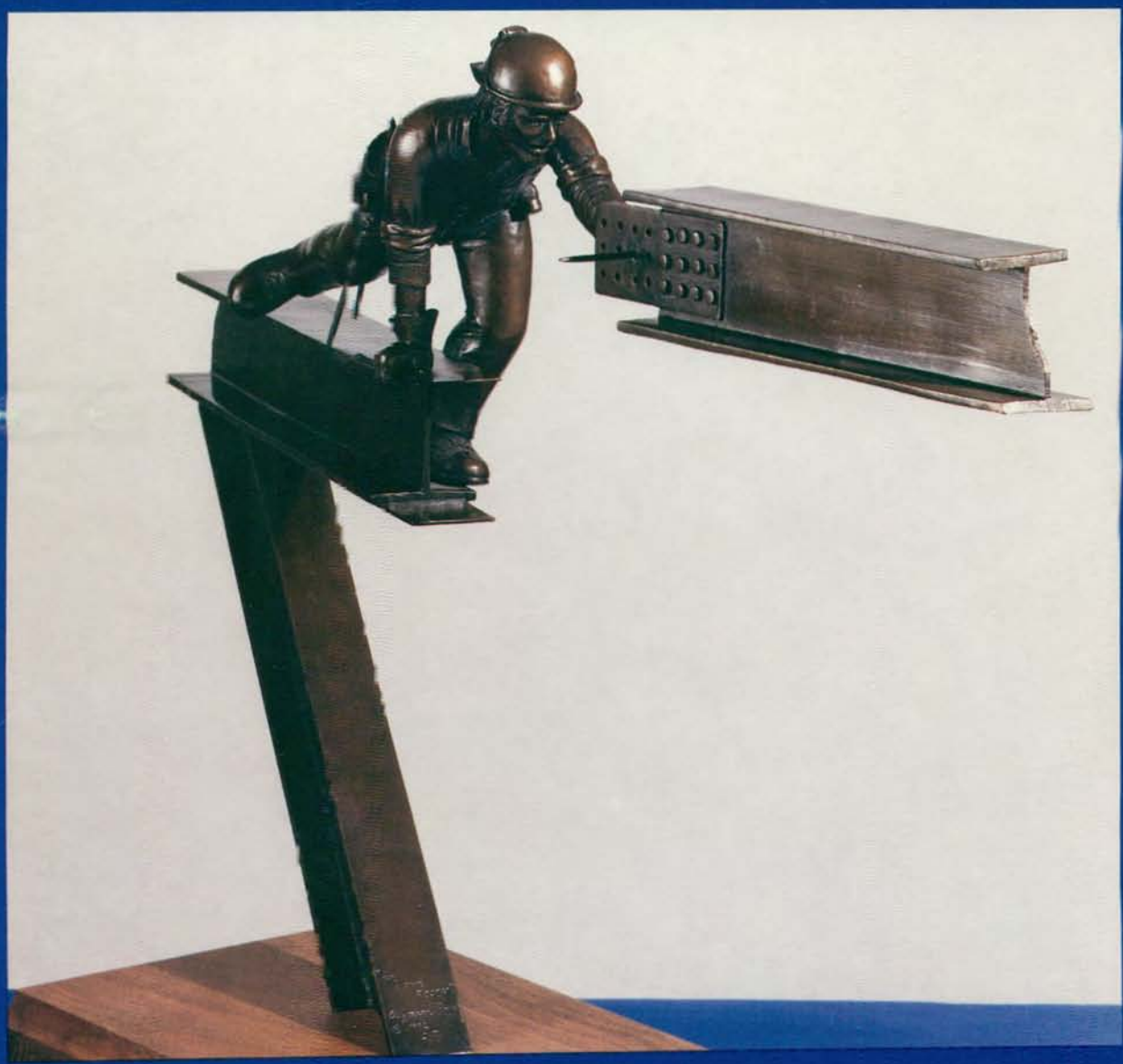
1987 Architectural Awards of Excellence



Special Section

1987 Architectural Awards of Excellence

This Special Section of *Modern Steel Construction* is a salute to the winners of the 1987 Architectural Awards of Excellence competition. This biennial event, sponsored by the American Institute of Steel Construction, recognizes and honors outstanding architectural achievement in building design.

