



P R I Z E B R I D G E S 1 9 7 0



AWARD

CATEGORIES

LONG SPAN BRIDGES

Bridges having one or more spans of over 400 ft in length.

MEDIUM SPAN BRIDGES, HIGH CLEARANCE

Bridges with vertical clearance of 35 ft or more, costing over \$500,000, and having no single span (as measured by the supporting foundations) longer than 400 ft in length.

MEDIUM SPAN BRIDGES, LOW CLEARANCE

Bridges having vertical clearances of less than 35 ft, costing over \$500,000 and having no single span (as measured by the supporting foundations) longer than 400 ft in length.

SHORT SPAN BRIDGES

Bridges having fixed spans and costing less than \$500,000.

HIGHWAY GRADE SEPARATION BRIDGES

Bridges whose basic purpose is highway grade separation as contrasted to the above categories.

MOVABLE SPAN BRIDGES

Bridges having a movable span.

SPECIAL TYPE BRIDGES

Includes pedestrian overpass bridges, and other special purpose bridges not identifiable to one of the above categories.

PRIZE BRIDGES 1970

Steel bridges selected in the annual national competition conducted by the American Institute of Steel Construction as the most beautiful bridges opened to traffic in 1969.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION
101 Park Avenue, New York, N.Y. 10017

JURY OF AWARDS



SAMUEL S. BAXTER, F. ASCE

President, American Society of Civil Engineers
Water Department Commissioner, City of Philadelphia
Philadelphia, Pennsylvania

DR. JAMES CHINN, M. ASCE

Professor of Civil Engineering, University of Colorado
Boulder, Colorado

WAYNE S. HERTZKA, FAIA

Hertzka & Knowles
San Francisco, California

FRANK M. MASTERS, JR., M. ASCE

Consulting Engineer
Harrisburg, Pennsylvania

FRANCIS C. TURNER, F. ASCE

Federal Highway Administrator, U.S. Department of Transportation
Washington, D.C.

L. to r.: Turner, Masters, Baxter, Hertzka, Chinn

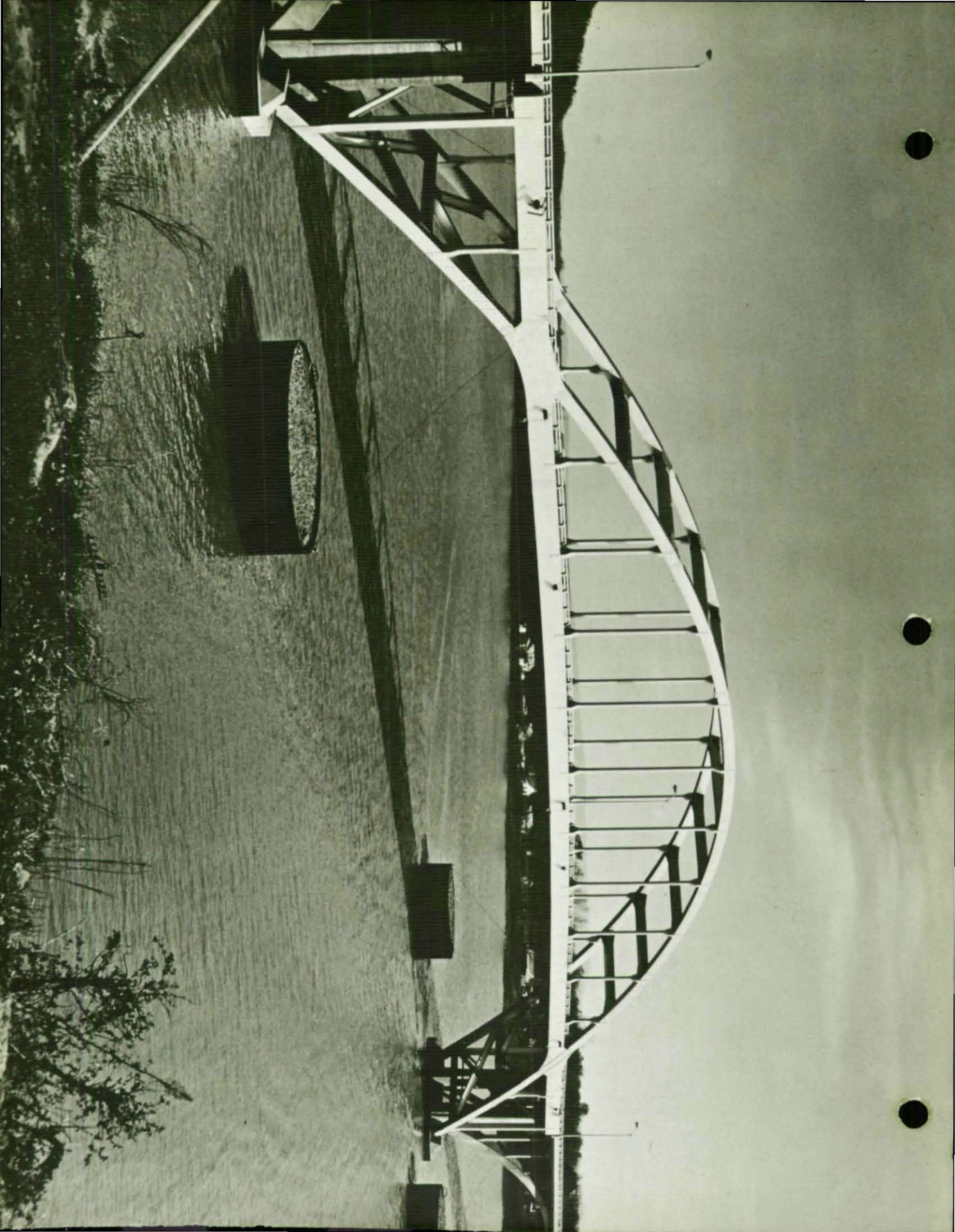
BEAUTY IN STEEL BRIDGES

The enduring beauty of steel bridges is eloquent tribute to the vision and skill of the men who plan, design and build them. The bridge designer of today is both artist and engineer. He understands the potential for strength and beauty which is inherent in steel structures, and he knows that aesthetic appearance can be achieved at no sacrifice of efficiency or economy. The simple grace of a highway overpass, no less than the majestic sweep of a river crossing, reflects a creative integration of structure, function and form, skillfully executed in beautiful bridges of steel.

To promote a more widespread appreciation of the aesthetics of steel bridges and to honor the architectural excellence of modern bridge design, the American Institute of Steel Construction sponsors an annual Prize Bridge Competition. Each year a distinguished Jury of Awards composed of leading educators, architects, and engineers, selects the steel bridges which it judges to be the most beautiful of those opened to traffic in the United States during the previous year.

