

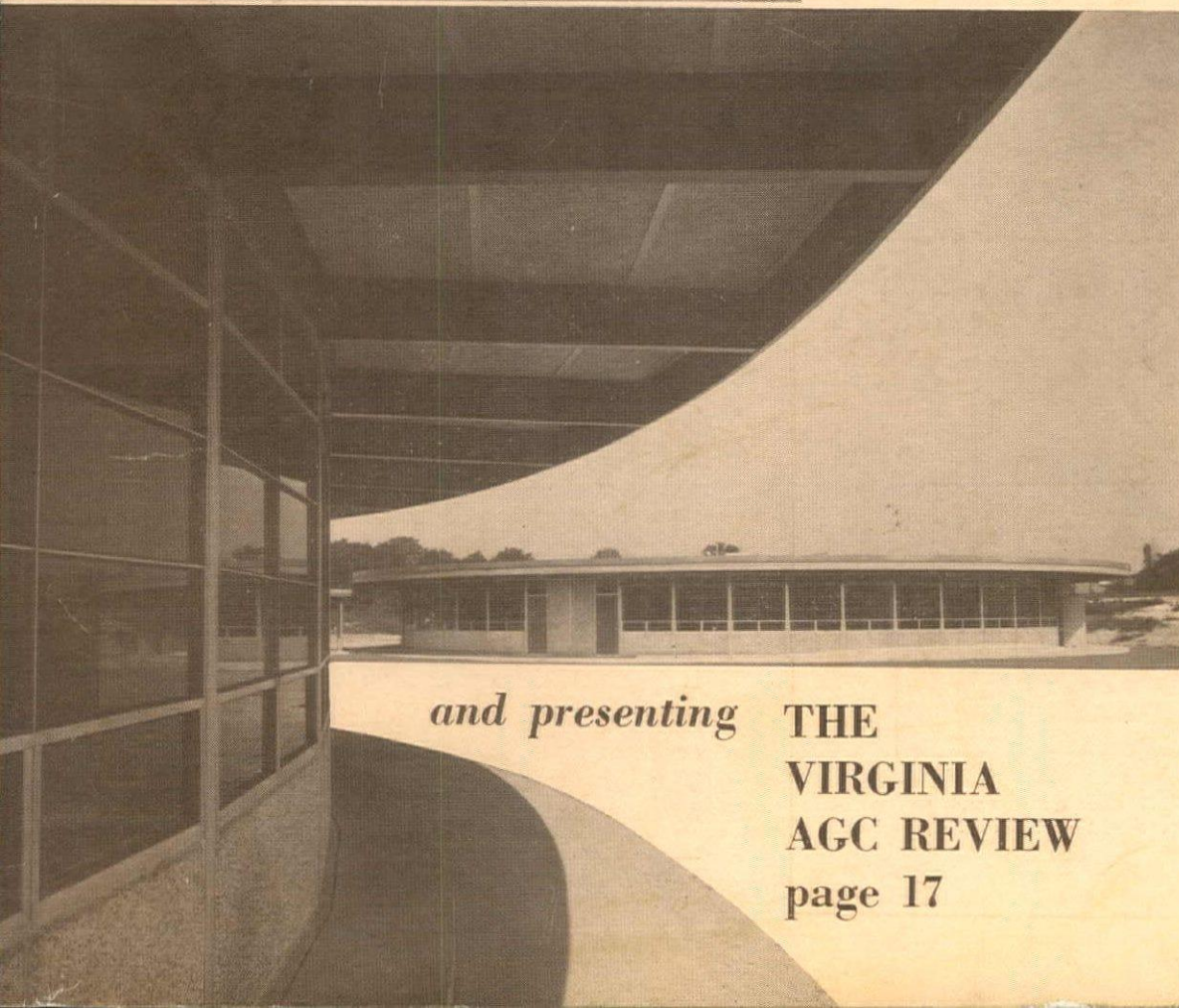


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Virginia RECORD

SEPTEMBER 1964 • 35 CENTS

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ROAD
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and presenting **THE
VIRGINIA
AGC REVIEW**
page 17



NEW BOOKLET ON ASPHALT PAVEMENT DESIGN PROVIDES QUICK AND SIMPLIFIED REFERENCE FOR CITY STREET ENGINEERS

"How to Design Asphalt Pavements for Streets" embodies latest information from recent road tests . . . provides examples of Asphalt pavement thickness design for various traffic volumes and subgrade soil conditions.

Just published by The Asphalt Institute, "How to Design Asphalt Pavements for Streets" (IS-96) now offers engineers up-to-date information that will help them design and build better city and residential Asphalt pavements at the lowest possible cost.

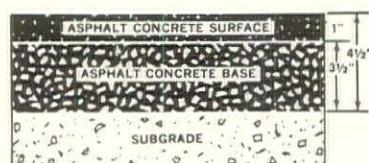
This valuable new booklet incorporates updated technology derived by computers from the multi-million-dollar AASHO and WASHO Road Tests, as well as other road experiments conducted in recent years both in the United States and abroad. Prepared for maximum simplicity of use, it is based on The Asphalt Institute's new Thickness Design Manual (MS-1, 7th Edition).

Design factors covered in the handbook include street classification, traffic weight and volume, subgrade support, pavement structure, material requirements, subgrade compaction, drainage and frost considerations.

In addition, typical Asphalt pavement design sections are illustrated for the various street and subgrade classifications with alternate design sections also shown which substitute a granular base for part of the Asphalt base.

ILLUSTRATION I TYPICAL SECTION FOR LOCAL STREETS

(MEDIUM SUBGRADE)

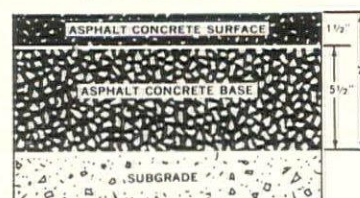


Alternate design employing granular base



ILLUSTRATION II TYPICAL SECTION FOR FEEDER STREETS

(MEDIUM SUBGRADE)



Alternate design employing granular base



These recommended typical sections are then presented in tabular form to permit fast comparison.*

How to design the pavement structure

The first step is street classification, based on the traffic conditions. For design purposes, streets are classified into four categories:

1. **Local** residential streets are those used primarily by passenger cars and light trucks serving the dwellings along these streets. Only an occasional heavy truck would normally be expected.
2. **Feeder** streets are collectors and distributors of traffic to local streets, and provide access from local streets to main arterial streets. Traffic, both in weight and volume, is appreciably greater than on local streets.
3. **Arterial** streets are the major thoroughfares which connect residential areas with principal business sections. They carry traffic generated by local and feeder streets and often serve traffic to and from outlying rural areas.

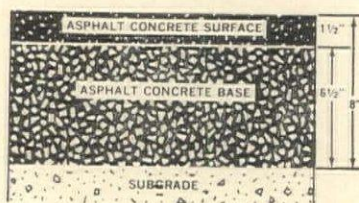
*Recommended designs are predicated on critically high moisture conditions and normal spring thaw conditions.

4. Light industrial streets are those in commercially zoned areas where a substantial volume of light- to medium-weight supply and delivery trucks is normally expected. (This classification does *not* include streets carrying a large number of trucks loaded at, or near to, the legal axle limit. For design of such streets, consult The Asphalt Institute's Thickness Design Manual, MS-1.)

