



STATE OF ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD

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DOCKET ITEM NUMBER: D-02	BOARD MEETING: October 30, 2018	PROJECT NUMBER: #12-066
PERMIT HOLDERS(S): Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center, Advocate Health Care Network, and Advocate Aurora Health		
FACILITY NAME and LOCATION: Advocate Christ Medical Center, Oak Lawn		

Project Description:

The Permit Holders are requesting an Alteration to Permit #12-066 – Advocate Christ Medical Center in accordance with 77 IAC 1130.750 – Alteration of the Project.

STATE BOARD STAFF REPORT
PERMIT ALTERATION REQUEST
Project #12-066

I. Project Description and Background Information

On December 10, 2012 the State Board approved the Permit Holders (Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center, Advocate Health Care Network, and Advocate Aurora Health) for the construction of a 7-level patient tower including the addition of 50 adult intensive care beds, 17 obstetric beds, and 27 neonatal intensive care beds in 308,090 gross square feet ("GSF") of new construction and 87,646 GSF of modernized space located at 4400 West 95th Street, Oak Lawn, Illinois.

State Board Staff Notes: Advocate Health Care Network and Aurora Health Care were approved by the Board Chair on February 1, 2018 to affiliate.

This is the first Alteration for this Permit. A Permit Renewal has also been submitted for this Permit to extend the completion date from July 31, 2019 to June 30, 2020.

II. Alteration to Permit

The State Board approved Advocate Christ Medical Center for the following beds and services at the December 2012 State Board Meeting. The Permit Holders now propose to increase the total number of intensive care beds by 17 beds and decrease neonatal beds by 3 beds.

Category of Service	Authorized Beds (12/2012)	Alteration	Change
Medical Surgical	394	394	0
Pediatric	45	45	0
Intensive Care	153	170	+17
OB	56	56	0
Neonatal	64	61	-3
AMI	39	39	
Rehabilitation	37	37	
Total	788	802	+14

According to the Permit Holders, this change in the number of beds is the result of a change in the care delivery model for neonatal service resulting in an increase square footage for this department and a decrease in the number of neonatal beds. In addition, since the approval of Permit #12-066 in 2012, demand increased for both pediatric and adult intensive care beds. This alteration proposes adding 16 pediatric intensive care beds and one adult neuro-intensive care bed in modernized space. These additions will increase the number of pediatric intensive care beds from 24 to 40 and adult intensive care beds from 129 to 130. The bed increases have resulted in intensive care square footage increases.

State Board Staff Notes: Generally an increase in the number of beds of lesser than 10% of total bed capacity or 20 beds does not require State Board approval. However, because the Permit Holder is increasing the number of beds which are subject to an outstanding permit State Board approval is required (See below).

III. Applicable Rules

77 ILAC 1130.750 specifies that a permit is valid only for the project as defined in the application and any change to the project subsequent to permit issuance constitutes an Alteration to the Project. **All alterations** are required to be submitted to the State Board for approval. Project alterations shall not increase the total approved permit amount by more than the limit set forth under the Board's rules.

Allowable alterations that require HFPB action are:

- 1) a change in the approved number of beds or stations, provided that the change would not independently require a permit or exemption from HFSRB;
- 2) abandonment of an approved category of service established under the permit;
- 3) any increase in the square footage of the project up to 5% of the approved gross square footage;
- 4) any decrease in square footage greater than 5% of the project;
- 5) any increase in the cost of the project not to exceed 7% of the total project cost. This alteration may exceed the capital expenditure minimum in place when the permit was issued, provided that it does not exceed 7% of the total project cost;
- 6) any increase in the amount of funds to be borrowed for those permit holders that have not documented a bond rating of "A-" or better from Fitch's or Standard and Poor's rating agencies, or A3 or better from Moody's (the rating shall be affirmed within the latest 18 month period prior to the submittal of the application). Summary of State Agency Findings

IV. Summary of Findings

- A) The State Board Staff finds the proposed Alteration appears to be in conformance with all applicable review criteria for Part 1110.
- B) The State Board Staff finds the proposed Alteration appears to be in conformance with all applicable review criteria for Part 1120.

V. Project Uses and Sources of Funds

The approved permit amount is \$299,990,191. The Permit Holders stated the costs to date are \$255,687, 836 and the costs to complete the project are estimated to be an additional \$29,748,299 for a total of \$285,436,135 or approximately \$14.6 million less than the approved permit amount. The funding for this project remains unchanged with cash in the amount of \$96,481,789 and a bond issue of \$203,508,402.

