

EIFFEL TOWER
 984 FEET
 PARIS

CHRYSLER BUILDING
 1046 FEET
 NEW YORK

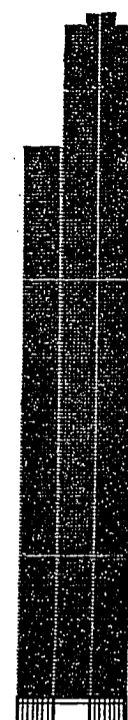
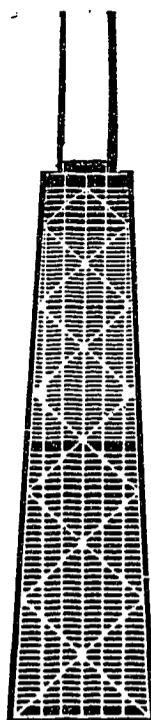
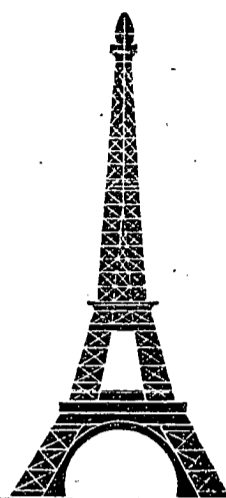
STANDARD OIL
 1136 FEET
 CHICAGO

JOHN HANCOCK CENTER
 1127 FEET
 CHICAGO

EMPIRE STATE
 1250 FEET
 NEW YORK

WORLD TRADE CENTER
 1350 FEET
 NEW YORK

SEARS BUILDING
 1450 FEET
 CHICAGO



The World's Tallest: Saga of a Chicago Skyscraper

The two days that shook the world of Sears, Roebuck & Co. took place in February, 1969, in the company's Chicago offices.

In long hours of negotiations, Sears agreed to buy the land west of the Loop on which it is now constructing—with no anti-New York malice aforethought—the world's tallest building.

This new headquarters building will soar 1,450 feet when it is finished in 1974. That is 100 feet higher than the World Trade Center, which will be finished in 1972 and which this week will surpass the Empire State building in height. As one 12-year-old New Yorker quipped, the Trade Center will be the world's tallest building for the world's shortest time.

The Sears Tower will also be the world's largest private office building. The word "private" excludes the Trade Center, whose prospective championship on this count is under no threat. The Sears building will have 3.7 million square feet of usable space. In the Trade Center's two towers the figure is 9 million.

But no such intermunicipal numbers game was remotely in prospect on those two critical days in February when Sears was balking at signing a 99-year lease for two square blocks on Wacker Drive.

"Had nothing happened, three of us were on the line for \$11-million," one of the assemblers of the site, Albert I. Rubenstein, said the other day. Sears had apparently never been comfortable with the notion of leasing the land. In the end, the company bought the land outright—for cash. How much, no one says.

The area is one that is experiencing what real estate men like to call a renaissance. New office buildings are shooting up on and around Wacker Drive. "Wacker Drive is becoming the Park Avenue of Chicago," Mr. Rubenstein said enthusiastically.

The story of the assembly and the sale is one of several threads in the development of the Sears Tower traced in the last few days. The others involve the planning for the company's space needs, and the planning of the building itself.

The threads lead back ultimately to the chairman of the board of directors of Sears, Gordon M. Metcalf. He was

determined to have a new central headquarters for the world's largest retailer, a business that Richard W. Sears started in a two-story railroad station in North Redwood, Minn., in 1886.

For months the Sears vice president for real estate and property, Warren G. Skoning, canvassed sites. Among the brokers who came to him were Matthew J. Stacom and Vincent J. Peters of the New York real estate firm of Cushman & Wakefield.

Mr. Stacom's suggestion was a property of 50 acres along the Chicago River that he was managing at the time for a real estate investment trust. Mr. Skoning was not interested.

The key to any purchase by Sears, the brokers decided, was transportation. Mr. Metcalf particularly was determined to find a site to which transportation for the thousands of Sears workers would

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Birthplace of Sears, Roebuck chain was railroad station in North Redwood, Minn.

World's Tallest: Skyscraper's Saga

Continued from Page 1

be simple. Mr. Stacom recalled a well-situated property bounded by Wacker Drive, Jackson Boulevard, Adams Street and Franklin Street that had been assembled and cleared for office development, but was still vacant. It was close to train stations, bus stops and arterial roads.

But it was too small. Mr. Stacom approached the owners with a proposition. "We said that if they would risk \$100,000 of option money and acquire a second block, we could arrange a long-term lease with Sears."