To establish an equitable basis for competition, awards are made in each of several contest classifications. Size, cost and operating conditions determine the class in which each entry is eligible to compete. The prize winning bridges are marked with a stainless steel plaque, and the designers, owners and steel fabricators are awarded engraved certificates in recognition of their contribution and achievement.

The American Institute of Steel Construction sponsors this competition and awards the prizes in the belief that it is helping to render a public service by stimulating a lasting interest in improved bridge design.



PRIZE BRIDGE 1970
LONG SPAN

ARKANSAS STATE HIGHWAY 23 BRIDGE

OVER ARKANSAS RIVER

DESIGNER

Howard, Needles, Tammen & Bergendoff, Kansas City, Missouri

OWNER

State of Arkansas, Little Rock, Arkansas

GENERAL CONTRACTOR

Al Johnson Construction Co., Minneapolis, Minnesota

FABRICATOR

Nashville Bridge Company, Nashville, Tennessee

JURORS' COMMENTS

"A simple, graceful structure with clean lines. The main span and the approaches are attractively integrated into a single unit. It truly is a beautiful bridge."

PRIZE BRIDGE 1970
MEDIUM SPAN, HIGH CLEARANCE

EUGENE A. DORAN MEMORIAL BRIDGE

(SAN MATEO CREEK BRIDGE)

DESIGNER

California Division of Highways, Sacramento, California

OWNER

State of California, Sacramento, California

GENERAL CONTRACTOR

Dan Caputo Co., San Jose, California

FABRICATOR

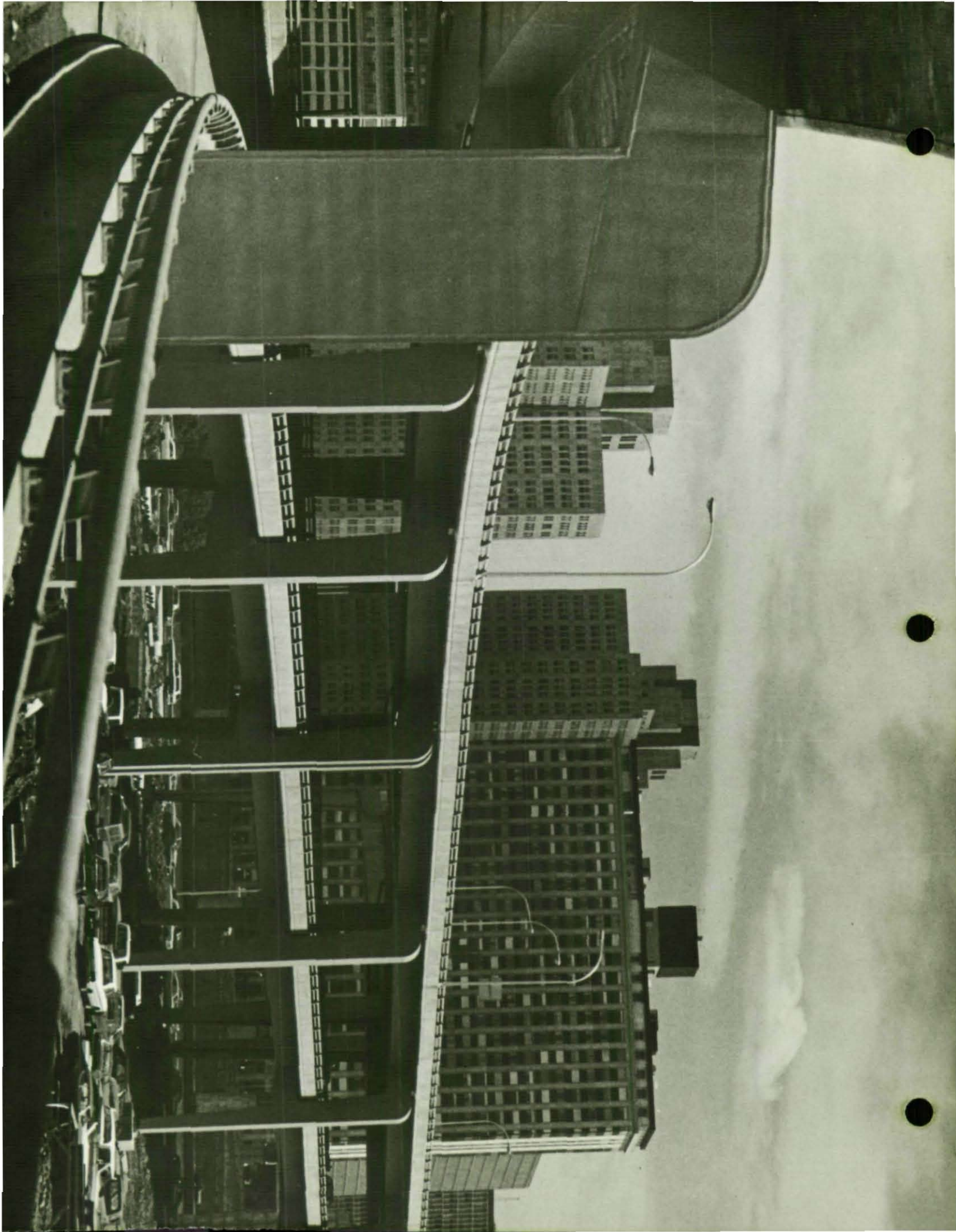
Kaiser Steel Corporation, Oakland, California

JURORS' COMMENTS

"A graceful structure that seems to grow out of its surroundings. It combines form and grace to create a pleasant viewing experience. The details are well executed."

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PRIZE BRIDGE 1970
MEDIUM SPAN, LOW CLEARANCE

NORTH APPROACHES - FORT DUQUESNE BRIDGE

DESIGNER

Richardson, Gordon and Associates, Pittsburgh, Pennsylvania

ARCHITECTURAL CONSULTANT

Stoltz, Hess, MacLachlan, Architects, Pittsburgh, Pennsylvania

OWNER

Commonwealth of Pennsylvania, Harrisburg, Pennsylvania

GENERAL CONTRACTOR

John F. Casey Company, Pittsburgh, Pennsylvania

FABRICATORS

Pittsburgh-Des Moines Steel Company, Pittsburgh, Pennsylvania
American Bridge Division, United States Steel, Pittsburgh, Pennsylvania

JURORS' COMMENTS

"An imaginative solution to a complicated and difficult design problem. The cantilever construction and the smooth, finished appearance are attractive and unusual concepts in bridge design. The designers have used considerable ingenuity to create a structure that, despite its massiveness, projects a light and airy appearance."

