | | | |
|---|---|---|---|---|---|
| Aug-2014 | 238 | 221 | 254 | 213 | 263 |
| Sep-2014 | 238 | 221 | 256 | 211 | 265 |
| Oct-2014 | 239 | 220 | 258 | 210 | 268 |
| Nov-2014 | 239 | 219 | 259 | 209 | 270 |
| Dec-2014 | 240 | 219 | 261 | 208 | 272 |
| Jan-2015 | 240 | 218 | 262 | 207 | 274 |
| Feb-2015 | 241 | 218 | 264 | 206 | 276 |
| Mar-2015 | 241 | 217 | 265 | 205 | 278 |
| Apr-2015 | 242 | 217 | 267 | 204 | 280 |
| May-2015 | 242 | 216 | 268 | 203 | 282 |
| Jun-2015 | 243 | 216 | 270 | 202 | 284 |
| Jul-2015 | 243 | 216 | 271 | 201 | 286 |
| Aug-2015 | 244 | 215 | 273 | 200 | 288 |
| Sep-2015 | 244 | 215 | 274 | 199 | 290 |
| Oct-2015 | 245 | 215 | 275 | 198 | 292 |
| Nov-2015 | 245 | 214 | 277 | 198 | 293 |
| Dec-2015 | 246 | 214 | 278 | 197 | 295 |
| Jan-2016 | 247 | 214 | 280 | 196 | 297 |
| Feb-2016 | 247 | 213 | 281 | 195 | 299 |
| Mar-2016 | 248 | 213 | 282 | 195 | 301 |
| Apr-2016 | 248 | 213 | 284 | 194 | 302 |
| May-2016 | 249 | 212 | 285 | 193 | 304 |
| Jun-2016 | 249 | 212 | 286 | 192 | 306 |
| Jul-2016 | 250 | 212 | 288 | 192 | 308 |
| Aug-2016 | 250 | 211 | 289 | 191 | 309 |
| Sep-2016 | 251 | 211 | 290 | 190 | 311 |
| Oct-2016 | 251 | 211 | 292 | 189 | 313 |
| Nov-2016 | 252 | 211 | 293 | 189 | 315 |
| Dec-2016 | 252 | 210 | 294 | 188 | 316 |
| Jan-2017 | 253 | 210 | 295 | 187 | 318 |
| Feb-2017 | 253 | 210 | 297 | 187 | 320 |
| Mar-2017 | 254 | 209 | 298 | 186 | 321 |
| Apr-2017 | 254 | 209 | 299 | 185 | 323 |
| May-2017 | 255 | 209 | 301 | 185 | 325 |
| Jun-2017 | 255 | 209 | 302 | 184 | 327 |
| Jul-2017 | 256 | 208 | 303 | 183 | 328 |
| Aug-2017 | 256 | 208 | 305 | 183 | 330 |
| Sep-2017 | 257 | 208 | 306 | 182 | 332 |
| Oct-2017 | 257 | 208 | 307 | 181 | 333 |
| Nov-2017 | 258 | 207 | 308 | 181 | 335 |
| Dec-2017 | 258 | 207 | 310 | 180 | 337 |
| Jan-2018 | 259 | 207 | 311 | 179 | 339 |
| Feb-2018 | 259 | 207 | 312 | 179 | 340 |
| Mar-2018 | 260 | 206 | 314 | 178 | 342 |
| Apr-2018 | 260 | 206 | 315 | 177 | 344 |
| May-2018 | 261 | 206 | 316 | 177 | 345 |
| Jun-2018 | 261 | 206 | 317 | 176 | 347 |

Foundational Document used by DAGS in estimating hospital capacity requirements.

| | | | | | |
|---|---|---|---|---|---|
| Mar-2018 | 260 | 206 | 314 | 178 | 342 |
| Apr-2018 | 260 | 206 | 315 | 177 | 344 |
| May-2018 | 261 | 206 | 316 | 177 | 345 |
| Jun-2018 | 261 | 206 | 317 | 176 | 347 |
| Jul-2018 | 262 | 205 | 319 | 175 | 349 |
| Aug-2018 | 262 | 205 | 320 | 175 | 350 |
| Sep-2018 | 263 | 205 | 321 | 174 | 352 |
| Oct-2018 | 264 | 205 | 323 | 173 | 354 |
| Nov-2018 | 264 | 204 | 324 | 173 | 355 |
| Dec-2018 | 265 | 204 | 325 | 172 | 357 |
| Jan-2019 | 265 | 204 | 326 | 171 | 359 |

# This page has been prepared by the Department of Accounting and General Services on August 25, 2015 for inclusion into the Hawaii State Hospital - 2015 Master Plan Update report.

The following conceptual construction cost estimate dated August 11, 2015, prepared by Rider Levett Bucknall (RLB) is preliminary. As the project moves through the planning and design phases, there will scope adjustments and additional requirements that are not evident at this early stage. Inflation and, possibly, an unfavorable bidding climate may escalate the cost of construction.

Therefore, a budget of **$153,000,000** in construction funds and **$7,500,000** in design funds are needed to complete this project. Total of **$160,500,000 in CIP bond funds.**

Construction budget for a 144 bed patient care facility with rehab mall, therapy spaces, offices, parking stalls, infrastructure improvements, site work, and related work (including cost escalation to midpoint of construction, contingency for bidding climate, contingency during construction, works of art assessment, utility charges, building commissioning services, DAGS consultant and staff support):

| | |
|---|---|
| $126,000,000 | RLB estimate dated August 11, 2015. |
| $ 13,000,000 | 10% for contingency and escalation to mid point of construction. |
| $ 7,000,000 | Contingency during construction work (5%) |
| $ 1,600,000 | Works of Art assessment (1%) |
| $ 3,000,000 | Utility charges (2%) |
| $ 1,400,000 | Building commissioning for energy efficiency (1%) |
| $ 1,000,000 | DAGS support services |
| **$153,000,000** | **Construction total** |
| $ 7,500,000 | Fees for Architects and Engineers |
| **$ 7,500,000** | **Design total** |

**Proposed appropriation language for the 2016 Hawaii State Legislative Session:**

| | APPROPRIATIONS (IN 000'S) FY 2015-2016 | FY 2016-2017 |
|---|---|---|
| HT430- ADULT MENTAL HEALTH- INPATIENT | | |
| 430161 HAWAII STATE HOSPITAL, OAHU | | |
| DESIGN AND CONSTRUCTION FOR A NEW PATIENT CARE FACILITY | | |
| DESIGN | | 7,500 |
| CONSTRUCTION | | 153,000 |
| **TOTAL FUNDING** | | **160,500** |

