

ENGINEERING BUILDING



Fig. 1. The Engineering Building after the completion of the Engineering Hall addition. [Del Brown photo AP-80]

The engineering building was erected in several sections, with the first part built in 1948. Additions were built in 1952, 1962 and 1993.

The convergence of powerful forces produced the engineering building in 1948. First, the enrollment in the university had reached 18,669 compared to 10,001 in 1930, the date of the last permanent engineering construction. Secondly, an increasing proportion of the students wanted to be engineers. Engineering enrollment went from 400 in 1900 when the Bascom Hill engineering building was built, to 3400 in 1946. Even with the erection and occupation of several temporary buildings in 1946, to call the engineering facilities in 1948 overtaxed is being charitable.¹

The 1945 state legislature appropriated \$8 million of the \$12 million requested by the regents for postwar University construction. The regents formulated a priority list. At or near the top of this list were a new library, an engineering building, a dairy building, and short-course dormitories. Nearly everyone agreed that of these projects the most pressing was the library. It was initially believed that the \$8 million would build the library and engineering building. In order to give no one, especially the legislature, the idea that the money was not needed, President E. B. Fred was insistent about beginning to spend the construction appropriation immediately. With this intent, the building program could not begin with the library because final plans were not finished. On the other hand, plans for the engineering building were well advanced. Engineering Dean Withey proselytized everywhere, giving speeches to engineering groups, interviews to magazines and newspapers. Industry was told that a steady supply of engineering graduates would be good not only for their businesses but for the country, and for the University, since new facilities for engineering would release much classroom space needed by other departments. The need for new engineering facilities and plans therefore were well established by the time funds became available.²

The plans were the result of a planning group that began meeting in March 1945 as a subcommittee of the campus planning commission. Two major issues were decided by this committee. First, in December 1945 the site of the building was changed from the initially proposed University Avenue site to the "area adjacent to Randall Avenue, between Johnson and Dayton Streets extended". Second



Fig. 2. Construction on west wing October 1949. [Series 9/6, Engineering Bldg, x25-2499]



Fig. 3. West wing and chemical engineering section (unit #2) complete, c. 1955. [Series 8/6, jf-64]

they decided whether engineering should be accommodated in several small buildings or whether all departments could be assigned space in a single large building. As the realities of postwar building (which favored maximizing area under one roof) conditions became clearer, the proponents of the separate building scheme began to drop out of the committee, rather than have their name connected with the radical single building idea. On October 30, 1947, all the members who had not resigned in protest voted to develop the single building plan submitted to the committee by the architectural firm of Foeller, Schober, Berners, Safford and Jahn of Green Bay. These plans called for two huge 'E' shaped wings connected by a one story section (see Fig. 4). These plans were passed through the chain of committees and were approved by the regents on November 15, 1947. Unfortunately so much time had passed since initial estimates had been made that building costs had risen extremely sharply, driven between the twin prongs of labor costs and material shortages, and there was no way for the University to build all the postwar top-priority buildings. The committee decided to build only the west 'E' shaped wing, to house electrical engineering and mechanics the first unit of the building, and that the balance of the building would be completed as soon as state funds became available. On January 15, 1948 the committee proceeded with the west third of the building.³

On December 11, 1948 the contracts, for the construction of the west wing of Engineering, were approved by the regents, General contractor was the George Fuller Company of Chicago, for \$1,947,580. Total contracts let amounted to \$2.55 million. Within days ground was broken by regent Frank Sensebrenner and President E. B. Fred. Thirty trailers of the Camp Randall trailer park had to be removed. The cornerstone ceremony was held June 18, 1949. It was planned that the engineers could move into the building in 1950, and begin using it for classes in the fall of 1950. Material shortages delayed the project about a year. Formal dedication took place on Engineer's Day, May 4, 1951, and the building went into full use in the fall semester of 1951.⁴

It was not however large enough. The diplomacy which led to the allocation of the available space in the new building did not hold even as long as it took to finish the west wing. The plight of chemical engineering was arguably as bad or worse than that of electrical or mechanics, and department chairman O. A. Hougen did so argue. In memos to Dean Withey, President Fred and the regents Hougen reiterated the desperate crowding, lack of suitable labs for graduate and faculty research work, and especially the "powder-keg" safety problems. There was a threat that the department might lose its accreditation without new facilities. By April 1950, the regents had approved plans, by Foeller



Fig. 4. Engineering c. 1965. East and west wings complete. This is the completion of the original design for the building. Mechanical engineering, and old forest products lab are in the foreground, Camp Randall stadium in the background. [Series 8/6, jf-63]

et. al, for the center arm of the east 'E' (see Fig. 3). Funding was from the surplus in the west wing fund and a loan from WARF to the WUBC. After the first round of bids came in, the regents upped the amount of the WARF loan to \$500,000 for a total of \$885,000. In March of 1951, the regents signed contracts worth \$885,000 for the construction of chemical engineering section. The general contractor was Harold Purtell Company of St. Paul, for \$449,000. Construction on the 50 foot by 100 foot basement and three story building was started in the spring of 1951 and finished about a year later. The engineering building now had the configuration shown in Fig. 3.⁵

Throughout the 1950s the departments of civil engineering and engineering drawing had remained in the temporary buildings erected in the post war era. Finally in 1962 the regents authorized a \$2.9 million dollar project to complete the east wing of the building, with a portion of the funding coming from the Nation Institute of Health and the National Science Foundation. The general contractor was the Vogel Brothers Building Company for \$1.27 million. Construction was begun in June 1962 and was dedicated on April 30, 1964. After this phase the building was as shown in Fig. 4. The architects for this section were still the original Foeller et. al. After this project most departments abandoned the temporary buildings.⁶

In 1990 the need for more office space and the long term lack of quality lecture halls in the building led to the construction of yet another section. This time the center court was filled in. Architects Bowen, Williamson and Zimmerman with Foeller et al. designed the \$26 million dollar addition and remodelling. The general contractor was Kraemer Brothers for \$8.135 million. This final section of the engineering building (see Fig. 1) was finished in mid 1993.⁷

- 1) *The Wisconsin Engineer*, Dean M. O. Withey December 1946, May 1941 p. 4, October 1948, p. 6; *Wisconsin State Journal*, December 17 and 18, 1944; *Milwaukee Sentinel*, March 24, 1947; *Wisconsin Alumni Magazine*, March 1947, p. 10, July 1949 p. 32, February 1951 p. 26; Building needs of the College of Engineering, series 24/1/10 box 2.
- 2) E. B. Fred, Address to the faculty, October 4, 1948; Regent's Minutes, October 28, 1944 series 4/16/5 box 5;
- 3) Withey and Kurt Wendt *Memorandum on the steps which led to the Engineering Building*, series 8/1/16 box 16.
- 4) *Wisconsin Alumni Magazine*, June 1951, p. 18. Jon M. Harkness; *Electrical Engineering at the University of Wisconsin*, 1991 p. 68. Regent's Minutes, December 11, 1948; Capital Times November 27, 1948;
- 5) Peterson to Fred, August 30, 1950, series 4/0/3 box 182; *Regent's Minutes*, April 15, 1950, June 15, 1950; *Executive Committee minutes*, March 7, 1951;
- 6) *Regent's Minutes*, April 6, 1962 exhibit G, February 9, 1962; *Wisconsin State Journal*, June 26, 1962; *Wisconsin Alumni Magazine*, November 1962; Daily Cardinal, April 30, 1964.
- 7) *Regent's Minutes*, September 8, 1989, December 10, 1993; *State Budget Letters*, dated February 14, 1991.