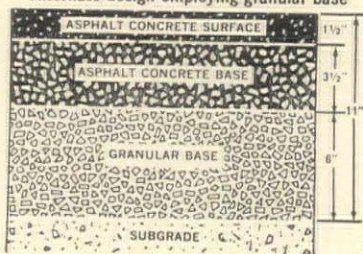
Once the street classification has been decided, the subgrade classification should be made. Ideally, this should be done by laboratory test. However, if test equipment is not available, classification can be determined on the basis of a careful field evaluation (visual examination and on-the-spot tests) performed by an experienced soils engineer who can assign the subgrade soil to one of the following categories:

1. Poor subgrade soils become quite soft and plastic when wet. These include those soils having appreciable amounts of clay and fine silt. Coarser silts and sandy loams may also fall into this category where frost penetration into the subgrade occurs for any length of time.

ILLUSTRATION III
TYPICAL SECTION FOR ARTERIAL
AND LIGHT INDUSTRIAL STREETS
(MEDIUM SUBGRADE)



Alternate design employing granular base



2. Medium subgrade soils retain a moderate degree of firmness even under adverse moisture conditions. Included are such soils as loams, silty sands and sand-gravels containing moderate amounts of clays and fine silts.

3. Good subgrade soils retain a substantial amount of their load-supporting capacity even when wet. They include clean sands and sand-gravels and those soils free of detrimental amounts of plastic materials.

4. Excellent subgrade soils are unaffected by moisture and frost, and include clean and sharp sands and gravels—particularly those that are well-graded.

Given any combination of these various types of streets and subgrade soils, how thick to build the pavement structure then depends on the strength characteristics of the materials used. Because of its uniform high strength, waterproofness, and resistance to frost penetration, full-depth Asphalt-base construction permits the design of a structure of minimum thickness.

As previously stated, this new booklet includes examples of *Asphalt-base* sections for each possible combination of soil and street category. Those for medium subgrades are reproduced in this ad. If, for example, a local residential street is to be built on medium subgrade soil, the recommended Asphalt design is shown in Illustration I. Illustration II shows the recommended design for a feeder street on the same soil; Illustration III for both arterial and light industrial streets.

* * *

If you would like a free copy of "How to Design Asphalt Pavements for Streets" (IS-96), or have any question regarding the use of Asphalt pavement, contact the Asphalt Institute engineer serving your area, or write to The Asphalt Institute, Department XX. For your convenience, a coupon is included.

Checklist of advantages of Asphalt pavement
for residential and city streets

1. Asphalt pavements can be designed to suit the needs and conditions of any area.
2. Construction is fast and economical.
3. Asphalt pavements permit economical stage construction. This means that pavements can be strengthened in depth as the need arises. Each successive pavement layer, or stage, becomes an integral part of the entire pavement structure and substantially increases its load-carrying capacity.
4. Performance is excellent and maintenance is low.
5. Snow melts faster on Asphalt pavements, and snow- and ice-removal chemicals don't affect them.
6. Asphalt pavements can be trenched and patched easily when utility lines under the pavement structure need repair.
7. Asphalt pavements minimize traffic noise.
8. There is greater visibility of striping and other traffic markings on asphalt pavements.
9. Asphalt paving is continuous; it has no distracting longitudinal and transverse joints.

THE ASPHALT INSTITUTE
Department XX, College Park, Maryland

Please send me a free copy of your new booklet, "How to Design Asphalt Pavements for Streets" (IS-96).

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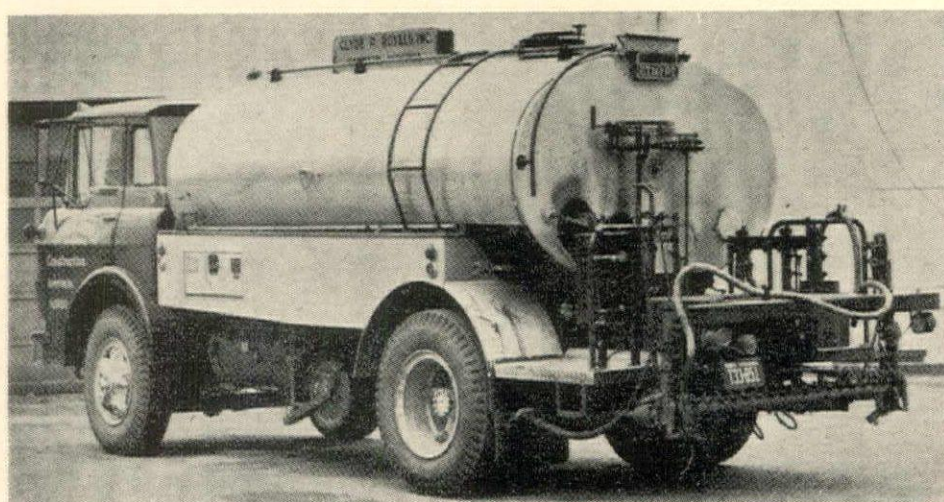
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VOLUME LXXXVI

SEPTEMBER 1964

NUMBER NINE

Who Is A "Liberal"?

NOT SINCE THE OLD GUARD REPUBLICANS of the early thirties vilified Roosevelt have I seen such a spectacle as the abuse heaped upon Goldwater. The vitriolic nature of the hatred spewed forth by the so-called liberals must have the same origin as the spite of the Old Guard—fear. First of all, I don't know what a liberal is. They appear to be self-righteous, intolerant doctrinaires who favor (1) the encroachments of centralized government; (2) giving away money (other people's, that is) as a solution to all the world's ills; (3) courting favor with organized power-groups, such as labor, and with ethnically united minorities—all this in the name of humanity for the oppressed; (4) and a reckless policy in the dangerous area of adjustment in racial relations—this with a moral superiority that would make the most strident abolitionists of the past seem humble in the sight of God. Then there is an area called "foreign policy," which seems summed up in the attitude of "don't make the Communists mad but act like we ain't scared"—all the while shelling out money and creating nations for the U.N., which we support so the newly created nations can tell the world what they think of us.

Beginning with Roosevelt and carried on by Truman, these general courses were pre-empted by the Democrats, and in the old days it would have been clear the Democrats were opposite from the Republicans, since the Republicans opposed Roosevelt and spat upon his works. But then the Republicans came back with Eisenhower, and nothing changed, except that the Republicans lost their brief control of Congress and the Senate and had fewer governors. When he was succeeded by Nixon and the Democrats led with Old Mr. Kennedy's Number One Boy, the country could not tell Republican from Democrat: everybody was a liberal. While the voters were splitting down the middle, with the loser thrown by the poor makeup work he had received on his television appearance, the Democrat-liberals did not go to work on Nixon as they have on Goldwater.

So, apparently, until the spring of 1964, the liberals under whatever party label seemed in control. The Kennedy Kultists found no significant difference in the successor. In the essays on power and politics by the late C. Wright Mills, the point was made that modern political power was exercised through "authority, manipulation and coercion." Lyndon adroitly used these three rubrics in outdoing the Kennedy Kultists when he forced through Congress the civil rights bill and then, as the first entirely original measure of his own, passed his anti-poverty bill through Congress. If this kind of lawmaking constitutes liberalism, then Lyndon is second money to no man. He is the liberal's liberal.