RLB | Rider Levett Bucknall

5.2 Conceptual Design Cost Estimate (144-Bed Goddard Patient Care Facility)

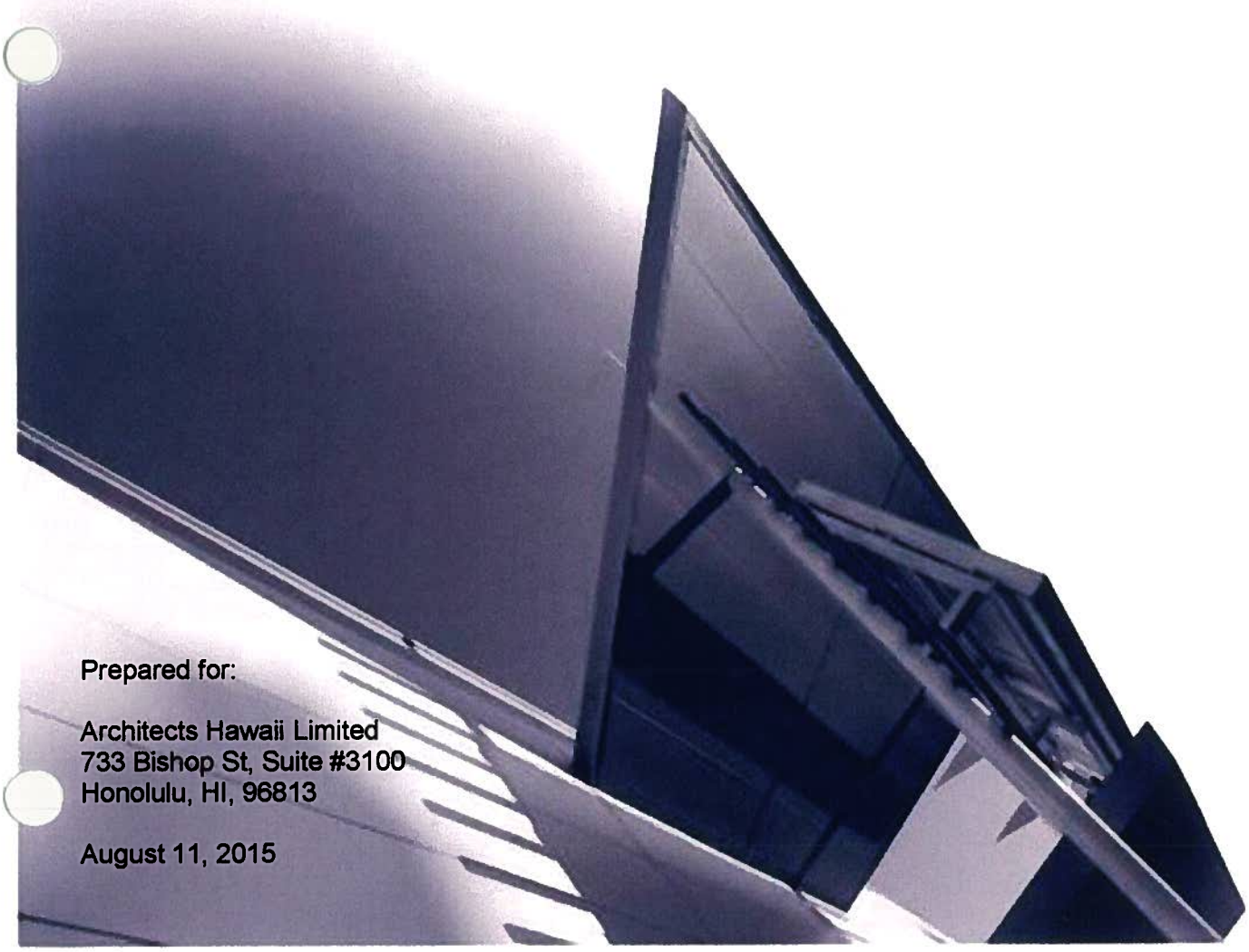
# ESTIMATE

## CONCEPTUAL DESIGN COST ESTIMATE

## Hawaii State Hospital - 2015 Master Plan Update
## New 144 Bed Patient Care Facility

DAGS Job No. 12-20-2698

Kaneohe, Hawaii



Prepared for:

Architects Hawaii Limited
733 Bishop St, Suite #3100
Honolulu, HI, 96813

August 11, 2015

RLB | Rider Levett Bucknall

# Hawaii State Hospital – 2015 Master Plant Update
## Conceptual Design Cost Estimate 8/11/2015
## New 144 Bed Patient Care Facility
## DAGS Job No. 12-20-2698

***Basis of Estimate***

This estimate has been prepared at the request of Architects Hawaii Limited and is to provide a Conceptual Design Cost Estimate for a proposed new Patient Care facility located at the Hawaii State Hospital in Kaneohe, Hawaii.

The estimate is based upon measured quantities and built-up rates prepared from the Conceptual Design drawings progress submittal package emailed to RLB on June 17, 2015 & meeting with Architects Hawaii Limited also on June 17, 2015 and benchmarked against similar type psychiatric facilities, hospitals and prisons.

Where information was insufficient, assumptions and allowances were made based on discussions with Architects Hawaii Limited.

General Exercise Tax is calculated at 2%. The subcontractor tax is included in the unit rates. This is a rough calculation based on the 4.712% on the General Contractors self-performing work and contractor markups on the overall estimate.

Unit pricing is based on June 2015 costs. Construction cost escalation has been excluded beyond June 2015. A design and estimating contingency has been included at 20%.

***Items Specifically Excluded***

- Hazardous materials abatement
- Demolition of existing Goddard building (by others)
- Costs associated with providing approx. 174 additional parking spaces
- Special / drilled shaft foundation systems
- Upgrade to existing site utilities and infrastructure
- Out of hours working
- Furniture, Fittings and Equipment (FF&E)
- Audio / Visual systems
- Telecom / Data systems
- Murals and works of art
- Mock-ups
- Work outside the site boundaries unless noted otherwise
- Special testing & inspections
- Utility tap fees and charges
- Building permits & plan review fees
- CM/GC Preconstruction Services
- Owner's contingency
- Land and legal costs
- Architectural, Engineering and other professional fees
- Project Management Costs
- Geotechnical, traffic and all other studies
- Escalation beyond June 2015
- Items marked as "Excl." in the estimate

RLB | Rider Levett Bucknall

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

| Location | | | Total Cost |
|---|---|---|---|
| **S** | **SITE WORK** | | **$ 6,627,640** |
| **B** | **BUILDING** | | **$ 80,919,879** |
| | | **ESTIMATED NET COST** | **$87,547,519** |
| **MARGINS & ADJUSTMENTS** | | | |
| General Conditions | | 8.0 % | $7,003,802 |
| Insurances and Bonds | | 2.0 % | $1,891,026 |
| Overhead & Profit | | 6.5 % | $6,268,753 |
| General Excise Tax | | 2.0 % | $2,054,222 |
| Contingency | | 20.0 % | $20,953,064 |
| Escalation | | | Excl. |
| | | **ESTIMATED TOTAL COST** | **$125,718,386** |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**S SITE WORK**

| | Description | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|
| **G1020** | **Site Demolition and Relocations** | | | | |
| **02** | **Existing Conditions** | | | | |
| 32 | Site demolition and clearing allowance | SF | 220000 | 0.5 | 110000 |
| 36 | Demolish existing road complete | SF | 90181 | 12 | 1082172 |
| 37 | Building demolition works to existing Goddard building - Not In Contract | LS | 1 | | Excl. |
| | ***Existing Conditions*** | | | | ***$1,192,172*** |
| | ***Site Demolition and Relocations*** | | | | ***$1,192,172*** |
| **G1030** | **Site Earthwork** | | | | |
| **02** | **Existing Conditions** | | | | |
| 33 | Bulk excavation to sloping site | CY | 69093 | 20 | 1381860 |
| 34 | Site erosion control and maintenance allowance | SY | 24445 | 5 | 122225 |
| | ***Existing Conditions*** | | | | ***$1,504,085*** |
| | ***Site Earthwork*** | | | | ***$1,504,085*** |
| **G1040** | **Hazardous Waste Remediation** | | | | |
| **02** | **Existing Conditions** | | | | |
| 31 | Hazardous materials & abatement | LS | 1 | | Excl. |
| | ***Existing Conditions*** | | | | ***Excl.*** |
| | ***Hazardous Waste Remediation*** | | | | ***Excl.*** |
| **G2010** | **Roadways** | | | | |
| **32** | **Exterior Improvements** | | | | |
| 38 | Concrete curb and gutter | LF | 5145 | 35 | 180075 |
| 39 | Asphalt concrete pavement, site road | SF | 47244 | 10 | 472440 |
| 40 | Base course to AC pavement, site road | CY | 875 | 80 | 70000 |
| 41 | Linemarking to roads | SF | 90181 | 1 | 90181 |
| 49 | Asphalt concrete pavement, Service Yard | SF | 21272 | 10 | 212720 |
| 50 | Base course to AC pavement, Service Yard | CY | 394 | 80 | 31520 |
| 135 | Asphalt concrete pavement, additional parking 56 spaces | SF | 21665 | 10 | 216650 |
| 136 | Base course to AC pavement, additional parking 56 spaces | CY | 803 | 80 | 64240 |
| | ***Exterior Improvements*** | | | | ***$1,337,826*** |
| | ***Roadways*** | | | | ***$1,337,826*** |
| **G2020** | **Parking Lots** | | | | |
| **32** | **Exterior Improvements** | | | | |
| 42 | Concrete driveway apron | SF | 1301 | 20 | 26020 |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**S SITE WORK (continued)**

| | Description | | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|---|
| 43 | Base course to driveway | | CY | 49 | 80 | 3920 |
| | | ***Exterior Improvements*** | | | | ***$29,940*** |
| | | ***Parking Lots*** | | | | ***$29,940*** |
| **G2030** | **Pedestrian Paving** | | | | | |
| **32** | **Exterior Improvements** | | | | | |
| 120 | Pedestrian paving allowance | | LS | 1 | 60000 | 60000 |
| | | ***Exterior Improvements*** | | | | ***$60,000*** |
| | | ***Pedestrian Paving*** | | | | ***$60,000*** |
| **G2040** | **Site Development** | | | | | |
| **32** | **Exterior Improvements** | | | | | |
| 25 | Site perimeter security fence | | LF | 660 | 500 | 330000 |
| 44 | Housekeeping pad to cooling towers | | SF | 1942 | 12 | 23304 |
| 45 | Base course to pad | | CY | 36 | 80 | 2880 |
| 46 | Site signage allowance | | LS | 1 | 20000 | 20000 |
| 116 | Sallyport allowance | | LS | 1 | 100000 | 100000 |
| 119 | Bike rack allowance | | LS | 1 | 10000 | 10000 |
| 125 | Miscellaneous site development allowance | | LS | 1 | 75000 | 75000 |
| 127 | Automated security gate to perimeter security fence | | No | 2 | 10000 | 20000 |
| | | ***Exterior Improvements*** | | | | ***$581,184*** |
| | | ***Site Development*** | | | | ***$581,184*** |
| **G2050** | **Landscaping** | | | | | |
| **32** | **Exterior Improvements** | | | | | |
| 47 | Landscaping, small tree allowance | | SF | 68277 | 12 | 819324 |
| 48 | Landscaping, large tree allowance | | LS | 1 | 30000 | 30000 |
| 117 | Irrigation system | | SF | 68277 | 3.5 | 238970 |
| 118 | Maintenance period, 90 days | | SF | 68277 | 0.5 | 34139 |
| | | ***Exterior Improvements*** | | | | ***$1,122,433*** |
| | | ***Landscaping*** | | | | ***$1,122,433*** |
| **G4030** | **Site Communications & Security** | | | | | |
| **28** | **Electronic Safety and Security** | | | | | |
| 130 | Site Communications & Security, allowance | | LS | 1 | 550000 | 550000 |
| | | ***Electronic Safety and Security*** | | | | ***$550,000*** |
| | | ***Site Communications & Security*** | | | | ***$550,000*** |
| **G9091** | **Site Utilities** | | | | | |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**S SITE WORK (continued)**

