



**Item 314.M. – Report on the Preplanning Study for the
Construction of a
Virginia Center for Behavioral Rehabilitation II**

**to the Chairs of the House Appropriations and Senate
Finance Committees of the General Assembly**

April 28, 2014



COMMONWEALTH of VIRGINIA

DEBRA FERGUSON, Ph.D.
COMMISSIONER

DEPARTMENT OF
BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

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April 28, 2014

The Honorable Charles J. Colgan, Co-Chair
The Honorable Walter A. Stosch, Chairman
Senate Finance Committee
General Assembly Building, Room 626
P.O. Box 396
Richmond, Virginia 23218

Dear Senators Colgan and Stosch:

I am pleased to forward to you the department's report in response to Item 314.M. of the 2013 *Appropriation Act*. This report summarizes the results of the preplanning study which identifies the project scope, cost estimate and methodology, and programmatic needs for a VCBR Expansion. The full study will be delivered in hard copy to you and additional copies will be available to the public upon request.

On the basis of the results of this study, the department recommends the following:

- DBHDS should plan for an increase of an additional 300 beds.
- A phased implementation strategy should be used, with Phase I providing 122 beds.
- The expanded capacity should be contiguous to the current VCBR facility to take advantage of the current support areas and shared services.
- The estimated project cost of Phase I is \$96.4 million.
- "CM at Risk" should be used to expedite project delivery.

Further, in accordance with Item 314.M., which states:

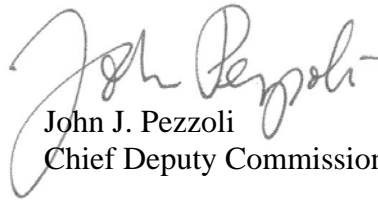
.... If an agreement on an option is reached by the Secretary of Health and Human Resources and the Chairman of the House Appropriations and Senate Finance committees, the Secretary of Finance is authorized to allocate up to \$1,000,000 from the Central Capital Planning Fund established under §2.2-1520, Code of Virginia for detailed planning of this project.....

DBHDS respectfully requests \$1.0 million be allocated from the Central Capital Planning Fund established under §2.2-1520 of the Code of Virginia for detailed planning of this project. If

funds are not available in the Planning Fund, the department requests authorization to utilize up to \$1.0 million from the Special Fund for this purpose, to be reimbursed upon renewal of the Planning Fund.

Staff are available to discuss the details of the study with you at your convenience.

Sincerely,

A handwritten signature in dark ink, appearing to read "John J. Pezzoli". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

John J. Pezzoli
Chief Deputy Commissioner

Attachment

Cc: The Hon. William A. Hazel Jr., M.D.
The Hon. Emmett W. Hanger, Jr.
Joe Flores
Clyde Cristman
Don Darr
Ruth Anne Walker



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April 28, 2014

The Honorable S. Chris Jones, Chairman
House Appropriations Committee
General Assembly Building, Room 947
P.O. Box 406
Richmond, Virginia 23218

Dear Delegate Jones:

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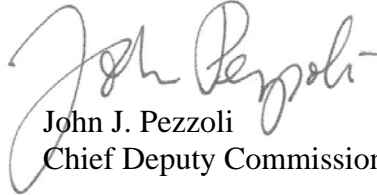
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The Hon. Riley E. Ingram
Susan E. Massart
Tony Maggio
Don Darr
Ruth Anne Walker

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**Item 314.M. – Report on the Preplanning Study for the Construction of a
Virginia Center for Behavioral Rehabilitation II**

April 28, 2014

I. Executive Summary

The existing Virginia Center for Behavioral Rehabilitation (VCBR) facility exceeded its initial design capacity of 300 residents (single-bedded) when the census reached 311 in August 2013. Double-bunking has increased the bed capacity to 450. If the Net New Resident Admissions Rate (new admissions less discharges) continues at the current rate of nearly four per month, the maximum capacity for residents will be reached in early to mid-2016.

Anticipating the need for additional facility space, the 2013 General Assembly authorized a study on options for such space. This report summarizes the results of the preplanning study and is submitted in accordance with Item 314.M. of the 2013 *Appropriation Act*, which states:

Out of this appropriation, \$250,000 the first year from the general fund is designated for the Department to preplan the construction/renovation of the Virginia Center for Behavioral Rehabilitation II (VCBR II) facility on state-owned property in and around the current VCBR site. The project options shall include costs for any relocation of current services as well as re-purposing of current facilities. The Department shall report the options for this project to the Chairman of the House Appropriations and Senate Finance Committees by October 15, 2013. If an agreement on an option is reached by the Secretary of Health and Human Resources and the Chairman of the House Appropriations and Senate Finance committees, the Secretary of Finance is authorized to allocate up to \$1,000,000 from the Central Capital Planning Fund established under §2.2-1520, Code of Virginia for detailed planning of this project.

