ORIGINAL

APPLICATION

TO ALTER PERMIT 12-066

TO CONSTRUCT A PATIENT TOWER

at

ADVOCATE HEALTH and HOSPITALS CORPORATION

d/b/a

ADVOCATE CHRIST MEDICAL CENTER

Oak Lawn, Illinois

and

ADVOCATE HEALTH CARE NETWORK

and

ADVOCATE AURORA HEALTH

Advocate Christ Medical Center

4440 West 95th Street || Oak Lawn, IL 60453 || T 708.684.8000 || advocatehealth.com

9/20/2018

Ms. Courtney Avery
Administrator
Illinois Health Facilities and Services Review Board
525 West Jefferson Street (Second Floor)
Springfield, Illinois 62761

Dear Ms. Avery:

Enclosed is a request to alter Permit 12-066, To Construct a Patient Tower, at Advocate Christ Medical Center, in accordance with Section 1110.750 of the Administrative Code. This is the first alteration to the Permit.

The alteration has two parts.

Part 1 – Neonatal Intensive Care Beds

During the design development process, it became evident that the space available to enlarge and modernize the neonatal intensive care unit could not support the number of approved neonatal intensive care beds and that the approved number of beds would have to be reduced by 3 or from 64 to 61. A change in the care delivery model required that the square footage of the remodeled unit be increased. Part 1 addresses need for fewer beds and more square footage as well as the related cost of this alteration.

Part 2 – Intensive Care Beds

Since the approval of Permit 12-066 in 2012, demand increased for both pediatric and adult intensive care beds (which are both included in the same category in the Rules). 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. Part 2

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addresses the need for additional pediatric and adult intensive care beds and square footage and the related cost of these alterations.

If you have any questions about this alteration, please contact Janet Scheuerman at JScheuerman@consultprism.com.

Thank you for your timely consideration of this request.

Sincerely,

Matthew Primack
President

Enclosure: Filing Fee $1,000.00 alteration filing fee

Introduction

In July 2012, Advocate Health Care Network and Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center (Advocate Christ, Medical Center) filed a certificate of need application to develop a new patient tower. Three months later, in October 2012, the applicants deferred, modified and refiled the application which was subsequently approved by the Illinois Health Facilities and Services Review Board (IHFSRB) on December 10, 2012 as Permit 12-066. As a point of information, on February 1, 2018, the Illinois Health Facilities and Services Review Board, in Exemption E-076, approved a change in ownership for Advocate Christ Medical Center related to an affiliation agreement between Advocate Health Care Network and Aurora Health Care, Inc. whereby Advocate Aurora Health, Inc. would become the new corporate member of each entity. The proposed affiliation was completed as of April1, 2018. There was no change in the licensee/operating entity or the owner of the site.

Almost 6 years have passed since the modified application for Project 12-066 was approved and in the interim many changes have occurred in the demand for space at the Medical Center. The components of the project affected by changes and addressed in this alteration include two categories of service, neonatal beds and intensive care beds. Total current and proposed bed complements are profiled on Exhibit 1. All proposed altered square footage is in modernized space. There is no new construction.

Part 1 includes:

1. Decreasing the number of neonatal intensive care beds from 64 to 61, and
2. Increasing the square footage of the neonatal intensive care unit by 9,278 sf.

Part 2 includes:

1. Adding 16 pediatric intensive care beds, thereby increasing the number of pediatric intensive care beds from 24 to 40. It also includes adding one adult intensive care bed, thereby increasing the number of adult intensive care beds from 129 to 130 and increasing the total intensive care beds from 153 to 170. Together these alterations account for 8,412 sf of space.

As shown in this alteration document, the proposed alteration will change the total bed complement by 14 authorized beds.

+16 pediatric intensive care beds +1 adult intensive care bed = +17 intensive care beds

+ 17 intensive care beds - 3 neonatal intensive care beds = 14 additional beds

14 additional beds < State maximum of 20 allowable altered beds

PART I

RATIONALE FOR REDUCING THE NUMBER OF NEONATAL INTENSIVE CARE BEDS AND INCREASING THE SQUARE FOOTAGE OF THE NICU (Neonatal Intensive Care Unit)

Background

Neonatal services at Advocate Christ Medical Center are provided through Advocate Children's Hospital – Oak Lawn (ACH – OL) which is licensed as part of Advocate Christ Medical Center. The Medical Center's neonatal geographic service area includes the local community as well as a broad referral area including Illinois and beyond. In addition to the high risk infants born at Advocate Christ, each year Advocate Christ receives more than 200 neonatal transports from either Advocate hospitals or more than 25 other facilities. The Medical Center also receives high risk maternal transports. Because of the extensive advanced clinical capabilities of Advocate Christ's neonatal service, many neonatal patients are from facilities that have neonatal service but do not have the advanced capabilities available at the Medical Center.