But the cloud in the liberals' sky appeared with the realization that evidently a frightening number of people had lost faith that Lyndon's Liberalism was taking them nowhere they wanted to go. When he used "authority, manipulation and coercion" to pass his anti-poverty bill through Congress, a number of citizens must have begun to suspect that the inmates were running the asylum. When all these doubters of the liberal course threatened to gather under the banner of Goldwater, it was Goldwater who became the object of the fear turned to outrage. The real outrage is at the people who could desert liberals

(Continued on page 51)

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TWENTY-EIGHTH ANNUAL ROSE SHOW

The twenty-eighth Annual Rose Show of the Garden Club of Virginia, sponsored by the Williamsburg Garden Club, will be held Wednesday and Thursday, October 6 and 7, at the Conference Center in Williamsburg.

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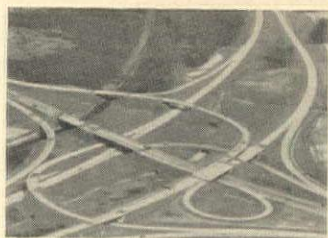
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VIRGINIA ROAD BUILDERS

by Pat Bryant

THE MEN BEHIND THE HIGHWAYS OF TODAY AND TOMORROW

THE BATTLES OF WORLD WAR II were still raging when a group of Virginia businessmen gathered in Richmond to make some plans for the postwar era—plans that would affect not only themselves but every man, woman and child living in the state or driving across the Commonwealth.

These men were highway contractors who foresaw that it was going to take some cooperative effort by their fellow road builders and the State Department of Highways if Virginians were literally to get back on the road in the postwar era.

There's vivid evidence of the fruits of their planning in the record-breaking highway building program underway in Virginia now. More than 250 million dollars worth of work is in progress at the present time. This is 10 times greater than figures from 10 years ago. In fact, the State Department of Highways is letting contracts for 10 to 20 million dollars worth of work a month—just about the amount for contracts during an entire year a decade ago.

Participating in that November 3, 1943 organizational meeting of the Virginia Road Builders Association were representatives of 17 firms: Virginia Asphalt Paving Co., Inc., Roanoke; W. N. Jackson, Roanoke; Y. L. Brown, Richmond; Ames and Webb, Inc., Norfolk; Asphalt Paving Service, Inc., Richmond; Hechler Brothers, Highland Springs; W. H. Scott, Inc., Franklin; E. G. Bowles, Richmond; E. V. Williams Co., Norfolk; Birsch Construction Co., Norfolk; Luck & Black, Inc., Richmond; G. P. Clay, Richmond; Highway Contractors, Inc., Norfolk; Evans Clearing Corp., Gloucester; Sam Finley, Inc., Roanoke; W. W. Tuck & Son, Virgilina; and R. W. Mitchell, Hilton Village.

In short order, the charter members voted to affiliate with the American Road Builders' Association and to employ an executive secretary. Officers were Kenneth L. Black, president; Nat Pendleton, vice president, Henry C. Hofheimer II, secretary-treasurer; and J. T. Cunningham, William Penick, W. Hunter Scott, W. E. Hechler and Robert Barnes, directors.

The purposes of the Association, as set forth in the by-laws are "... to cooperate with and assist the American Road Builders' Association in the continuance of an adequate national highway program; to further the continuation of the state highway program; to further the educational presentation of scientific, technical and factual data to the end that highway legislation both national and state may be considered with full knowledge of facts and conditions; to further the benefits to the public of better highways and lower costs by advocating the use of the contract system; to protect the interest of the American motorist by vigorously opposing the diversion of highway revenues to purposes unrelated to highways; to collect and disseminate information within the state on highway and street planning, finance, methods of construction and maintenance; to promote educational and other measures for the safe use of highways and streets."

The war years had seen much highway construction in Virginia but it was mostly for the military. Maintenance of the roads most used by civilians in rural areas had been accomplished but major construction on and improvements to most of the state's secondary and primary highways had been curtailed. The Highway Department, faced with drastic manpower shortages, had resorted to such measures as recruiting farm wives, students and the like for maintenance crews. Contractors had sought their workers where they could be found. Materials were short and equipment dear.

Typical of highway projects in the World War II era was Virginia 168 in the Newport News area. This was totally financed by the Federal government as a military project with the State Department of Highways carrying out the work.

With so much military work in progress, so much civilian highway work being postponed and faith in the ultimate outcome of the war, contractors and Department of Highways engineers began looking to a peaceful time.

The engineers made surveys and prepared plans for 21 million dollars worth of road work.

OFFICERS of the VIRGINIA ROAD BUILDERS ASSOCIATION



E. V. WILLIAMS

(Fariss Pictures, Inc.)

● Virginia Road Builders Association officers are President E. V. WILLIAMS, of E. V. Williams Company, Norfolk, shown at left; TOM H. LEWIS, Vice President, of Guy H. Lewis & Son, McLean, lower left; and E. V. (TIM) ECHOLS, Secretary-Treasurer, of A. B. Torrence & Company, Elkton, lower right.



TOM H. LEWIS



E. V. (TIM) ECHOLS

They also made surveys and placed sufficient plans on file to provide for the first postwar year's construction program.

For their part, the contractors were planning their postwar efforts so they'd be ready and able to carry out the work. How well did they do their planning job? In 1946, the first full year of peace, construction projects were advertised and contracts awarded for 78 projects totaling more than 20 million dollars.

As an organization the Virginia Road Builders Association was moving ahead with its plans too. Just six weeks after the initial meeting, the first executive secretary, A. J. (Gus) Rayner was employed and a headquarters set up in the old Hotel Murphy. Membership was growing to include not only Virginia contractors but material, equipment and service firms, such as aggregate producers, asphalt and petroleum suppliers, insurance and bonding companies, concrete and concrete products firms, financial firms, inspection engineers, equipment appraisers, accountants, general suppliers, equipment distributors, chemical suppliers, sheet and metal products firms and haulers and allied out-of-state companies. Today, the association counts 185 contractors (more than 80 per cent of those based in Virginia) and more than 150 material, equipment and service members. And it gains 40 to 50 new members a year. Meetings are held annually with the 1964 session planned for the Homestead, November 29-December 2.

Virginia Road Builders Association presidents over the years have been leaders in the construction field—the late Kenneth L. Black of Richmond, 1943 and 1944; the late W. A. Penick of Richmond, 1945 and 1946; A. B. Burton of Lynchburg, 1947; G. P. Clay, Sr. of Richmond, 1948; Alvin H. Hechler of Highland Springs, 1949; T. E. Ritter of Norfolk, 1950; Wiley N. Jackson, 1951; the late Jesse R. Ford of Lynchburg, 1952; Richard F. Krause of Newport News, 1953; the late A. B. Torrence of Elkton, 1954; W. H. Scott of Franklin, 1955; D. E. Ball of McLean, 1956; C. J. Fraim of Roanoke, 1957; S. L. Williamson of Charlottesville, 1958; John M. Bratten of Norfolk, 1959; Sidney R. Johnston of Arlington, 1960; H. Raymond Glover of Lynchburg, 1961; David H. Burrows of Wiley N. Jackson Co., Roanoke, 1962; G. Russell Edwards of Highland Springs, 1963; and E. V. Williams of Norfolk, 1964.

Serving with President Williams of E. V. Williams Company are Tom H.

Lewis of Guy H. Lewis & Son, McLean, vice president; and E. V. (Tim) Echols of A. B. Torrence & Company, Elkton, secretary-treasurer.