The preplanning study identifies the project scope, cost estimate and methodology, and programmatic needs.

II. Preplanning Study

A. Project Guiding Principles/Assumptions

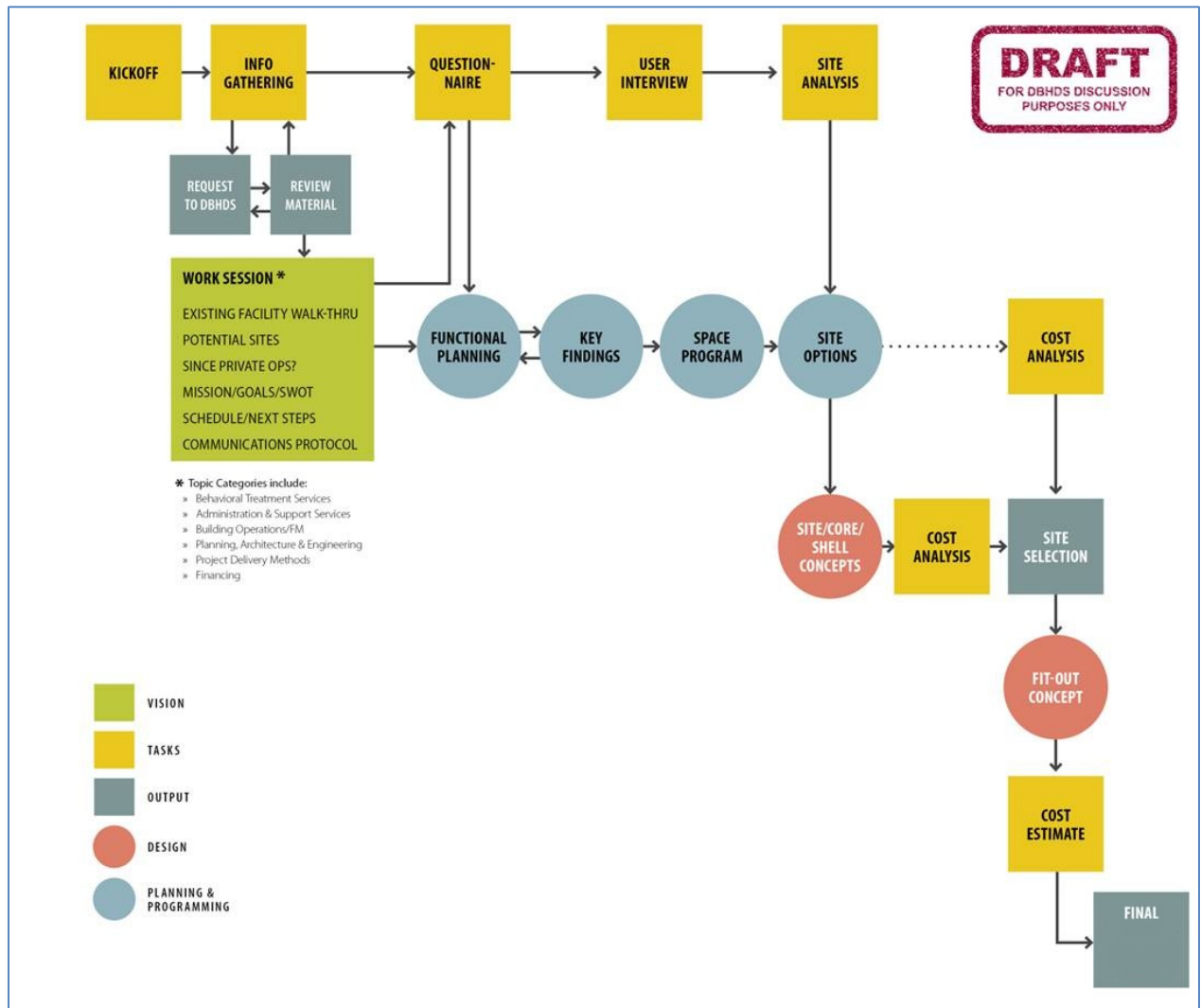
At the beginning of the project, Project Guiding Principles were established to provide a touchstone as the study developed. The VCBR expansion would:

- Maintain the current level of security in new areas;
- Provide an integrated solution, allowing areas/services to be shared by both the existing and expanded facility;
- Facilitate operational efficiencies;
- Improve the ability of VCBR to treat residents;
- Provide a multi-tiered environment which accommodates increased responsibility and self-management as residents progress in the program;
- Accommodate different functional levels of residents – form follows treatment function;
- Provide an environment that enhances treatment and reduces the length of stay;

- Provide flexibility to accommodate changing needs;
- Provide ability to address specialty needs/special needs populations; and,
- Provide ability to accommodate future growth.