Two fundamental factors contributed to the proposed reduction of 3 neonatal intensive care beds at Advocate Christ – structural limitations and improved care delivery model.

Structural Limitations

The Neonatal Intensive Care Unit at Advocate Christ will be modernized in space that formerly housed the existing 37-bed NICU as well as space vacated by the Obstetric Department as part of Permit 12-066. 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.

Improved Care Delivery Model in the NICU

The Medical Center's existing NICU is an open ward design. Unlike the current design, 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.

Research has shown improved medical and neurobehavioral outcomes for neonates cared for in private rooms rather than open wards. These improved outcomes are related to increased developmental support and better infection control.

In addition to improved outcomes, the private room design will allow the minimum number of beds to be maintained throughout the unit's multiple modernization phases and this bed availability is very important to the ongoing operation of the neonatal intensive care service during modernization.

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.

Together, these factors – the adoption of the private room/neighborhood design requiring more square footage per bed and the inefficiencies related to column grids and spacing – reduced the number of neonatal beds that the available space could accommodate. Despite several attempts to design the unit with the approved 64 beds, 61 is the maximum that could be achieved. Exhibit 2 is a diagram of the altered NICU design showing 58 patient rooms. Of these, 55 will be private rooms and 3 will be twin rooms which brings the total altered NICU count to 61 beds.

Determination of Need for the Proposed 61 Neonatal Intensive Care Beds

The NICU is an integral part of Advocate Christ's Perinatal Center. Being designated as a Level III center means that the Medical Center is able to care for the most acutely ill newborns.

In 2004, the Medical Center was authorized by the-then Illinois Health Facilities Planning Board to increase its number of neonatal intensive care beds to 37. In that application, the Medical Center outlined the rationale for having Level II+ and Level III babies in a single neonatal unit. A NICU capable of caring for both Level II+ and Level III babies provides benefits for babies, their families, and staff. For example, because the babies stay in one area, personal linkages develop between the families and the caregivers; the flow of critical information among clinicians and the family is enhanced.

Having a single NICU permits greater staffing flexibility and efficiency than having babies in separate Level II+ and Level III units. In a unit that can accommodate the continuum of neonatal care, a nurse can be assigned to a baby or babies and the family upon admission. The nurse follows the baby as it progresses from more acute to less acute status. The modernized NICU will continue to accommodate Level II+ and Level III babies. The neonatal charge structure has been designed to reflect the acuity of the neonates.

Before moving forward with three fewer neonatal intensive care beds, the Advocate Christ clinicians and planners tested the revised capacity to provide care to the expected volume of patients. As shown on Table 1, the proposed 61-bed NICU will support current and projected budgeted utilization.

Table 1
Historical and Proposed Utilization of 61 Neonatal Intensive Care Beds at Advocate Christ
2013 through 2018

Year	Proposed Beds	Total Level III and Level II+ Days	Average Daily Census	Occupancy of Proposed 61 Beds
2013	61	14,092	38.5	63.3
2014	61	15,157	41.5	68.0
2015	61	15,886	43.5	71.3
2016	61	16,385	44.9	73.6
2017	61	17,555	48.1	78.9
2018 Budget	61	16,362	44.8	73.5
2019 Budget	61	16,362	44.8	73.5

Source: Advocate Christ Medical Center Financial Department

During the early months of 2018, neonatal intensive days declined modestly. Although the decline was most likely due to the amount of modernization/construction in the area with some beds being temporarily out of service, Advocate Christ leadership, to be conservative, reduced the budgeted number of days for 2018 and 2019. Even so, the projected occupancy of the beds will remain strong at over 70 percent and will certainly achieve 75 percent occupancy by the end of the second year of operation when all beds are in service and construction has been completed. See Exhibit 3.

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.