Directors are Frank L. Burkholder of Burkholder & Burkholder, Winchester; G. R. Edwards of Hechler Brothers, Inc., Highland Springs; L. S. Ellis of Holston River Paving Corporation, Marion; C. Merle Luck Jr. of Luck Corporation, Richmond; Jack L. Massie, contractor, of Newport News; Doug W. McDowall of McDowall and Wood, Inc., Salem; M. M. Pettyjohn Sr. of Steele Construction Company, Lynchburg; Robert W. Reddish of Moore, Kelly & Reddish Inc., Orange; Thomas D. Rutherford of Thomas Rutherford Bonding & Insurance, Roanoke; and W. B. Taylor of Taylor Construction Company, Kinsale.

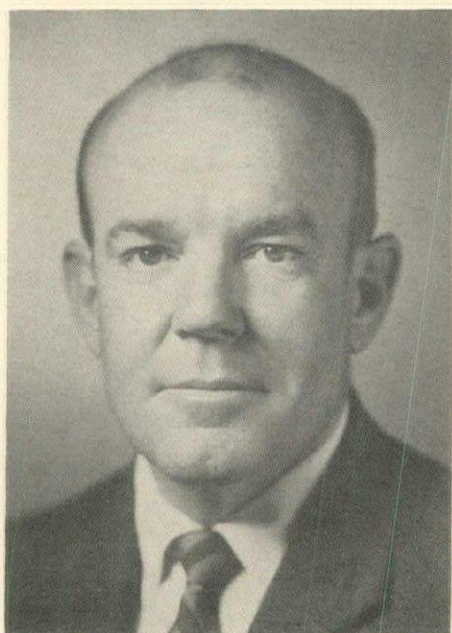
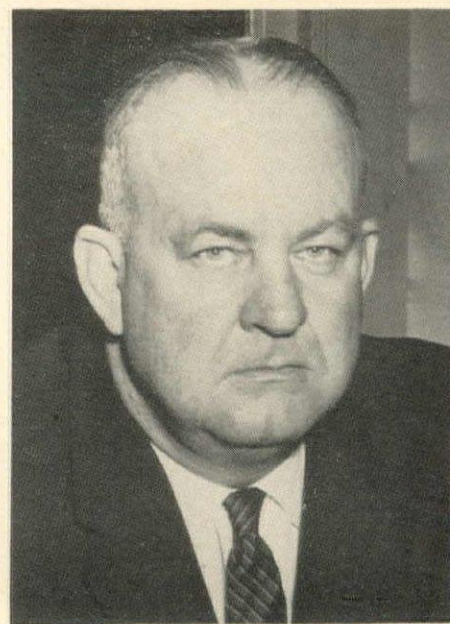
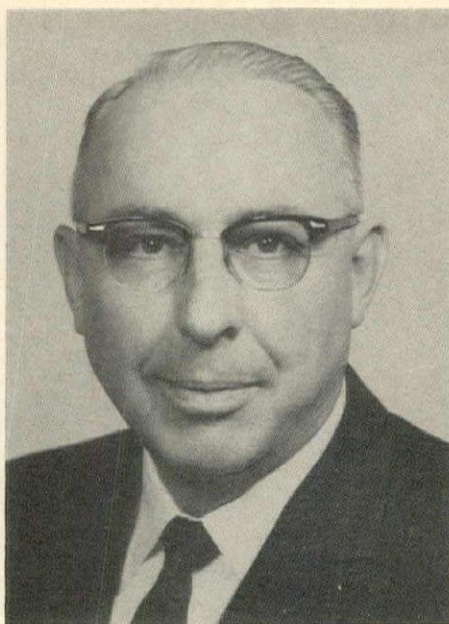
The district vice presidents are Salem District—W. S. Boyd of J. M. Turner Company, Inc., Roanoke; Lynchburg District—T. C. Laramore Jr. of Laramore Construction Co., Inc., Danville; Fredericksburg District—C. T. Neale Jr. of Mattaponi Sand and Gravel Co., Beulahville; Staunton District—Ferman W. Perry of Perry Engineering Co., Inc., Winchester; Bristol District—Richard E. Phillippi of Richard E. Phillippi, Inc., Wytheville; Suffolk District—W. B. Siviter of Birsch Construction Corp., Norfolk; Richmond District—J. A. Walder of J. A. Walder, Inc., Richmond; and Culpeper District—R. H. Wrenn of Phillips Machinery & Tractor Co., Arlington.

The American Road Builders Association Contractor Division directors are E. V. Williams of E. V. Williams Company, Norfolk; Frank A. Howard, VRBA Engineer-Director, Richmond; John M. Bratten of Ames & Webb, Inc., Norfolk; David H. Burrows of Wiley N. Jackson Company, Roanoke; H. Raymond Glover of A. B. Burton Company, Lynchburg; Sidney R. Johnston, contractor, Arlington; and G. R. Edwards of Hechler Brothers, Inc., Highland Springs.

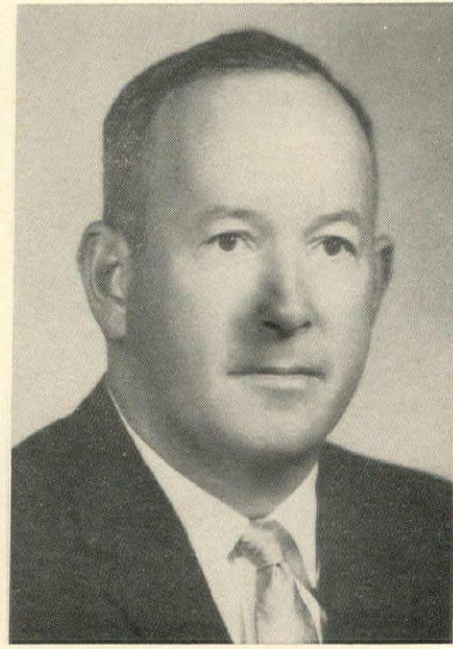
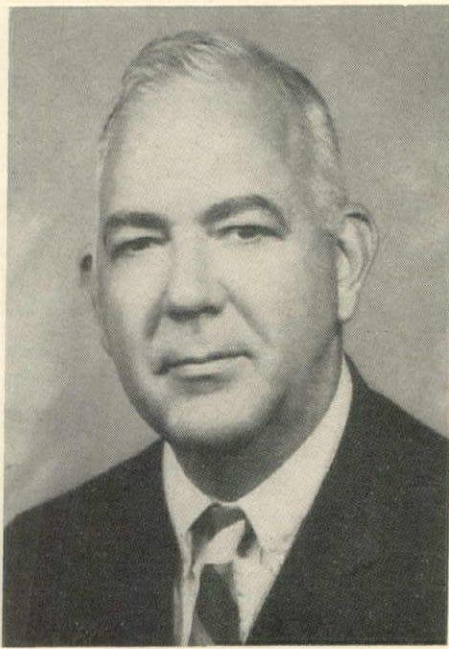
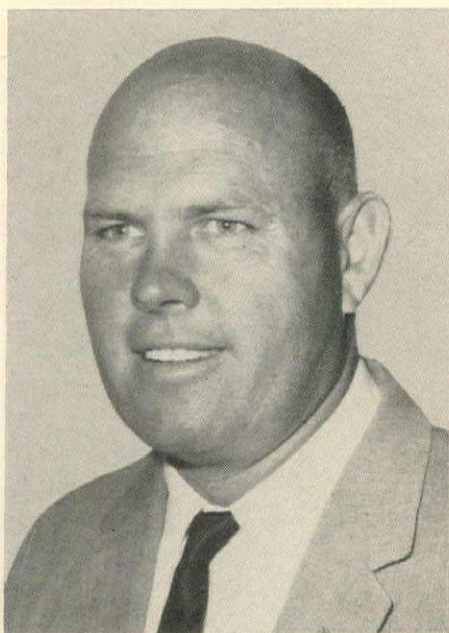
The Association has a staff of four headed by the engineer-director, Frank A. Howard. Eddie C. Reid is the public relations director and managing editor of the semi-monthly magazine, the *Virginia Road Builder*. William Craig is the Services Director and Catherine Whitworth is the office manager.