The owners of the 55,000-square-foot block were Bernard Feinberg, president of the Jefferson State Bank, and two lawyers and real estate men who were old friends, Albert I. Rubenstein and Philip Teinowitz.

Convinced that the Wacker Drive area had great redevelopment potential, they had managed to acquire every piece of property on the block over a five-year period. There had been 16 buildings in which about 200 owners had some share. "We bulldozed our way through the block and every lease on it," Mr. Rubenstein said.

But the group had already failed once in an effort to assemble the neighboring block of 74,000 square feet. The Greyhound Corporation had been interested in the combined blocks as the site for a new terminal.

Back to the assemblage task they went, finally succeeding in obtaining 90-day purchase options from the three private owners under terms that Mr. Rubenstein described as tough indeed: each option provided that it would be forfeited unless the assembler succeeded in acquiring at least one of the neighboring properties.

"We could have forfeited more than a million dollars for all of them," Mr. Rubenstein said.

But they did succeed, and they exercised the options about 30 days before the negotiations with Sears were completed. Mr. Rubenstein would not say how much

assemblers paid for the property—apparently it was at least \$11-million—and no one will say what Sears paid for the entire package.

On the money question, Sears will only say that the building will cost "more than \$100-million." The company has registered a \$125-million debenture sale, which is due later this month. Part of the site cost to Sears is \$1.6-million for the closing of Quincy Street, which bisected the property. Sears is also shifting a city sewer line under that street.

To the very end, according to those who were present at the land negotiations, Mr. Skoning preferred a different site—the air rights over Illinois Central railroad tracks along the river. But Mr. Metcalf was swayed by the transportation factor.

Well before these issues were settled, the interior space design concern of Saphier, Lerner, Schindler, Inc., was analyzing and forecasting Sears's space needs.

Every person or object that takes space or moves, as Lawrence Lerner put it, was

tabulated for all 90 departments. At the present time, there are 2,400 merchandise managers at Sears in all sizes and shapes at offices flung all about the Chicago area. It was necessary to establish space standards for every type of employe, multiply by the number of people in each category, extrapolate in the company's growth estimates and arrive at a per-square-foot space need for the company for each five-year interval from the day the building opened to the year 2003.

"Actually," Mr. Lerner said, "you can't predict anything accurately beyond three years."

At first the designers planned a standard office size of 9 feet by 12 feet. That turned out to be too small. In the end the standard office was 10 by 15. The offices grow larger in five-foot increments.

The departments "modularized themselves," it developed, into floors of 40,000 square feet of usable space, or 52,000 gross square feet per floor, counting in elevators, mechanical equipment and other nonusable areas. And by 1978, it was decided,

Sears itself would need two million square feet of space. By comparison, the entire Pan Am building in New York has 2.4 million square feet of rentable space.

A decision was made along what Mr. Lerner called "classical" lines to expand upward, leaving the higher floors available for renting in the earlier years at the higher rents that higher floors draw.

The final design for the building in part reflected all these decisions. Sears will occupy the first 60 of the 109 floors when the building opens. There will be 52,670 gross square feet of space from the 1st to the 49th floors, and from there up the building will narrow.

The architectural work fell to the Chicago office of Skidmore, Owings & Merrill. It found itself with a site of 130,000 square feet surrounded by four streets, and a contract calling for a structure with a gross building area no smaller than 3.5 million square feet and no larger than 5.5 million.

"We studied concepts ranging between these limits," said William Dunlap, who is in charge of the architectural team, "and out of the studies came shapes and forms." Two guiding considerations were construction costs below ground and rentability above.

There were various constraints, zoning not among them. Under Chicago's relatively loose zoning, studies showed, the building could have gone 300 stories high with 45,000 gross square feet per floor, for a maximum building area of 13.5 million square feet. ("But who could afford it build it?" someone remarked.)

One constraint was the 1,450-foot height limit in Chicago imposed by the Federal Aviation Administration. Another was Sears's desire for large floors but at the same time smaller upper floors that could more easily be rented to smaller tenants.

A third was the depth to which the building could economically go below grade level. "We found that to go down five or six levels to bedrock 100-odd feet below the surface would be fright-

fully expensive," Mr. Dunlap said. The actual structure will have three levels of 400,000 square feet below grade, reaching a depth of 45 or 50 feet.

Various types of structures were considered. One variant called for two rectangular slabs, one 60 floors high and the other 40. This produced a typical floor of insufficient size. Another variant provided for 16 bays — the architectural term for the space between columns—at the base levels, peaking at varying levels to give varying floor sizes at the higher levels. But this provided less-flexible floors for office use and no central bay for use as an elevator core. Also, this shorter, flatter building lacked a graceful form.

The final choice was a building of nine bays, 75 feet by 75 feet, or 225 feet by 225 feet at the ground level. As it rose beyond 60 stories, sets of bays would peak, until two would rise the final 20 stories to the F. A. A. limit of 1,450 feet at 109 stories.

Along the way the decision

was made to cut down the gross area by 500,000 square feet to 4.4 million gross square feet.

"The question then was whether to shorten the building or reshape it and maintain the height," Mr. Dunlap said. "We kept the height, for reasons of proportion, and aesthetics. There was some mention that it would be nice to have the world's tallest building. But the idea of a space race is silly."

In so large a building, with an expected working population of 16,500 — 7,000 of them Sears employes — the elevating system is critical. If everyone were to go directly from the ground floor to any floor in the building, an unmanageable amount of space would have to be devoted to elevators.

The problem was solved by two two-story sky lobbies, one at the 33d-34th floors, the other at the 66th-67th floors. At those levels visitors will change over to separate sets of double-decker elevators to take them higher. Shops will line the sky

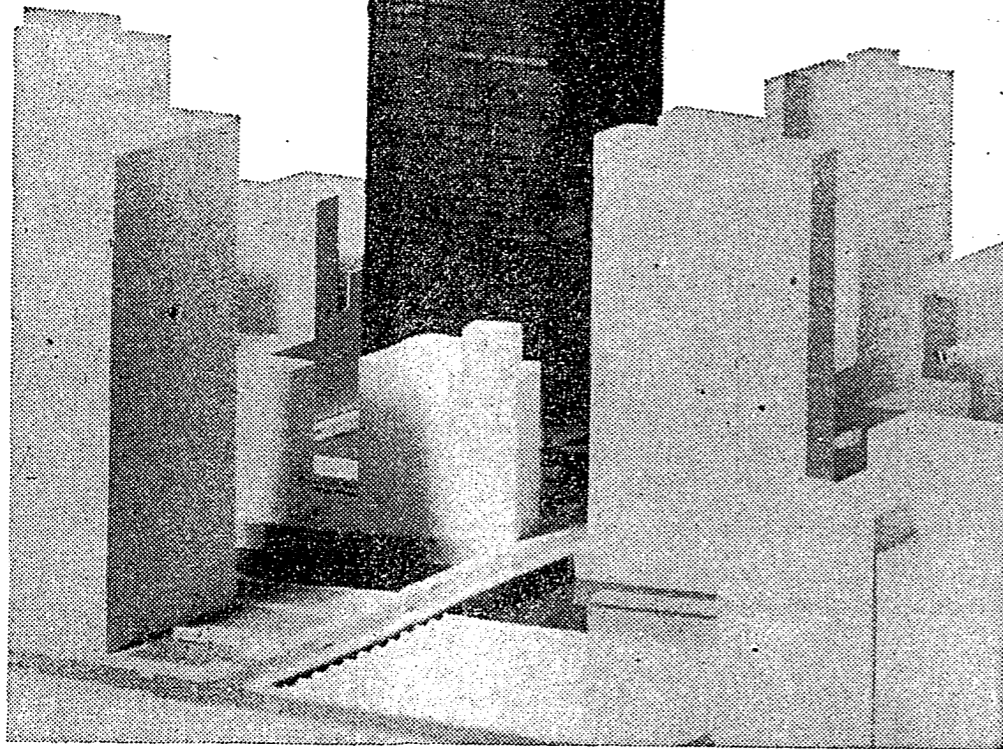
lobbies, giving a ground-floor effect.

One level of the elevators will serve even-numbered floors; the other level will serve the odd-numbered. Escalator connections at the lobby levels will take the visitor to the proper elevator level.

As for the facing, or skin, of the building, Sears has reported that there will be a curtain wall of black aluminum that will give the building a black-sheath effect, and bronze-tinted windows to give a feeling of depth.

But this is not completely decided. The use of granite and marble in the exterior has not been completely ruled out, Mr. Dunlap said. Construction, in the hands of the Diesel Construction Company, a division of Carl A. Morse, Inc., is only at the foundation stage.

As for rents, Mr. Stacom said the schedule was not completed. "But they will be reasonable," he said. At the moment, though, the main problem is construction. "Everything's just going great," Mr. Metcalf says.



Sears building will rise to 109 stories in nine bays peaking at various levels