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MARYLAND HEALTH CARE COMMISSION

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MEMORANDUM

To: Commissioners

From: Kevin R. McDonald, Chief
Certificate of Need

A handwritten signature in black ink, appearing to read "Kevin R. McDonald", is written over the "From:" line.

Date: November 16, 2017

Re: Staff Report and Recommendation:
Request to Modify a Certificate of Need
Suburban Hospital
Docket No. 15-15-2368

Attached is a Staff Report and Recommendation in the review of the request for a modification of a Certificate of Need ("CON") issued in May 2016 for a project designed to modernize this 236-bed acute care general hospital located in Bethesda, Maryland. That CON included the construction of shell space designed to accommodate replacement nursing units in the future. In 2016, budgetary constraints led the applicant to propose shelling the space for future relocation and replacement of nursing units rather than including these modernization components as part of the project. Suburban now requests authorization for several changes that require MHCC approval.

MHCC action is required because the capital cost increase exceeds the inflation allowance.

The centerpiece of this change request is authorization to accelerate the finishing of space that was approved in the CON as shell space intended for future nursing units and do it as part of the project. The rationale for this change request is that Suburban received favorable bids which created what they see as an opportunity to save between \$1.5 million and \$2.5 million on the project.

Thus Suburban has submitted a modification to its CON that would allow finishing the shell space as part of the project, as well as include several other design changes that would improve the operational efficiency and physical layout of the new addition. Overall, the proposed changes will increase the total cost of the project by \$10,141,154, which the facility will finance with cash.

Staff recommends that the Commission **APPROVE** the proposed modification of the Certificate of Need issued to Suburban, to include the following conditions:

1. Upon completion of this project, Suburban Hospital will not place any of the semi-private MSGA patient rooms being converted to private rooms into service for more than one patient without the approval of MHCC.
2. Suburban Hospital will not finish the second floor shell space for rate-regulated uses without giving notice to the Commission and obtaining all required Commission approvals.
3. Suburban Hospital will not request an adjustment in rates from the Health Services Cost Review Commission ("HSCRC") that includes depreciation or interest costs associated with construction of the proposed shell space unless and until Suburban Hospital has obtained CON approval for finishing the shell space, or has obtained a determination of coverage from the Maryland Health Care Commission that CON approval for finishing the shell space is not required.
4. In calculating any future rates for Suburban Hospital, the HSCRC shall exclude the capital costs associated with the shell space until such time as the space is finished and put to use in a rate-regulated activity. In calculating any rate that includes an accounting for capital costs associated with the shell space, the rate should only account for depreciation going forward through the remaining useful life of the space (i.e., the HSCRC shall exclude any depreciation of the shell space that has occurred between the construction of the shell space and the time of the rate calculation). Likewise, allowable interest expense shall also be based on the interest expenses going forward through the remaining useful life of the space.
5. Any future change to the financing of this project involving adjustments in rates set by the Health Services Cost Review Commission must exclude \$8,496,741. This figure includes the estimated new construction costs that exceeds the Marshall Valuation Service guideline costs and portions of the contingency allowance and inflation allowance that are based on the excess construction cost.

IN THE MATTER OF
SUBURBAN HOSPITAL
Docket No.: 15-15-2368

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BEFORE THE
MARYLAND HEALTH
CARE COMMISSION

REQUEST TO MODIFY CERTIFICATE OF NEED

I. INTRODUCTION

Brief Summary of the Requested Project Change

Suburban Hospital (“Suburban” or “the hospital”) requests a change to a Certificate of Need (“CON”) issued in May 2016 for a project designed to modernize this 236-bed acute care general hospital located in Bethesda, Maryland. That CON included the construction of shell space designed to accommodate replacement nursing units in the future. In 2016, budgetary constraints led the applicant to propose shelling the space for future relocation and replacement of nursing units rather than including these modernization components as part of the project.

However, Suburban bid the project with an “add alternate” to test the feasibility of advancing the timeline on fitting out the shell space. In its modification request, Suburban noted: *“Having hard construction costs allowed Suburban to evaluate the possibility of including the fit out of the shell space into the project budget. Based on the positive pricing achieved on the base bid as well as the add alternate, Suburban would like to move forward with replacing the originally planned shell space with nursing units.”*

Thus Suburban has submitted a modification to its CON that would allow finishing the shell space as part of the project, as well as include several other design changes that would improve the operational efficiency and physical layout of the new addition. Overall, the proposed changes will increase the total cost of the project by \$10,141,154, which the facility will finance with cash.

Under COMAR 10.24.01.17B, Suburban Hospital is required to obtain approval for this change in the approved CON because it is a significant change in the design of the project and requires an increase in the cost of the project that exceeds the project cost inflation allowance for the initially approved cost.

Background

In May 2016 the Maryland Health Care Commission (“Commission” or “MHCC”) granted Suburban a CON to construct a 300,000 square foot building addition. The primary objective of the project was to replace outdated patient and clinical service facilities. The project also included the renovation of approximately 18,000 square feet of the existing facility to address connections and retro-fitting of a small number of existing spaces. The project will create private patient rooms, modernize the hospital’s surgical facilities, and create improved circulation and departmental adjacencies. The hospital is also constructing a 1,112 space parking garage and performing

associated site work in conjunction with the project, improvements that are not elements of the CON approval.