**PRIZE BRIDGE 1970
SHORT SPAN**

NINE MILE CREEK BRIDGE

DESIGNER

Howard, Needles, Tammen & Bergendoff, Minneapolis, Minnesota

OWNER

City of Bloomington, Bloomington, Minnesota

GENERAL CONTRACTOR

Allied Structural Steel Company, Hammond, Indiana

FABRICATOR

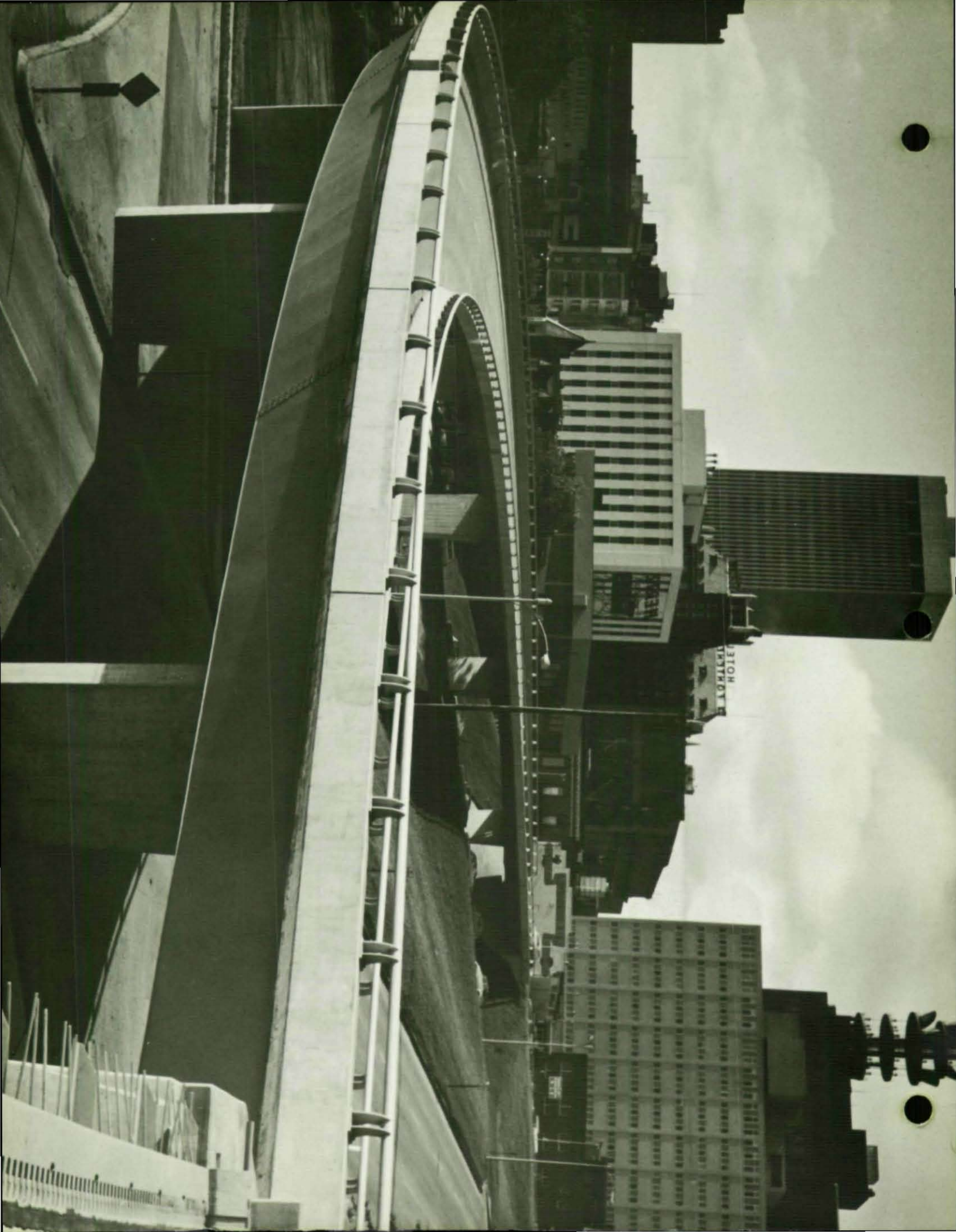
The Maxson Corporation, St. Paul, Minnesota

JURORS' COMMENTS

"A delightful bridge that gives a feeling of stability, grace, and flowing lines. It is highly visible, yet blends beautifully into the landscape."

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PRIZE BRIDGE 1970

HIGHWAY GRADE SEPARATION

INTERSTATE 480 - 20th STREET EXIT RAMP

DESIGNER

Nebraska Department of Roads, Lincoln, Nebraska

OWNER

State of Nebraska, Lincoln, Nebraska

GENERAL CONTRACTORS

Foster-Smetana Co. and
Fischer-Nixon-Greer, Inc., Omaha, Nebraska

FABRICATOR

Pittsburgh-Des Moines Steel Company, Pittsburgh, Pennsylvania

JURORS' COMMENTS

"The bold, clean lines of the curved box girder are particularly compatible with the urban surroundings. This is an imaginative design that illustrates what can be done to create an attractive bridge in a downtown city area. This is believed to be the first trapezoidal, unsymmetrical steel box girder bridge completed in the United States."