All registered architects practicing professionally in the United States are eligible for the competition. They are invited to enter buildings of their design constructed anywhere in the United States or its territories. For the 1987 competition, each project must have been designed, fabricated and erected in the U.S. during the calendar years 1985 or 1986.

Buildings of all classifications are eligible, with equal emphasis given to all sizes and types in the judging. The structural frame must be steel, although it is not a requirement that the steel be exposed and a part of the architectural expression. Older structures which have undergone major reconstruction/ rehabilitation may also be entered. There is no limitation on the number of entries by any individual or firm.

On Our Cover . . .

A Joe Kinkel sculpture on permanent display at AISC headquarters, "The Long Reach," is the motif for AAE and Prize Bridge Awards presented by AISC. Award winners receive bas relief plaques adapted from the sculpture.

THE AWARDS JURY

(left to right)

DONALD J. HACKL
President
Lobel Schlossman Hackl
Chicago, Illinois
(and 1987 President,
American Institute of Architects)

TED A. NIEDERMAN
Principal
RTKL Associates, Inc.
Baltimore, Maryland

HAL IYENGAR
Partner
Skidmore, Owings & Merrill
Chicago, Illinois

PROFESSOR WILLIAM McGUIRE
School of Civil & Environmental Engineering
Cornell University
Ithaca, New York

BRUNO D'AGOSTINO
Senior Vice President
Benjamin Thompson and Associates, Inc.
Cambridge, Massachusetts

CLARKE COLLEGE

Dubuque, Iowa

Juror comments: ***"Historically, spirituality has often been expressed in structural terms. Clarke College's design and use of materials epitomizes that mode of expression."***

Replacing key buildings lost in a fire, designers created a new "hub" for this 57-acre campus, echoing the character of the original group of closely linked buildings through a single large structure. It accommodates administrative offices, central library, chapel, recital hall, art gallery, post office and bookstore. The roof line has three individual peaks, one of which—the glazed atrium—reinforces the hub concept. Exposed bundled steel tube columns and vaulting are utilized to dramatically shape the space in forms reminiscent of a Gothic cathedral. Similar exposed bundled steel tube columns and vaulting are expressed in the two-story reading room of the library and chapel. The design integrates adjacent campus architecture and the masonry tradition of Dubuque architecture, consisting primarily of brick and limestone resting on the structural steel frame.

Architect
VOA Associates Incorporated
Chicago, Illinois

Structural Engineer
Shive-Hattery Engineers, Inc.
Moline, Illinois

Construction Manager
Conlon C.M.
Dubuque, Iowa

Steel Fabricators
Bradley Iron Works, Inc.
Dubuque, Iowa
and
Venetian Iron Works, Inc.
Des Moines, Iowa

Steel Erector
Northwest Erection Services, Inc.
Des Moines, Iowa

Owner
Clarke College
Dubuque, Iowa

345 CALIFORNIA CENTER

San Francisco, California

An elegant and unique form on the cityscape, this is one of the first major projects using a multiple tube and eccentric brace concept: a welded ductile, moment-resisting space framed tube at the exterior of the building, two transverse interior frames with an eccentrically braced core. Both frame and concept were selected because of ductility considerations and the fact that steel, light and flexible, reduced the inertia forces due to earthquake load. Steel framing also provided flexibility for inter-floor stairs for two-floor tenants; and erection of the tower's concrete-backed granite wall system. Rising 47 stories above grade, the project includes several parts: at the top, in two separate towers emerging from the office building and linked together with glazed skybridges, are 11 floors of hotel rooms; at the base is a full floor of mechanical equipment; then 31 floors of office space, two large podium office floors and—at street level and one above—two floors of office building and hotel lobbies, retail and restaurant space.

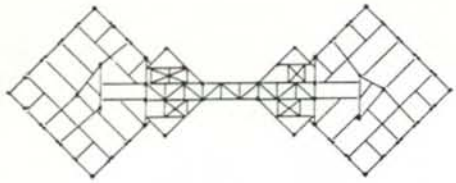
Jury comments: ***"A very aggressive, robust and powerful building statement."***

Architect/Structural Engineer
Skidmore, Owings & Merrill
San Francisco, California