The project will be implemented in several phases to facilitate the hospital's continued operation during construction with the least amount of disruption. *Phase I* involves construction of a temporary loading dock, renovation and upgrading of the existing loading dock, and construction of an underground connector and above-grade connector. *Phase II* includes the building addition and related site work. *Phase III* completes the building-to-building connections and also includes renovations to existing building space. All phases of the project are included in a single construction contract.

The approved project cost was \$200,550,831 and included several conditions. The hospital did not anticipate a need to seek an extraordinary adjustment of its global budget revenue in order to undertake this project. Cash and fundraising were projected to account for 64.5% of total project funding.

The project increased the physical bed capacity of Suburban Hospital by replacing semi-private medical/surgical patient rooms with private patient rooms, but the CON was conditioned on the hospital not expanding its effective bed capacity (i.e., the existing semi-private rooms would only be used as private patient rooms after completion of the project, unless relief from this condition was obtained from MHCC). The project also reduced the number of operating rooms at Suburban from 15 to 14.

Modification Request

Suburban Hospital has submitted a Request for Project Change after Certificate of Need Approval to allow for the following substantive changes to the project, and for the cost increase associated with those changes. The changes are:

- Fit Out of Proposed Shell Space for Nursing Units. Suburban's CON approval included a four story building addition that would include two finished nursing units containing a total of 54 private patient rooms on the fourth floor and shelled space on the third floor designed with the same footprint. The hospital anticipated finishing this third floor space for bed replacement within 10 years as capital became available. Suburban now estimates that an accelerated fit-out of the third floor during the construction of the new addition will save between 15% to 25% (about \$1,479,000 to \$2,465,000) in current dollars when compared to the ultimate cost of replacing the beds at a later date.

With completion of the two replacement nursing units on the third floor, Suburban will be able to close existing medical/surgical nursing units on the 2nd, 4th, and 6th floors (units containing a total of 50 beds)¹. The dedicated observation unit will be relocated to the space now occupied by the 6th floor nursing unit and the number of dedicated observation beds will increase from 23 to 27.

¹ When asked the future status for the two closed nursing units on the second and fourth floor, Suburban Hospital's response was "these nursing units may be used as temporary nursing units as needed during future major renovations...in the existing facility. Suburban has many undersized departments and departments located off site, and the (two) closed nursing units will be considered in the master facility planning process as inventory of available space to accommodate these space needs." (Response to MHCC Modification questions, October 5, 2017)

Table 1 below shows the configuration of MSGA beds as the hospital is currently operated, the operational configuration approved in the 2016 CON, and the operational configuration proposed through this change request. In fiscal year 2018 (July 1, 2017 through June 30, 2018), Suburban has allocated 203 beds of licensed acute care bed capacity to MSGA services.

Obviously, this change in the approved project will increase the physical bed capacity of Suburban, as the approved project did, by increasing the number of patient rooms in the facility but is not intended to increase the effective bed capacity the hospital puts into operation. The project is intended to provide a general medical/surgical patient room for each hospitalized general medical/surgical patient but older rooms designed and set up as semi-private rooms will not be used as semi-private rooms in the future. The CON is conditioned as follows:

Upon completion of this project, Suburban Hospital will not place any of the 45 semi-private MSGA patient rooms being converted to private rooms into service for more than one patient without the approval of MHCC.

A similar condition would be appropriate for a CON changed in the manner requested by Suburban to reflect the changes proposed in the approved project.

**Table 1: Suburban Hospital Operational MSGA Bed Inventory
By Location: Current, Approved, and Proposed**

Floor/Unit	Service	Current	Approved	Proposed	
2/100	General Medical Surgical	23	0	0	
2/200		16	16	0	
2/400		20	20	20	
3/500		Does not currently exist	Shelled space	24	
3/600		Does not currently exist	Shelled space	30	
4/300		32	17	0	
4/400		30	18	16	
4/500		Does not currently exist	24	24	
4/600		Does not currently exist	30	30	
6/300		26	18	16	
6/400		8	17	0*	
<i>Subtotal-General Med/Surgical</i>		<i>155</i>	<i>160</i>	<i>160</i>	
3/100		ICU/CCU	12	12	12
3/300			12	12	12
3/200	20		18	18	
<i>Subtotal-Intensive/Critical Care</i>		<i>44</i>	<i>42</i>	<i>42</i>	
Total MSGA		199	202	202	

Source: DI #2, Suburban Hospital CON Application, Exhibit 1A and Suburban Hospital Modification , Exhibit 3, Table A.

* 6/400 will become a 27 bed observation unit.

The fit out of the two nursing units on the third floor will extend the construction schedule by 3 to 6 months, which can be accommodated within the applicable CON performance requirements. The cost of fitting out the 30 (Third Floor, Unit 600) and 24-bed (Third Floor, Unit 500) nursing units is estimated at \$6,925,814 and \$6,135,201 respectively.