**PRIZE BRIDGE 1970
SPECIAL TYPE**

CLINIC INN PEDESTRIAN BRIDGE

DESIGNER

Barber and Hoffman, Inc., Cleveland, Ohio

ARCHITECTURAL CONSULTANT

Flynn, Dalton, van Dijk & Partners, Cleveland, Ohio

OWNER

Bolton Square Hotel Company, Cleveland, Ohio

GENERAL CONTRACTOR

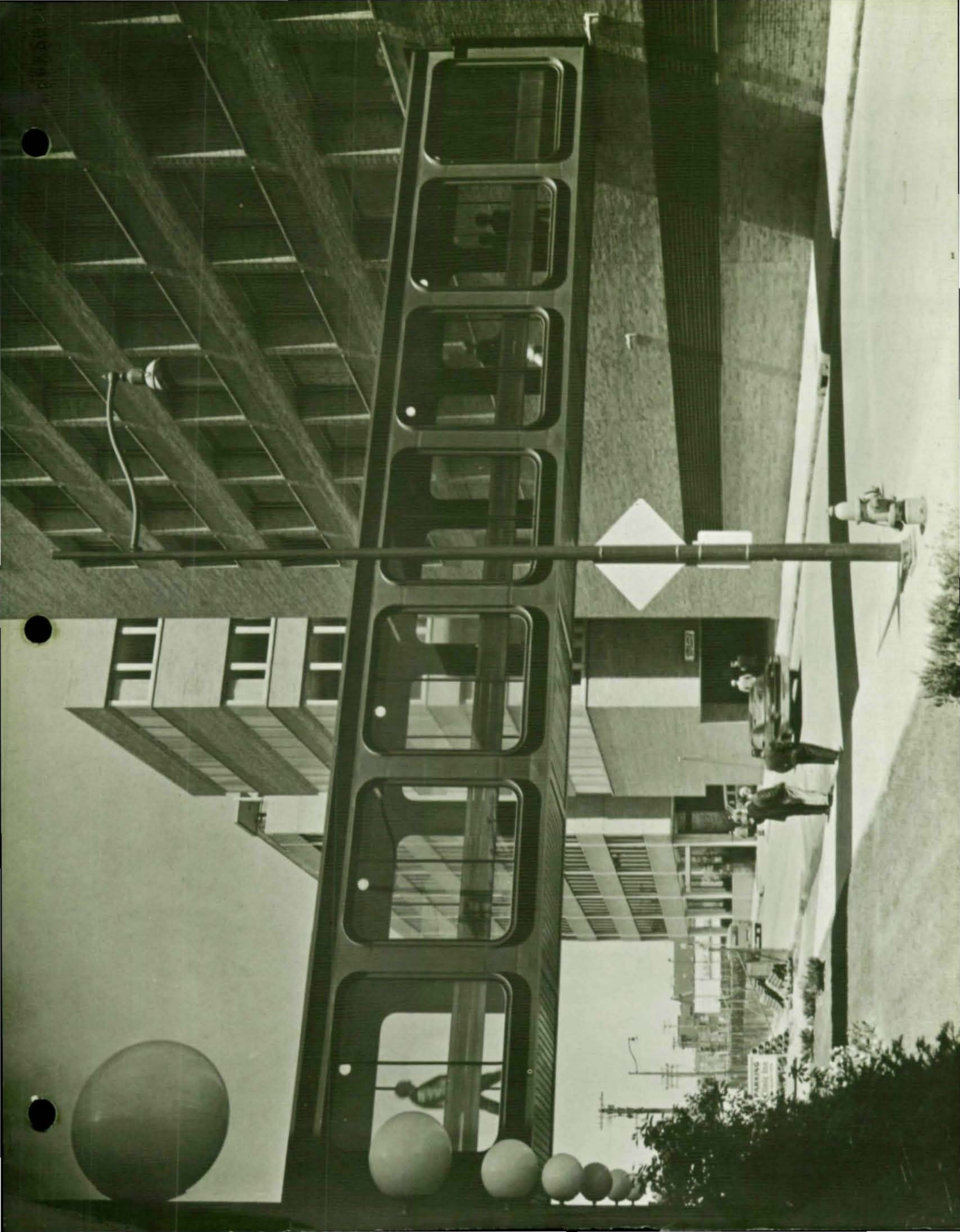
The Albert M. Higley Co., Cleveland, Ohio

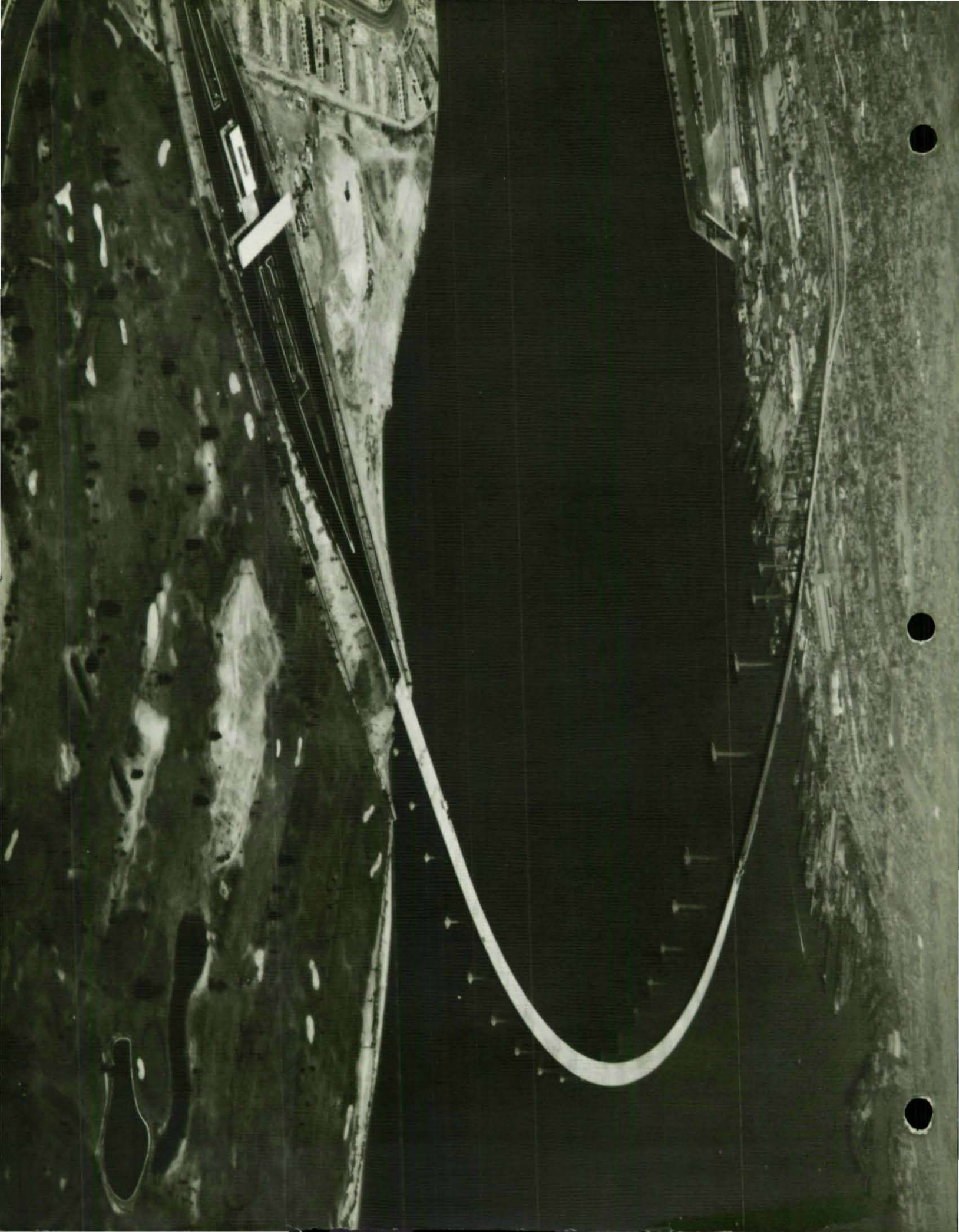
FABRICATOR

Paterson-Leitch Company, Cleveland, Ohio

JURORS' COMMENTS

"A simple attractive structure with good clean lines. The steel Vierendeel truss permits a great deal of visibility and is easy to maintain. It is a nice solution for both vehicles and pedestrians in congested urban areas."





