

STREETER AND QUARLES WEST, SAN FRANCISCO

BUILDING TYPES STUDY: STORES & SHOPS—DESIGN FOR MERCHANDISING

NEW APPROACHES TO HOSPITAL PLANNING

IBM'S NEW COMPLEX IN BOCA RATON, FLORIDA

FULL CONTENTS ON PAGES 4 AND 5

ARCHITECTURAL RECORD

FEBRUARY 1971 **2** A MCGRAW-HILL PUBLICATION THREE DOLLARS PER COPY

FEATURES

105 **Planning consolidated clinical techniques spaces**

New approaches to hospital planning, unencumbered by habits of history or the whims of clients, are described by Sheila Clibbon, A.R.I.B.A., and Marvin Sachs, M.D., of the University City Science Center, Philadelphia. Clinical spaces are growing in size and importance as health care practices respond to technical advances and soaring costs.

113 **IBM complex in Boca Raton by Marcel Breuer and Robert Gatje**

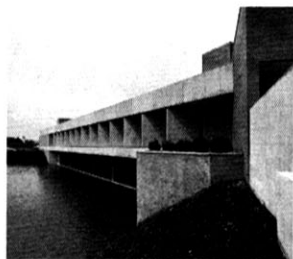
Extending ideas with which they have been working for some time, the architects are beginning Phase II construction on a giant complex for Florida's Atlantic Coast. When completed, this development and manufacturing center will be IBM's first in the Southeast.

119 **A house that enhances its environment**

Architect E. H. Zeidler, of Craig Zeidler and Strong, has created a remarkable "non-house" for a Toronto ravine.

123 **Three Industrial Buildings**

The inventive expression of materials, structure, and function in industrial architecture.



Norman McGrath

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89 **Design for merchandising**

Eight projects, quite different and widely separated, are used to explore the problems and possibilities in store design today. Eight key words convey the qualities of good design for merchandising:

90 **Clarity:** the most important design element of all, the facade.

92 **Boldness:** the newest design technique in high-quality merchandising.

94 **Intimacy:** the most important trend in selling today.

96 **Flexibility:** the basic ingredient of any functional store.

98 **Complexity:** the architect's special contribution on today's building scene.

100 **Economy:** the basis for a sound approach to design.

101 **Efficiency:** the goal for buyer, seller and owner.

102 **Inventiveness:** the way to guarantee change for the better.



Robert Riggs

ARCHITECTURAL ENGINEERING

133 **Toward a new standard for insulating glass**

Steps are underway for the development of an ASTM standard for the testing of sealed insulating glass units against possibility of failure. Glass manufacturers have in house testing, an insulating glass association has a specification and a certification program related to a series of tests, and the Canadian government has a standard for insulating glass units. The idea is to consider all of these and develop an improved test procedure and a performance standard that will have the consensus of manufacturing and consumer interests.



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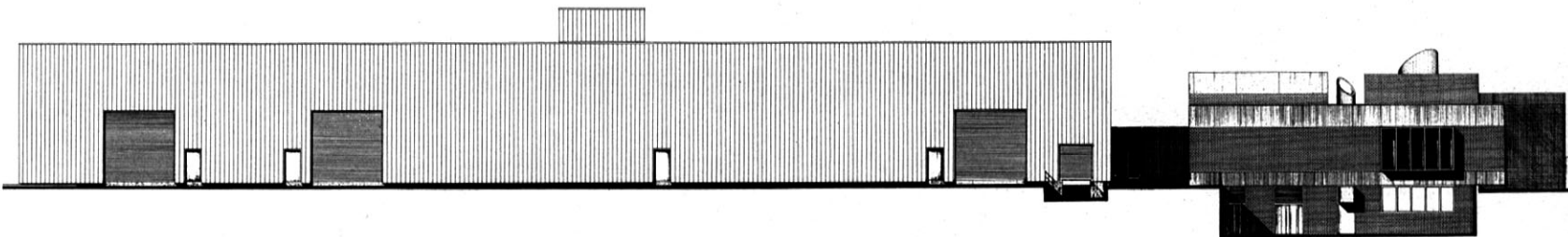
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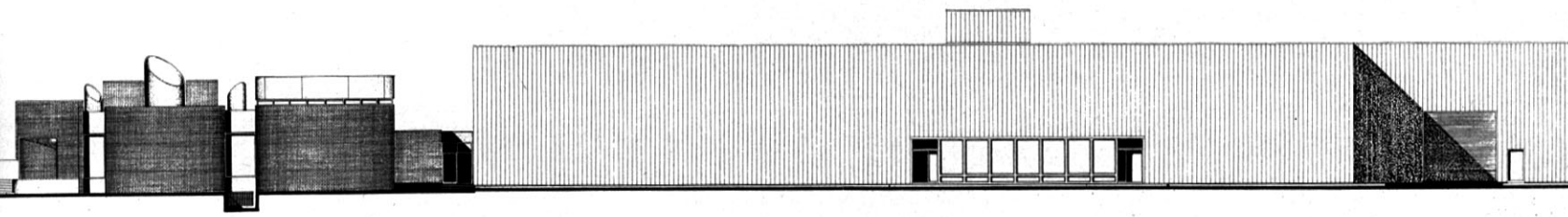
Francisco)—Dodge Construction Statistics—Dodge Reports—Dodge Spec-Fax—Management Control Service—Sweet's Construction Catalog Systems—Sweet's Canadian Construction Catalog Services—Sweet's Information and Library Centers—Sweet's Microfilm Systems. THIS ISSUE is published in national and separate editions. Additional pages of separate edition numbered or allowed for as follows: Western Section 32-1 through 32-6.