- Moving Cardiac Catheterization Laboratories into the Surgical Suite. The CON included construction of a connector on the third floor between the existing building and the new building addition. This would require modification of the existing catheterization suite that would eliminate one laboratory and necessitate reconstruction of support areas. Given that this laboratory was built in 2006, it has equipment that will reach the end of its useful life within five years; since replacing it will require construction within the laboratory to accommodate new equipment, Suburban has concluded that relocating the cardiac catheterization laboratory to the surgical suite would be a better solution, and has included that move as part of this change request. Suburban identified several benefits of this relocation. These include consolidation of all interventional services on the first floor of the hospital, creating a more sterile environment for the performance of cardiac catheterization procedures, locating cardiac catheterization facilities closer to the emergency department, enhancing opportunities for staffing efficiency by consolidating the procedural, pre-operative, and recovery areas on the same level, and consolidating the storage of supplies that are commonly used by both the surgical department and the cardiac catheterization laboratories. This change will require a redesign of the first floor to accommodate the cardiac catheterization laboratories, as well as some reallocation of space for procedural, pre-operative, and recovery functions. The total capital cost estimate of this project change component is \$4,722,799.
- Reallocation of Space in the Cellar of the Building Addition. The primary functions of the cellar in the building's new addition are to provide space for sterile processing directly below the new surgical suite and to house the mechanical equipment supporting the building addition. This will not change. However, the space originally assigned for a satellite pharmacy and the facilities department will. Suburban has concluded that creating a satellite pharmacy was not the best use of space or staff resources and that moving the supply chain services adjacent to the sterile processing area would be a better long term fit for the space, providing "a greater opportunity...for operationalizing just-in-time supply management and address(ing)...evolving regulatory requirements for sterility and product integrity." Relocating the supply chain services to the new addition will also provide it with two new service elevators for deliveries. Under the modification the facilities department will relocate to the existing supply chain offices and storage areas. Suburban stated that these relocations will not change the cost of the approved project.
- Additional Stairwell and Elevator. Suburban has an auditorium that is used for hospital and community events. Subsequent to CON approval, Suburban realized that access to the auditorium from the new main entrance would be difficult. The solution arrived at was construction of a stairwell and elevator along the main concourse. Suburban included an add alternate during the construction bid process to evaluate having that work performed as part of the project rather than at a later date, and has included these elements in this change request, at an additional estimated cost of \$2,040,891.
- Reallocation of Space Allotments on the Second Floor (Main Entry Level) of the Building Addition. In designing the new main entrance, Suburban reconsidered the services that should be located proximate to this public area, and included these changes in the base bid package. Suburban described the changes as minor and stated that they will not change the cost of the approved project.

The estimated cost increase of each of the design changes discussed above, considered individually, is summarized as follows:

• Fit out of 30-bed nursing unit on 3 rd floor	\$6,925,814
• Fit out of 24-bed nursing unit on 3 rd floor	\$6,135,201
• Relocation of Cardiac Catheterization Laboratories to 1 st floor	\$4,722,799
• Additional Stairwell and Elevator	\$2,040,891
Total	\$19,824,705

There are offsetting changes to the project budget that bring the net increase in total estimated project cost to \$10,141,154 (detailed in section III of this report and Appendix 1).

II. APPLICABLE REGULATIONS

At COMAR 10.24.01.17C the Commission's regulations identify certain circumstances where a modification is not permissible and require the applicant to apply for a new Certificate of Need. Suburban's modification request will not cross any of those thresholds.² However, under the Commission's regulations, at COMAR 10.24.01.17B, the following changes to an approved CON require the Commission's approval:

- (1) A significant change in physical plant design;
- (2) Capital cost increases that exceed the approved capital cost inflated by an amount determined by applying the Building Cost Index published in *Healthcare Cost Review* from the application submission date to the date of the filing of a request for approval of a project change;
- (3) When total projected operating expenses or revenue increases exceed the projected expenses or revenues in the approved Certificate of Need Application, inflated by 10 percent per year;
- (4) Changing the financing mechanisms of the project; or
- (5) Changing the location or address of the project.

As described above, this request involves a significant change in physical plant design and a capital cost increase far in excess of the inflation allowance. The blend of financing also changes somewhat. These factors obligate the applicant to seek Commission approval. The actions available to the Commission are found at COMAR 10.24.01.17D(3):

- (a) The proposed change is approved and is incorporated into a modified Certificate of Need for the project;

² The Commission's regulations identify certain circumstances where a modification is not permissible and the applicant requires a new Certificate of Need. COMAR 10.24.01.17C provides:

- (1) Changes in the fundamental nature of a facility or the services to be provided in the facility from those that were approved by the Commission;
- (2) Increases in the total licensed bed capacity of medical service categories from those approved;
- (3) Any change that requires an extension of time to meet the applicable performance requirements specified under Regulation .12 of this chapter, except as permitted under Regulation .12E of this chapter.