Engineer-Director Howard is the fourth administrative director of the Association. A. J. (Gus) Rayner was first, serving as executive director from 1943 to 1946. He was followed by the late Sterry J. Mahaffey, who was engineer-director from 1946 to 1950 and Archer B. Gay from 1950 to 1959.





(Arthur Clarke Studio)



(Dementi Studio)



DIRECTORS OF VIRGINIA ROAD BUILDERS ASSOCIATION

Directors of the Virginia Road Builders Association, shown on the facing page are, top row left to right: FRANK L. BURKHOLDER, Burkholder & Burkholder, Winchester; G. RUSSELL EDWARDS, Hechler Brothers, Inc., Highland Springs; L. S. ELLIS, Holston River Paving Corporation, Marion. Second row, left to right: C. MERLE LUCK, JR., Luck Corporation, Richmond; JACK L. MASSIE, Newport News contractor; DOUGLAS W. McDOWALL, McDowall & Wood, Inc., Salem. Bottom row, left to right: M. M. PETTY-JOHN, SR., Steele Construction Company, Lynchburg; THOMAS D. RUTHERFOORD, Thomas Rutherford Bonding & Insurance, Roanoke; WALTER B. TAYLOR, Taylor Construction Company, Kinsale. Photograph of Director ROBERT W. REDDISH, Moore, Kelly & Reddish, Inc., Orange, was not available.

Howard, a former district engineer for the State Highway Department, has held the post since November, 1959. It was in 1959, too, that Eddie Reid, former newspaper and magazine reporter-photographer, joined the Association staff as public relations director.

As membership has grown over the years, so have activities of the Association. In 1944 a study was begun that led to publication of a magazine—originally on a bi-monthly basis; now, semi-monthly. Not just a chatty little pamphlet, the *Virginia Road Builder* is a full-fledged magazine filled with technical, legislative and industrial news and pictures of Virginia highway construction.

The Association has legislative programs which move into high gear at the bi-annual General Assembly sessions. And it's worked over the years to see that gasoline tax funds are used only for roads and not diverted to other state-financed but non-related projects; to limit use of State Convict Road Forces to maintenance and not actual construction work; and to oppose any effort of the Department of Highways to go into contracting in competition with Association members.

To help meet the shortage of engineers, the Association several years ago began making grants of \$100 each to Virginia Polytechnic Institute, Virginia Military Institute and the University of Virginia to be used by students in the Civil Engineering departments of the schools. A new program of furnishing financial assistance to engineering students in the cooperative program at Tech will be initiated this fall.

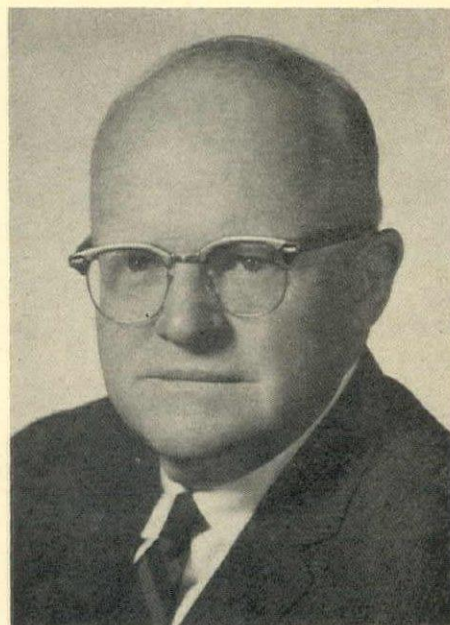
The Association also is an active participant in the Virginia State Chamber of Commerce-sponsored "Better Roads" program and cooperates with the State Department of Highways in planning for Highway Week each year. In addition, Association members, officers and staff personnel are often on the speaker's platform, presenting programs aimed at making the citizenry more aware of what's needed to make Virginia's roads the best anywhere.

Construction problems arise and mutual understanding is recognized as the best solution. Usually the Engineer-Director, Frank Howard, can discuss problems with the Highway Engineers and work out the matter to the satisfaction of everyone concerned.

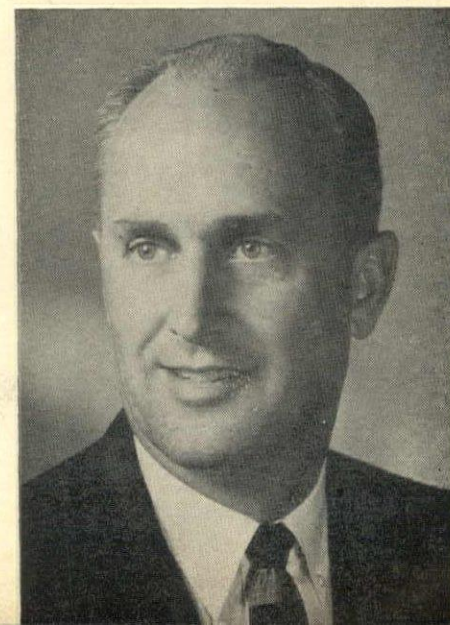
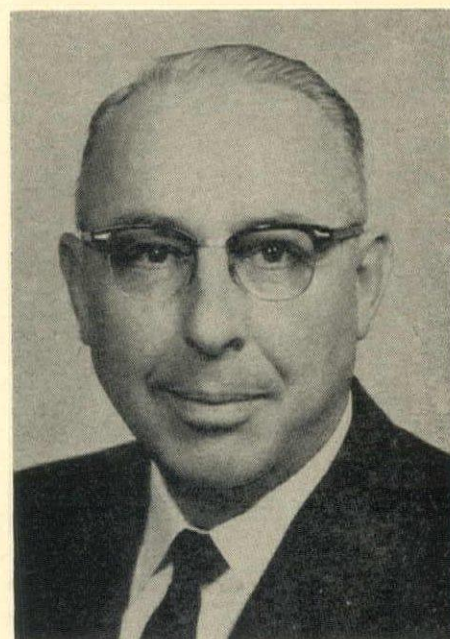
However, some problems do not have quick and easy solutions and it takes collective effort to overcome these general problems. To this end, the Association has a joint cooperative committee. Serving on the committee are

(Story continued on page 39)

PAST PRESIDENTS OF VRBA



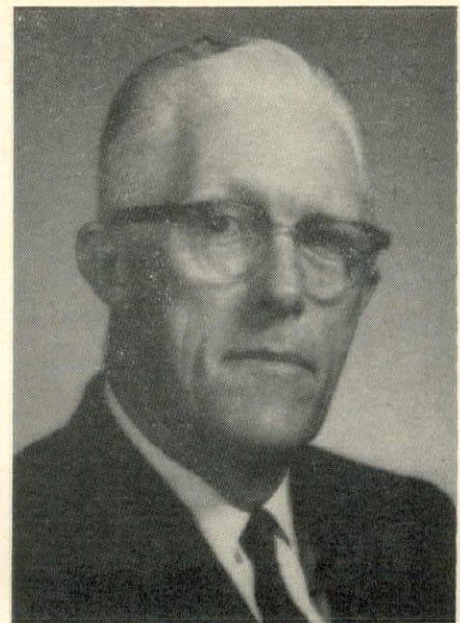
(Fariss Pictures, Inc.)