| Description | Unit | Qty | Rate | Total |
|---|---|---|---|---|
| **33 Utilities** | | | | |
| 115 Upgrade to existing site utilities & infrastructure | LS | 1 | | Excl. |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**S SITE WORK (continued)**

| | Description | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|
| 131 | Connections of existing site utilities and minor modifications | LS | 1 | 250000 | 250000 |
| | ***Utilities*** | | | | ***$250,000*** |
| | ***Site Utilities*** | | | | ***$250,000*** |
| | ***SITE WORK*** | | | | ***$6,627,640*** |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING**

| Description | | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|
| **A1010** | **Standard Foundations** | | | | |
| **03** | **Concrete** | | | | |
| 5 | Elevator pit | EA | 8 | 25000 | 200000 |
| | ***Concrete*** | | | | ***$200,000*** |
| | ***Standard Foundations*** | | | | ***$200,000*** |
| **A1020** | **Special Foundations** | | | | |
| **03** | **Concrete** | | | | |
| 4 | Standard foundation system, assume Standard | SF | 73503 | 15 | 1102545 |
| | ***Concrete*** | | | | ***$1,102,545*** |
| | ***Special Foundations*** | | | | ***$1,102,545*** |
| **A1030** | **Slab on Grade** | | | | |
| **02** | **Existing Conditions** | | | | |
| 3 | Base course below slab on grade | CY | 1362 | 80 | 108960 |
| | ***Existing Conditions*** | | | | ***$108,960*** |
| **03** | **Concrete** | | | | |
| 1 | Slab on garde | SF | 73503 | 14.5 | 1065794 |
| 2 | Vapor barrier below slab on grade | SF | 73503 | 1.75 | 128630 |
| | ***Concrete*** | | | | ***$1,194,424*** |
| | ***Slab on Grade*** | | | | ***$1,303,384*** |
| **A2020** | **Basement Walls** | | | | |
| **03** | **Concrete** | | | | |
| 6 | Basement walls | SF | 11393 | 60 | 683580 |
| 7 | Waterproofing to basement walls | SF | 11393 | 15 | 170895 |
| | ***Concrete*** | | | | ***$854,475*** |
| | ***Basement Walls*** | | | | ***$854,475*** |
| **B1010** | **Floor Construction** | | | | |
| **03** | **Concrete** | | | | |
| 8 | Suspended floor structure including beams | SF | 103203 | 38 | 3921714 |
| 30 | Columns | SF | 179490 | 10 | 1794900 |
| 133 | Suspended floor structure including beams, link bridge | SF | 1660 | 75 | 124500 |
| | ***Concrete*** | | | | ***$5,841,114*** |
| **05** | **Metals** | | | | |
| 112 | Structural steel allowance | SF | 177830 | 1.5 | 266745 |
| | ***Metals*** | | | | ***$266,745*** |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING (continued)**

| Description | Unit | Qty | Rate | Total |
|---|---|---|---|---|
| ***Floor Construction*** | | | | ***$6,107,859*** |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING (continued)**

| Description | | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|
| **B1020** | **Roof Construction** | | | | |
| **03** | **Concrete** | | | | |
| 9 | Suspended roof structure including beams | SF | 74787 | 38 | 2841906 |
| 10 | Perimeter upturn wall to roof | SF | 6797 | 45 | 305865 |
| | ***Concrete*** | | | | ***$3,147,771*** |
| | ***Roof Construction*** | | | | ***$3,147,771*** |
| **B2010** | **Exterior Walls** | | | | |
| **04** | **Masonry** | | | | |
| 11 | Exterior CMU walls | SF | 120658 | 30 | 3619740 |
| | ***Masonry*** | | | | ***$3,619,740*** |
| **09** | **Finishings** | | | | |
| 12 | Paint finish to facade | SF | 127455 | 2 | 254910 |
| | ***Finishings*** | | | | ***$254,910*** |
| | ***Exterior Walls*** | | | | ***$3,874,650*** |
| **B2020** | **Exterior Windows** | | | | |
| **08** | **Openings** | | | | |
| 13 | Exterior heavy duty windows (assume 20% of exterior walls) | SF | 24134 | 200 | 4826800 |
| | ***Openings*** | | | | ***$4,826,800*** |
| | ***Exterior Windows*** | | | | ***$4,826,800*** |
| **B2030** | **Exterior Doors** | | | | |
| **08** | **Openings** | | | | |
| 15 | Loading dock door, overhead coiling door | No | 1 | 50000 | 50000 |
| 16 | Exterior double door | No | 5 | 5000 | 25000 |
| 17 | Exterior single door | No | 5 | 3000 | 15000 |
| 126 | Exterior glazed automatic sliding doors | No | 2 | 15000 | 30000 |
| | ***Openings*** | | | | ***$120,000*** |
| | ***Exterior Doors*** | | | | ***$120,000*** |
| **B3010** | **Roof Coverings** | | | | |
| **07** | **Thermal and Moisture Protection** | | | | |
| 14 | Waterproof & membrane to concrete roof | SF | 74787 | 14 | 1047018 |
| | ***Thermal and Moisture Protection*** | | | | ***$1,047,018*** |
| | ***Roof Coverings*** | | | | ***$1,047,018*** |
| **C1010** | **Partitions** | | | | |
| **03** | **Concrete** | | | | |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING (continued)**

| | Description | | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|---|
| 20 | Interior elevator shaft walls | | SF | 12112 | 45 | 545040 |
| | | ***Concrete*** | | | | ***$545,040*** |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING (continued)**

| Description | | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|
| **04** | **Masonry** | | | | |
| 19 | Interior CMU walls | SF | 202251 | 30 | 6067530 |
| 132 | Premium allowance for additional protection to CMU walls | SF | 525160 | 5 | 2625800 |
| | ***Masonry*** | | | | ***$8,693,330*** |
| **09** | **Finishings** | | | | |
| 18 | Interior stud partition walls | SF | 11284 | 15 | 169260 |
| | ***Finishings*** | | | | ***$169,260*** |
| | ***Partitions*** | | | | ***$9,407,630*** |
| **C1020** | **Interior Doors** | | | | |
| **08** | **Openings** | | | | |
| 21 | Single, high impact hollow metal door to patient rooms, shared & individual with glass opening and secure hardward | No | 230 | 5200 | 1196000 |
| 22 | Single, high impact hollow metal door to seclusion patient rooms with glass opening and secure hardward | No | 24 | 5500 | 132000 |
| 99 | Single fire rate door to stairs | No | 27 | 2500 | 67500 |
| 100 | Single hollow metal doors | No | 166 | 2250 | 373500 |
| 101 | Double swing double door to kitchens | No | 6 | 3000 | 18000 |
| 102 | Single hollow metal doors to medical treatment rooms | No | 16 | 3000 | 48000 |
| 103 | Double hollow metal doors | No | 5 | 4000 | 20000 |
| 104 | Single doors to back of house areas | No | 24 | 2250 | 54000 |
| 129 | Centrally controlled button activated zone dividing door, highly durable and secure door leaf, frame and hardware | No | 9 | 8000 | 72000 |
| | ***Openings*** | | | | ***$1,981,000*** |
| | ***Interior Doors*** | | | | ***$1,981,000*** |
| **C1030** | **Fittings** | | | | |
| **10** | **Specialties** | | | | |
| 24 | Signage allowance | SF | 177830 | 1.5 | 266745 |
| 105 | Staff toilet accessories | EA | 6 | 5000 | 30000 |
| 106 | Lockers allowance | LS | 3 | 20000 | 60000 |
| 134 | Toilet accessories to patients | EA | 144 | 400 | 57600 |
| | ***Specialties*** | | | | ***$414,345*** |
| | ***Fittings*** | | | | ***$414,345*** |
| **C2010** | **Stair Construction** | | | | |
| **03** | **Concrete** | | | | |
| 26 | Stairs including landings and balustrade | FT/R | 512 | 1400 | 716800 |
| | ***Concrete*** | | | | ***$716,800*** |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING (continued)**

| Description | Unit | Qty | Rate | Total |
|---|---|---|---|---|
| ***Stair Construction*** | | | | ***$716,800*** |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING (continued)**