This alteration will not result in an increase in the permit amount or an increase in the total gross square feet.

TABLE ONE Project Costs		
Use of Funds	Costs To Date	Approved Amount
Preplanning Costs	\$4,370,500	\$4,370,500
Site Survey and Soil Investigation	\$202,074	\$263,400
Site Preparation	\$1,540,000	\$1,540,000
Off Site Work	\$4,583,000	\$4,583,000
New Construction Contracts	\$139,374,375	\$140,474,500
Modernization Contracts	\$31,514,042	\$29,397,568
Contingencies	\$9,063,898	\$16,678,705
Architectural/Engineering Fees	\$10,890,419	\$10,834,629
Consulting and Other Fees	\$6,945,368	\$9,916,000
Movable or Other Equipment (not	\$33,053,862	\$44,282,000
Bond Issuance Expense	\$408,660	\$2,150,600
Net Interest During Construction	\$3,307,671	\$13,707,723
Other Costs To Be Capitalized	\$10,433,966	\$21,791,566
Total	\$255,687,835	\$299,990,191
Alteration Costs	\$16,817,261	
Costs to Complete Project	\$12,931,038	
Total	\$285,326,125	\$299,990,191

VI. Space Requirements

The permit holders are not increasing the total gross square footage for this project. The space that is be modernized was approved As Is space.

TABLE TWO Space Requirements					
	Proposed	New Construction	Remodeled	As Is	Vacant
Approved Permit					
Clinical	270,344	91,589	36,045	142,170	12,837
Non-Clinical	268,102	216,501	51,601	0	0
Total	538,446	308,090	87,646	142,170	12,837
Altered Permit					
Clinical	258,575	91,589	44,036	112,749	10,201
Non-Clinical	279,871	216,501	63,370	0	0
Total	538,446	308,090	107,406	112,749	10,201

VII. Size of the Project, Projected Utilization, Assurance

A) Criterion 1110.120 – Size of the Proposed Project

To demonstrate compliance with this criterion the Permit Holders must document that the proposed alteration meets the size requirements specified in Part 1110, Appendix B.

The Permit Holders are proposing to increase the size of the intensive care bed unit by approximately 22,000 GSF in modernized space and decrease the NICU unit by approximately 9,600 GSF in modernized space from the approved permit amount. The Permit Holders are in compliance with the gross square footage standards for the two categories of service being altered. No other reviewable services are being altered.

TABLE THREE
Gross Square Feet by Department

Department/Area	Approved	Proposed	Increase Decrease GSF	Number of Beds Stations Rooms	State Standard		Difference	Met Standard
					Per Unit	Total		
Intensive Care Beds	76,241	98,308	+22,067	170	685	116,450	-18,142	Yes
Neonatal Intensive Care Beds	41,657	31,968	-9,686	61	560	34,160	-2,192	Yes

B) Criterion 1110.120 (b) – Projected Utilization

To demonstrate compliance with this criterion the Permit Holders must document that the proposed categories of service to be altered will be at target occupancy

As discussed in detail below the Permit Holders will be at target occupancy two years after project completion.

C) Criterion 1110.120 (e) – Assurance

Assurance was provided by the Permit Holders as required that the intensive care unit will be at target occupancy of 60% by the second year after project completion.

VII. Medical/Surgical, Obstetric, Pediatric and Intensive Care

The Permit Holders currently have 129 adult and 24 pediatric intensive care beds for a total of 153 intensive care beds. The State Board does not differentiate between pediatric and adult intensive care beds and considers both under one category of service.

The Permit Holders are proposing to add 16 pediatric intensive care beds for a total of 40 pediatric intensive care beds and one adult intensive care bed for a total of 130 adult intensive care beds.

A) Criterion 1110.200 (b) (2) – Planning Area Need – Service to Planning Area Residents

To demonstrate compliance with this criterion the Permit Holders must document that the proposed expansion of beds will serve the residents of the planning area.

At the time of approval, the Permit Holders provided patient origin information as required and 50% or more of the patients for the services to be expanded (intensive care beds) would come from within the planning area.

The Medical Center's Planning Area is the A-04 Hospital Planning Area which includes the City of Chicago Community Areas of West Pullman, Riverdale, Hegewisch, Ashburn, Auburn Gresham, Beverly, Washington Heights, Mount Greenwood, and Morgan Park; Cook County Townships of Lemont, Stickney, Worth, Lyons, Palos, Calumet, Thornton, Bremen, Orland, Rich and Bloom.

The Hospitals in the A-04 Planning Area are Adventist LaGrange Memorial Hospital, LaGrange, Advocate South Suburban Hospital, Hazel Crest, Franciscan St. James Health – Olympia Fields, Ingalls Memorial Hospital, Harvey, Little Company of Mary Hospital, Evergreen Park, MetroSouth Medical Center, Blue Island, and Palos Community Hospital, Palos Heights

B) Criterion 1110.200 (b) (4) - Planning Area Need – Expansion of a Category of Service

To demonstrate compliance with this criterion the Permit Holders must document there is sufficient demand for the proposed expansion of beds

The Permit Holders provided the following justification for the expansion of the intensive care beds at the Hospital. The State Board's target occupancy for the intensive care category of service is 60%.

Pediatric Intensive Care Beds (justification)

1. In 2016, 144 (or, on average, 36 per quarter) potential pediatric intensive care patient transports were turned away from the Hospital. During the first quarter of 2018, 76 potential pediatric intensive care admissions were turned away or more than twice as many as turned away per quarter in 2016. The Permit Holders believe the additional pediatric ICU beds will be needed because the Hospital will be able to accept transports when previously these patients were denied admission because of the lack of a pediatric intensive care bed. The Applicants believe this would result in approximately 815 additional patient days.
2. Adding the pediatric intensive care beds will allow the hospital to continue to provide care to Cardio Vascular Intensive Care Patients that are transferred to pediatric beds at times of high census in the pediatric intensive care patients. These patients could remain in the pediatric intensive care unit (PICU) where all services for intensive care patients are immediately available. These patients were equivalent to 548 patient days in 2016.
3. At times of high census, patients with other diagnoses are also moved to general pediatric beds when ideally they would have the full resources of the Pediatric Intensive Care Unit immediately available. Maintaining these patients in the pediatric intensive care beds until discharge, an additional 743 PICU days would be incurred.
4. During 2016, high pediatric intensive care census at times precluded admitting young teenage trauma patients (age 14, 15, and 16) to the PICU. Instead they were admitted to the Adult Trauma Unit. By definition, these are pediatric patients and are best cared for on the PICU. With additional PICU beds, these patients would account for an additional 125 PICU days.

Taken together this would account for 2,231 additional PICU days. With these 2,231 additional PICU days and the 7,224 PICU days reported in 2016 would equate to a total of 9,455 PICU days or an average daily census of 25.9 days.

$25.9 \text{ days}/60\% = 44 \text{ PICU beds}$. This would result in a need for 44 PICU Beds.

Adult Intensive Care Beds (justification)

The Permit Holders currently have 129 intensive care beds and is requesting 1 additional intensive care bed resulting in a total of 130 adult intensive care beds.

The Permit Holder's planning efforts at the Medical Center identified the need for a dedicated neurological intensive care unit to support the Medical Center's designation as a Comprehensive Stroke Center with the largest number of stroke patients of any hospital in the State of Illinois. Between 2016 and 2017, the volume of neuro critical care patients at the Medical Center increased from 3,801 days to 4,909 days, or by 29.2 percent; utilization through July of 2018 was 2,793 days or on pace with 2017 utilization. The clinicians and planners determined that neuro critical care volume could potentially support as many as 23 beds, but conservatively determined that an 18-bed unit would be adequate. The unit vacated by a unit relocated to the Bed Tower is being used as the Neuro Critical Care Unit. One bed is being modernized as part of this alteration. Current neuro volume consists of about one-third stroke-related patients, one third cranial patients (tumor removal and cranial brain injuries), and one third complex spine and other obscure neuro conditions.

TABLE FOUR
Historical Utilization
Intensive Care Beds

2015						
	ADM ⁽¹⁾	Days	ALOS	ADC	Beds	Occ.
Adult	3,857	26,635	6.96	73.5	129	57.00%
Pediatric	1,162	7,173	6.19	19.7	24	82.10%
Total	5,019	33,808	6.74	92.9	153	60.60%
2016						
Adult	4,711	28,697	6.09	78.6	129	60.90%
Pediatric	1,175	7,224	6.15	19.8	24	82.50%
Total	5,886	35,921	12.24	98.4	153	64.30%
2017						
Adult	5,088	30,691	6.03	84.1	129	65.20%
Pediatric	1,160	7,349	6.34	20.1	24	83.80%
Total	6,248	38,040	12.37	104.2	153	68.10%
Source: Information furnished by the Applicants						
ADM-Admissions						

C) Criterion 1110.200 (e) – Staffing Availability

To demonstrate compliance with this criterion the Permit Holders must provide evidence that the proposed expansion of beds will be sufficient staffed.

The Permit Holders have a 129-bed intensive care category of service in place and at the time of approval of this Permit and it was determined that the Permit Holders would be able to recruit sufficient staff to staff the number of beds being proposed.

D) Criterion 1110.200 (f) – Performance Requirements

To demonstrate compliance with this criterion the Permit Holders must document that the proposed number of intensive care beds meets the minimum number of beds for an intensive care unit located in a Metropolitan Statistical Area.

Advocate Christ Medical Center meets the requirement of an intensive care unit of 4-beds or more if the unit is located in a Metropolitan Statistical Area.

E) Criterion 1110.200 (g) – Assurance

To demonstrate compliance with this criterion the Permit Holders must provide assurance that the intensive care unit will be at the target occupancy of 60%.

Assurance was provided by the Permit Holders, as required, that the intensive care unit will be at target occupancy of 60% by the second year after project completion.

Neonatal Intensive Care Beds (NICU)

There are no specific rules to discontinue the number of NICU beds. The reasons for the decrease in NICU beds from 64-61 beds are presented below as well as the historical and projected utilization.

1. Structural

The Applicants are reducing the number of NICU beds from 64 to 61 beds as part of this Alteration. During the design development phase of the expanded NICU, the architects and engineers found multiple, but previously unidentified, existing column grids and less than ideal column spacing. These structural impediments resulted in inefficiencies in the NICU design and contributed to the need to reduce beds.

2. Delivery Model

The modernized NICU will be developed with all private rooms grouped in three neighborhoods with each grouping being served by local service support. The neighborhoods will not be specific to acuity; rather all beds will be equipped to care for neonates at all levels of acuity. Once admitted to a room, the baby will remain there for his entire stay and nurse staffing will be adjusted based on the acuity of the baby. The private room configuration requires more space than the open ward concept. This requirement for more space per bed and the limited space available to expand was the second factor that requires a modest reduction in the number of proposed neonatal intensive care beds.

The proposed design of the NICU unit will accommodate Level II+ and Level III babies.

TABLE FIVE					
Year	Beds	Days	ADC	Utilization	Utilization of 61 Beds
2013	64	14,092	38.5	60%	63%
2014	64	15,157	41.5	65%	68%
2015	64	15,886	43.5	68%	71%
2016	64	16,385	44.9	70%	74%
2017	64	17,555	48.1	75%	79%
2018	61	16,362	44.8	73%	73%
2019	61	16,362	44.8	73%	73%

The Applicants stated “in the future, as now, the NICU will operate with all Level III and as many Level II+ babies as can be safely accommodated on the unit. At times of extremely high census, soon-to-be discharged Level II+ babies may be transferred to the normal nursery with appropriate additional nurse staffing. Or, if an infant has been transferred to Advocate Christ from the birth hospital, after the baby stabilizes and when necessary resources are available at the birth hospital, some babies may be returned to the birth hospital. Based on these findings and plan of operation, the clinical and planning staffs are confident that the 61 proposed neonatal intensive care beds will meet foreseeable future need, even during peak census.”

VIII. Financial Viability

- A) Criterion 1120.120 – Availability of Funds**
- B) Criterion 1120.130 – Financial Viability**

These two criteria remain unchanged from the Original Permit.

IX. Economic Feasibility

- A) Criterion 1110.140 (a) – Reasonableness of Financing**
- B) Criterion 1110.140 (b) – Terms of Debt Financing**
- C) Criterion 1110.140 (c) – Reasonableness of Project Costs**
- D) Criterion 1110.140 (d) – Direct Operating Costs**
- E) Criterion 1110.140 (e) – Effect of the Project on Capital Costs**

The Permit Holders are not increasing the costs of this Permit. They project to expend approximately \$14.6 million less than the approved permit amount. These criteria remain unchanged from the Original Permit Amount.