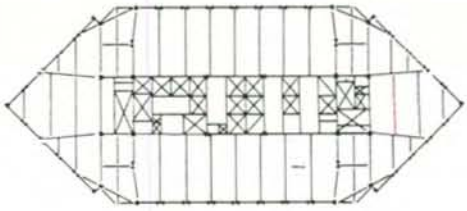
General Contractor
Dinwiddie Construction Company
San Francisco, California

Steel Fabricator/Erector
The Herrick Corporation
Hayward, California

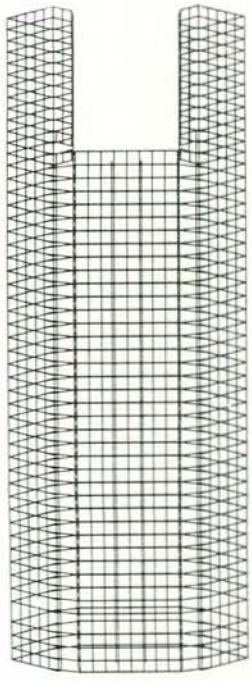
Owner
California Center Partners,
Norland Properties
San Francisco, California



TYPICAL HOTEL FLOOR
FRAMING PLAN



TYPICAL OFFICE FLOOR
FRAMING PLAN



ELEVATION–
DUCTILE MOMENT FRAME

TRW WORLD HEADQUARTERS

Lyndhurst, Ohio

Expressive use of steel and aluminum emphasizes the technological sophistication of this company headquarters. Steel columns and beams are clad in bronze anodized aluminum with window frames and other components set in from the steel building frame. The 450,000-sq. ft building steps down in terraces; four narrow, pavilion-like office wings with full-height glass walls radiate from the central atrium.

Jury comments: ***"An almost timeless piece of corporate architecture, as fresh and wonderful 20 years from now as it is today."***

Architect
Lohan Associates
Chicago, Illinois

Structural Engineer
KKBNA Unlimited, Inc.
Chicago, Illinois

General Contractor
Gilbane Building Company
Cleveland, Ohio

Steel Fabricator/Erector
Kilroy Structural Steel Company
Cleveland, Ohio

Owner
TRW, Inc.
Lyndhurst, Ohio

Jury comments: ***"This type of building brings life into the city, captivates and holds shoppers in a pleasant, stimulating environment."***

PIER 17 PAVILION

New York, New York

This final element of the South Street Seaport in lower Manhattan is a three-story steel frame structure with painted metal siding and a standing-seam metal roof. Interior circulation is oriented around two three-story atria, one running north/south parallel to the shoreline, the other running east/west to the river. Retail stores and specialty shops focus inward; restaurants, cafes and public spaces focus outward, overlooking the waterfront.

Architect
Benjamin Thompson & Associates, Inc.
Cambridge, Massachusetts

Structural Engineer
Severud-Szegezdy Consulting Engineers P.C.
New York, New York

General Contractor
Tishman Construction Corp. of New York
New York, New York

Steel Fabricator
Mosher Steel Company
Birmingham, Alabama

Steel Erector
American Steel Erectors
South Plainfield, New Jersey

Owner
Seaport Marketplace Limited Partnership,
Affiliate of The Rouse Company
Columbia, Maryland

VACATION HOUSE

New England Coast

This family complex of autonomous units includes parents', children's and guest houses, and studio, with the parents' dwelling composed of two pavilions under a glass "tent:" master bedroom and living-dining-kitchen, each defined by piers at the corners supporting tubular steel space trusses spanning the entire space to carry the roof deck.

Architect
Peter Forbes and Associates, Inc.
Boston, Massachusetts

Structural Engineer
Zaldastani Associates, Inc.
Boston, Massachusetts

General Contractor
Prin A. Allen & Sons
Brooklin, Maine

Steel Fabricator
Maine-Cascade Iron Works
Clinton, Maine

Steel Erector
Nancy's Welding
Freedom, Maine

Jury comments: ***"A modern house that fits beautifully into the rugged landscape."***

VIRGINIA POWER'S INNSBROOK TECHNICAL CENTER

Glen Allen, Virginia

The open structural steel frame used throughout this utility's new center achieves the visual impact needed for the building's central architectural element, a 189-ft microwave tower. And it enabled the erector to lift preassembled platforms like building blocks. Building modules of open office are organized along an open 3-story circulation spine. The frame and exterior envelope were being constructed while the design team completed the interior package. Steel framing also permitted minor adjustments on the interior without major cost.