B. Process

This report provides an overview of the proposed project for the construction of an expanded VCBR. The process of developing this study is articulated in the diagram below.



C. Justification of Need

Program Background

The treatment program provided by VCBR is multi-faceted and includes the following:

- An assessment of medical, psychiatric and SVP treatment needs, updated annually;
- Participation in a treatment program, including group therapy, family outreach, education, and dialectical behavior therapy;
- Recovery planning;

- Educational services;
- Vocational services, including work readiness training and work-for-pay positions;
- Recreational Services; and,
- Case management.

The need for treatment and program space increases proportionally to census growth, including: group, educational, and vocational and work readiness training areas. While initial treatment is primarily group-focused, as individuals progress through the program, the focus shifts towards more individualized treatment, with an increased emphasis on enhancing skills that allow residents to function effectively in the community.

It is through these programs that residents progress towards successful re-entry into the community. The programs are tightly scheduled, with each resident expected to participate in a minimum of 10 hours of treatment per week, with a maximum of 13 residents per group or class. At the current census level, all available treatment and educational space is in use for 12 hours per day. The vocational area has been repurposed to provide a dining hall to accommodate the population increase resulting from double-bunking, and is no longer available. The expanded VCBR would provide space for vocational programs/industry, more group and classroom areas, and the medical and psychiatric needs of the residents. These areas would be provided in the core facility to allow access by residents of both the existing and expanded facility.

Census and Phased Approach

Work began with a needs analysis – how many beds will be required and when. Current projections expect the existing 450 beds to be filled by early to mid-2016. An additional 300 beds (for a total of 750) would provide sufficient capacity until fall 2022. With the Net New Resident Rate declining over recent years, rather than initially constructing the full complement of beds, a phased approach seems the most beneficial to meet the needs of VCBR. Full build-out of the facility could be phased over a period of 8 to 15 years, allowing the flexibility to respond to changes in the commitment rate.

Phase 1 of the proposed expansion would provide for the construction of an additional 122 beds, with an expanded core facility that would include support space to serve all phases of construction. Phase 2 would provide an additional 178 beds when needed, resulting in a total of 750 beds. The first phase would set the stage for potential future growth. The conceptual design for all phases would be completed as part of Phase 1 to allow DBHDS to respond efficiently to the need for additional space in later years.



Architect's rendering of Phase 1 construction

D. Site Selection

Phase 1 of the project would encompass approximately 207,000 square feet, and with completion of the proposed phases, the expanded VCBR would require a minimum 12-acre site size. Using this size requirement, several sites in the immediate vicinity of the current VCBR were considered.

Each site was analyzed on the basis of 25 weighted factors, including: site challenges, availability of utilities, proximity to the existing facility, development (or renovation) costs, and risks. Criteria were developed and each criterion was given an importance factor from one (1) to five (5). The following options were reviewed.

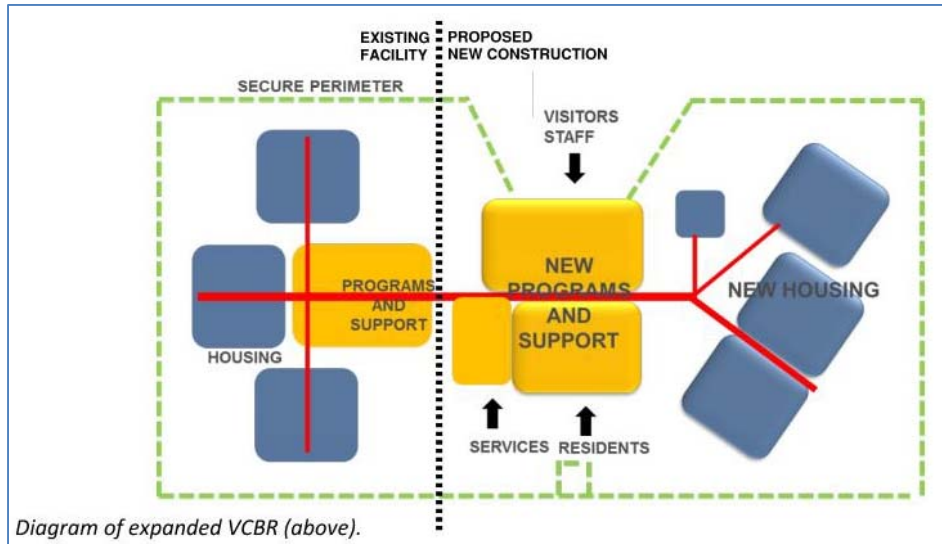
- Site Option A: Located immediately adjacent to existing VCBR
- Site Option B: Use of Piedmont Geriatric Hospital (PGH) existing Buildings 15 and 29
- Site Option B1: Adjacent to PGH Dogwood Road
- Site Option B2: Adjacent to PGH B2 Power Plant Road
- Site Option C: No Site Expansion

Based on the criteria in the flowchart in Section II B. above, Site Option A was selected.