AWARD OF MERIT 1970

LONG SPAN

SAN DIEGO-CORONADO BAY BRIDGE SAN DIEGO, CALIFORNIA

DESIGNER

Division of Bay Toll Crossings, State of California, Sacramento, California

ARCHITECTURAL CONSULTANT

Wm. Stephen Allen, FAIA, Anshen & Allen, Architects, San Francisco, California

OWNER

California Toll Bridge Authority, State of California, Sacramento, California

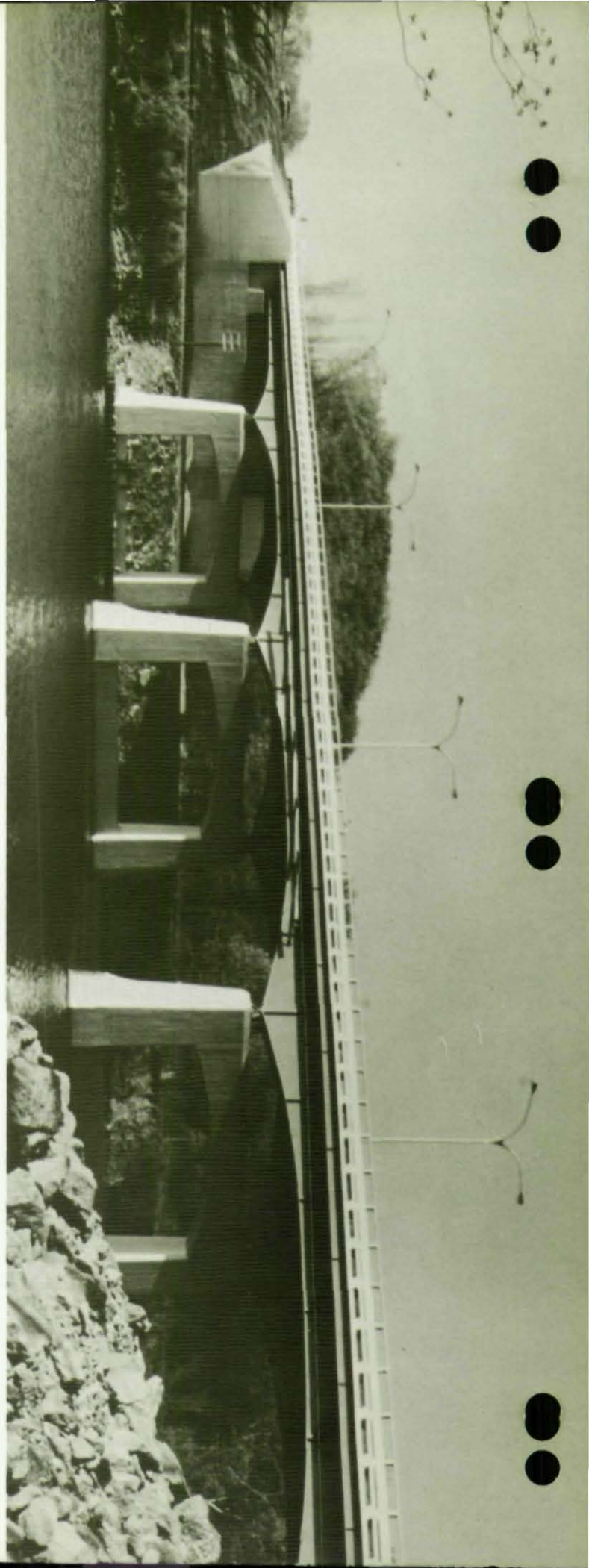
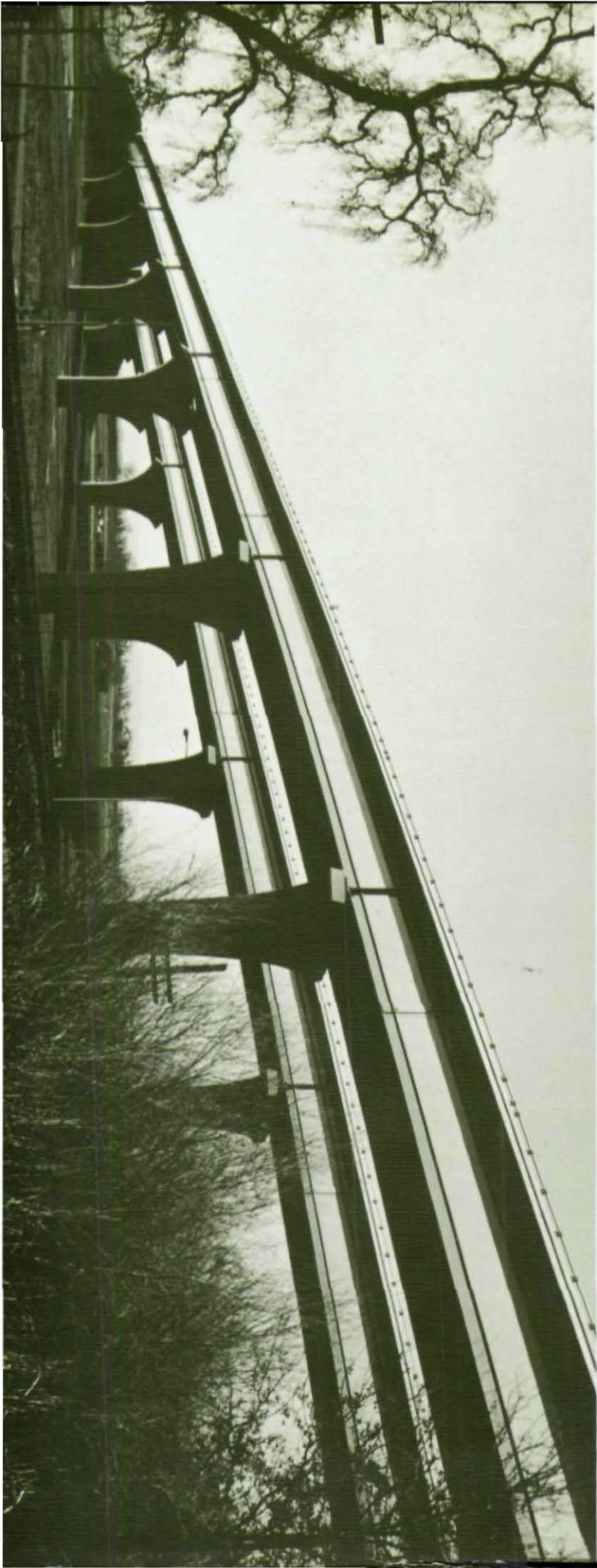
GENERAL CONTRACTORS

Superstructure: Murphy Pacific Enterprises, Oakland, California

Substructure: Guy F. Atkinson Co., South San Francisco, California

FABRICATOR

Murphy Pacific Corporation, Oakland, California



MEDIUM SPAN, HIGH CLEARANCE

EDGEWOOD ROAD BRIDGE

CEDAR RAPIDS, IOWA

DESIGNER

Ned L. Ashton, Iowa City, Iowa

OWNERS

The City of Cedar Rapids and Linn County, Iowa

GENERAL CONTRACTOR

Cramer Brothers Construction Company, Des Moines, Iowa

FABRICATOR

Pittsburgh-Des Moines Steel Company, Pittsburgh, Pennsylvania

A W A R D O F M E R I T 1 9 7 0

MEDIUM SPAN, HIGH CLEARANCE

SACRAMENTO RIVER BRIDGE AT ELKHORN

NORTH OF SACRAMENTO, CALIFORNIA

DESIGNER

California Division of Highways, Sacramento, California

OWNER

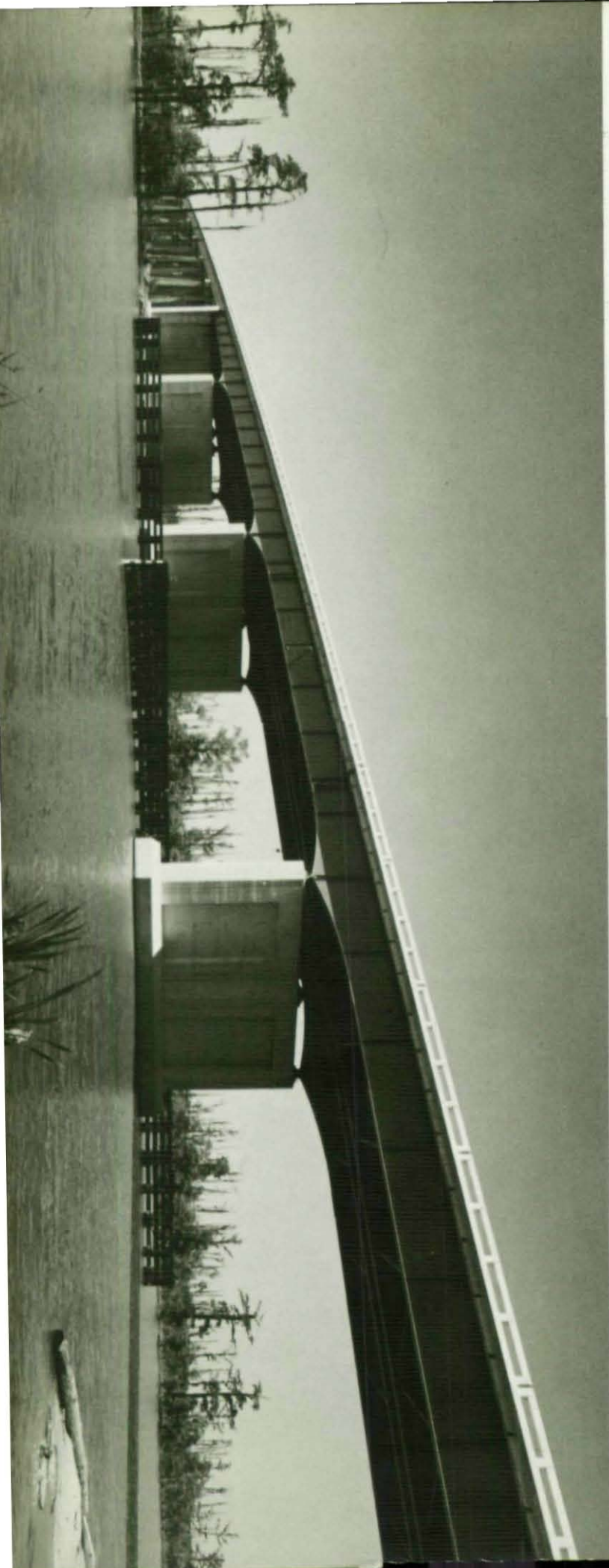
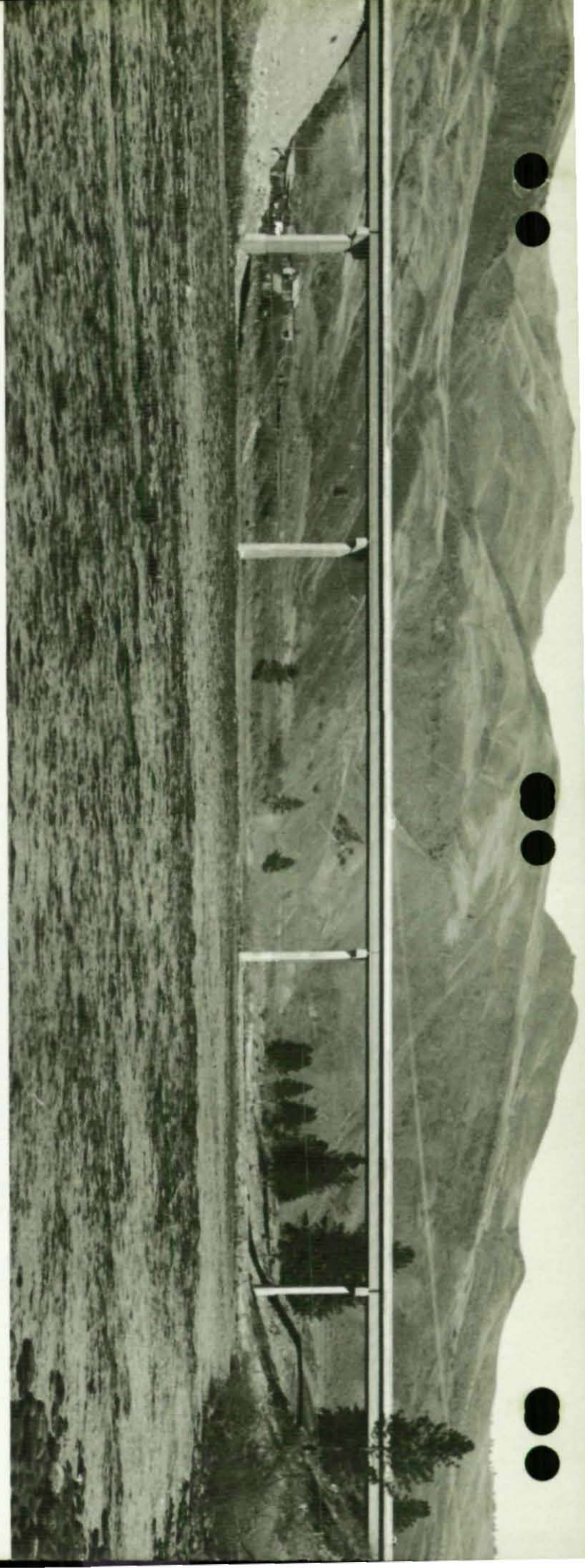
State of California, Sacramento, California

GENERAL CONTRACTOR

C. K. Moseman Construction Co., Fresno, California

FABRICATOR

San Jose Steel Company, Inc., San Jose, California



MEDIUM SPAN, HIGH CLEARANCE

U. S. 95 OVER SALMON RIVER
NORTH OF RIGGINS, IDAHO

DESIGNER
Idaho Department of Highways, Boise, Idaho

OWNER
State of Idaho, Boise, Idaho

GENERAL CONTRACTOR
Sletten Construction Co., Great Falls, Montana

FABRICATOR
S & A Fabricating Company, Pocatello, Idaho

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MEDIUM SPAN, LOW CLEARANCE

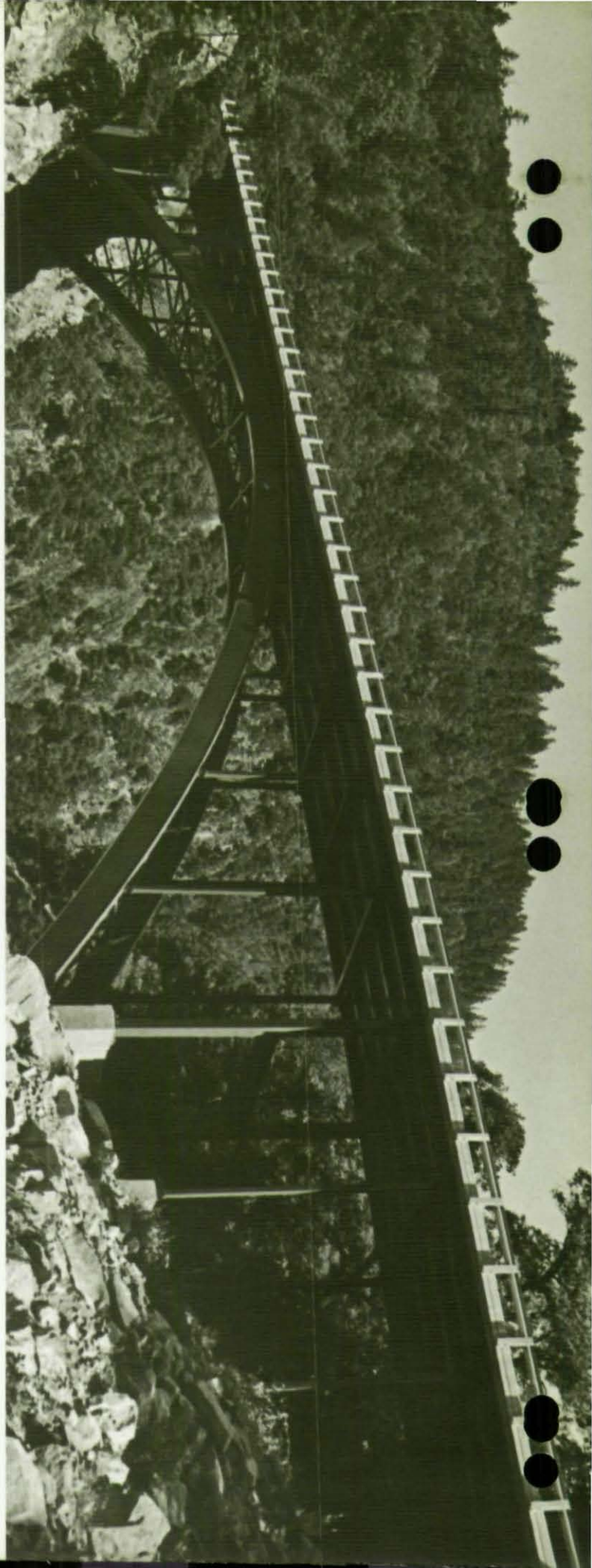
CALCASIEU RIVER BRIDGE
U. S. ROUTE 171 NEAR LAKE CHARLES, LOUISIANA

DESIGNER
Louisiana Department of Highways, Baton Rouge, Louisiana

OWNER
State of Louisiana, Baton Rouge, Louisiana

GENERAL CONTRACTOR
F. Miller and Sons Construction Company, Lake Charles, Louisiana

FABRICATOR
Mosher Steel Company, Houston, Texas



SHORT SPAN

SALMON RIVER BRIDGE AT WOOLEY CREEK
NEAR SOMESBAR, CALIFORNIA

DESIGNER

Clair A. Hill & Associates, Redding, California

OWNER

U. S. Forest Service, Yreka, California

GENERAL CONTRACTOR

Leo Davis, Fort Jones, California

FABRICATOR

Western Steel Company, Salt Lake City, Utah

A W A R D O F M E R I T 1 9 7 0

HIGHWAY GRADE SEPARATION

RAMP A (STATE ROUTE 41 OVER STATE ROUTE 11)
GOODLETTSVILLE, TENNESSEE

DESIGNER

Tennessee State Highway Department, Nashville, Tennessee

OWNER

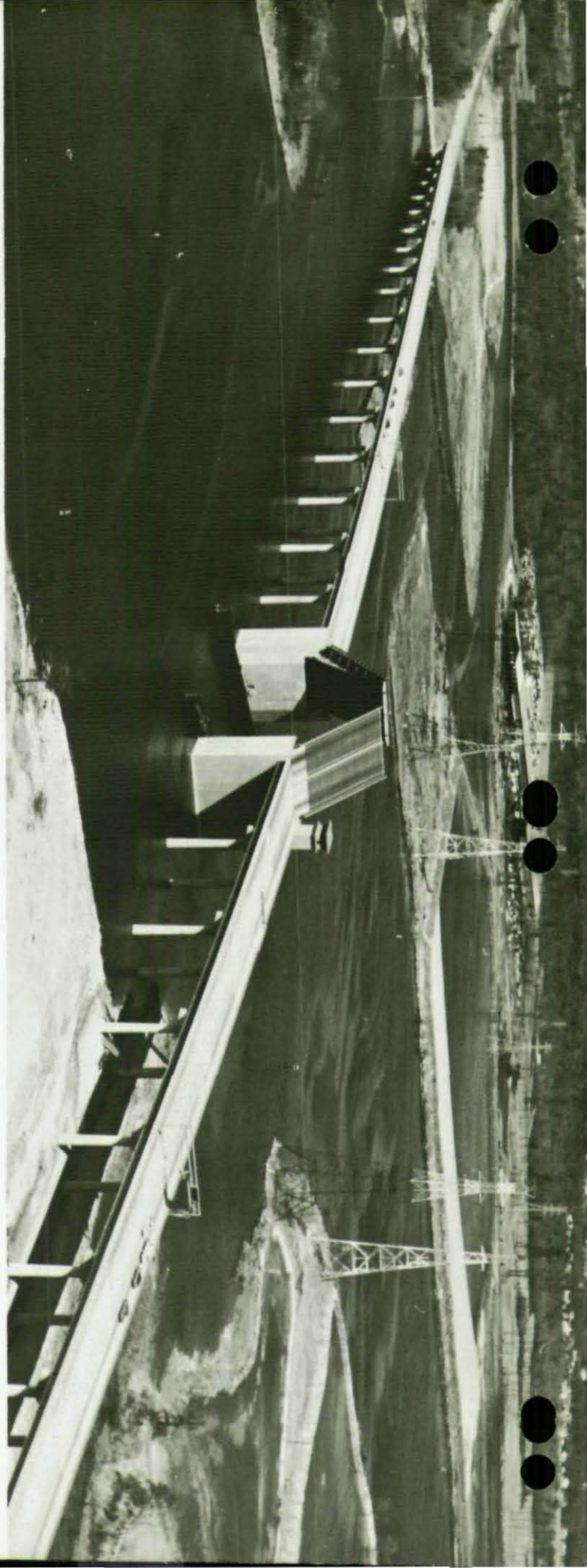
State of Tennessee, Nashville, Tennessee

GENERAL CONTRACTOR

Oman Construction Company, Nashville, Tennessee

FABRICATOR

Nashville Bridge Company, Nashville, Tennessee



MOVABLE SPAN

SOUTHERN BRANCH ELIZABETH RIVER BRIDGE

CHESAPEAKE, VIRGINIA

DESIGNER

Hayes, Seay, Mattern & Mattern, Roanoke, Virginia

ENGINEERING CONSULTANT

J. E. Greiner Company, Inc., Baltimore, Maryland

OWNER

Commonwealth of Virginia, Richmond, Virginia

GENERAL CONTRACTOR

B. F. Diamond Construction Co., Inc., Savannah, Georgia

FABRICATORS

Bristol Steel & Iron Works, Inc., Bristol, Virginia

Nashville Bridge Company, Nashville, Tennessee

A W A R D O F M E R I T 1 9 7 0

SPECIAL TYPE

OLMSTEAD ISLAND FOOTBRIDGES

GREAT FALLS, MARYLAND

DESIGNER

U. S. Department of the Interior, Washington, D. C.

OWNER

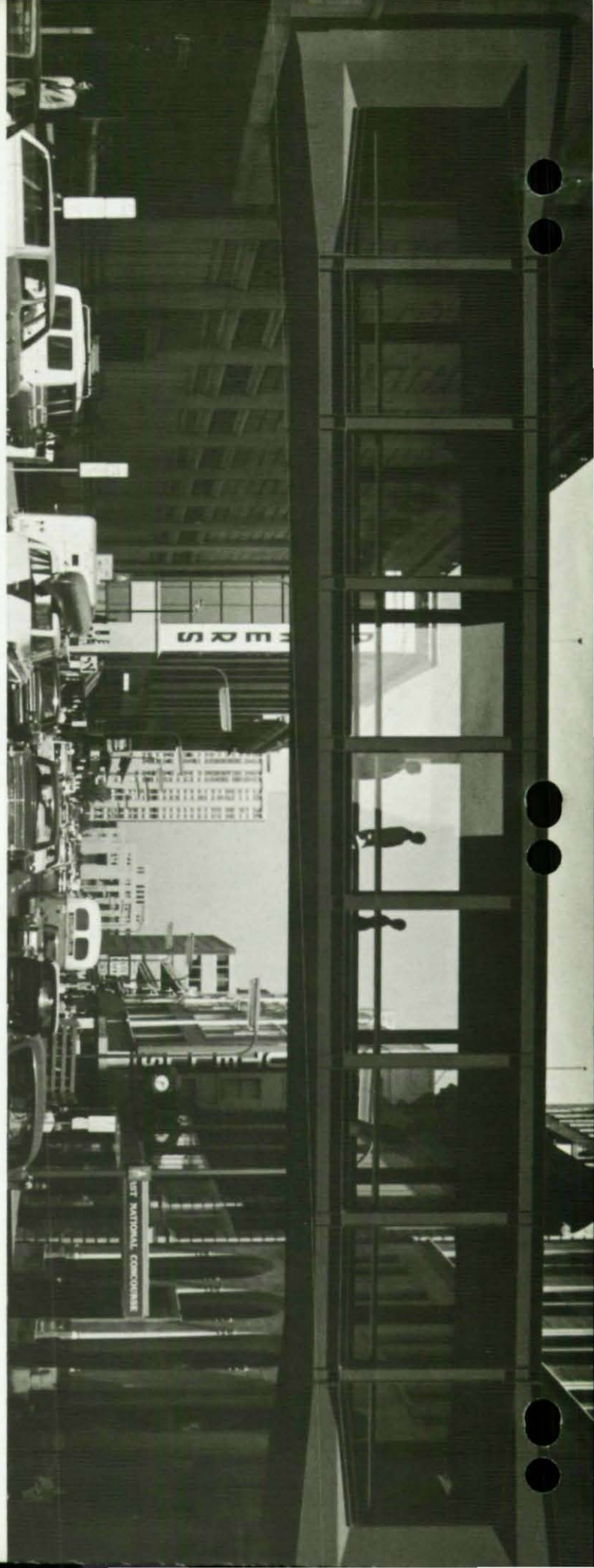
U. S. Department of the Interior, Washington, D. C.

GENERAL CONTRACTOR

Slavin & Shafer, Inc., Salmon, Idaho

FABRICATOR

Leckenby Company, Seattle, Washington



SPECIAL TYPE

PEDESTRIAN SKYWAYS

MINNEAPOLIS, MINNESOTA

DESIGNER

The Cerny Associates, Inc., Minneapolis, Minnesota
Meisch and Robertson, Structural Engineers, St. Paul, Minnesota

OWNERS

Dain, Kalman & Quail, Incorporated, Minneapolis, Minnesota
Farmers and Mechanics Savings Bank of Minneapolis, Minneapolis, Minnesota
Minnesota Federal Savings & Loan Association, Minneapolis, Minnesota
First National Bank of Minneapolis, Minneapolis, Minnesota

GENERAL CONTRACTOR

Naugle-Leck, Inc., Minneapolis, Minnesota

FABRICATOR

Crown Iron Works Company, Minneapolis, Minnesota

A W A R D O F M E R I T 1 9 7 0

SPECIAL TYPE

WEST COLLEGE PEDESTRIAN BRIDGES 3 AND 4

SANTA CRUZ, CALIFORNIA

DESIGNER

Wildman & Morris, Consulting Engineers, San Francisco, California

ARCHITECTURAL CONSULTANTS

Thomas D. Church, San Francisco, California
Ernest J. Kump, Palo Alto, California
John E. Wagstaff, Santa Cruz, California

OWNER

University of California, Santa Cruz, California

GENERAL CONTRACTOR

Murphy Pacific Corporation, Oakland, California

FABRICATOR

Murphy Pacific Corporation, Oakland, California

COLOR PHOTOS

Front Cover/Nine Mile Creek Bridge, Bloomington, Minn.

Inside Front Cover/Interstate 480 — 20th Street Exit Ramp, Omaha, Nebr.

Inside Back Cover/North Approaches — Fort Duquesne Bridge, Pittsburgh, Pa.

Back Cover/West College Pedestrian Bridges 3 and 4, Santa Cruz, Calif.

