CONSTRUCTOR

E MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

January 1971

ARTICLES AND FEATURES — PAGE

WHO FAILED IN PHILADELPHIA: In Which The Smoke Clears And Somebody Is Left Holding The Bag 16

CONSTRUCTION PHOTOGRAPHIC AWARDS. Prizes And Recognition By Builder's Association Of Chicago Go To Press Photographers And Papers 26

BID LESS AND MAKE MORE: A Simple System for Analyzing Your Own Operation And Your Competition In Order To Increase Your Profit 28

YUP, WE GOT TALKING SIGNS: A Highway Contractor's Public Relations Program And How It Began 33

SYSTEMS/CONTRACTING: A DIFFICULT MARRIAGE: The Idea That Industrialized Building Must Be Mated To A Whole New Kind Of Contracting If It Is To Work 35

RESEARCH: The Inaugural Column Of An Occasional Series of Reports Of Construction Related R & D 37

1970 INDEX: A Listing, By Author and Subject Of Articles Which Appeared In Constructor During The Past Year 39

OCCUPATIONAL SAFETY AND HEALTH ACT: A Special Report On What This New Legislation Will Mean For Contractors 55

DEPARTMENTS

Editorial Comment 7
Letters 9
Labor Notes 10
Legal Sidelights 14
Construction News 43
Forms and Publications 57
Advertisers Index 60

CREDITS: Cover: Richard Gage

AGC Construction Cost Index

The average of construction costs in principal construction centers for December stands at 181 on the AGC index compared with 154 for December 1969 (1957-59 average = 100). Average of wages was 318 compared with a year-ago index figure of 259. Average of prices paid by contractors for basic construction materials stands at 91 on the AGC index, compared with 84 a year ago.

PLAINTIFF'S
EXHIBIT
B&R-165

CONSTRUCTOR

THE MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

February 1971

ARTICLES AND FEATURES — PAGE

EXHIBIT '71: A Special Preview Of Machines And Other Equipment Which Will Be On Display Next Month In San Diego 20

THE CONVENTION: What To Expect On March 5-11 At The 52nd Annual Convention And Exhibit 24

ARE THE HOMETOWN PLANS WORKING: An Assessment Of The Progress Claimed For The Voluntary Agreements In Finding Jobs For Minority Workers 28

MORE ON COMPUTERS AND HOW THEY WORK: In Which Three Construction Companies Talk About Their Experiences In Computer Operation 34

RESEARCH BRIEFS: And A Call For Much More Research By A Concrete Expert 37

'COPTERS QUICKER, CHEAPER: Or So They Say In This Parade Of Projects Which Employed The Flying Cranes 38

ARBITRATION IS MUCH BETTER: Says This Argument For Greater Use of Arbitration in Settling Disputes 40

DEPARTMENTS

Editorial Comment 9
Letters 10
Labor Notes 13
Legal Sidelights 44
Construction News 48
Forms and Publications 67
Advertisers Index 68

AGC Construction Cost Index

The average of construction costs in principal construction centers for January stands at 183 on the AGC index compared with 155 for January 1970 (1957-59 average = 100). Average of wages was 319 compared with a year-ago index figure of 280. Average of prices paid by contractors for basic construction materials stands at 93 on the AGC index, compared with 84 a year ago.

The yearly average index figures for 1970 were 166 for construction costs, 285 for wages, and 87 for materials.



CONSTRUCTOR

THE MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

ARTICLES AND FEATURES **PAGE**

THE CONTRACTOR AS BOSS: Dr. Leon Danco Examines The Closely Held Corporation Contractor-Owner, With Some Startling Results 15

CONSTRUCTION INDUSTRY REPORT: More Detailed Information Than Has Ever Been Obtained Before About Who Does What In The Construction Business 20

INFORM THE PUBLIC!: Says Consultant Rex M. Whitten About Trying To Turn Back The Rising Tide Of Anti-Highway Public Feeling 24

IMPACT: What Change Orders Can Do To You If You Don't Watch Out, And Other Similar Advice 27

EQUAL EMPLOYMENT OPPORTUNITY: A Positive Approach Helps One Company Achieve Meaningful Results With Minimum Disruption 29

WILL THE METRIC SYSTEM FIT IN?: This Subject Has Been Revived, And, In Fact Will Probably Become A Reality Before You Know It 31

DEPARTMENTS

Editorial Comment 7
Labor Notes 9
Legal Sidelights 11
Research Briefs 32
Construction News 33
What's New 40
Literature 47
Forms and Publications 53
Advertisers Index 56

AGC Construction Cost Index

The average of construction costs in principal construction centers for February stands at 184 on the AGC index compared with 155 for February 1970 (1957-59 average=100). Average of wages was 320 compared with a year-ago index figure of 283. Average of prices paid by contractors for basic construction materials stands at 93 on the AGC index compared with 84 a year ago.