- (b) The proposed change is approved in part or approved with conditions;
- (c) The proposed change is not approved, with explanation; or
- (d) The proposed change is of sufficient scope to warrant complete review in accordance with the Certificate of Need review process described in Regulations .08 —.10 of this chapter, and may only be considered upon completion of this review.

III. COST INCREASES AND FINANCIAL IMPACT OF THE PROPOSED MODIFICATION

Projected Cost Increase Exceeds the Inflation Allowance

As shown in the table below, the changes being proposed in the scope of the project would result in a 9.2% increase in the estimated total current capital cost. Appendix 1 provides a detailed comparison of the changes to the Project Budget entailed in this change request.

**Table 2: Suburban Hospital
Projected Total Current Capital Cost Approved and Proposed Change in Current Capital Cost**

Original CON Approved Total Current Capital Costs	Additional Cost	Modification Total Current Capital Cost*	% Increase
\$189,748,185	\$17,503,423	\$207,251,608	9.2%

*Total Current Capital Cost before inclusion of Inflation Allowance for the Modification.

CON regulations provide for an inflation allowance, but require increases that exceed that allowance to seek Commission approval. The allowance is calculated using the building cost indices published on a quarterly basis by IHS Global Insight in *Healthcare Cost Review*.³ Suburban’s CON was approved in May 2016 with a Total Current Capital Cost of \$189,748,185. Staff calculated the allowable level of current capital costs after factoring in the inflation allowance to be \$195,899,951.⁴ The estimated Total Current Capital Cost of the modified project is \$207,251,608, exceeding the cost increase threshold that requires Commission review.

The \$19.8 million increase described earlier is offset by cost reductions made elsewhere in the project budget. Those include:

- Estimated Site Infrastructure costs cut by \$5.0 million. The original CON approval included costs for proposed off-site sanitary and sewer mains that were subsequently determined to be unnecessary.

Estimated Gross Interest during Construction reduced by \$5,053,965. Two factors contributed to this reduction. The interest rate in the CON project budget was assumed to be 5%, but Suburban was able to obtain a rate of 3.9% with the actual bond issuance. Additionally, Suburban decided to reallocate its funding sources, using a larger portion of the bond issuance on another project – a parking garage – that is not part of this CON but part of the larger Suburban campus master plan. Thus the borrowed funds allocated to this project went from \$69.8 million to \$53.0 million. The difference is made up by a larger cash contribution to this project. Suburban

³ As described at

http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_con/documents/con_capital_threshold_update_20170317.pdf.

⁴ (1.013)*(1.013)*(1.156/1.149)*(\$189,748,185)

is increasing its cash contribution to this project from \$90.8 million to \$118 million.

Projected Financial Impact of Proposed Modification

As a member of the Johns Hopkins Health System, Suburban has access to the capital resources to support this modification. Operating expense is actually lowered by the proposed modification, as the decreased borrowing decreases interest expense more than the increased project cost would increase depreciation expense (a non-cash expense).

Projected cumulative net income for 2020 through 2022 in the approved CON totaled a negative \$2,842,000. Suburban updated revenue and expense projections, rebasing and incorporating revised assumptions reflecting its experience in the years since the expansion project was planned. The revised forecast projects, like the forecast considered in 2016, losses from operations in the first two years following project completion with a return to net income generation in the third year. The difference in the cumulative three year forecast is approximately \$100,000. The direct impact of the changes requested in the project on financial performance of the project are quite small.

IV. ANALYSIS AND STAFF RECOMMENDATION

Staff has reviewed this request for project change, comparing it to the Commission's conclusions in the original application. Staff does not believe that the proposed modification would have a material effect on the findings made by the Commission in that 2016 decision. A summation of that conclusion follows.

State Health Plan: Construction Costs

This standard requires a comparison of the project's estimated construction cost to an "expected cost" benchmark calculated using the specific construction characteristics of the proposed project using a methodology provided by the Marshall Valuation Service ("MVS"). If the projected cost per square foot exceeds the Marshall Valuation Service benchmark cost, any rate increase proposed by the hospital related to the capital cost of the project shall not include the amount of the projected construction cost that exceeds the Marshall Valuation Service benchmark and those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess construction cost. Although Suburban stated that it "is not currently seeking a rate increase and does not do so as part of this modification request," it reserved the possibility "that in the future Suburban will seek a rate increase with this project."⁵

The original CON approval was conditioned with a statement that \$2,361,291 should be excluded from any rate increase request. With the design changes, staff calculates that that exclusion should now be \$8,496,741 (Appendix 2 shows details). Thus if this modification request is approved, staff recommends a condition excluding that amount from any future rate request associated with this project.

⁵ Response to MHCC Questions, October 5, 2017.