POSTMASTER: Please send form 3579 to Fulfillment Manager, ARCHITECTURAL RECORD, P.O. Box 430, Hightstown, N.J. 08520.





THREE INDUSTRIAL BUILDINGS



Industrial buildings still provide some of the best opportunities to express those qualities of our culture that modern architecture was invented to express: efficiency, precision, rationality, our desire to understand the structure of things. Industrial buildings were “discovered” by a few architects who were out to change the world in the early 20th century, and industrial facilities were used as examples of the forms those designers liked; forms that were gradually applied to other types of architecture. Unadorned surfaces and spaces dictated mostly by their functions have been appreciated for several decades; now some architects are beginning to doubt that such simplified, mechanistic expressions are appropriate to our culture, or at least to the way people are beginning to want to live today. But they still remain appropriate in the field to which they were first applied. With industrial architecture today, we can still believe that efficiency and clarity and economy are the values on which the system should be based, and we can work within the architectural forms and rules invented to express those values. Most industrial buildings make no attempt to express any values beyond that of keeping the weather out, of course, except when the owner worries about his building being seen, as well as its being worked in, and hires architects to help him.

The three industrial buildings on the next nine pages—The Brockton Water Filtration Plant, The Monarch Machine Tool Company, and the Pepperell Spring Water Company—are examples of the inventive expression of materials, structure, and function by architects who obviously understand the roots of their visual training, and who helped their clients enormously.