(Roberts Portraits)

Presidents of the Virginia Road Builders Association, whose photographs begin in the right hand column of this page, are from top to bottom: 1964 President E. V. WILLIAMS; G. RUSSELL EDWARDS, 1963; DAVID H. BURROWS, 1963.

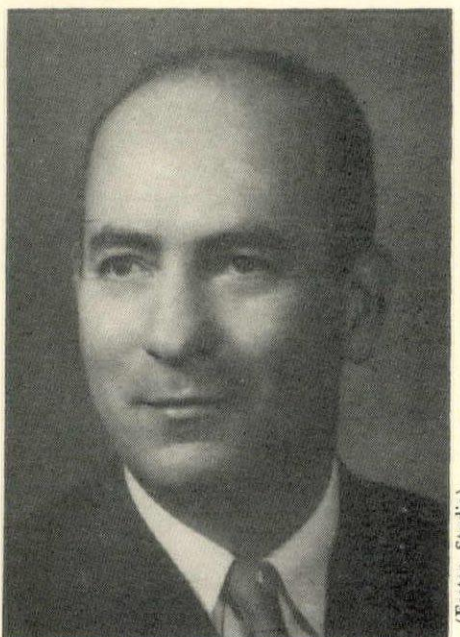
Past presidents are continued on the next page.



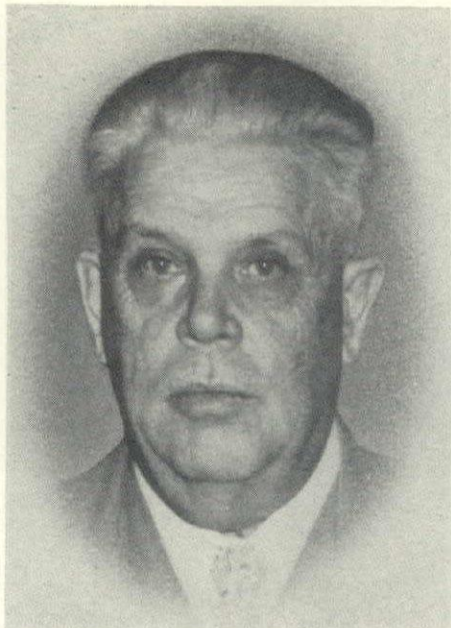
(Boice Studio, Virginia Beach)



(Holsinger Photo)

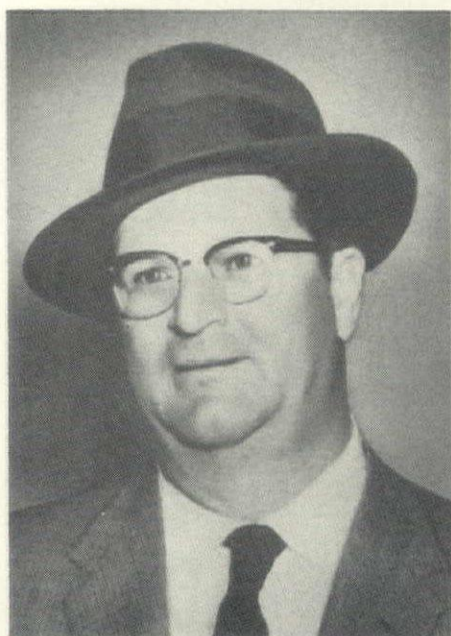


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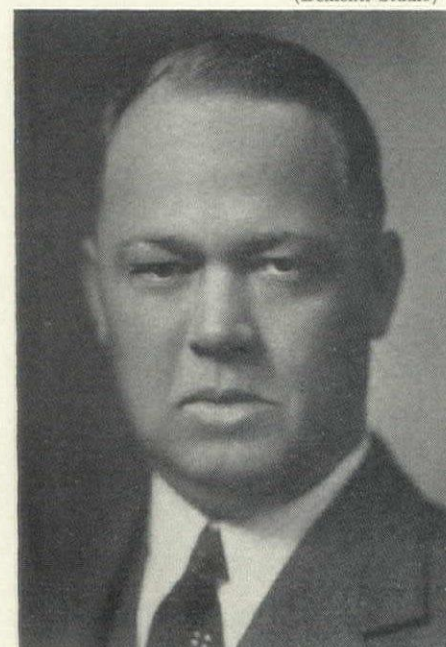
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VRBA past presidents, shown on the facing page include, top row left to right: H. RAYMOND GLOVER, 1961; SIDNEY R. JOHNSTON, 1960; JOHN M. BRATTEN, 1959. Center row: S. L. WILLIAMSON, 1958; G. J. FRAIM, 1957; DONALD E. BALL, 1956. Bottom row: W. HUNTER SCOTT, 1955; the late A. B. TORRENCE, 1954; RICHARD F. KRAUSE, 1953.

This page, top row left to right: the late J. R. FORD, 1952; WILEY N. JACKSON, 1951; T. E. RITTER, 1950. Center row: ALVIN H. HECHLER, 1949; GARLAND P. CLAY, 1948; A. B. BURTON, 1947. Bottom row: The late W. A. PENICK, 1945-46; the late KENNETH L. BLACK, 1943-44.

(VRBA Staff, page 14)



(Dementi Studio)



VRBA STAFF



FRANK A. HOWARD

The Engineer-Director of the Virginia Road Builders Association got his start in the highway construction industry early.

The 55-year-old Montgomery County native was a high school student when he decided formal education was not for him and a neighbor offered him a job with the North Carolina State Highway Commission. He worked in North Carolina from 1924 and 1926 as chairman, rodman, level rodman and levelman and then moved on to Florida to work for that state's highway department in similar jobs.

Three years on the job convinced him that he did need an education, so he came back home to Virginia, finished high school and entered Virginia Polytechnic Institute. He attended VPI on an athletic scholarship and, while he won his B.S. degree in agricultural economics in 1933, he's quick to say he really majored in football and wrestling. He has since supplemented his education with courses in civil engineering from the International Correspondence School, photogrammetry in aerial surveying and mapping during a hitch in the Marines and in highway location and design with the University of Wisconsin Extension.

After being graduated from VPI, Howard worked for nearly four years with the U. S. Bureau of Public Roads as transitman, chief of party and project engineer on the location and construction of Skyline Drive and Blue Ridge Parkway. He spent a year as a special instructor with the North Carolina Highway Department and in April, 1944, he joined the Virginia Department of Highways as inspector of construction of Class 1 roads and bridges.

March, 1944 to January, 1946, found him in the Marine Corps, serving in the Pacific Theater. On his return to civilian life, he resumed his old post with the Department of Highways, later moving on to become assistant resident engineer in the Fairfax Residency and resident engineer

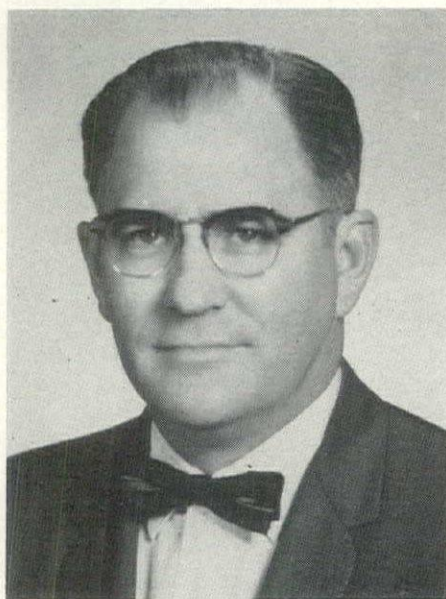
in the Martinsville Residency. In May, 1954, he was appointed Salem District Engineer.

Howard left the Highway Department in November, 1959 to assume the position of Engineer-Director of the VRBA, a post that requires him to travel about the state, consulting with contractors, and to work with the Department of Highways on problems mutual to it and VRBA members.

Mr. and Mrs. Howard (she is the former Miss Lucille Virginia Richardson of Pulaski) have one daughter, Bette Sue (now Mrs. Robert Milton of Roanoke), and two granddaughters.

Howard is a Presbyterian, Kiwanian, Mason, Royal Arch Mason, Commandery and Shriner. He enjoys deep sea fishing, an occasional game of golf and spectator sports—baseball, football and basketball—especially when they can be watched on TV while relaxing at home.

(Photos by Colonial Studio)



EDDIE C. REID

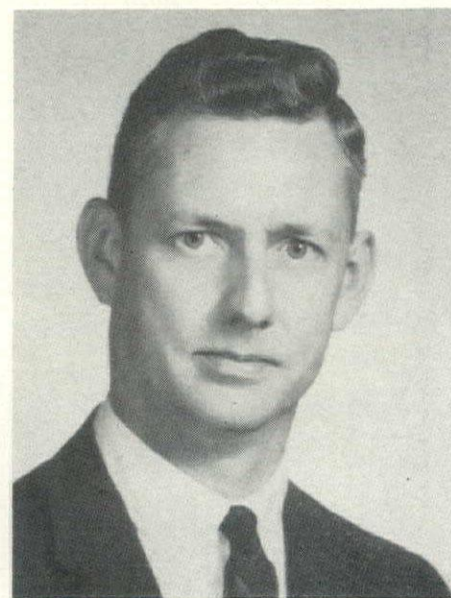
From a bustling, book and magazine filled office on the mezzanine of the Hotel Richmond-West comes the message of the Virginia Road Builders Association.

Delivering the message is Eddie C. Reid, public relations director of the Association. It is his job to inform members of new developments in the industry and the general public of Virginia's highway needs and accomplishments and Association members' roles in meeting these needs. He does this through the bi-weekly *Virginia Road Builder* magazine which he edits, through talks and programs and by helping the Department of Highways with "Highway Week" each year.

Reid was born in Roanoke in 1925 and attended Roanoke public schools and Roanoke College. He joined the staff of the Roanoke Times in 1942, served in the Army from 1943 to 1947 and returned to remain with the newspaper as a photographer-reporter until 1954. That year he joined the staff of *Construction* magazine. He became VRBA public relations director in 1959.

Reid is married to the former Miss Mary Woody of Roanoke. The Reids, their two sons and two daughters live in Richmond.

Reid is a charter member of the Virginia Press Photographers Association, vice president of the Farmington Recreation Association and active in the work of the Derbyshire Baptist Church where he is assistant superintendent of the adult department.



WILLIAM H. CRAIG, JR.

William H. Craig, Jr., Services Director, says his association with the VRBA goes back to 1954 when his wife was a secretary there, but he actually joined the staff two years later when his wife, the former Miss Jean Drinkwater, resigned in favor of full-time housekeeping.

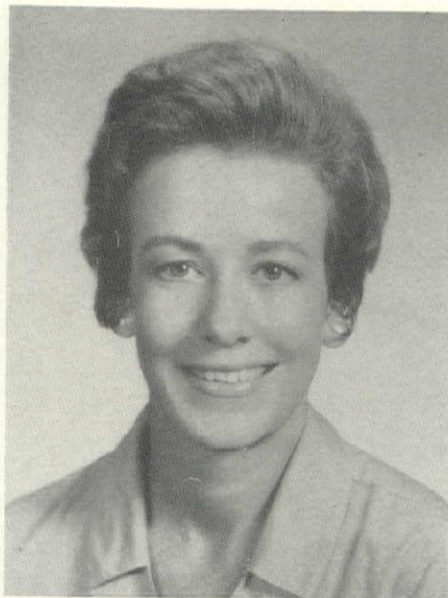
His multiple-function job includes fiscal control, arranging for meetings and outings, keeping Association minutes, work with standing and special committees and with the Department of Highways on wage rates under the Davis-Bacon Act, handling membership releases, arranging for schools and seminars, assisting in magazine production and handling group insurance programs.

Born in Lynchburg in 1926, Mr. Craig attended public schools there and V.P.I. His college education was interrupted by service in the Army Air Force, but he returned to graduate in 1949. During the Korean conflict, he served as civilian training officer at Fort Lee.

Following his graduation, he went with a utility gas company; from 1953-55 he was associated with Allied Chemical Company, Hopewell, then served on the staff of Mechanics & Merchants Bank in Richmond until he came to VRBA.

At this time, he also joined the staff of the Virginia Aggregates Association and, upon the retirement of Archer B. Gay in 1959, became executive secretary. This fall he will resign to devote full time to his position as VRBA Services Director.

Mr. and Mrs. Craig have a four-year-old son. Mr. Craig is a Mason and a member of Westover Hills Methodist Church.



MRS. CATHERINE I. WHITWORTH

Mrs. Catherine I. Whitworth, VRBA Office Manager, is a native Richmonder and attended Chesterfield County schools and Pan-American School.

Past business associations include three years as secretary with the Virginia Education Association, six months in Washington with the Labor Department, where she was promoted to Assistant Chief, Stenographic Pool, and three years as secretary for Mizpah Presbyterian Church in Richmond. She came to VRBA in 1958 as secretary.

Mrs. Whitworth has one son, age 19.

(VRBA story continued on page 39)