Of the options considered, Option B was determined to have the highest cost (\$103.5 million) and present the greatest risk. Due to the type of construction needed, Building 15 is inflexible and would be difficult to adapt to the needs of VCBR. Building 29 does not have a security-hardened exterior and is sufficient only to serve as administrative, training and storage space. Both buildings would require major upgrades to all systems, including: HVAC, plumbing, electrical, fire alarm, and telecommunications. Building 29 contains asbestos, which would have to be abated. In order to comply with building codes, installation of an elevator and a sprinkler system would be required. Increased operating expenses would result from having services provided in multiple, disparate buildings.

Options B1, B2 and C were ranked lower due to drainage issues, site size, proximity to the existing facility, and/or public visibility. A detailed review of the above sites is available in the full preplanning study.

E. Programming and Concept Design



Functional programming and space programming are the processes by which the program requirements for a particular operating unit are identified. The programming is based on the service delivery model and ideal workflow(s) for a unit, and the key relationships that exist between the units. The result is a conceptual design that is flexible and meets the operational requirements of the project.

Phasing

It was determined that this project should provide a program and design to expand VCBR to accommodate 300 additional residents, with supporting administrative, treatment, support, and engineering services. The needs analysis projections bear out the need for all 300 additional beds by fall 2022.

With the Net New Resident Rate declining over recent years, rather than initially constructing the full complement of beds, a phased approach seems the most beneficial to meet the needs of VCBR. This resulted in a Phasing Analysis and Plan. DBHDS also looked at resident growth beyond the current projection of an additional 300 to ensure the designed plan would continue to accommodate expansion for the foreseeable future.

The study indicated there is adequate land to allow long-range planning and that decisions made today would not limit operational efficiency, flexibility, and the ability to provide services in the future.

With an aggressive schedule, Phase 1 of the expanded VCBR providing an additional 122 beds could be complete in approximately 2018. It is expected that the first of the new housing areas would be available for occupancy prior to the completion of the full Phase 1 construction, in time to meet the need for additional beds in 2016. This first housing unit would include construction of an unfinished floor that would be available to accommodate 50 beds in a later phase.

For efficiency, effectiveness, and to limit disruptions during construction of future additions, it was determined that administration, treatment, support and engineering areas should be built to accommodate not only the initial 122 beds, but the full 300 beds anticipated, at an additional cost of approximately \$3.5 million. In some cases, the areas would remain unfinished until a later phase of the project. Providing space for these support services on a piecemeal basis would create functional and security difficulties during construction of later phases, as the building would be occupied and these services are critical to continuing operations.

F. Capital Planning and Procurement

The Commonwealth utilizes four basic methodologies for procurement/delivery of capital projects. Each was analyzed, and the anticipated duration required to provide for the VCBR expansion is as follows:

Methodology	Anticipated Duration
Traditional Design-Bid-Build	56 months
Design-Build	57 months
CM at Risk duration	49 months
PPEA	63 months

Construction Manager (CM) at Risk is the fastest method and allows for the introduction of a builder in the design phase of the process while providing for competitive pricing on construction work. CM at Risk offers a significant scheduling advantage, and might become even more advantageous, if temporary housing were needed. This housing could be provided through the phased construction approach described above. As with Design-Bid-Build, the Commonwealth retains the design risk by holding the designer's contract, but as an agency with numerous facilities, DBHDS is highly experienced in the procurement management of architects and engineers and feels it could mitigate the design risk associated with the CM at Risk methodology. As a result, the use of "CM at Risk" for the VCBR expansion is proposed.

G. Cost Estimating

The cost estimate for Phase 1 indicates a total project cost of \$96.4 million. In addition to building construction and site development costs, the project cost includes design fees, project management, inspection fees, and associated reviews and testing. No land acquisition costs are included. The estimated cost for including the infrastructure for Phase II is \$3.5 million, which has been included in the above \$96.4 million estimate.

III. Recommendation

The department recommends the following:

- DBHDS should plan for an increase of an additional 300 beds.
- A phased implementation strategy should be used, with Phase I providing 122 beds.
- The expanded capacity should be contiguous to the current VCBR facility to take advantage of the current support areas and shared services.
- The estimated project cost of Phase I is \$96.4 million.
- “CM at Risk” should be used to expedite project delivery.

On the basis of the recommendations in this report, and in accordance with Item 314.M., which states:

.... If an agreement on an option is reached by the Secretary of Health and Human Resources and the Chairman of the House Appropriations and Senate Finance committees, the Secretary of Finance is authorized to allocate up to \$1,000,000 from the Central Capital Planning Fund established under §2.2-1520, Code of Virginia for detailed planning of this project.....

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