Need and Impact:

Because no material changes are occurring in the location, capacity, or nature of the project, the requested modification does not change the findings made by the Commission in May 2016 with respect to the need for the project or its likely impact on existing providers and on costs and charges. There is no projected impact on rate-payers, as Suburban Hospital does not propose an increase in regulated revenue related to this project beyond that already approved by the Health Services Cost Review Commission.⁶

The applicant states that “Suburban is not currently seeking a rate increase and does not do so as part of this modification request, but it is possible that in the future Suburban will seek a rate increase with this project.”⁷”

Viability and Financial Feasibility:

The increase in project costs will not hurt operating results because the hospital has reduced its interest expense such that total operating expenses are actually projected to be lower than in the original application. Projected net income is essentially the same as it was in the approved CON.

Cost and Effectiveness of Alternatives:

The hospital has made a credible case that the centerpiece of this modification request – accelerating its move to all-private patient rooms (which comprises 65% of the costs associated with the modification) by finishing the third floor shell space -- is a better alternative given the favorable bids it has received and its ability to cover the modification’s cost with cash. Suburban estimates that this approach is likely to save 15% to 25% in overall capital cost when compared with the alternative of delayed finishing of the shelled nursing unit space, as originally planned. The balance of the modification -- consolidating the cardiac catheterization facilities into the surgical services department, relocating the supply chain services to the cellar, the addition of a stairwell and elevator, and reallocation of second floor space (main entry level) will improve operational efficiency and provide better campus access.

V. SUMMARY AND STAFF RECOMMENDATION

Staff recommends that the Commission **APPROVE** the proposed changes in Certificate of Need Docket No. 15-15-2368. The changes authorized include: (1) The fit out of space on the third floor of the new building addition that was originally approved as shell space to create a 24- and 30-bed general medical/surgical nursing unit; (2) Relocation of the hospital’s cardiac catheterization laboratories to the replacement surgical services department on the first floor; (3) Reallocation of space in the cellar for the supply chain services department; (4) Addition of a stairwell and elevator in the main concourse; and (5) Reallocation of space on the second floor (main entry level) of the building addition. The modification request will increase the approved cost of the project by \$10,141,154, bringing the total approved cost of the project to \$210,691,985.

⁶ The Hospital states that “Suburban does not currently seek a rate increase and does not do so as part of this modification request, but it is possible that in the future Suburban will seek a rate increase with this project.” Response to MHCC Questions, October 5, 2017.

⁷ Response to MHCC Questions, October 5, 2017.

Staff recommends that the original conditions placed on the CON when it was approved in May 2016 be replaced with the following modified conditions.

1. Upon completion of this project, Suburban Hospital will not place any of the semi-private MSGA patient rooms being converted to private rooms into service for more than one patient without the approval of MHCC.
2. Suburban Hospital will not finish the second floor shell space for rate-regulated uses without giving notice to the Commission and obtaining all required Commission approvals.
3. Suburban Hospital will not request an adjustment in rates from the Health Services Cost Review Commission ("HSCRC") that includes depreciation or interest costs associated with construction of the proposed shell space unless and until Suburban Hospital has obtained CON approval for finishing the shell space, or has obtained a determination of coverage from the Maryland Health Care Commission that CON approval for finishing the shell space is not required.
4. In calculating any future rates for Suburban Hospital, the HSCRC shall exclude the capital costs associated with the shell space until such time as the space is finished and put to use in a rate-regulated activity. In calculating any rate that includes an accounting for capital costs associated with the shell space, the rate should only account for depreciation going forward through the remaining useful life of the space (i.e., the HSCRC shall exclude any depreciation of the shell space that has occurred between the construction of the shell space and the time of the rate calculation). Likewise, allowable interest expense shall also be based on the interest expenses going forward through the remaining useful life of the space.
5. Any future change to the financing of this project involving adjustments in rates set by the Health Services Cost Review Commission must exclude \$8,496,741. This figure includes the estimated new construction costs that exceeds the Marshall Valuation Service guideline costs and portions of the contingency allowance and inflation allowance that are based on the excess construction cost.

Appendix 1: Suburban Hospital - Project Budget Comparison After CON approval and After Modification