Square Footage Assigned to the Neonatal Intensive Care Unit

The altered NICU will have 41,246 sf of space or 9,278 sf more than approved in the Permit. This square footage is justified by the very high acuity of the neonatal patients who require more physician and nurse staffing, other clinical specialists, more bedside and unit equipment, more family space, as well as additional space necessary for the graduate medical education program. It is further justified by the inefficiencies inherent in modernizing vacated space.

The modernization of the NICU is a multi phase project and is expected to be completed in 2019.

Cost Assigned to the Altered Neonatal Intensive Care Unit

Of the total square footage assigned to the altered neonatal intensive care unit, the cost of 31,968 sf was accounted for in the modified application. The additional cost of the space remodeled as part of this alteration is $9,352,461.

PART 2 – PEDIATRIC ADULT INTENSIVE CARE BEDS

RATIONALE FOR INCREASING THE NUMBER OF PEDIATRIC INTENSIVE CARE BEDS, THE NUMBER OF ADULT NEURO CRITICAL CARE BEDS AND THE SQUARE FOOTAGE RELATED TO EACH

Background

Advocate Christ Medical Center has major roles in both pediatric intensive care and pediatric general care. Pediatric services are provided through Advocate Children's Hospital which is located on two Advocate campuses – Advocate Christ Medical Center in Oak Lawn (ACH – OL) is one of them. ACH-OL is licensed as part of Advocate Christ Medical Center.

ACH-OL is designated as a Pediatric Critical Care Center and a Pediatric Trauma Center by the Illinois EMS. ACH-OL is a tertiary/quaternary provider that receives patients from as far away as anywhere in Illinois and Northern Indiana and beyond. With a respected transport team, ACH-OL has the capability to transport patients by ground, helicopter or fixed wing.

Advocate Children's Hospital-OL provides many advanced clinical programs for children. For example, Advocate Children's Heart Institute is a recognized leader in caring for pediatric hearts. This program includes the latest technologies such as CT and MRI imaging combined with a team of specialists to detect and treat congenital heart defects, heart rhythm problems, congestive heart failure and a wide range of other heart-related issues in utero and after birth. The Institute was named a national leader in Pediatric Cardiology and Pediatric Surgery by *U.S. News and World Report.* In addition, it was in the top 10 percent of Best Performing Children's Hospitals in the nation for Cardiovascular Surgery Quality Outcomes according to the Society for Thoracic Surgery (STS) for the seventh year in a row.

Medical advances for children with medically complex heart defects have led to greater survival rates. However, research shows that children born with complex heart defects are at greater risk for experiencing developmental delays. To address this potential, the Advocate Children's Neurodevelopment Program has developed a wide range of clinical assessments to identify early developmental delays and disorders, interventions to address them, and consultation with schools to help devise special education plans. This is just one example of the comprehensiveness of Advocate Christ's pediatric cardiology program.

As part of this alteration, Advocate Christ is proposing to remodel vacated space that previously housed a 17-bed adult intensive care unit. This adult intensive care unit was relocated to the new East Tower in 2016. Advocate Christ is proposing to modernize the space to house 16 pediatric intensive care beds. Licensure requires that one of the rooms be assigned as support space. The location of the vacated unit is ideal for the pediatric cardiovascular program because of its proximity to the surgical suite.

In actual clinical practice, adult and pediatric intensive care beds are not interchangeable. The care of pediatric patients requires specially trained nurses and other support staff, specialty boarded pediatric medical and surgical physicians as well as anesthesiologists. In addition, equipment designed especially for infants and children must be provided. However, the IHFSRB does not differentiate between adult and pediatric intensive care beds. To justify the need for 16 additional intensive care beds (and, specifically for 16 additional pediatric cardiovascular intensive care beds), the Medical Center has elected to provide both adult, pediatric and total intensive care utilization in this application.

Table 2 provides 3 years of historical utilization data for adult, pediatric and total intensive care bed utilization. (See next page.)

Table 2
Utilization of Adult and Pediatric Intensive Care Beds at
Advocate Christ and AHC-OL
2015 - 2017

		Adm	Days	ALOS	ADC	Beds	Pct. Occ
2015							
	Adult	3,857	26,635	6.96	73.5	129	57.0
	Pediatric	1,162	7,173	6.19	19.7	24	82.1
	Total	5,019	33,808	6.74	92.6	153	60.6
2016							
	Adult	4,711	28,697	6.09	78.6	129	60.9
	Pediatric	1,175	7,224	6.15	19.8	24	82.5
	Total	5,886	35,921	6.10	98.4	153	64.3
2017							
	Adult	5,088	30,691	6.03	84.1	129	65.2
	Pediatric	1,160	7,349	6.34	20.1	24	83.8
	Total [1]	6,248	38,040	6.09	104.2	153	68.1
	Total [2]	6,266	38,139	6.09	104.5	153	68.3

Source: Advocate Christ Medical Center Financial Records

[1] 11 months of data annualized

[2] AHQ 2017 annual data indicates that actual utilization was greater than the 11 months of data annualized, thus making the projections slightly conservative.

[3.] Advocate Christ added 50 adult intensive care beds as part of Permit 12-066; this brought the number of adult intensive car beds to 129. These beds immediately were added to the Medical Center's bed inventory; however, they did not become operational until 2016. ACH – OL currently also has 24 pediatric intensive care beds – one 9-bed unit and one 15-bed unit. No pediatric intensive care beds were added as part of Permit 12-066. As shown on Table 2, both the adult and pediatric intensive care beds operated in excess to the State Guideline of 60 percent annual occupancy for intensive care beds for each of the last three years except for adult beds in 2015 when only 79 beds were available. In 2015, the 79 available intensive care beds operated at 93.0 percent occupancy.

Note: The Advocate Christ Medical Center bed capacity by service at no time exceeded the bed capacity authorized in Permit 12-066.

Determination of Need for 16 Additional Pediatric Intensive Care Beds

The overall goal of the proposed increase in pediatric intensive care beds at ACH – OL is to assure that pediatric patients requiring intensive care are accommodated in a timely way in state-of-the-art facilities designed to meet the needs of acutely ill infants, children, teenagers and their families and staff. Today, because of the very high occupancy of the existing 24 pediatric intensive care beds, this is often not possible. With the proposed additional pediatric intensive care beds, ACH – OL will have 40 pediatric intensive care beds that will operate at over 60 percent occupancy when alteration is completed in early 2020.

The following is a brief description of the conservative factors quantified to arrive at the need for 16 additional pediatric intensive care beds. (See Exhibit 4 – Factors Affecting the Need for Pediatric Intensive Care and Pediatric General Beds).

The original pediatric bed need analysis was completed in 2017 using 2016 data. Since then, key indicators demonstrate that the need for additional pediatric intensive care beds has increased. For example, in 2016 144 (or, on average, 36 per quarter) potential pediatric intensive care patient transports were turned away from Advocate Children's Hospital – OL. 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. For these reasons, Advocate Christ assumes utilization would be even greater if determined by 2017 or annualized 2018 data. The following factors were considered in determining the number of additional pediatric intensive care beds.

New Patients

1. Reduce the Number of Patient Transports from Other Facilities Denied because No Pediatric Intensive Care Beds Available at ACH – OL
   Because ACH – OL offers a comprehensive cadre of pediatric specialists, other specialized clinical staff and technology, community physicians often request that their most acutely ill pediatric patients be transported and admitted to ACH – OL. These requests for transport come from across Illinois and beyond. In 2016, these transport denials were determined by the planners and clinicians to be equivalent to 815 patient days.

2. Reduce the Number of Denied Transports to General Pediatric Beds

   Again, because ACH – OL has an extensive cadre of pediatric specialists and other clinical staff, unique equipment, and programs as well as a reputation for excellence. Further, many hospital-based general pediatric units are being discontinued; as a result, community physicians are increasingly requesting that general pediatric patients be transported to ACH – OL. The pediatric program serves the local community as well as a broad regional market including Other Illinois and Out of State. This substantial presence in the regional market is reflected in the in-migration of patients to ACH – OL's very specialized programs and especially the advanced cardiac and cancer care services.

   In 2016, 288 general pediatric patients were turned away. Again, based on experience, the clinicians and planners at ACH – OL estimated that had these patients been admitted to the facility, they would have accounted for 926 additional general pediatric days. In the first quarter of 2018, 63 general patients were turned away or very similar to the 2016 volume.

Relocate Patients

3. Eliminate Transfers of Pediatric Cardio Vascular Intensive Care Patients from the PICU to General Pediatric Beds

   At times of extremely high census, it is necessary to transfer cardiovascular (cardiac surgical) patients from an intensive care bed to 2 Hope (a general pediatric unit). The care and safety of these patients is never compromised because the staffing is increased on the 2 Hope unit. However, these patients should 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.

4. Reduce Transfers of Short Stay (Less than 1 Day) Patients from the Pediatric Intensive Care Unit (PICU) to General Pediatric Beds

   Similarly, 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 PICU immediately available. These include high flow oxygen, high dose chemotherapy, monoclonal antibody, and children with compromised airways (sleep apnea, BIPAP, and persistent vegetative state).

   Data from 2016 shows that by maintaining these patients in the PICU until discharge, an additional 743 PICU days would be incurred.

5. Reduce the Admission of Young Teenagers to the Adult Trauma Unit

   During 2016, high PICU 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.

6. Increase Admissions to the General Pediatric Beds on 2 Hope and on 4 Hope

   2 Hope and 4 Hope will have open bed capacity as patients are appropriately relocated from general to the additional new pediatric intensive care beds. Some of these new admissions would be accounted for by the ability to accept all requested general pediatric transfers. Other volume will be from hospitals that are discontinuing pediatric general beds, including Advocate South Suburban Hospital which is located in the same Health Planning Area as ACH – OL. Finally, new patients will be accounted for by new general and specialist pediatric physicians recruited to the medical staff and new programs on the drawing board at ACH – OL based on identified need in the service area.

7. Eliminate Pediatric Stays in the Decision Support Unit.

   During peak times, ACH-OL has operated a 4-bed observation unit for pediatric patients with low acuity (typically less than a 24-hour admission). Typically these patients would be on a designated pediatric unit where the staff and resources specific to the needs of children are available. This unit closed in June 2018 and these patients will now be cared for on the general pediatric units, 2 Hope and 4 Hope.

Taken together – accepting a higher percentage of requested transfers, retaining patients in the PICU rather than transferring them to general pediatric beds, and avoiding admitting pediatric trauma patients to the adult trauma unit, account for 2,231 additional PICU days. These additional days, together with the 7,224 PICU days reported in 2016 conservatively calculate to the need for as many as 44 PICU beds, or 20 more than currently authorized.

7,224 2016 PICJ days + 2,231 relocated PICU days = 9,455 total PICU days in 2016

9,455 PICU days ÷ 365 days per year = 25.9 average daily census

25.9 average daily census x 60 percent occupancy = 44 needed PICU beds

To be conservative, Advocate Christ is requesting only 16 additional pediatric intensive care beds for a total at project completion of 40 pediatric intensive care beds. This calculates to a conservative 64.8 percent occupancy at opening. No pediatric general beds will be added as part of the project.

9,455 projected PICU days + 30,961 adult ICU days = 40,146 total intensive care days

40,146 intensive care days ÷ 365 days per year = 110 average daily census

110 average daily census ÷ 170 beds (130 adult and 40 pediatric intensive care beds) = 64.7 percent occupancy

Based on these analyses, at the completion of Permit 12-066, Advocate Christ's total 170-bed intensive care bed complement will be operating at 64.7 percent occupancy or higher than the State target of 60 percent for intensive care beds. An assurance letter attesting to this occupancy is included as Exhibit 3.

Determination of Need for One Additional Adult Neuro Intensive Care Bed

When the new tower (known as the East Tower) was completed in 2016, one of the existing intensive care units was relocated to the seventh level of the Tower.

Ongoing planning efforts at Advocate Christ 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. Additional planning for what was to be called the Neuro Critical Care Unit (NCCU) determined an increasing volume of neuro critical care patients were being cared for in several of the Medical Center's critical care units – many of which were operating at very high occupancies.

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 Tower is being used as the Neuro Critical Care Unit (NCCU). One bed is being modernized as part of this alteration. These beds would operate at 74.4 percent occupancy.

4,909 days ÷ 365 = 13.4 ADC

13.4 ADC ÷ 60 percent occupancy = 23 beds

13.4 ADC ÷18 beds 74.4 percent occupancy

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.

The proposed NCCU will have a close working relationship with the Medical Center's Trauma Center. At the same time as the planning for the reuse of the vacated space was underway, a team of specialized professional staff came together to provide complex, high quality neuro patient care. The staff includes neurosurgeons and APNs for round the clock staffing. This service obviously meets the needs of the increasingly complex patients who are assigned to the unit.

PROPOSED ALTERATION APPEARS TO BE IN COMPLIANCE WITH SECTION 1130.750 OF THE ADMINISTRATIVE CODE

Section 1130.750 of the Administrative Code notes that "Projects for which a permit has been issued can be altered during the time period between the permit issuance and the date of project completion. Permit 12-066 was issued in December 2012 and originally scheduled for completion July 31, 2019. A permit renewal application is being filed concurrently with this alteration to renew the completion date to June 30, 2020.

Allowable alterations that are part of this proposed alteration requiring IHFSRB action are:

1. A change in the number of beds or stations, provided that the change would not independently require a permit or an exemption from the IHFSRB. (Twenty is the maximum number of beds that can be increased)
2. An increase in the square footage of the project up to 5% of the approved square footage.
3. An increase in the cost of the project not to exceed 5% of the total approved project cost.

As described below, the proposed alteration to Permit 12-066 appears to be in compliance with the relevant allowable alteration criteria.

Change in the Approved Number of Beds

This alteration application describes changes in the number of beds in two categories approved in Permit 12-066. These changes are a decrease in the number of neonatal intensive care beds and increases in the number of pediatric and adult intensive care beds.

Neonatal Intensive Care Beds

Advocate Christ Medical Center was authorized to have 64 neonatal intensive care beds in Permit 12-066. This alteration outlines the rationale for decreasing the number of authorized neonatal intensive care beds from 64 to 61 due to structural limitations in the space being modernized for the expanded unit and a change in the model of care which requires more space per bed; these factors contributed to the modest reduction in the number of beds that could be accommodated in the available space. In addition, the applicants are proposing to add 16 pediatric intensive care beds and one adult intensive care bed.

+16 pediatric intensive care beds + 1 adult intensive care bed – 3 neonatal intensive care beds = 14 additional beds

+14 beds is < State maximum of 20 beds in an altered application

A letter assuring that new beds will operate at State Agency target occupancy within two years is included as Exhibit 3.

Square Footage Assigned to the neonatal and intensive care beds

Permit 12-066 authorized Advocate Christ to have 395,736 additional sf including 308,090 sf of new construction and 87,646 sf of modernization. Based on this total square footage, allowable alterations may not exceed more than 5 percent of total project square footage, or more than 19,787 sf for Permit 12-066.

At project completion, the neonatal intensive care unit will have 41,246 sf of space, see Exhibit 5. In Attachment 9 of the modified application, the neonatal intensive care unit was included with 31,968 sf of space. See Exhibit 5. The difference between the authorized and the altered square footage is +9,278 sf.

41,246 sf – 31,968 sf = +9,278 sf

The altered pediatric intensive care unit is being remodeled in existing space. The space in the altered unit is the same space as the original unit. Together, the altered pediatric intensive care unit and the modernized adult intensive care room (NCCU) will have 8,104 sf.

The addition of the neonatal intensive care space and the pediatric and adult intensive care unit space equals 17,690 sf of space for intensive care services, or fewer than allowed in this alteration.

9,278 sf + 8,412 sf = 17,690 total altered sf

17,690 altered sf < 19,787 allowed for an alteration

See Exhibit 6

Change in Project Cost

Permit 12-066 was approved for a total project cost of $299,990,191. The expenditures related to this alteration are first the cost of completing the neonatal intensive care unit expansion ($9,352,461) and the second is the modernization of the 16-bed pediatric intensive care unit ($16,539,661) and modernization of one adult (neuro) intensive care bed ($277,600) for a total alteration cost of $16,817,261. See Exhibit 6.

In summary, the expected cost of the project will include the total expenditures incurred to date including the approved neonatal intensive care space plus the alteration-related costs plus the costs to complete the project.

$255,687,836 expenditures to date + $16,817,261 alteration costs
+ $12,931,038 expected project completion costs =

$285,436,135 total expected project completion costs

$285,436,135 Total expected project completion costs < $299,990,191 Total approved original project costs

Conclusion

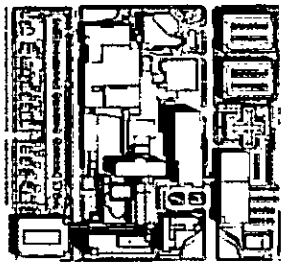
Advocate Christ Medical Center's proposed alterations to Permit 12-066 appears to be in compliance with the Administrative Code 1130.750. These alterations will be completed before the project's proposed renewed completion date, June 30, 2020.

Advocate Christ Medical Center

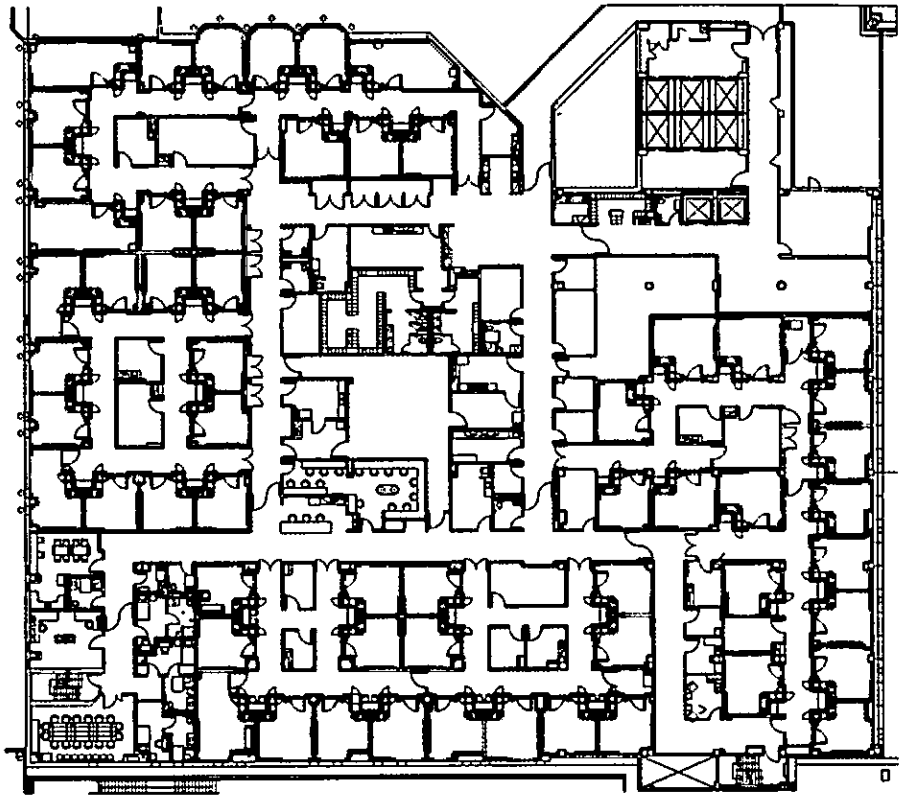
	Authorized Beds [1]	Proposed Bed Alteration	Proposed Beds
Medical / Surgical	394		394
Intensive Care			
Adult	129	+1	130
Pediatric	24	+16	40
Total	153		170
Neonatal Intensive Care	64	-3	61
General Pediatrics	45		45
Rehabilitation	37		37
Acute Mental Illness	39		39
Obstetrics	44		44
Total	788	+14	802

[1] At no time has the number of operational beds by service exceeded the number of authorized beds.

Altered Neonatal Intensive Care Unit Design Showing Location of the Proposed three "Neighborhoods"



CAMPUS PLAN



PARTIAL SECOND FLOOR PLAN: **58 Patient Rooms**

61 Bed Positions

Neonatal Intensive Care Unit
Advocate Christ Medical Center
29 September 2017

HDR

Advocate Christ Medical Center

4440 West 95th Street || Oak Lawn, IL 60453 || T 708.684.8000 || advocatehealth.com

9/20/2018

Ms. Courtney Avery
Administrator
Illinois Health Facilities and Services Review Board
525 West Jefferson Street (Second Floor)
Springfield, Illinois 62761

Re: Compliance with IHFSRB's Second Year Target Utilization Rate

To Whom It May Concern:

This letter is being written for inclusion in Advocate Christ Medical Center's first alteration to Permit 12-066 addressing expansion of the neonatal intensive care unit and the increase in the number of intensive care beds in existing space at the Oak Lawn campus.

Please be advised that it is my expectation and understanding that by the second year following the project's completion, the 61 neonatal intensive care beds, the 16 pediatric and the 1 adult (neuro) critical care bed, in this alteration will be operating at the HFSRB's target utilization rate, and that it will, at minimum, maintain this level of utilization thereafter.

Sincerely,

Matthew Primack
President
Advocate Christ Medical Center

Notarization:

Subscribed and sworn to before me

this 20th day of SEPTEMBER, 2018

OFFICIAL SEAL
COLLETTA A PLONIS-KOTARSKI
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:02/10/20

Signature of Notary

Factors Affecting Pediatric Intensive Care and General (Floor) Beds

	Pediatric Intensive Care Beds			Pediatric General = 2016		
	Patient Intensive Care Days	ADC	Beds @ 60% Occupancy	Pediatric Patient Days	General (Floor) Beds ADC	Beds @ 75% Occupancy
New Patients						
1. Transports to PICU	815	2.23	3.72			
2. Transports to Floor				926	2.54	3.38
Internally Relocated Patients						
3. Cardiac patients remain in PICU	548	1.50	2.50	-548	-1.50	-2.00
4. Other remain in PICU	743	2.04	3.40	-743	-2.04	-2.72
5. Pediatric trauma (14, 15, 16 years)	125	0.40	0.66			
6. Vacated capacity on 2 Hope and 4 Hope					2.64	3.52
7. Pediatric observation patients from Decision Support lent to floor						
Total	2,231	6.11	11.00	926	2.53	3.37

Cost / Space Requirements							
		Gross Square Feet		Amount of Proposed Total GSF That Is:			
Department	Cost	Existing	Proposed	New Construction	Remodeled	As Is	Vacated Space
Clinical							
OB Triage	$ -	2,795	5,409		5,409		
Labor/Delivery/Recovery	$ -	9,444	13,853	13,853			
C-Section Suite	$ -	1,970	3,525	3,525			
Phase I Recovery	$ -	7,866	8,884	1,618		7,266	
Existing C-Section Recovery		*600*		*1,618*			
Hospital Surgical Recovery		*2,796*				*2,796*	
Ambulatory		*4,470*				*4,470*	
Obstetric Beds	$ -	18,410	36,506	32,702		3,804	8,873
Antepartum beds	$ -		*3,824*	*3,824*			
Postpartum beds	$ -		*28,878*	*28,878*		*3,804*	*8,873*
2W		*5,761*					*5,761*
2E		*5,733*					
3W		*6,916*				*3,804*	*3,112*
Newborn nursery bassinets	$ -	1275	1,799	1,799			1,275
Neonatal Intensive Care Beds	$ -	6,848	31,968		31,968		
Intensive Care Beds	$ -	40,356	98,308	66,698		31,610	8,746
SINI		*9,464*				*9,464*	
MICCU		*8,746*					*8,746*
PICU/PSHU		*8,518*				*8,518*	
ASHU		*9,806*				*9,806*	
SVTU/AHU		*3,822*				*3,822*	
Medical Surgical Beds	$ -	96,090	93,840		2,191	91,649	
Morgue	$ -	979	2,597	2,597			979
	$ -						
Clinical to Non Clinical		-2,574					
Total Clinical	$ -	183,459	296,689	122,792	39,568	134,329	19,873

Cost / Space Requirements							
		Gross Square Feet		Amount of Proposed Total GSF That Is:			
Department	Cost	Existing	Proposed	New Construction	Remodeled	As Is	Vacated Space
Building Components		10,103	78,821	71,103	7,718		
Shell Space			15,488	15,488			
Total Non-Clinical	$ -	54,744	310,494	266,079	44,415	0	0
Total Project	$ -	238,203	607,183	388,871	83,983	134,329	19,873

Attachment 9 Cost Space Requirements							
Cost / Space Requirements							
		Gross Square Feet		Amount of Proposed Total GSF That Is:			
Department	Project Cost	Existing	Proposed	New Construction	Remodeled	As Is	Vacated Space
Neonatal Intensive Care	$ 9,532,461	31,968	41,246		9,278	31,968	
Intensive Care [1]	$ 7,284,800	76,241	84,653		8,412	76,241	
	$ -						
	$ -						
Total Project	$ 16,817,261	108,209	125,899	0	17,690	108,209	0
APPEND DOCUMENTATION AS ATTACHMENT 9, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM							

[1] Includes adult and pediatric intensive care beds.