| Description | | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|
| **C3010** | **Wall Finishes** | | | | |
| **09** | **Finishings** | | | | |
| 73 | Wall finish to patient rooms, shared, individual and seclusion | SF | 143234 | 1.75 | 250660 |
| 74 | Wall finish to corridor | SF | 168621 | 1.75 | 295087 |
| 75 | Wall finish to office spaces, conference rooms and visitor areas | SF | 83930 | 1.5 | 125895 |
| 76 | Wall finish to kitchen | SF | 7290 | 20 | 145800 |
| 77 | Wall finish to laundry | SF | 3864 | 1.75 | 6762 |
| 78 | Wall finish to triage & treatment spaces | SF | 4872 | 1.75 | 8526 |
| 79 | Wall finish to toilets & showers, tile | SF | 10752 | 20 | 215040 |
| 80 | Wall finish to BOH areas | LS | 4 | | Nil |
| 81 | Wall finish to Recreational Therapy room | SF | 7072 | 1.75 | 12376 |
| 82 | Wall finish to Occupational Therapy room | SF | 12512 | 1.75 | 21896 |
| 83 | Wall finish to Rehabilitation Therapy room | SF | 5100 | 1.75 | 8925 |
| 84 | Wall finish to toilets & showers, paint | SF | 10752 | 1.5 | 16128 |
| | ***Finishings*** | | | | ***$1,107,095*** |
| | ***Wall Finishes*** | | | | ***$1,107,095*** |
| **C3020** | **Floor Finishes** | | | | |
| **09** | **Finishings** | | | | |
| 51 | Flooring to patient rooms, shared, individual and seclusion | SF | 26504 | 8 | 212032 |
| 52 | Flooring to corridor | SF | 53962 | 6 | 323772 |
| 53 | Flooring to office spaces, conference rooms and visitor areas | SF | 17556 | 10 | 175560 |
| 54 | Flooring to kitchen | SF | 2822 | 20 | 56440 |
| 55 | Flooring to laundry | SF | 792 | 5 | 3960 |
| 56 | Flooring to triage & treatment spaces | SF | 938 | 10 | 9380 |
| 57 | Flooring to toilets & showers | SF | 4815 | 20 | 96300 |
| 58 | Flooring to BOH areas | SF | 39866 | 3.5 | 139531 |
| 59 | Flooring to Recreational Therapy room | SF | 10695 | 10 | 106950 |
| 60 | Flooring to Occupational Therapy room | SF | 12330 | 10 | 123300 |
| 61 | Flooring to Rehabilitation Therapy room | SF | 5170 | 10 | 51700 |
| 121 | Rubber base | LF | 20209 | 5 | 101045 |
| 122 | Tile base | LF | 1755 | 20 | 35100 |
| 123 | Flooring to dining room | SF | 2380 | 20 | 47600 |
| | ***Finishings*** | | | | ***$1,482,670*** |
| | ***Floor Finishes*** | | | | ***$1,482,670*** |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING (continued)**

| Description | | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|
| **C3030** | **Ceiling Finishes** | | | | |
| **09** | **Finishings** | | | | |
| 62 | Ceiling finish to patient rooms, shared, individual and seclusion | SF | 26504 | 25 | 662600 |
| 63 | Ceiling finish to corridor | SF | 53962 | 14 | 755468 |
| 64 | Ceiling finish to office spaces, conference rooms and visitor areas | SF | 17556 | 14 | 245784 |
| 65 | Ceiling finish to kitchen | SF | 2822 | 14 | 39508 |
| 66 | Ceiling finish to laundry | SF | 792 | 14 | 11088 |
| 67 | Ceiling finish to triage & treatment spaces | SF | 938 | 14 | 13132 |
| 68 | Ceiling finish to toilets & showers | SF | 4815 | 20 | 96300 |
| 69 | Ceiling finish to BOH areas | SF | 39866 | | Nil |
| 70 | Ceiling finish to Recreational Therapy room | SF | 10695 | 14 | 149730 |
| 71 | Ceiling finish to Occupational Therapy room | SF | 12330 | 14 | 172620 |
| 72 | Ceiling finish to Rehabilitation Therapy room | SF | 5170 | 14 | 72380 |
| 124 | Ceiling finish to dining room | SF | 2380 | 14 | 33320 |
| | ***Finishings*** | | | | ***$2,251,930*** |
| | ***Ceiling Finishes*** | | | | ***$2,251,930*** |
| **D1010** | **Elevators & Lifts** | | | | |
| **14** | **Conveying Equipment** | | | | |
| 27 | Hospital elevator traveling 4 levels, 2 elevator | Stop | 8 | 40000 | 320000 |
| 28 | Hospital elevator traveling 2 levels, 4 elevator | Stop | 8 | 40000 | 320000 |
| 29 | Hospital freight elevator traveling 4 levels, 2 elevator | Stop | 8 | 50000 | 400000 |
| 113 | Elevator cab finishes | No | 8 | 25000 | 200000 |
| 114 | Elevator steel incl ladder, hoist beam, sump, miscellaneous | No | 8 | 15000 | 120000 |
| | ***Conveying Equipment*** | | | | ***$1,360,000*** |
| | ***Elevators & Lifts*** | | | | ***$1,360,000*** |
| **D4010** | **Sprinklers** | | | | |
| **21** | **Fire Suppression** | | | | |
| 111 | Sprinklers | SF | 177830 | 7 | 1244810 |
| | ***Fire Suppression*** | | | | ***$1,244,810*** |
| | ***Sprinklers*** | | | | ***$1,244,810*** |
| **D5030** | **Communications & Security** | | | | |
| **28** | **Electronic Safety and Security** | | | | |
| 110 | Communications & security | SF | 177830 | 45 | 8002350 |
| | ***Electronic Safety and Security*** | | | | ***$8,002,350*** |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING (continued)**

| Description | | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|
| | ***Communications & Security*** | | | | ***$8,002,350*** |
| **E1030** | **Vehicular Equipment** | | | | |
| **11** | **Equipment** | | | | |
| 97 | Loading dock equipment | LS | 1 | 20000 | 20000 |

# Hawaii State Hospital - 2015 Master Plan Update

## Patient Care Facility - Conceptual Estimate 8.11.15

DAGS Job No. 12-20-2698

Rates/estimates current as of June 2015
Adjust costs beyond June 2015

**B BUILDING (continued)**

| | Description | | Unit | Qty | Rate | Total |
|---|---|---|---|---|---|---|
| 98 | Parking equipment | | LS | 1 | 15000 | 15000 |
| | | ***Equipment*** | | | | ***$35,000*** |
| | | ***Vehicular Equipment*** | | | | ***$35,000*** |
| **F1020** | **Integrated Construction** | | | | | |
| **09** | **Finishings** | | | | | |
| 85 | Fitout of Recreational Therapy room | | SF | 10695 | 50 | 534750 |
| 86 | Fitout of Occupational Therapy room | | SF | 12330 | 50 | 616500 |
| 87 | Fitout of Rehabilitation Therapy room | | SF | 5170 | 50 | 258500 |
| 88 | Fitout to kitchen | | SF | 2822 | 200 | 564400 |
| 89 | Fitout to office spaces, conference rooms and visitor areas | | SF | 17556 | 50 | 877800 |
| 90 | Fitout to patient rooms, shared, individual and seclusion | | SF | 26504 | 3 | 79512 |
| 91 | Fitout to corridor | | SF | 53962 | 10 | 539620 |
| 93 | Fitout to laundry | | SF | 792 | 50 | 39600 |
| 94 | Fitout to triage & treatment spaces | | SF | 938 | 50 | 46900 |
| 96 | Fitout to BOH areas | | SF | 39866 | 2.5 | 99665 |
| | | ***Finishings*** | | | | ***$3,657,247*** |
| | | ***Integrated Construction*** | | | | ***$3,657,247*** |
| **D2000** | **Plumbing Services** | | | | | |
| **22** | **Plumbing** | | | | | |
| 107 | Plumbing services | | SF | 177830 | 27.5 | 4890325 |
| | | ***Plumbing*** | | | | ***$4,890,325*** |
| | | ***Plumbing Services*** | | | | ***$4,890,325*** |
| **D5000** | **Electrical Services** | | | | | |
| **26** | **Electrical** | | | | | |
| 108 | Electrical Services | | SF | 177830 | 47.5 | 8446925 |
| | | ***Electrical*** | | | | ***$8,446,925*** |
| | | ***Electrical Services*** | | | | ***$8,446,925*** |
| **D3000** | **Mechanical Services** | | | | | |
| **23** | **Heating, Ventilating, and Air Conditioning** | | | | | |
| 109 | Mechanical Services | | SF | 177830 | 75 | 13337250 |
| | | ***Heating, Ventilating, and Air Conditioning*** | | | | ***$13,337,250*** |
| | | ***Mechanical Services*** | | | | ***$13,337,250*** |
| | | ***BUILDING*** | | | | ***$80,919,879*** |

## 5.3 PRELIMINARY PARKING STUDY

### INTRODUCTION

This study provides an estimate of the total number of parking spaces that will be required at three future conditions. The study also provides an estimate of the number of new parking spaces that will need to be added at each increment of future development.