	Originally Approved CON	Adjusted Costs Post Award	Alternate- 30 Bed Nursing Unit	Alternate- 24 bed Nursing Unit	Alternate- Cardiac Cath Labs	Alternate- Stair/ Elevator	Total Proposed	Difference
A. USE OF FUNDS								
1. CAPITAL COSTS								
New Construction								
Building	\$89,816,065	\$95,751,397	\$4,212,175	\$3,527,938	\$544,446		\$104,035,956	14,219,891
Fixed Equipment	10,507,670	10,507,670					10,507,670	0
Site and Infrastructure	13,372,894	8,372,894					8,372,894	(5,000,000)
Architect/Engineering Fees	5,537,540	6,554,315	85,000	85,000	50,000		6,774,315	1,236,775
Permits (Building, Utilities, Etc.)	1,049,400	1,920,375	40,000	35,000	5,000		2,000,375	950,975
SUBTOTAL	\$120,283,569	\$123,106,651	\$4,337,175	\$3,647,938	\$599,446	\$0	\$131,691,210	\$ 11,407,641
Renovations								
Building	2,375,878	2,375,878				1,574,700	3,950,578	1,574,700
Fixed Equipment (not included in construction)	0						0	0
Architect/Engineering Fees	127,460	128,301				36,500	164,801	37,341
Permits (Building, Utilities, Etc.)	35,600	14,625				15,000	29,625	(5,975)
SUBTOTAL	\$2,538,938	\$2,518,804	\$0	\$0	\$0	\$1,626,200	\$4,145,004	\$ 1,606,066
Other Capital Costs								
Movable Equipment	30,320,000	30,320,000	1,600,000	1,583,474	3,500,000	148,236	37,151,710	6,831,710
Contingency Allowance	8,533,323	7,797,273	296,859	261,571	204,972	88,722	8,649,396	116,073
Gross interest during construction period	10,467,372	4,937,540	166,557	146,015	114,169	49,127	5,413,407	(5,053,965)
Imputed interest	4,471,974	3,988,587	130,633	114,522	89,544	38,531	4,361,816	(110,158)
Other (Specify/add rows if needed)								0
Project Support from FD+C	2,976,963	3,340,034	37,100	37,100	30,250	27,750	3,472,234	495,271
Project Support from Operations	425,385	678,757	7,900	7,900	6,800	6,000	707,357	281,972
Consultants (non-construction/non-renovation)	1,760,844	1,602,638	116,500	116,500	40,500	8,000	1,884,138	123,294
Third Party Tests and Inspections	550,000	1,220,000	45,000	45,000	30,000	12,500	1,352,500	802,500
Landlord Fitout Allowance for Physician Offices	1,400,000	1,968,750					1,968,750	568,750
Special Exception Costs	5,713,867	5,955,105					5,955,105	241,238

Appendix 2: Marshall Valuation Service Review

The Marshall Valuation System – what it is, how it works

In order to compare the cost of a proposed construction project to that of similar projects as part of a cost-effectiveness analysis, the Maryland Health Care Commission uses the Marshall Valuation Service (“MVS”). The MVS approach is based upon a comparison between the actual costs to construct a new building against a benchmark cost calculated using a methodology developed by the Marshall Valuation Service (“MVS”). MVS data includes the base cost per square foot for new construction by type and quality of construction for a wide variety of building uses, including hospitals. The cost of constructing the building is the total cost of construction required to replace the building with a substitute of like or equal utility using current standards of materials and design.⁸

The MVS states that the cost to construct a new building is based on the actual final costs to the owner and should include all material and labor costs, contractor overhead and profit, average architect and engineering fees, nominal building permit costs, and processing fees or service charges and normal interest on building funds during construction. It also includes: normal site preparation costs including grading and excavation for foundations and backfill for the structure; and utilities from the lot line to the structure figured for typical setbacks.

MVS also clarifies that the construction costs should not include costs of buying or assembling land, piling or hillside foundations (these can be priced separately), furnishings and fixtures not found in a general contract, general contingency set aside for some unknown future event such as anticipated labor and material cost increases. Also not included in the base MVS costs are site improvements such as signs, landscaping, paving, walls, and site lighting. Offsite costs such as roads, utilities, and jurisdictional hook-up fees are also excluded from the base costs.⁹

MVS allows staff to develop a benchmark cost using the relevant construction characteristics of the proposed project and the calculator section of the MVS guide. In developing the MVS benchmark costs for a particular project the base costs are adjusted for a variety of factors using MVS adjustments that include an add-on for sprinkler systems, the presence or absence of elevators, number of building stories, the height per story, and the shape of the building (the relationship of floor area to perimeter). The base cost is also adjusted to the latest month and the locality of the construction project.

Calculating the Adjusted Project Cost in this Application

Suburban and MHCC staff each independently calculated an adjusted project cost per sq. ft. based on the allowable construction costs in the modification, excluding those costs categorized in the introduction above.

⁸ Replacement Cost, Reconstruction Cost, and Insurable Value: Which one?, Appraisal Institute, CoreLogic, July 27, 2016, p. 7. Available at: https://www.appraisalinstitute.org/assets/1/7/Replacement_Cost_Reconstruction_Cost_Insurable_Value.pdf.

⁹ Marshall Valuation Service Guidelines, Section 1, p. 3 (January 2016).

Suburban calculated the adjusted project cost to be \$112,318,926, or \$373.06 per square foot (“SF”). MHCC staff calculated the adjusted project cost to be slightly lower, at \$111,917,389, or \$371.73 per SF as shown in Table A below.

**Table A: Adjusted Project Cost
Developed by MHCC Staff**

Project Budget Item	New Construction
Building Construction	\$ 104,035,956
Fixed Equipment	\$ 10,507,670
Normal Site Prep.	\$ 8,372,894
Arch./Eng. Fees	\$ 6,774,315
Permits	\$ 2,000,375
Subtotal	\$ 131,691,210
Adjustments	
Total Adjustments	\$ 22,697,101
Adjusted New Construction Costs	\$ 108,994,109
MHCC Addition of Allocated Const. Period Interest & Processing Fee	\$ 2,923,280
Adjusted Total for MVS Comparison	\$ 111,917,389
Total Square Footage	\$ 301,075
Adjusted Cost Per Square Foot	\$ 371.73

Source: Suburban Hospital Modification and MHCC Staff calculations

The small difference – much less than 1% -- between the two calculations of project cost results from small differences in the treatment of calculations related to the costs for building construction, normal site prep, architectural/engineering fees, and for capitalized construction interest.

Developing an MVS Benchmark for This Project

Suburban Hospital calculated the MVS benchmark cost to be \$341.42 per SF (calculations in Table B below).

**Table B: Suburban Hospital's Calculation of MVS Benchmark
Building Modification-September 2017**

Type Structure	Hospital Addition	Basement	Penthouse	Total
Class	A	Class A-B	A	
Quality	Good	Good	Excellent	
Floors	4	1	1	
Square Footage	235,597	64,432	1,046	301,075
Average Perimeter	1376		178	
Weighted Average Wall Height	15	19	15	
Stories	4	1	1	6
Average Area Per Floor	58,899	64,432	1,046	50,179
Base Cost (November 2015)	\$ 365.78	\$ 186.67	\$ 89.56	
Adjustment for Dept. Cost Differential	0.96	0.9	1	
Gross Base Cost	\$ 352.78	\$ 168.45	\$ 89.56	
Elevator Add-on or Deduction	0	0.15	0.15	
	\$ 352.78	\$ 168.60	\$ 89.71	
Perimeter Multiplier	0.907650599	0.890706328	1.2925032	
Height Multiplier	1.07	1.16	1.413	
Multi-story Multiplier*	1.005	1	1.035	
Multipliers	0.976042072	1.03321934	1.890227767	
Refined Square Foot Cost	\$ 344.01	\$ 174.35	\$ 169.58	
Sprinkler Add-on	\$ 2.46	\$ 3.07	\$ 5.82	
Adjusted Refined Square Foot Cost	\$ 346.46	\$ 177.42	\$ 175.40	
Current Cost Modifier	1.04	1.04	1.05	
Local Multiplier (Bethesda Oct 2017)	1.06	1.06	1.07	
CC & Local Multipliers	\$ 1.10	\$ 1.10	\$ 1.12	
MVS Building Cost Per Square Foot	\$ 381.94	\$ 195.59	\$ 197.06	
Building Square Footage	235,597	64,432	1,046	301,075
MVS Building Costs	\$ 89,983,330	\$ 12,602,255	\$ 206,127	\$ 102,791,712
Final MVS Cost Per Square Foot	\$ 381.94	\$ 195.59	\$ 197.06	\$ 341.42

Source: Suburban Hospital CON Application, Suburban Hospital Modification, Exhibit 7, and Marshall Valuation Service, published by Core Logic and Commission Staff calculations.

*Multi-story multiplier is 0.5% (.005) per floor for each floor more than three floors above the ground.

MHCC staff calculated the MVS benchmark to be \$346.44 per square foot. Staff used separate MVS November 2015 Class A, Good quality construction base costs for floors one through four, Class A-B good construction for the basement, and Class A-B good quality

construction for the mechanical penthouse.¹⁰ The base cost for floors one through four were adjusted for the departmental uses proposed by Suburban as detailed in the September modification request. Select building characteristics and staff's calculation of the MVS benchmark are detailed in the following table.

**Table C: MHCC's Calculation of Marshall Valuation Service Benchmark
For Suburban Hospital Building Modification-September 2017**

Type Structure	Hospital Addition	Basement	Penthouse	Total
Class	A	A-B	A-B	
Quality	Good	Good	Good	
Floors	4	1	1	
Square Footage	235,597	64,432	1,046	301,075
Average Perimeter	1376	1101	178	
Weighted Average Wall Height	15	19	15	
Stories	4	1	1	6
Average Area Per Floor	58,899	64,432	1,046	50,179
Base Cost (November 2015)	\$ 365.78	\$ 157.36	\$ 80.77	
Elevator Add-on or Deduction	incl. above	3.23	-	
Adjusted Base Cost	\$ 365.78	\$ 160.59	\$ 80.77	
Adjustment for Dept. Cost Differential	0.988481638	1	1	
Gross Base Cost	\$ 361.57	\$ 160.59	\$ 80.77	
Perimeter Multiplier	0.907673186	0.890542128	1.2925032	
Height Multiplier	1.069	1.161	1.069	
Multi-story Multiplier*	1.005	1	1.01	
Multipliers	0.975154149	1.033919411	1.39550278	
Refined Square Foot Cost	\$ 352.58	\$ 166.04	\$ 112.71	
Sprinkler Add-on	\$ 2.43	\$ 2.43	\$ 2.43	
Adjusted Refined Square Foot Cost	\$ 355.01	\$ 168.47	\$ 115.14	
Current Cost Modifier (October 2017)	1.04	1.04	1.04	
Local Multiplier (Bethesda Oct 2017)	1.06	1.06	1.06	
CC & Local Multipliers	\$ 1.10	\$ 1.10	\$ 1.10	
MVS Building Cost Per Square Foot	\$ 391.37	\$ 185.72	\$ 126.94	
Building Square Footage	235,597	64,432	1,046	301,075
MVS Building Costs	\$ 92,204,832	\$ 11,966,192	\$ 132,775	\$ 104,303,798
Final MVS Cost Per Square Foot	\$ 391.37	\$ 185.72	\$ 126.94	\$ 346.44

¹⁰ Suburban used November 2015 base costs, the most current values at the time of modification submission.