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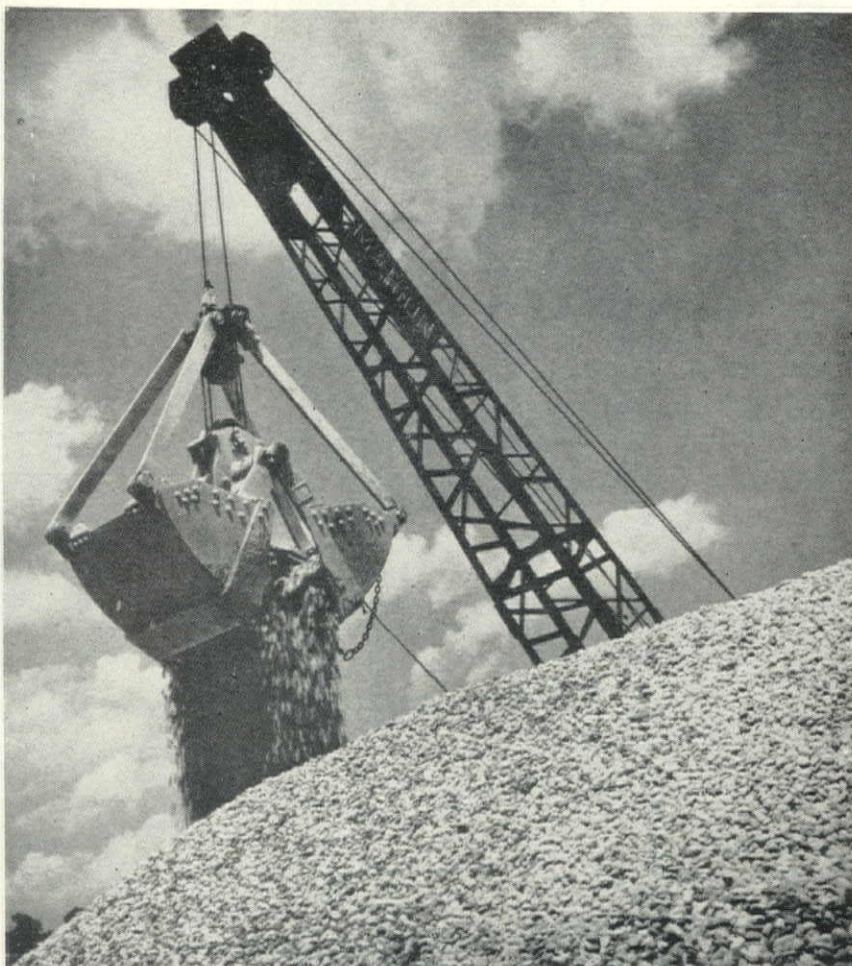
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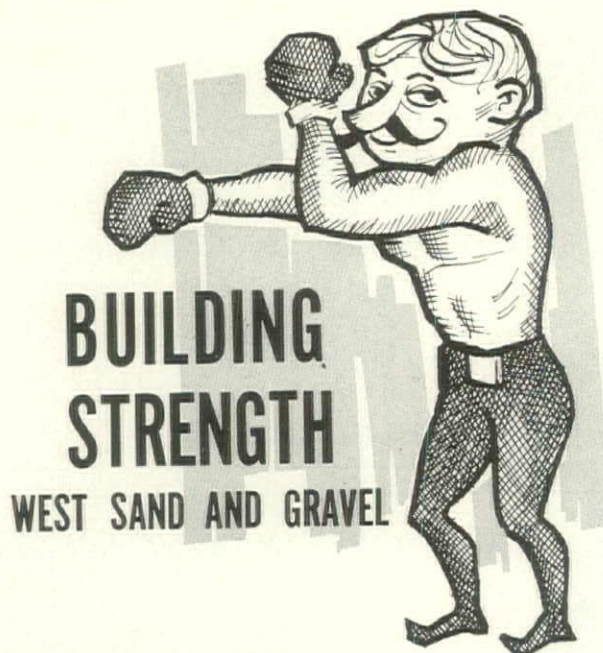
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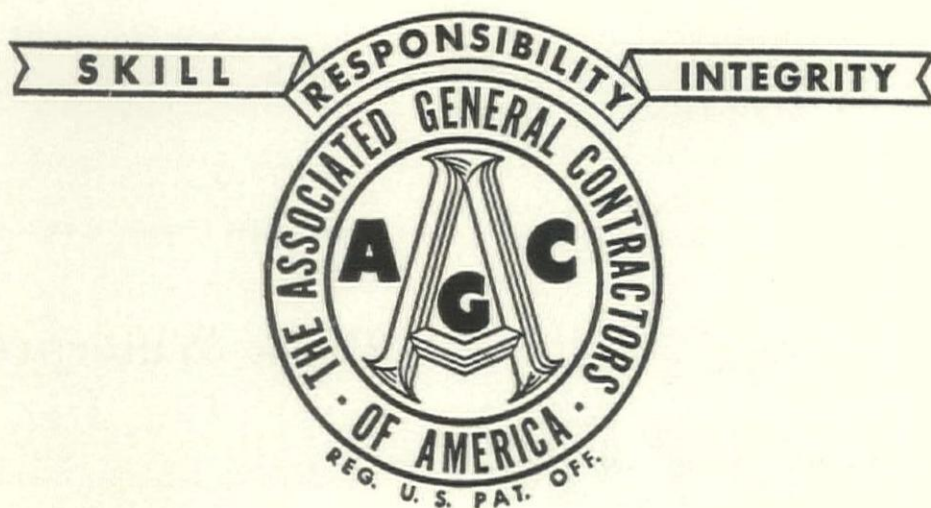
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Electrical contractors for National Guard Armory, page 26.
Mosby School, page 26.



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VIRGINIA BRANCH AGC MIDYEAR CONVENTION

• The 1964 Mid-Year Convention of the Virginia Branch AGC was held at The Homestead, Hot Springs, beginning on Sunday, July 12, through Wednesday, July 15, 1964. Approximately 175 persons attended the three-day convention.

The business program began with a Board of Directors meeting at 4:00 P.M., Sunday, July 12, and presiding was Virginia Branch President Fred L. Showalter, Jr. of F. L. Showalter, Inc., Lynchburg. Problems confronting the Association and industry were considered and, where applicable, referred to the later membership business sessions. Some of the items considered were time and place for the 1965 Mid-Year Convention, a safety training course for construction supervisory personnel, a hospitalization insurance program for the Association, and numerous resolutions. The social part of the convention began on Sunday evening with a reception for the full membership.

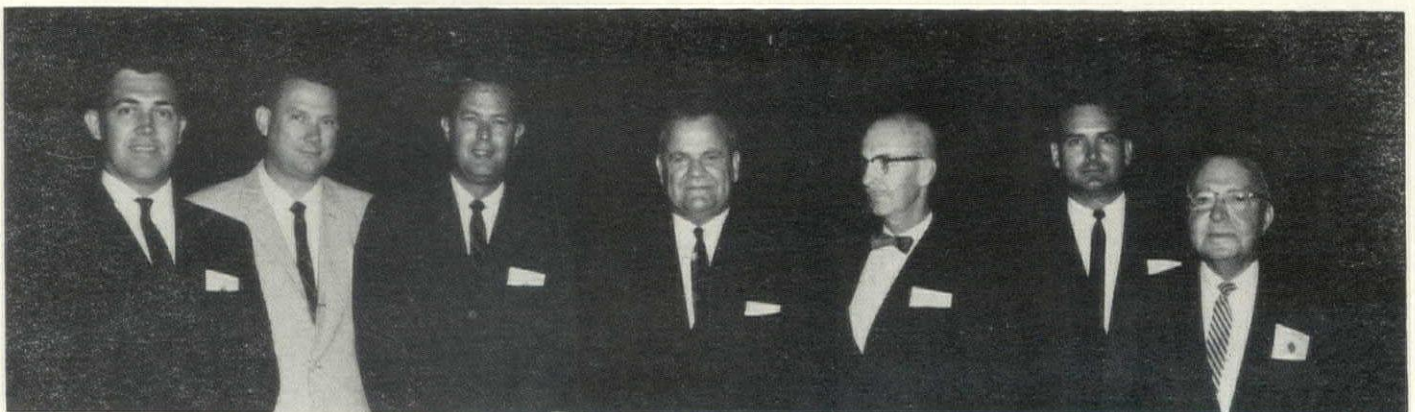
Beginning at 8:30 A.M. Monday, a buffet breakfast and committee workshop sessions were held. A total of six Virginia Branch committees held meetings and a separate meeting of all District Officers was also held at the same time. The following is a list of the committees that held meetings at this time:

(Continued on next page)

Top photo: Board of Directors, left to right: Ed Cothran, Phil Brooks, Henry Read, National AGC President W. Ray Rogers, 1st V-Pres. Joe Howe, