

# Axel & Associates, Inc.

MANAGEMENT CONSULTANTS

by email and USPS

September 28, 2018

Michael Constantino  
Supervisor, Project Review  
Illinois Health facilities and  
Services Review Board  
525 West Jefferson  
Springfield, IL 62761

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HEALTH FACILITIES &  
SERVICES REVIEW BOARD

RE: Project 18-023  
Rush University Medical Center  
New Ambulatory Care Building

Dear Mike,

Please accept this letter in response to your September 26, 2018 inquiry relating to the anticipated construction cost and architectural and engineering fees associated with Rush University Medical Center's proposed project.

The applicants have taken great care to ensure that the costs associated with this project are not excessive, and that the building is not designed in a fashion that would result in unnecessary expenditures. The applicants accept that these two cost categories exceed the HFSRB's standards, but believe, as discussed below, legitimate causes can be identified.

As you are aware, the project is for an approximately 526,000 sf 11 story building plus a 1,000-car parking structure, to be constructed in a congested area, and at a major intersection.

The construction-related costs for this project were estimated by Power Construction, one of the most experienced health care construction management firms operating in the Midwest, and having a background in the construction of major hospital project's in Chicago's urban environment. The estimated costs are based, to a large degree on Power Construction's historical data from other projects. Among Power's recent major health care projects are Prentice Women's Hospital, Shirley Ryan Ability Lab/RIC, Rush University Medical Center's inpatient tower, and Presence Center for Advanced Care at St. Joseph Hospital.

#### New Construction Cost and Contingencies

The reviewable component of the project involves 95,424 sf of construction, limited to the project's clinical areas. The costs in excess of the norm equate to 18.4% of the construction and contingency costs of the project's reviewable component and 1.7% of the total project cost.

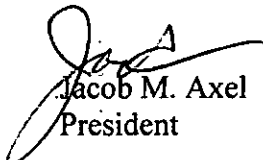
In evaluating the anticipated construction cost in response to your inquiry, factors relating to the building in general (which contribute to the construction cost of the reviewable component) as well as the composition of the reviewable component of the project appear to have impacted the construction cost of the reviewable component. Among those factors and their estimated impact on construction costs are:

- Less than ideal soil conditions with a high water table, that results in the need for deeper than typical foundations, a permanent earth retention system to act as a water cut-off, and the off-site disposal of a higher than usual volume of excavated materials. (\$4.5-6M)
- The necessity to provide a building enclosure/external skin consistent with the city's expectations for major construction projects viewable from the Eisenhower Expressway (\$1.75-2M)
- Higher than typical infrastructure requirements (air handling, emergency power, fixtures, etc.) to ensure compatibility with adjacent campus structures (\$1.8-\$2M)
- A high proportion (41%) of the reviewable area being dedicated to imaging and radiation therapy, both of which require high construction costs, ranging from \$460 to \$540 per sf, compared to the standard of \$371 per sf for reviewable areas
- The absence within the project of traditionally low construction cost reviewable areas such as physical therapy, occupational therapy, and respiratory therapy

#### Architectural and Engineering Fees

\$3,000,000 has been allocated to the reviewable component of the project, to include architectural and engineering design services, as well as document preparation, project monitoring, interaction with reviewing agencies, and other miscellaneous tasks. The HFSRB standard for a project of this scope is 6.34% and the proposed fee is 6.91%. This variance equates to \$247,320, or 0.05% of the project cost. Incorporated into the cost are the higher-than-typical engineering fees associated with the radiation therapy function, and the locating of imaging on the fourth floor (load-bearing and vibration abatement issues), and a portion of the costs associated with the remediation of the soil conditions. Radiation therapy is located on the first floor. Given the building's footprint, and based upon the expertise of Power and HDR (the project architectural firm), the imaging functions are being centralized and located on the fourth floor to minimize staffing redundancies and maximize the patient experience. It is estimated that the engineering costs associated with the issues discussed above add \$250-\$300,000 to the architectural and engineering fees.

Sincerely,



Jacob M. Axel  
President

cc J. Johnson  
A. Del Rio