As noted above, the differences in the assumptions made or values used by Suburban and MHCC staff are explained in the following narrative.

- Suburban used a multiplier of .90 to adjust (downward) the base cost of the basement space because of the proposed use of the space; MHCC staff did not make such an adjustment to the base cost because its use (central sterile processing, supply chain services, storage areas, and electrical and mechanical spaces) match the MVS description.
- MHCC made a higher adjustment for the inclusion of an elevator (“elevator add-on” in MVS terms) because MHCC recognized this add-on for all floors whereas Suburban apparently erred, including it only in an adjustment to the basement. This resulted in MHCC adjusting the benchmark by \$3.23 per SF compared to Suburban’s adjustment of \$.15 per SF.
- A math error led to Suburban arriving at a different adjustment for departmental cost differential (0.96 to the 0.988 calculated by staff).
- The calculation of wall height multipliers differed because staff determined that the appropriate penthouse multiplier should be 1.069 (MVS Section 15, p. 38), while Suburban used a multiplier of 1.413.
- MHCC staff adjusted for the sprinkler system differently than Suburban, arriving at a lower add-on. The MVS add-on for sprinkler systems is based on the amount of space covered by this sprinkler system. Suburban calculated its add-on section-by-section rather than based on the total square footage (as staff calculated it); this has the effect of increasing the differential because the cost/sq. ft. is larger in smaller spaces than it is when applied to the total square footage in the aggregate (akin to savings inherent in economies of scale).
- As the last step, the total resulting from the preceding steps is adjusted by multiplying it by factors that bring the cost a) up-to-date with today’s costs (current cost multiplier), and b) local costs (local multiplier), i.e., bringing the MVS benchmark up to date for October 2017 in Bethesda, Maryland. While staff and the applicant used the same value for the current (1.04) and local multiplier (1.06) for the basement and hospital segment of the modification, Suburban inexplicably used a different current (1.05) and local multiplier (1.07) for those sections of the hospital.

Comparing Estimated Project to the MVS Benchmark

Commission staff’s MVS calculation arrived at a somewhat higher benchmark (\$346.44 per SF) than that calculated by Suburban (\$341.42). Table D compares the adjusted cost per SF calculated by Suburban and, alternatively, by Commission staff for the project.

Table D: Comparison of Adjusted Project Costs as Calculated With MVS Benchmark

Project Budget Item	Suburban	MHCC
Adjusted Project Cost per SF	\$ 373.06	\$ 371.73
MVS Benchmark Cost per SF	\$ 341.42	\$ 346.44
Total Over(Under) per SF	\$ 31.64	\$ 25.29
Over (Under) %	9.3%	7.3%
Over(Under) Total Costs	\$ 9,526,013	\$ 7,614,187

Source: Suburban Hospital Modification and MHCC Staff calculations.

The *construction cost* standard requires that any rate increase proposed by the hospital related to the capital cost of the project shall not include the amount of project construction costs that exceeds the MVS benchmark, as well as those portions of the contingency allowance, inflation allowance and capital construction interest that are based on the excess construction cost. Since in this case the construction interest was already factored into the adjusted project cost, only the contingency and inflation allowances need to be added to the excess construction cost.

The inflation and contingency allowances are calculated based on the percentage that these cost estimates exceed the MVS benchmark (7.3%¹¹ in staff's calculations, and 9.3%¹² in Suburban's calculations). The resulting exclusion is \$8,496,741, as shown in Table E.

Table E: Calculation of Excess Cost

	Suburban ¹	MHCC ²
Construction cost exceeding benchmark (\$25.29 x 301,075 SF)	\$ 9,526,013	\$ 7,614,187
The portion of future inflation that should be excluded (\$3,440,377 x apportioned %)	\$ 319,955	\$ 251,148
The portion of the contingencies that should be excluded (\$8,649,396 x apportioned %)	\$ 804,394	\$ 631,406
Total to be excluded from any rate increase proposed by the hospital related to the capital cost of the project	\$ 10,650,362	\$ 8,496,741

¹Suburban Hospital's calculated apportioned % is 9.3%

²MHCC's calculated apportioned % is 7.3%.

Based on the findings from MHCC's calculations, staff recommends the approval of the project should be accompanied by the following condition:

Any future change to the financing of this project involving adjustments in rates set by the Health Services Cost Review Commission must exclude \$8,496,741. This figure includes the estimated new construction costs that exceeds the Marshall Valuation Service guideline cost and portions of the contingency allowance and inflation allowance that are based on the excess construction cost.

¹¹ (\$25.29/\$346.44=7.3%)

¹² (\$31.64/\$341.42=9.3%)