**Condition 1:** When construction of the 144-Bed Goddard Patient Care Facility has been completed. At that point the Hospital will have 252 patient beds. See the Short-Term Master Plan in Section 2 for additional details.

**Condition 2:** When construction of a second 144-Bed Patient Care Facility has been completed on the Guensberg site. At that point the Hospital will have 396 beds. See the Long-Term Master Plan in Section 2 for additional details.

**Condition 3:** When construction of a third 144-Bed Patient Care Facility has been completed on the J-Pad site. At that point the Hospital will have 516 beds. This is the full-build-out condition envisioned in the Long-Term Master Plan. See Section 2 for additional details.

### EXECUTIVE SUMMARY - PRELIMINARY PARKING REQUIREMENTS

**Condition 1:** **682** total parking spaces required (**410** existing spaces + **272** new spaces).
**98** of the new spaces will be located adjacent to the 144-Bed Goddard Patient Care Facility.
The remaining **174** new spaces will be located in Planning Zones 7, 8, 10, 14, or15.

**Condition 2:** **1,072** total parking space required (**590** existing spaces + **482** new spaces).
The **482** new spaces will be located in Planning Zones: 7, 8, 10, 14, or 15.

**Condition 3:** **1,397** total parking spaces required (**1,072** existing spaces + **325** new spaces).
The 325 new spaces will be located in Planning Zones: 7, 8, 10, 14, or 15.

## 5.3 PRELIMINARY PARKING STUDY

### REGULATORY PARKING REQUIREMENTS

Article 6 of the Land Use Ordinance (Revised Ordinances of Hawaii, Chapter 21) defines the parking requirements for projects on Oahu. The formulas listed in Table 21-6.1 can be used to determine the minimum number of parking spaces required for most land uses. However, the Land Use Ordinance (LUO) does not provide specific parking requirements for hospitals. Hospital parking requirements fall under the Social and Civic Service category in the Parking To Be Determined By The Director (Table 21-6.1). In practice this means that parking requirements for hospitals are determined during the PRU process.

### ASSUMPTIONS

The following assumptions are used to estimate future parking requirements:

- The number of parking spaces required is proportional to the number of Hospital beds
- The current (i.e. 2015) peak parking demand establishes a baseline for estimating the number of parking spaces required to support future increases in the number of beds
- The peak demand for parking spaces occurs during the afternoon period when the day shift staff and evening shift staff overlap
- Parking requirements are based on the number of spaces required at the peak demand period (i.e. not on the number of spaces required to accommodate the staff on a single shift)

### BASELINE (CURRENT PEAK PARKING DEMAND)

| | | |
|---|---|---|
| Patient Beds [1] [2] | 178 | |
| Peak Parking Demand [3] | 374 | Day shift staff |
| | 82 | Nurses (evening shift) |
| | 1 | Officer of the Day (evening shift) |
| | 5 | State Operated Special Residential Program staff (evening shift) |
| | (10) | Deduct for staff car poolers |
| | 20 | State-owned vehicles |
| | 10 | Visitors |
| | **482** | spaces required at peak demand period |
| Existing Spaces [3] | **450** | (32 spaces short at peak demand) |

## 5.3 PRELIMINARY PARKING STUDY

### PEAK PARKING DEMAND (CONDITION 1)

The following calculations provide an estimate of the number of parking spaces that will be required after construction of the new 144-Bed Goddard Patient Care Facility.

Patient Beds [4] [5] = **252**

Peak Parking Demand = 252 beds x 482 spaces (current peak demand) = **682** total spaces required
178 current beds

Existing Spaces= 450 spaces – 40 demolished spaces on Goddard site = **410** spaces

Additional Spaces = 682 total spaces – 410 existing spaces = **272** new spaces required

Note: The Conceptual Design Cost Estimate (Appendix 5.2), prepared by Rider Levett Bucknall, includes the cost of **98** new surface parking spaces located adjacent the Goddard Patient Care Facility. The costs associated with providing the additional **174** new spaces (located in Planning Zones 7, 8, 10, 14, or 15) are not included in the Conceptual Design Cost Estimate.

### PEAK PARKING DEMAND (CONDITION 2)

The following calculations provide an estimate of the number of parking spaces that will be required after construction of the 144-Bed Goddard Patient Care Facility and the 144-Bed Guensberg Patient Care Facility.

Patient Beds [6] = **396**

Peak Parking Demand = 396 beds x 482 spaces (current peak demand) = **1,072** total spaces required
178 current beds

Existing Spaces = 682 spaces (provided in Condition 1) – 36 demolished spaces on Guensberg site – 56 demolished spaces on Goddard site = **590** existing spaces

## 5.3 PRELIMINARY PARKING STUDY

Additional spaces = 1,072 spaces – 590 existing spaces = **482** new spaces required

### PEAK PARKING DEMAND (CONDITION 3)

The following calculations provide an estimate of the number of parking spaces that will be required after construction of the future 144-Bed Goddard Patient Care Facility, the future 144-Bed Patient Care Facility on the Guensberg site, and the future 144-Bed Patient Care Facility on the J-Pad site.

Patient Beds [7] [8] = **516**

Peak parking demand = $\frac{516 \text{ beds} \times 482 \text{ spaces (current peak demand)}}{178 \text{ current beds}}$ = **1,397** total spaces required

Additional spaces = 1,397 spaces – 1,072 existing spaces (provided in Condition 2) = **325** new spaces required

**Footnotes**

1. Guensberg (70) + Unit E (36) + Unit F (28) + Unit H (20) + Unit I (24) = 178 beds
2. Excludes the 40 patients currently housed at Kahi Mohala Behavioral Health in Ewa Beach. The staff and visitors for those patients don't contribute to the Hospital's current peak parking demand.
3. Current peak demand parking statistics and existing number of parking spaces provided by Hospital.
4. Goddard Patient Care Facility (144) + Unit E (36) + Unit F (28) + Unit H (20) + Unit I (24) + Guensberg (0) = 252 beds
5. Guensberg is demolished
6. Guensberg Patient Care Facility (144) + Goddard Patient Care Facility (144) + Unit E (36) + Unit F (28) + Unit H (20) + Unit I (24) = 396 beds
7. "J-Pad" Patient Care Facility (144) + Guensberg Patient Care Facility (144) + Goddard Patient Care Facility (144) + Unit E (36) + Unit F (28) + Unit H (20) + Unit I (0) = 516 beds
8. Unit I demolished prior to construction of second increment of the "J-Pad" Patient Care Facility

5.4.1 DOH Letter to SHPD (re: Bishop Demolition)

DAVID Y. IGE
GOVERNOR OF HAWAI'I

ADDRESS ONLY
ADMINISTRATOR
HAWAI'I STATE HOSPITAL

INFORMATION REGARDING PATIENTS
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FOR PROFESSIONAL PURPOSES ONLY

STATE OF HAWAI'I
DEPARTMENT OF HEALTH
HAWAI'I STATE HOSPITAL
45-710 KEA'AHALA ROAD
KANE'OHE, HAWAI'I 96744-3528

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

PLEASE REFER TO
FILE NO.

June 12, 2015

Mr. Alan Downer, Ph.D., Administrator
State Historic Preservation Division (SHPD)
Department of Land and Natural Resources (DLNR)
601 Kamokila Boulevard, Suite 555
Kapolei, HI 96707

Dear Dr. Downer:

Subject: Proposed Demolition of the Bishop Building
Hawaii State Hospital (HSH)
Tax Map Key (1) 4-5-023: 002

This is in response to your September 30, 2014 letter (attached for your reference) which restarted the discussion on the proposed demolition of the Bishop Building. We provide our understandings from your letter:

1. We understand that:

   a. SHPD must review public building applications to see if historic properties will be affected and must concur with the project in order for it to move forward to design and construction.

   b. Interested parties may have opportunity to comment on SHPD's effect determination and appeal the Hawaii Historic Review Board.

   c. An environmental assessment, for compliance with Hawaii Revised Statutes 343 and Hawaii Administrative Rules 11-200, will be completed by our Developer before the construction of the new Long Term Care Hospital (LTCH)/Skilled Nursing Facility (SNF).

d. SHPD requires the Bishop Building demolition to be mitigated by either preservation or architectural recordation.

Subsequent to the execution of the DOH/DLNR September 13, 2005 letter, the DOH moved to execute a public-private developer partnership to construct a new LTCH/SNF at the site of the Bishop building. The DOH is now ready to:

1. Execute a contract with the Developer to process permits, approvals, etc. and design and construction of the LTCH/SNF subject to the confirmation of funding.

2. Execute the lease of approximately 5.0 acres of land for the development of the LTCH/SNF. See attachment 1 for the lease area.

Following a series of more recent meetings between HSH and SHPD staffs, we now have the following understandings about the Bishop building demolition:

1. SHPD has accepted the HSH's conclusion that the Bishop building must indeed be removed to make way for a successful new LTCH/SNF. (The DOH believes that a suitable sized LTCH/SNF cannot be achieved on the 5.0 acre site without the demolition and removal of the Bishop building. The DOH came to this conclusion after numerous interested developers explored the operational, financial and constructability analyses for the facility, and explored a wide variety of site and facility layout options. In each analysis, the best outcome was to demolish the Bishop Building.)

2. SHPD is requiring the following mitigation requirements for the Bishop building prior to its demolition:

   Completion of the requirements of an **Intensive Level Survey (ILS)** as outlined in the ***Guidelines: Architectural Historic Resource Surveys*** published by SHPD (document not dated). See Attachment 2. (The public-private developer partnership will fund and implement the ILS requirements and submit the documents to SHPD for review and approval.)

On behalf of the public-private developer, the HSH assures the successful completion and delivery of this ILS Report to the SHPD for review and approval prior to any demolition of the Bishop building. Once this ILS is approved by SHPD, we understand public-private developer will have completed its mitigation obligations for the Bishop building and will then be clear to proceed with the other permits, approvals, and finally its demolition.

Again, thank you for your cooperation in this process. Our understandings will make future progress easier and efficient as the campus of HSH evolves to meet the ever-changing needs of the people we serve. Feel free to contact me at 236-8237 if any further information is required.

Sincerely,

WILLIAM J. MAY
Administrator

c: Ms. Anna E. Broverman, State Architectural Historian w/attachments
Dr. Virginia Pressler, M.D., Director of Health w/attachments
Ms. Lynn N. Fallin, Deputy Director for Behavioral Health w/attachments
Dr. Mark A. Fridovich, Ph.D., M.P.A., Adult Mental Health Administrator w/attachments

# STATE OF HAWAII
## DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

**DATE:** September 30, 2014

**LOG:** 2014.01494
**DOC:** 1409AB66

**TO:** Linda Rosen, M.D., M.P.H
Director of Health
State of Hawaii Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378

**SUBJECT:** **Section 6E-8 Historic Preservation Review**
**Project:** Demolition – Bishop Building
**Owner Name:** Hawaii State Hospital
**Building Permit:** None Submitted
**Address:** Hawaii State Hospital – Keaahala Road
**Tax Map Key:** (1) 4-5-023:001

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**Date Received by THE SHPD:** April 3, 2014

SHPD would like to thank Hawaii State Hospital for resubmitting its project proposal and meeting with SHPD staff on September 26, 2014. The purpose of the meeting was to reestablish communication between the DOH and SHPD and restart the discussion regarding the proposed demolition of the Bishop Building. Recent staff turnover in both divisions has led to confusion over the project's status. It is important that current staff have a comprehensive understanding of previous consultation on this project in order to make an accurate and fair determination that serves the public interest and the state's obligations pursuant to HRS § 6E-8.

The Bishop Building is a long narrow structure located on the southeastern side of the Hawaii State Hospital campus. The building was constructed in the early 1930s, and is listed on the Hawaii State Register of Historic Places under Criteria A and C as a contributing resource to the Territorial Hospital campus. Although not individually distinctive, the building, when placed in the context of the hospital complex, makes a strong architectural statement related to the philosophy of providing more humane treatment and environments for the mentally ill.

The proposed project consists of demolishing the Bishop Building and constructing a new Long Term Care Hospital. Pursuant to HRS § 6E-8, SHPD must review public building applications to see if historic properties will be affected and concur with the project in order for it to move forward. Additionally, interested parties will have the opportunity to comment on SHPD's effect determination and appeal to the Hawaii Historic Review Board if they disagree with it. The project must also be reviewed under HRS § 6E-10 as it listed on the Hawaii Register of Historic Places. HRS § 6E-10 requires SHPD to review any proposed construction, alteration, disposition or improvement of any nature to listed historic properties and concur before the project moves forward. Pursuant to HRS § 343-5 (a)(4) an environmental assessment shall be required for actions that propose any use within any historic site or designated in the National Register or Hawaii Register, as provided for the Historic Preservation Act of 1966, Public Law 89-665, or Chapter 6E.

Demolishing the Bishop Building does constitute an adverse effect under HRS § 6E-8 and has to be mitigated. Mitigation for this project must be either preservation or architectural recordation. Preservation may include avoidance and protection, stabilization, rehabilitation, restoration, reconstruction, or exhibition with interpretation of significance. Architectural recordation involves the photographic documentation and possibly the measured drawing of a building, structure or object prior to its destruction.

Initial consultation on the demolition of the Bishop Building occurred in 2004/2005 when the Department of Health was proposing demolishing the Goddard, Guensberg, Iolani, Haloa, Bishop, Cooke, M, N, O and P buildings. Over the next several months, the project scope was limited to the demolition the Goddard, Guensberg and Cooke Buildings. The other structures were to be evaluated for demolition at a later time. Mitigation was agreed upon for the demolition of the three buildings above. One actually agreed upon mitigation requirement was the reuse of the Bishop Building as the site of an information/education area pending a structural assessment of the building and a conceptual analysis which would determine whether the building could be renovated or should be demolished. The rest of the mitigation obligations can be found in the reference timeline under September 13th, 2005.

In order to move forward with the proposed project, the Department of Health must decide whether this previous consultation will be followed or if the Chapter 6E consultation will be reinitiated. If the previously agreed upon mitigation will be followed, a structural assessment and conceptual analysis for the reuse of the Bishop Building must be completed before considering demolition.

Alternately, if the DOH does not want to follow the mitigation outlined in the previous agreement, consultation must be reinitiated. In this case, DOH must notify SHPD about the proposed project and request a letter of determination. DOH must include in its letter the number of historic properties within the proposed project area, their significance, the impact of the proposed project on the historic properties, and any proposed mitigation measures. SHPD will either concur or not concur with DOH's effect determination and explain why. A good way to expedite the process would be to gather those working on the project, such as architects and planners, with SHPD to discuss possible solutions prior to submitting a letter. Information presented at the meeting should include DOH's master plan, a clearly defined project scope, programmatic needs of the hospital, and project alternatives.

The SHPD understands that this is a very important project for the hospital, and we are eager to work with the DOH to form the best solution possible for the hospital, its unique historic properties, and the people of Hawaii.

Please contact Anna Broverman, the SHPD Architectural Historian, at Anna.E.Broverman@hawaii.gov if you have any questions or concerns.

Aloha,

Alan Downer
Deputy State Historic Preservation Officer

CC: William J. May, Administrator
Hawaii State Hospital
45-710 Keaahala Road
Kanoehe, HI 96744
william.may@doh.hawaii.gov

Kiersten Faulkner
Historic Hawaii Foundation
680 Iwilei Road
Honolulu, HI 96817
kiersten@historichawaii.org

Jay L. King
Office of U.S. Representative Tulsi Gabbard
Prince Jonah Kuhio Kalanianaole Federal Building
300 Ala Moana Blvd. Suite 5-104
Honolulu, HI 96850
Jay.King@mail.house.gov

**Project Consultation Timeline for Reference**

**March of 2004:** The SHPD received a letter from the State Public Works Administrator requesting to demolish the Goddard, Guensberg, Iolani, Haloa, Cooke, Bishop Buildings, as well as Buildings M, N, O, & P and various cottages on the property.

**July 28th, 2004:** The SHPD responded to the previous letter on stating that the Iolani, Haloa, Cooke and Bishop Buildings were significant as the first and only major insane asylum in Hawaii, and that the Goddard building was, "significant as an exception record of mental health treatments and how they were approached and expressed structurally in Hawaii". The SHPD's determination was "effect with proposed mitigation commitments involving one or more forms of mitigation to reasonably mitigate adverse effects of short and long term plans for the hospital complex. [L2004.1373, D0404st04 &0407TL101]. Options for mitigation included:

- Research and documentation of the significant buildings or structures
- Preparation and establishment of a preservation plan based on the above report in coordination with the Hawaii State Hospital campus master plan. It should prioritize historic buildings, save elements of the buildings for re-use, or reuse space as a public information resource center.
- Create a written evaluation of functional analysis, an explanation of new theme, a cost estimate of program requirements, and a good faith effort for adaptive re-use/relocation of function or partial demolition/relocation in adaptive reuse based on priorities set above.
- Salvage certain elements from the Goddard Building
- Provide graphics to illustrate the proposed resolutions
- HABS recordation and written histories for each demolished building

**September of 2004:** The SHPD received a report on Historic and Potentially Historic Buildings at Hawaii State Hospital from Mason Architects. The report recounted the history of the hospital through 1956, and gave individual histories and descriptions for each of the building proposed for demolition. All of the buildings were found to be significant under Criteria A and C. Recommendations for the territorial buildings included their inclusion in a preservation plan for the district which maintains and/or restores their historic character. The report also recommended the Goddard Building be reused, and that the Guesnberg Building's significance be reassess once it was 50 years old.

**October 11, 2004:** A Master Planning Update from this date that showed concept options for retaining/demolishing/altering the Goddard Building and using the Bishop and Cooke Building sites.

**December 17th, 2004:** SHPD received a letter from the Department of Health (DOH) addressed to Chairperson Peter T. Young of the Department of Land and Natural Resources. The letter stated that the DOH had completed an assessment of the subject buildings and that they proposed to demolish the Goddard, Guensberg and Cooke Buildings. However, they planned to retain the Iolani, Haloa, and Bishop Buildings and would reassess the buildings later. The letter states that the DOH did not agree that the Goddard Building was significant and that they had created plans for its redevelopment, which were included in the submittal packet. DOH proposed the following list of items as mitigation for the demolition of the Goddard, Guensberg, Cooke, and possibly Bishop Buildings, but the SHPD has no record of then Chairperson Young's concurrence by signature with the proposal.

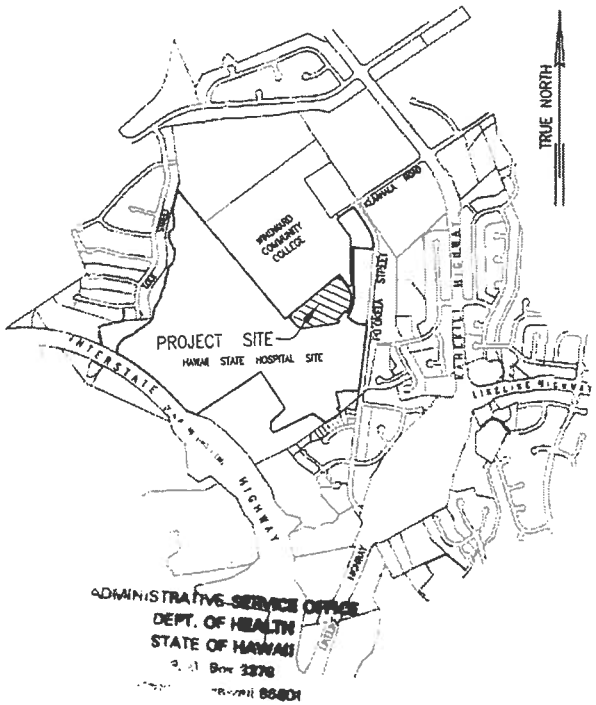
- An information/education area near the front of the Hawaii State Hospital Campus that would allow visitors to view artifacts from the buildings and learn about the history of the hospital.
- The center could be in a new building or in the Bishop Building, and a conceptual analysis would be done to see if the Bishop Building should be renovated or demolished.
- Display salvaged items from the various buildings, including certain items or rooms from the Goddard Building
- Assuming the Bishop Building could be renovated and floor space added, the center could accommodate a replica of patient housing in the Goddard Building.

**September 13th, 2005:** The Director of Health sent another letter to Chairperson Young. This letter again states that an assessment of the subject buildings had been completed, and that DOH wanted to demolish and retain the same buildings. Here, the DOH agrees that the Goddard Building is significant and proposes new mitigation for the demolition of the Goddard, Guensberg and Cooke Buildings. Chairperson Young signed this document, concurring with the following mitigation actions.

- In the Hawaii State Hospital Master Plan, a visitor's center with an information/education area near the front entrance to the HSH campus that would allow visitors to view hospital items and displays and learn about the history of the hospital. The center would include a permanent photo gallery, and the SHPD would be included in the planning of this facility.

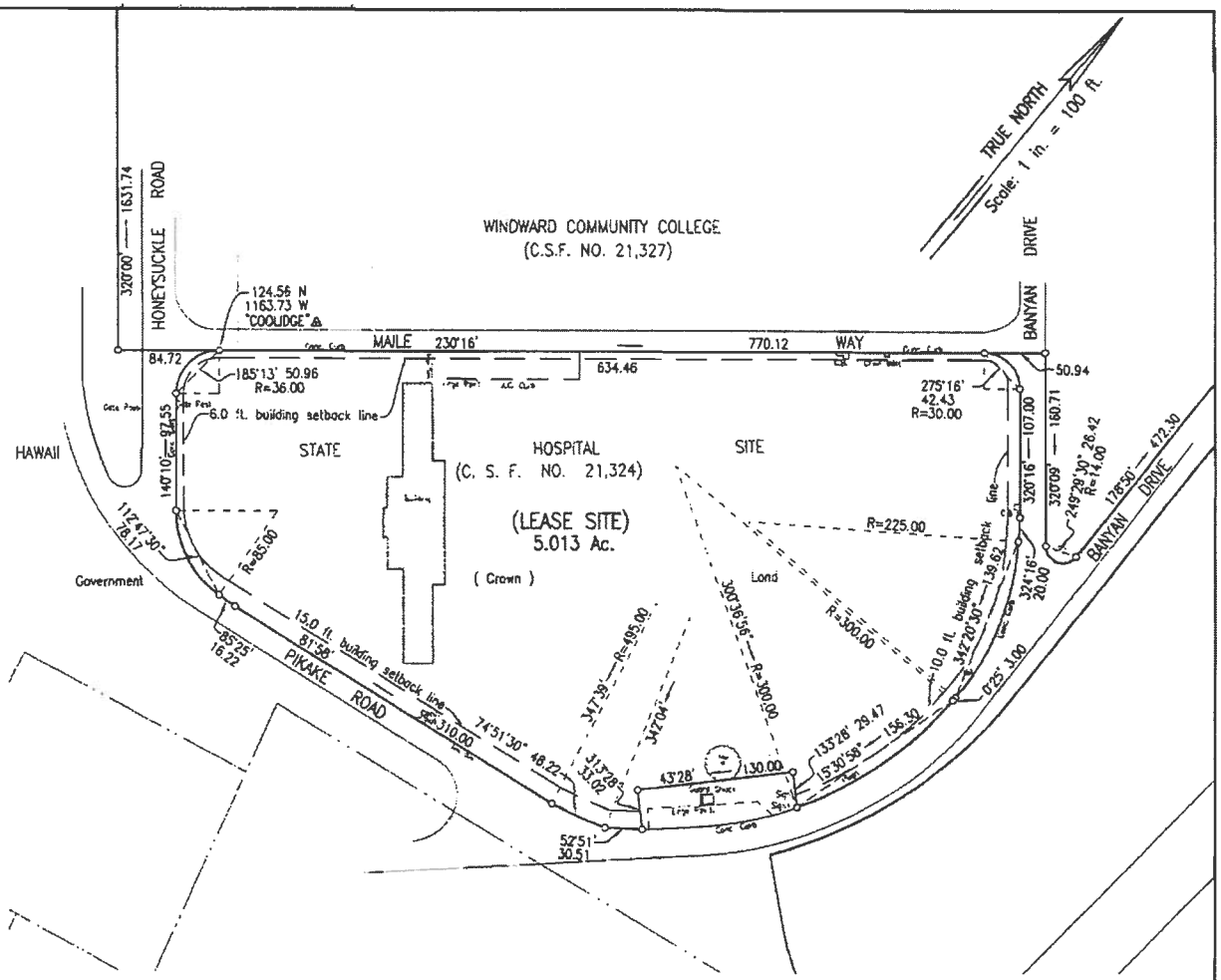
- The information/education area would be in the existing Bishop Building pending a structural assessment of the building and a conceptual analysis which would determine whether the building could be renovated or should be demolished.
- The information/education area could display items salvaged from the various hospital buildings. The items could include
    - Two cast-stone grilles in a floral and leaf pattern from the Goddard Building
    - Two sliding gates of decorative metal grille in an oriental/geometric motif and side panels of the same design from the Goddard Building
    - Wrought iron decorative work
- Assuming the Bishop Building is renovated, floor space could be added so that the enlarged building could accommodate:
    - A replica of the patient care and living spaces (circa 1950's).
    - A replica of Goddard's operating room
    - Courtyards that provide open space and bring the outdoors into the building just like the Goddard Building
- Prior to the demolition of the Goddard, Guensberg, and Cooke buildings (and possibly the Bishop Building), HABS documentation and written histories would be completed for each of the buildings.

**March 25, 2014:** The director of health sent SHPD a letter requesting to demolish the Bishop Building.




APPROVED
J. Messina
DEC 28 2009

12/4/09




# PLAN SHOWING

## LONG-TERM CARE FACILITY (LEASE SITE)

## BEING A PORTION OF HAWAII STATE HOSPITAL

AT KEAAHALA, KANEOHE, KOOLAUPOKO, HAWAII

This work was prepared by me or under my direct supervision

By: _____
Licensed Professional Land Surveyor
Certificate Number 3499
License Expires 4/10

FN: acad-09165-start.dwg

TMK: 4-5-23: 2 (por)
Job No. 09165

CONTROLPOINT SURVEYING, INC.
1150 SOUTH KING STREET, SUITE 1200
HONOLULU, HAWAII 96814

11" X 17"
December 2, 2009
FB 2917 Pg. 25

5.4.2 SHPD Letter to DOH (re: Bishop Demolition)





# STATE OF HAWAII
## DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

**LOG NO:** 2015.02762
**DOC NO:** 1507AB24

**SHPD Review**
**Follow Up Required*

July 17, 2015

William J. May, Administrator
Hawaii State Hospital
Department of Health
State of Hawaii
45-710 Keaahala Road
Kaneohe, HI 96744

Dear Mr. May:

**SUBJECT: Chapter 6E-8 Historic Preservation Review**
**Building Permit**
**Application No. None Submitted**
**45-710 Keaahala Road – Demolition**
**Kaneohe Ahupuaa, Koolaupoko District, Island of Oahu**
**TMK: (1) 4-5-023:002**
**Owner Name: Hawaii State Hospital**

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On June 19, 2015, the State Historic Preservation Division (SHPD) received the submittal for Section 6E-8 Historic Preservation Review. The Area of Potential Effect (APE) is **TMK (1) 4-5-023:002**, which measures approximately 84 Acres. The project scope of work includes demolishing the Bishop Building.

The Bishop Building is a long narrow structure located on the southeastern side of the Hawaii State Hospital campus. The building was constructed in the early 1930s and is now listed on the Hawaii State Register of Historic Places under Criteria A and C as a contributing resource to the Territorial Hospital campus. The building is not individually distinctive, but when placed in the context of the hospital complex, it makes a strong architectural statement related to the philosophy of providing more humane treatment and environments for the mentally ill.

The State Historic Preservation Division (SHPD) has consulted with the Hawaii and State Hospital and Department of Health multiple times over the previous year. The demolition of the Bishop Building had been stalled due to the fact that its preservation was a mitigation commitment for the demolition of the Goddard Building, which is also located on the Hawaii State Hospital Campus. This mitigation requested that the Bishop Building be kept and rehabilitated as a public information/education area for Hawaii State Hospital if possible. Through several meetings, Hawaii State Hospital agreed that the Bishop Building was not a reasonable location for a public information/education area because of the hospital's need for additional patient housing, security concerns regarding its close proximity to the hospital, and in order to respect the privacy of current hospital patients. Demolition of the Bishop Building will negatively affect the historic integrity of the historic hospital campus.

Based on the above information, SHPD's determination is **"historic properties affected".**

**(Continued on Reverse)**

***SHPD requests the following actions to be completed before permit issuance:**

ARCHITECTURE
- ☐ HABS[2] Choose an item.
- ☐ HAER[3] Choose an item.
- ☐ HALS[4] Choose an item.
- ☒ Intensive Level Survey
- ☐ Reconnaissance Level Survey
- ☐ Submit Floor Plans & Photographs
- ☐ Salvage Structure(s)

HISTORY & CULTURE
- ☐ Verify Protective Measures
- ☐ Site Visit

ARCHAEOLOGY
- ☐ Verify Preservation Measures
- ☐ Archaeological Inventory Survey
- ☐ Archaeological Monitoring Plan[1]
- ☐ Preservation Plan
- ☐ Field Inspection by Archaeologist

☒ Other: Continued Consultation (see below)

Hawaii State Hospital and SHPD have agreed that an Intensive Level Survey (ILS) will be the best mitigation for the demolition of the Bishop Building. SHPD looks forward to receiving the completed Intensive Level Survey (ILS) form, which can be found on SHPD's website under the Review and Compliance – Forms subsection. SHPD will notify you when the requested material has been reviewed, accepted, and SHPD's part of the review process is complete. SHPD acceptance of requested material is required prior to issuance of the permit. Any future work outside of the proposed scope identified in this review may be subject to additional SHPD review.

Additionally, SHPD and Hawaii State Hospital must continue discussions regarding an appropriate information/education area for the hospital's historic artifacts as required per the Goddard Building mitigation commitments. SHPD looks forward to continually working with Hawaii State Hospital to resolve this issue.

For **Architecture** questions, please contact Anna Broverman at (808) 692-8028 or at anna.e.broverman@hawaii.gov.
For **Archaeology** questions, please contact Susan A. Lebo, PhD at (808) 692-8019 or at susan.a.lebo@hawaii.gov.
For **History & Culture** questions, burials, or other cultural resources, please contact Regina Hilo at (808) 692-8026 or at regina.hilo@hawaii.gov

Mahalo,

Alan S.Downer, PhD
Administrator, Deputy State Historic Preservation Officer

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1. Archaeological Monitoring Plan (AMP) for all ground disturbance activities associated with the project
2. Historic American Buildings Survey (HABS)
3. Historic American Engineering Record (HAER)
4. Historic American Landscape Survey (HLS)

In the event that historic resources, including human skeletal remains, cultural layers, cultural deposits, features, artifacts, or sinkholes, lava tubes or lava blisters/bubbles are identified during construction and/or other activities, cease all work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division (SHPD) immediately at (808) 692-8015 (Oahu)

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P O BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to
File

June 22, 2015

The Honorable John Morton
Vice President for Community Colleges
2444 Dole Street, Bachman 207
Honolulu, Hawaii 96822

5.4.3 DOH Letter to Community Colleges (re: Bishop Land Exchange)

Dear Mr. Morton:

Subject: ***Proposed Land Exchange with the Department of Health's Hawaii State Hospital***

This is in response to Chancellor Dykstra's presentation on May 21, 2015 at the Kaneohe Neighborhood Board which mentioned a proposed land exchange with the Hawaii State Hospital (HSH). The HSH understands that the Windward Community College (WCC) would like the HSH's "Bishop parcel" in exchange for an undeveloped area physically separate from the HSH campus.

The Department of Health's (DOH) Administration has reviewed the offer and has decided that it is not in the best interest of the Hawaii State Hospital (HSH) to relinquish any land to the WCC or any other entity that does not provide services in support of the DOH's mission. Therefore, the WCC should look for alternate sites that do not involve the HSH property when planning future development.

The HSH has recently completed its master plan, which includes the development of a long term care facility on the site of the Bishop Building. This public/private partnership will help to alleviate overcrowding in the Hospital. The master plan also outlines development at other locations at the HSH. All locations at the HSH campus will be utilized for patient care or ancillary services with the intent of upgrading the level of services for future patients.

The HSH is committed to working with the WCC, however it must be understood that the population of persons with severe mental illness will not diminish, and will most likely increase in the future. This places an enormous burden on the HSH to expand capacity.

It should be further noted that the HSH was constructed in Kaneohe at a time when there were few close neighbors. Over the years, the once vacant land around the Hospital was developed, to the point where the Hospital now has very close neighbors. Despite this fact, the Kaneohe community and the residents of this state continue to acknowledge the "Kaneohe Hospital" as the state's haven for treating persons with mental illness.

The HSH wishes to remain good neighbors with the WCC and hopes that we can work together on issues of mutual concern. Please contact me whenever an issue arises that must be mutually resolved so that we can move forward in improving our services for the residents of the Kaneohe community and the state of Hawaii.

Sincerely,

Virginia Pressler, M.D.
Director of Health

c: Ms. Lynn Fallin Deputy Director for Behavioral Health Administration
Mr. Doug Dykstra, Chancellor, Windward Community College

## 5.5 PARTICIPANTS

The following DOH, Hospital, and DAGS staff members gave generously of their time and provided valuable input.

**Department of Health**

Dr. Virginia Pressler, Director

Lynn Fallin, Deputy Director, Behavioral Health Administration

Dr. Mark A. Fridovich, Administrator, Adult Mental Health Division

John Messina, Capital Improvements Coordinator

**Hawaii State Hospital**

William May, Administrator

Dr. William Sheehan, Medical Director

Robin Denton, Plant Operations Manager

Additional Hawaii State Hospital Staff:

Katrina Alabanza, Reynaldo Baguso, Peter Bediz, John Bryant, Robert Burns, Joseph Buxton, Dr. John Buzanoski, Katherine Carsten, Vivien Cayetano, Michael Champion, Nadine Correa, Catherine Davis, William Elliot, Stephan Espinueva, Mark Fleming, Curtis Fujimoto, Joan Fukumoto, Eileen Ganotisi, Rev. Jessica Gibo, Margaret Grant, Leona Guest, Karen Hara, Tracy Harada, Eddie Harrell, Nina Harrington, Run Heidelberg, Esther Hsu, Lawrence Imada, Mack Kalahiki, Lisa Kanda, Billy Kekuna, Gwen Kondo, Robert Kulesa, Carol LaFlamme, Faye Luke, Franklin Magnani, Lisa Matsumoto, Mark Mierwza, Allen Miho, James Nakanishi, Ron Nimcheski, Daylena Odom, Alicia Oh, Janet Phillips, Michael Quinn, Adrian Russell, Claude Saclusa, Patrick Sanchez, Tasi Santos, Lauri Saplad, Teri Silva, Anna Kanahele Simeona, Candace Sullivan, Clyde Tanabe, Glen Tani, Abe Tokioka, Ph.D., Brad Tolstedt, Edwin Ulsh, Deborah Wright, Gail Yoshimura, Leann Young

**Department of Accounting & General Services**

Brian Isa, Project Engineer, Planning Branch, Public Works Division

Joseph Earing, Section Head, Planning Branch, Public Works Division

Ralph Morita, Chief of Planning Branch, Public Works Division

## 5.5 PARTICIPANTS

**Architects Hawaii Project Team**

Gary Marshall, Director of Healthcare

Mariel Moriwake, Associate, Planner

Mayleen Cuestas