Architect/Structural Engineer/General Contractor
Virginia Power, E & C Division
Glen Allen, Virginia

Steel Fabricator
Owen Steel Company, N.C., Inc.
Gastonia, North Carolina

Steel Erector
W. O. Grub Steel Erection, Inc.
Richmond, Virginia

Owner
Virginia Power
Glen Allen, Virginia

Juror comments: ***"Integration of a new technology with forms that go back historically."***

MORROW HYDROELECTRIC DAM

Kalamazoo County, Michigan

Generating facility is crisp and prismatic. Primary triangular bents of built-up architecturally exposed structural steel elements form the design icon, linked by tubular steel sections. Secondary and tertiary structural steel elements frame the entire exterior glass wall system, and form graceful catwalks, stair and craneway elements.

Jury comments: ***"This simple, elegant enclosure becomes architecture. It's direct, powerful and has a real poetry."***

Architect/Structural Engineer
Skidmore, Owings & Merrill
Chicago, Illinois

General Contractor
Erhardt Construction Company
Ada, Michigan

Steel Fabricator
Grand Rapids Steel & Supply
Grand Rapids, Michigan

Steel Erector
Steelcon
Kalamazoo, Michigan

Owner
STS Consultants, Ltd.
Northbrook, Illinois

LLOYD CENTER CINEMAS

Portland, Oregon

The design for this multi-screen cinema complex is intended to "rekindle the spirit and excitement of the 20s, when a night out at the movies was a grand event." Red-painted exposed structural steel lends a lightness throughout, starting with an entrance galleria, moving through a transitional rotunda and ending in the "street of theatres." Each movie house has its own identity and sparkling neon marque. All detailing is exposed where appropriate; fasteners and cable structures are used to suspend light fixtures and neon artwork.

Jury comments: ***"Totally unique . . . they put some real show business into this."***

Architect
Broome, Oringdulph, O'Toole, Rudolf, Boles & Associates, PC
Portland, Oregon

Structural Engineer
KPFF Consulting Engineers
Portland, Oregon

Steel Fabricator
Fought & Company, Inc.
Portland, Oregon

General Contractor
Hoffman Construction Co.
Portland, Oregon

Steel Erector
REFA Erection, Inc.
Tigard, Oregon

Owner
Tom Moyer Theaters
Portland, Oregon

RADIO STATION K92FM/WDBO

Orlando, Florida

Two major components of this broadcast facility and corporate office have been integrated into the overall design: the 200-ft tower and the satellite dish. A 10-ft × 150-ft skylight-covered corridor permits viewing of both elements from within the building. Because the building is severed literally into two pieces by the barrel arch skylight, an exceptionally strong column system was required to resist hurricane force winds. Steel truss columns resist wind shear by triangulation in a manner similar to the 200-ft broadcast tower.

Architect
Helman Hurley Charvat Peacock/Architects,
Maitland, Florida

Structural Engineer
Allan and Conrad, Inc.
Winter Park, Florida

General Contractor
R.C. Stevens Construction Co.
Orlando, Florida

Steel Fabricator/Erector
Southern Central Steel
Sanford, Florida

Owner
NewCity Communications, Inc.
Orlando, Florida

Jury comments: ***"Refreshing and very laid back; a building that says the public is welcome."***

INDUSTRIAL TECHNOLOGY INSTITUTE

Ann Arbor, Michigan

A steel frame provides the "high-tech" image for this project, and curved stainless steel panels for the facade enforce the dynamic projection of a progressive corporation whose work is in "factories of the future." The interior integrates three functions: corporate headquarters, industrial research laboratories and training facilities. The corporate offices, a series of pods which include the training center, are sheathed in stainless steel and two shades of gray spandrel glass. The two-story industrial-bay laboratories are identified with black masonic tile.

Jury comments: ***"A high-tech solution, using both symmetry and materials very nicely."***

Architect
William Kessler and Associates, Inc.
Detroit, Michigan

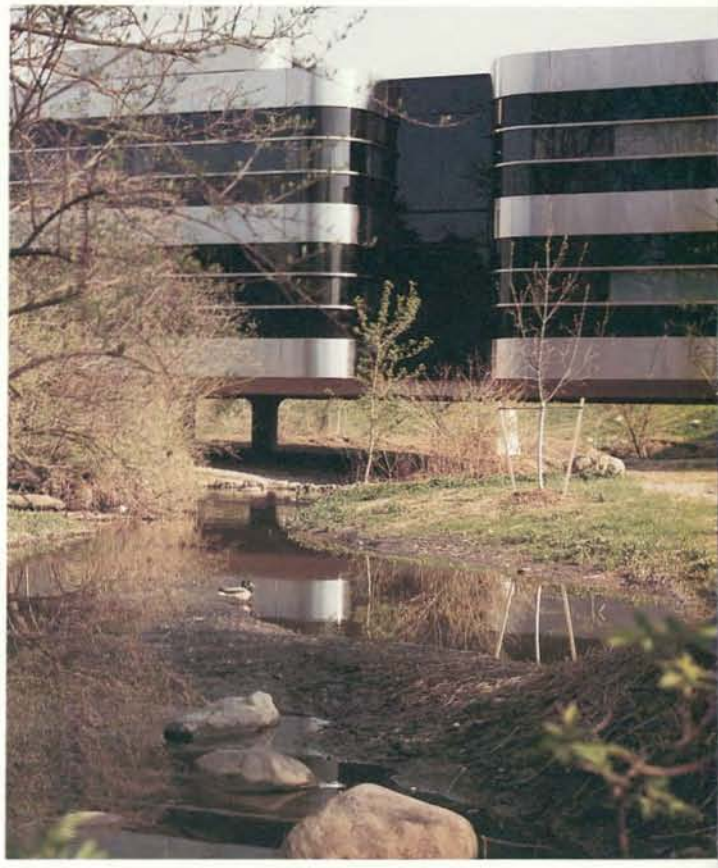
Structural Engineer
Robert Darvas Associates P.C.
Ann Arbor, Michigan

General Contractor
O'Neal Construction
Ann Arbor, Michigan

Steel Fabricator
Service Iron Works, Inc.
Livonia, Michigan

Steel Erector
McGuire Steel Erection, Inc.
Northville, Michigan

Owner
Industrial Technology Institute
Ann Arbor, Michigan



Jury comments: ***"A very simple, natural expression of exposed structural steel . . . clarity and order are apparent."***

GEORGIA STATE BOTANICAL GARDEN CONSERVATORY VISITOR'S CENTER

Athens, Georgia

The steel frame, painted white, ensures lightness and elegance for this great glass box. The aluminum skylight and curtain wall system is broken thermally and glazed with insulating glass. The main purpose of this teaching/visitor complex was the development of a tropical rain forest as part of the University's research efforts in biotechnology. However, it is also the setting for many special events, including lectures, parties and weddings. For general use, large exhaust fans in connection with motorized greenhouse window sash allow air circulation; for special events, the conservatory is air-conditioned.

Architect
Hall, Norris & Marsh, Inc.
Atlanta, Georgia

Structural Engineer
Sedki & Russ Engineers
Atlanta, Georgia

General Contractor/Steel Erector
Terry Development Corporation
Athens, Georgia

Steel Fabricator
Thackston Steel Co., Inc.
Statesboro, Georgia

Owner
University of Georgia
Athens, Georgia

McCORMICK PLACE EXPANSION FACILITY

Chicago, Illinois

A steel-framed low-rise building utilizing a cable-suspended structural steel roof system, the McCormick Expansion resolves site constraints, yet remains harmonious with adjacent lakefront environs. It augments the existing McCormick Place Exhibit Hall to form the world's largest contiguous exhibition facility, and has a 480 ft × 780 ft long-span roof, suspended from cables supported by 12 concrete pylons projecting 60 ft above roof level. The 3-¾ in. diameter galvanized steel cables, six at each pylon, are jacketed by an extruded white PVC protective sheath with polished stainless steel anchorage fittings.

Jury comments: ***"An extremely delicate way of handling a gigantic structure."***

Architect/Structural Engineer
Skidmore, Owings & Merrill
Chicago, Illinois

Construction Manager
Schal/McHugh
Chicago, Illinois

Steel Fabricator/Erector
Bristol Steel Corporation
Bristol, Virginia

Owner
Metropolitan Fair & Exposition Authority
Chicago, Illinois

OWINGS MILLS TOWN CENTER

Owings Mills, Maryland

Structural steel creates a light, airy, upscale and sophisticated statement within a low-maintenance, highly durable framework. The food court's conservatory appearance was achieved using bent structural steel T-sections to support curved glass skylights. Exposed Vierendeel steel roof trusses serve both as stabilizers and decorative elements throughout the mall, forming the feature design element. Exposed steel columns are built up from one WF-shape and two T's welded together to make cruciform columns.

Jury comments: ***"A very sophisticated, state-of-the-art type structure."***

Architect/Structural Engineer
RTKL Associates, Inc.
Baltimore, Maryland

General Contractor
HCB Contractors
Baltimore, Maryland

Steel Fabricator
Strait Manufacturing
Greencastle, Pennsylvania

Steel Erector
L. R. Willson & Sons, Inc.
Gambrills, Maryland

Owner
The Rouse Company
Columbia, Maryland

THE HARTFORD LIFE INSURANCE HEADQUARTERS

Simsbury, Connecticut

Stub girders proved cost-effective while minimizing floor-to-floor height in this 4-story building. Ducts serving three separate wings run parallel to the beams, through the girders. The composite steel beams afforded great design flexibility, allowing openings to be cut in the field. The exterior is clad in 2-in. pink Connecticut granite. The 650,000 sq. ft campus-style building includes a computer center, corporate office space for 2,000 employees, cafeteria, private dining rooms and conference center, and a 100-seat multi-purpose auditorium.

Architect
Thompson, Ventulett, Stainback & Associates, Inc.
Atlanta, Georgia

Structural Engineer
Ross Bryan Associates, Inc.
Nashville, Tennessee

General Contractor
Bartlett, Brainard, Eacott/Dugan & Meyers, a Joint Venture
Bloomfield, Connecticut

Steel Fabricator/Erector
The Berlin Steel Construction Co.
Berlin, Connecticut

Owner
The Hartford Insurance Group
Hartford, Connecticut

STUB GIRDER FRAMING

Jury comments: ***"Traditional mainstream architecture, eminently well-executed."***

The 1987 AAE Winners

Designers honored in the 1987 Architectural Awards of Excellence competition, and their winning structures, are (in alphabetical order):

Broome, Oringdulph, O'Toole, Rudolf Boles & Associates, PC, Portland, Oregon
LLOYD CENTER CINEMAS, PORTLAND, OREGON

Peter Forbes and Associates, Inc., Boston, Massachusetts
VACATION HOUSE, THE NEW ENGLAND COAST

Hall, Norris & Marsh, Inc., Atlanta, Georgia
GEORGIA STATE BOTANICAL GARDEN CONSERVATORY VISITOR'S CENTER, ATHENS, GEORGIA

Helman Hurley Charvat Peacock/Architects, Inc., Maitland, Florida
RADIO STATION K92FM/WDBO, ORLANDO, FLORIDA

William Kessler and Associates, Inc., Detroit, Michigan
INDUSTRIAL TECHNOLOGY INSTITUTE, ANN ARBOR, MICHIGAN

Lohan Associates, Chicago, Illinois
TRW WORLD HEADQUARTERS, LYNDHURST, OHIO

RTKL Associates, Inc., Baltimore, Maryland
OWINGS MILLS TOWN CENTER, OWINGS MILLS, MARYLAND

Skidmore, Owings & Merrill, Chicago, Illinois
McCORMICK PLACE EXPANSION FACILITY, CHICAGO, ILLINOIS

Skidmore, Owings & Merrill, Chicago, Illinois
MORROW HYDROELECTRIC DAM, KALAMAZOO COUNTY, MICHIGAN

Skidmore, Owings & Merrill, San Francisco, California
345 CALIFORNIA CENTER, SAN FRANCISCO, CALIFORNIA

Benjamin Thompson & Associates, Inc., Cambridge, Massachusetts
PIER 17 PAVILION, NEW YORK, NEW YORK

Thompson, Ventulett, Stainback & Associates, Inc., Atlanta, Georgia
THE HARTFORD LIFE INSURANCE HEADQUARTERS, SIMSBURY, CONNECTICUT

Virginia Power, E & C Division, Glen Allen, Virginia
VIRGINIA POWER - INNSBROOK TECHNICAL CENTER, GLEN ALLEN, VIRGINIA

VOA Associates Incorporated, Chicago, Illinois
CLARKE COLLEGE, DUBUQUE, IOWA

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