CONSTRUCTOR

E MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

April 1971

ARTICLES AND FEATURES — PAGE

THE SECOND CROSSING: New Techniques Save Time And Money For Contractors Building The Second Chesapeake Bay Bridge 18

SAFETY LEGISLATION BRINGS PROBLEMS: A Detailing For The Contractor Of Things He Must Worry About As The Result Of Recent Congressional Action 24

THE 500 POUND PARROT: Dr. Leon Danco Continues What He Began Last Month By Offering Some Pungent Personal Advice To Our Readers 26

CONVENTION PRESSURES NIXON: Action On Inflation, Labor, And Other Issues Stirs 52nd Annual Convention In San Diego 30

INDUSTRIALIZED BRIDGE BUILDING: In Which Factory Production Of Component Parts Is Attempted In Yet Another Field 32

PRODUCTIVITY INCREASE SOUGHT: A Study Attempts To Up Productivity In Masonry Construction 39

DEPARTMENTS

Editorial Comment 9
Letters 11
Labor Notes 13
Research Briefs 39
Construction News 46
Whats New 52
Literature 57
Forms and Publications 59
Advertisers Index 58

AGC Construction Cost Index

The average of construction costs in principal construction centers for March stands at 184 on the AGC index compared with 156 for March 1970 (1957-59 average=100). Average of wages was 320 compared with a year-ago index figure of 263. Average of prices paid by contractors for basic construction materials stands at 94 on the AGC index, compared with 85 a year ago.

PHOTO CREDITS: Copyright: The Globe and Mail, Toronto, Canada, from Wide World Photos. John Brennels: pg. 4-5. James Davis, 28-29. U.S. Steel: 35-37.

(Reader Service No. 8)

CONSTRUCTOR

THE MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

May 1971

ARTICLES AND FEATURES **PAGE**

NEW PRESIDENT: John E. Healy, II Talks About His Hopes For AGC And The Industry During The Coming Year 16

ECOLOGICALLY BUILDING: Demands Against Thermal Pollution Of Waterways Are Increasing The Use And Size of Cooling Towers Such As This One 20

CPM—SOLUTION OR PROBLEM?: In Which Four Men Candidly Discuss A No Longer Quite So Sacred Cow 22

COMMON SENSE AND THE ENVIRONMENT: One Man's Opinion About The Ecological Flap And What (Who?) Is Causing It 28

INDUSTRIALIZATION: An Englishman Examines What American Contractors Have Done With This European Developed Concept 30

A CONTRACTOR REVIEWS: The New Caterpillar Dystred Cushion Track Loader 32

CLIMBING CRANE ACCIDENTS: Why They Happen And How To Prevent Them 34

DEPARTMENTS

Editorial Comment 7
Letters 9
Labor Notes 10
Construction News 38
Whats New 42
Literature 46
Forms and Publications 49
Advertisers Index 52

AGC Construction Cost Index

The average of construction costs in principal construction centers for April stands at 186 on the AGC index compared with 157 for April 1970 (1957-59 average = 100). Average of wages was 323 compared with a year-ago index figure of 285. Average of prices paid by contractors for basic construction materials stands at 95 on the AGC index, compared with 85 a year ago.

Copyright 1971 by Associated General Contractors of America

CONSTRUCTOR

THE MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

June 1971

ARTICLES AND FEATURES — PAGE

HOW TO RUN OVER PEOPLE AND MAKE THEM LIKE IT: The Story Of One Contractor's Efforts To Keep A Sometimes Irate Public Happy 16

SOME CONTRACTORS MAKE OPEN SHOP MOVE: A Report On The Efforts Of A Number Of General Contractors To Open Two Gates 18

THE CONTRACTOR AS FINANCIER: What Can Happen When You Become So Involved In One Of Your Jobs That It Changes The Whole Nature Of Your Business 23

ARE YOU LIABLE?: Recent Decisions In The Courts Have Far Reaching Impact On Who Can Sue You For What, And How Long After The Job Was Completed 25

CONTRACTOR WAGES WAR AGAINST POLLUTION: The Story Of One Contractor Who Will Never Be Accused Of Polluting The Environment 27

AID OFFERED MINORITY SUBCONTRACTORS: Efforts Being Made To Assist In The Integration Of The Construction Industry .. 30

I.R.S. PROPOSES CHANGES IN CONTRACT ACCOUNTING METHOD: And What Will Happen To Your Pocketbook If This Controversial Change Is Allowed 32

LOCALS SLOW "JOBS '70" PROGRESS: Representative Al Clarke Discusses A Number Of Causes Involved In Slowing The Program 34

DEPARTMENTS

Editorial Comment 7
Labor Notes 9
Legal Sidelights 12
Letters 15
Construction News 41
Whats New 44
Literature 49
Forms and Publications 52
Advertisers Index 53

AGC Construction Cost Index

The average of construction costs in principal construction centers for May stands at 188 on the AGC index compared with 159 for May 1970 (1957-59 average = 100). Average of wages was 327 compared with a year-ago index figure of 270. Average of prices paid by contractors for basic construction materials stands at 95 on the AGC index, compared with 85 a year ago.

William E. Dunn, Publisher

E. Taylor Gregg, Editor

M.J. Davis, Associate Editor

Booth Mooney, Consulting Editor

Vaughn Smartt, Special Sections Ed.

James Lawlor, Review Editor

Elizabeth Haney, Production Mgr.

CONTRIBUTING EDITORS:

Arthur Hintze, Travis Brown, Donald Giampaoli, Frank Schneller, Joseph Ashooh

Statements and opinions expressed in editorials or articles by the editors and contributors do not necessarily represent the official position of the AGC, and the publication of advertising does not imply endorsement of products advertised or statements made concerning them

Published monthly Editorial and Executive offices 1957 E Street N W Washington D C 20006 Second class postage paid at Washington D C And additional office

Subscription rates U S and Canada $7 50 per year foreign $10 50 per year Single copies regular issue U S and Canada 75¢ foreign $1 00 AGC Directory issue $25 00

Copyright 1971 by Associated General Contractors of America Change of address and subscription orders should be mailed to CONSTRUCTOR 1957 E Street, N W., Washington D C 20006

BUSINESS DEPARTMENT

John C. Ellis, Business Manager

James Lawlor, Advertising Manager

Genevieve Morris, Circulation Manager

ADVERTISING OFFICES

James M Angell
Suite 332, 200 Park Avenue
New York, New York 10017
Phone 212-682-5775

Thomas Cutler
185 North Wabash
Chicago, Illinois 60601

Bruce Bigler
7602 Kelvin Ave
Canoga Park, California 91306
Phone 213-348-4785

Max Cook
672 Hawthorne Dr.
Tiburon, California 94920
Phone 415-435-4073

Yoshihiro Takemura
IPS Group, Ltd
Box 36 Ohsaki Post Office,
Tokyo 141
Phone 504-1485

Advertising contracts, insertion orders and copy should be forwarded to Advertising Department, 1957 E Street, N W., Washington, D C 20006 Phone: 202 393-2040

New Safety Regulations: And Assessment 10

Constructor Roundtable: Contractors Question Federal Officials 14

Officers 32

Executive Committee 32

Directors 32

National Staff 36

Secretaries' and Managers' Council Officers 37

Committees 37

Chapters, Branches, by States 71

Members, Alphabetically 73

Members, by State, Chapter 131

Members, National 279

AGC Forms and Publications 292

Advertiser's Index 294

Copyright 1971 by Associated General Contractors of America

CONSTRUCTOR

THE MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

August 1971

ARTICLES AND FEATURES — PAGE

KIDS LEARN ABOUT CONSTRUCTION: The Story Of A Program In The Public Schools To Help Teenagers Select A Career 15

GETTING PAID!: A New Firm Proposes To "Monitor" Your Jobs Financially In Order To See That Everybody Gets Paid On Time . . 20

AGC SCHOLARSHIP WINNERS: The Names And Backgrounds Of Those Young People Chosen To Receive Annual Monetary Assistance Awards 22

POLLUTION - A PROPOSAL: John Palazzi Suggests A Solution For Some Of The Many Problems Plaguing Environmental Efforts . . 24

SPY PLANE: Originally Devised As A Weapon To Detect The Enemy, This Sophisticated Aircraft Will Be Used In The War Against Polluters 26

TIME-LAPSE PHOTOGRAPHY: News Of The Success Several Firms Have Had With The Use Of This Management Technique For Cutting Wasted Effort 28

CREDITS: Cover, Richard Gage; pgs. 4-5 & 24-25, H. Armstrong Roberts; pgs. 15, 16 & 17, James Davis; pgs. 18-19, Ted Saylor.

DEPARTMENTS

Editorial Comment 7
Labor Notes 8
Letters 10
Legal Sidelights 12
Construction News 33
Whats New 40
Literature 45
Forms and Publications 47
Advertisers Index 48

AGC Construction Cost Index

The average of construction costs in principal construction centers for July stands at 197 on the AGC index compared with 188 for July 1970 (1957-59 average is 100). Average of wages was 348 compared with a year-ago index figure of 289. Average of prices paid by contractors for basic construction materials stands at 97 on the AGC index, compared with 88 a year ago.

Copyright 1971 by Associated General Contractors of America

CONSTRUCTOR

THE MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

September 1971

ARTICLES AND FEATURES **PAGE**

"MIXING BOWL" MASSIVE TASK: The Story Of A Contractor's Efforts To Keep Traffic Flowing While Rebuilding A Major Artery 20

CAN THEY REALLY STOP THE HIGHWAYS?: Contractor James D. Pitcock, Jr. Answers The Charges Against Highways And Calls For Greater Public Involvement 25

WILLIAM A. KLINGER: Thoughts And Remembrances About The Life Of A Man Who Played A Spiritual And Forming Role In The History Of The AGC 32

CREDITS: Cover and pgs. 26-27 & 30, Gestalt Associates Inc.; pgs. 4-5, Taylor Gregg; pgs. 20 & 22, *American Motorists Magazine;* pgs. 21-22, James Davis.

DEPARTMENTS

Editorial Comment 9
Labor Notes 11
Legal Sidelights 16
Construction News 37
Whats New 40
Literature 44
Forms and Publications 47
Advertisers Index 48

AGC Construction Cost Index

The average of construction costs in principal construction centers for August stands at 198 on the AGC index compared with 171 for August 1970 (1957-59 average = 100). Average of wages was 349 compared with a year-ago index figure of 294. Average of prices paid by contractors for basic construction materials stands at 97 on the AGC index, compared with 89 a year ago.

CONSTRUCTOR ANNUAL

VOLUME 3

A pictorial review of the year in construction, featuring jobs in progress or completed during 1970-71, in the U.S. and other countries by AGC contractors 12

When contractors can't buy or lease a machine that will do the job, they often build one. Pictures of some of the odd contraptions they have built appear on the next few pages. 68

Construction News 73

Index of Advertisers 84

Copyright 1971 by Associated General Contractors of America

CONSTRUCTOR

THE MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

NOVEMBER 1971

ARTICLES AND FEATURES

PAGE

PHASED CONSTRUCTION: A British design engineer relates the many frustrations that accompany the British Government's attempt to use phased construction 19

DECISIONS STRENGTHEN LIMITATION STATUTES: One of a series of articles by attorney William E. Curtin on legal issues of major importance to general contractors 23

MUNROE EFFECT PRODUCES CLEAN-CUT BRIDGE: The use of jet-age linear explosives quickly demolishes three major spans of an old C&O railroad bridge 26

CONSTRUCTION MANAGEMENT AND GSA: A CONSTRUCTOR interview examines four AGC contractors' views about GSA's new construction manager program 28

CREDITS: H. Armstrong Roberts, cover; J. Davis, pgs. 20, 21 & 22; Arnold Washburn, Ky. Dept. of Hwys, pg. 27.

DEPARTMENTS

Editorial Comment 9
Labor Notes 11
Legal Sidelights 15
Construction News 37
Whats New 40
Literature 45
Forms and Publications 47
Advertisers Index 48

COVER: The two bridges on this month's cover span the Feather River Canyon near Pulga, California. The Canyon is part of the Sierra Nevada Range. The Highway Bridge, designed by the California Division of Highways, was completed in 1932. It's main span is 350 feet long. The Feather Canyon railroad bridge, which is part of the Western Pacific line, was built in 1907.

Copyright 1971 by Associated General Contractors of America

CONSTRUCTOR

THE MANAGEMENT MAGAZINE OF THE CONSTRUCTION INDUSTRY

DECEMBER 1971

ARTICLES AND FEATURES **PAGE**

G.S.A. REBUTS C.M. CRITICS: Commissioner Sampson Explains His Confidence About What Construction Management Will Do For Federal Building 12

KINDERGARTEN CONSTRUCTION: The Logical Next Step In Construction Education For Some Is To Begin Even Before Public School 16

A PIECE OF THE PIE: A Coalition Of Black Contractors Are "Left Out" Of Major Contracts And Want To Know Why 18

BATIMETAL: A Poured-On-Site Metal Form System Long Used In Europe Saves Money For An American Contractor 21

BETWEEN GENERALS AND SUBS: The Courts Make Clearer Certain Questions About The Nature Of A Binding Contract 24

RAISING THE ROOF: How It Was Done, By Whom, And To What End 26

MEXICAN ROAD RACE: Or, Watch Out For That Priest From South Of The Border 28

WHEN OSHA CAME TO CALL: A Report, Step-By-Step, Of One Of The First Job Inspections Conducted By OSHA Enforcers 31

DEPARTMENTS

Editorial Comment 5
Labor Notes 7
Legal Sidelights 10
Construction News 33
What's New 38
Literature 44
Forms and Publications . . . 47
Advertisers Index 48

COVER: The steam rising from hot asphalt creates a strange landscape, not unlike that of another planet. photograph by the Editor.