

NEW BIOLOGY BUILDING

THE PROJECT

Originally, the concept was to renovate Pennebaker Hall, home to Biology, upon the completion of the new Interdisciplinary Science Building.

Dober Lidsky Mathey was engaged by the University to help the Biology faculty articulate a vision and to define the spaces that will be necessary to achieve that vision. A facility program for a Biology was the outcome, located on a site identified in the Campus Master Plan.

CHALLENGE

The challenge was to fit the department into a renovated Pennebaker Hall, which unfortunately was inadequate for their needs.

Numerous meetings were held with the department and with the University. It became clear that what the department needed was beyond the space resources available in a renovated Pennebaker.

It was assumed that a gut renovation would be required and that 38,000 net assignable square feet (NASF) would be available after the renovation. The department defined a need for 58,000 NASF. In addition, the existing structural bay size would limit the number of students in a lab as well as the square feet per student so that few of the labs would meet present code.

SOLUTION

Three alternatives were explored. The first was to reduce the facility program so that the department would fit within the building. The least desirable solution.

The second was to expand the existing Pennebaker Hall, north, south, or west. This was a better solution although the constraints of the existing building were felt to be too much of a compromise.

The third alternative was to construct a new science building for Biology, in close proximity to the soon to be constructed Interdisciplinary Science Building. This alternative provides the required space for instruction, research, active learning environments, offices, and various support resources.

The chart below summarizes the construction and project costs for three alternatives: the renovation of Pennebaker; the renovation of Pennebaker plus the Option C expansion to the west; and all new construction.

RESULTS

The University has decided to pursue new construction for the Biology Building and the site is adjacent to the new Interdisciplinary Science Building.

Alternative 1 Renovation of Pennebaker	\$/GSF	GSF	Construction Cost	Project Cost Multiplier	Project Cost
	\$300	60,000	\$18,000,000	1.3	\$23,400,000
	\$350	60,000	\$21,000,000	1.3	\$27,300,000

Alternative 2 Renovation and Addition	\$/GSF	GSF	Construction Cost	Project Cost Multiplier	Project Cost
Renovation	\$300	60,000	\$18,000,000	1.3	\$23,400,000
	\$350	60,000	\$21,000,000	1.3	\$27,300,000
Addition New Construction (Option C)	\$450	31,100	\$14,000,000	1.3	\$18,200,000
	\$500	31,100	\$15,600,000	1.3	\$20,300,000
Renovated and Addition					\$41,600,000
Renovated and Addition					\$47,600,000

Alternative 3 New Construction	\$/GSF	GSF	Construction Cost	Project Cost Multiplier	Project Cost
	\$450	97,700	\$43,965,000	1.3	\$57,154,500
	\$500	97,700	\$48,850,000	1.3	\$63,505,000



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