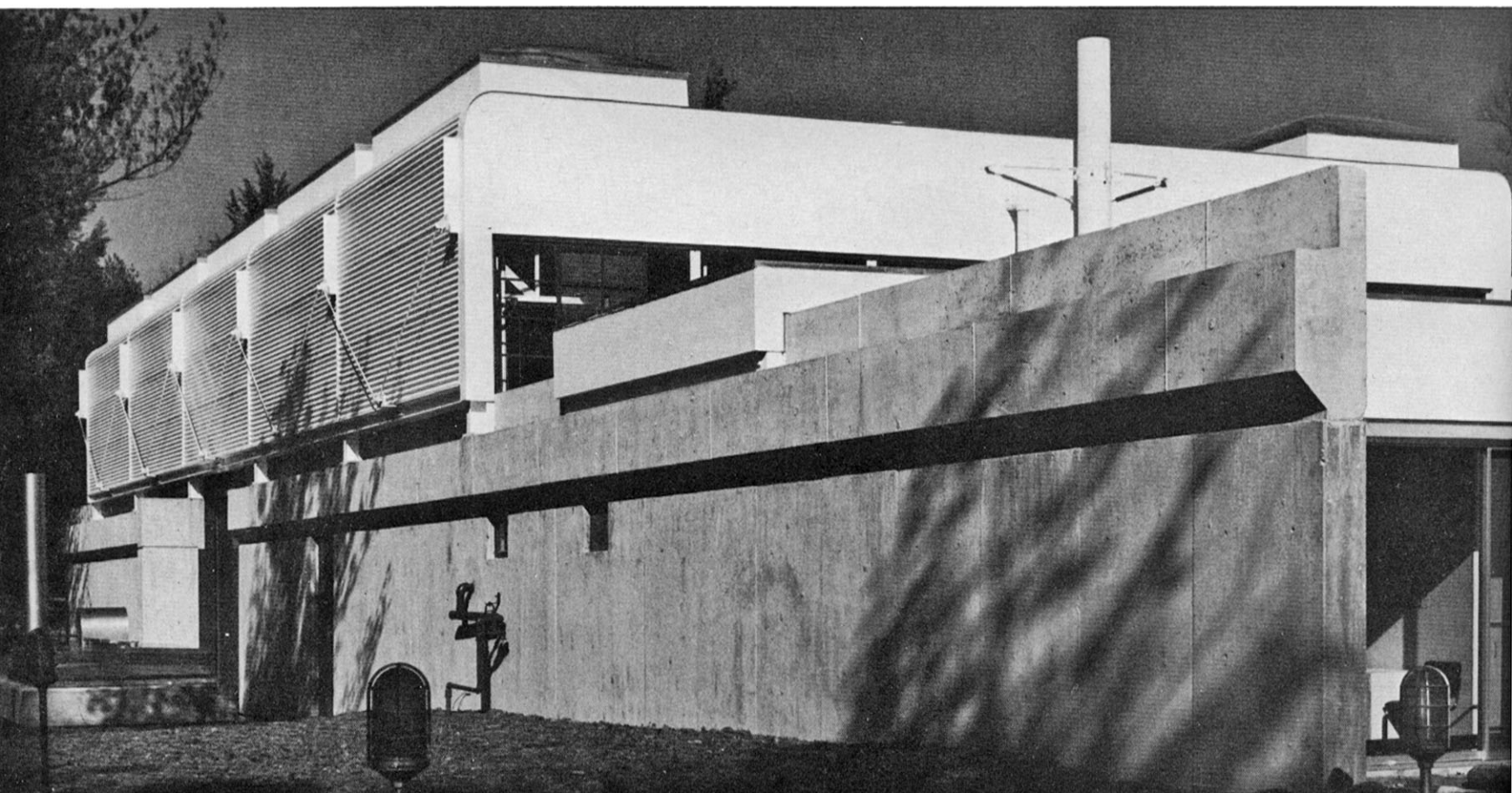
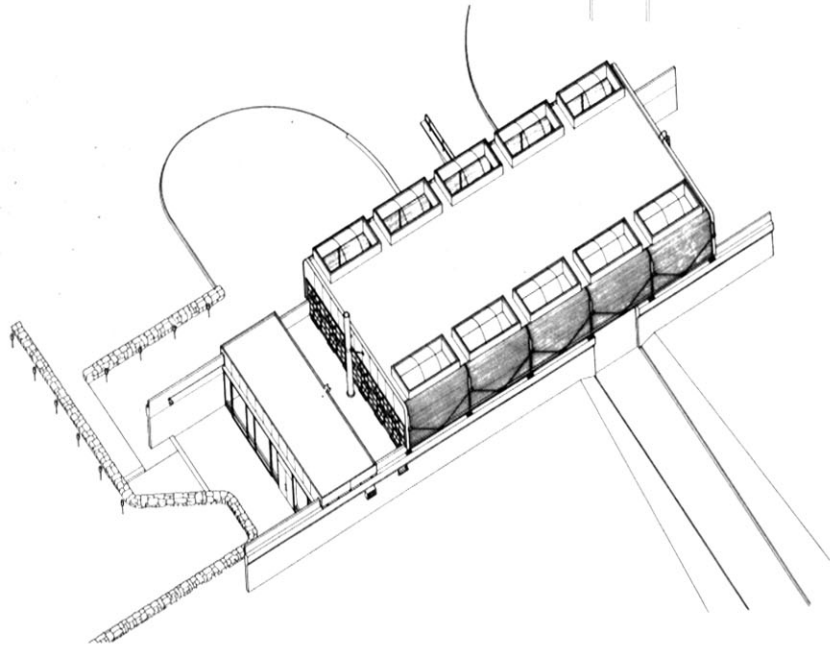
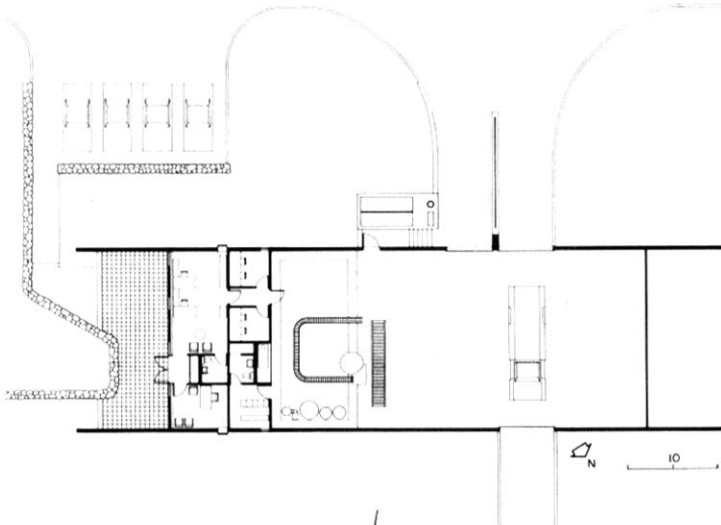
—Robert Jensen

3 PEPPERELL SPRING: RATIONALITY AND PRAGMATISM IN A PRECISE DESIGN

The Pepperell Spring Water Company bottles spring water for retail sale. It owns 350 acres in northeastern Massachusetts, and it hired the firm of Stifter and Baum, and it hired the firm of Stifter and Baum to produce an ecological study of the site, to recommend future land-uses and the best location for a new bottling plant, and finally to design the plant itself, shown on these pages.

The plant is an essay in the rationality and pragmatism that has guided the whole project. Its functions are organized linearly between two parallel concrete walls that read as extensions of the foundations. They set the pattern for future expansion, and can take continued abuse from fork-lift trucks and heavy pallets. Straddling the walls is a steel superstructure clad in sheet siding, with one roofing system for the high, skylit production space, another for the office and support areas. Because the side walls are used for storage, natural light is gained primarily from the ten rectangular acrylic domes in the roof (isometric left, and color photo, right). By using these domes, the light level inside is nearly the same as outdoors. The metal end walls are designed to be unbolted and re-used when expansion occurs, and the insulated sandwich panels, along with the corrugated aluminum siding, are detailed with a butt-joint at each bay, which permits demounting without damaging adjacent panels. Ventilation occurs through the banks of awning-type windows at both ends of the production space, and the area is heated by gas-fired units suspended from the ceiling, as shown in the photograph, next page. The Pepperell Spring Water Plant has a studied purity that is seldom found in industrial architecture and it is worth close examination.

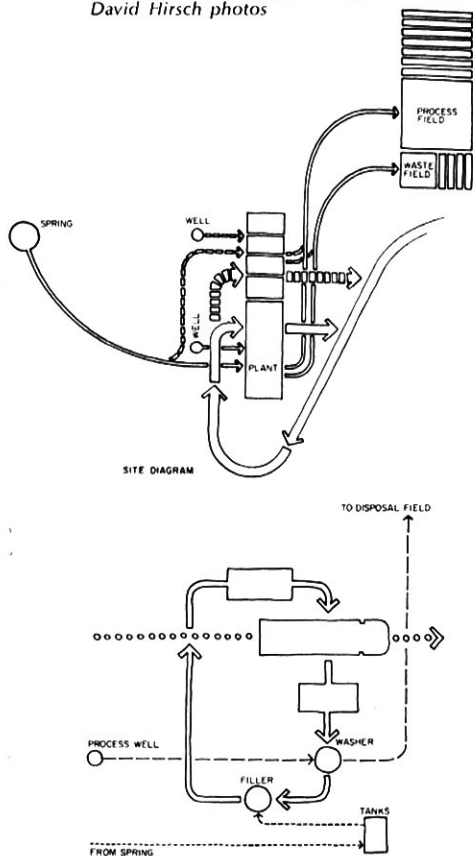
PEPPERELL SPRING WATER COMPANY, Pepperell, Mass.
 Architects: *Stifter and Baum, Architects*. Structural engineers: *Structural Design and Research*; mechanical engineers: *Joseph Schneider*; general contractor: *Honkala Construction Co.*







David Hirsch photos



The interior of the main working space (above) and a detail of the exterior siding and concrete wall (right) exhibit the careful articulation of parts and expression of function that pervades the whole building. At left are two sketches showing the processing of water from well to shipping (upper diagram) and the movement of bottles and water within the plant itself prior to shipping by truck (lower diagram). Process diagrams like these were created before any actual building designing took place, and the final ones dictated the building's form. The major objective was that the entire operation—from drawing water to shipping to waste disposal—be protected from contamination in any form.

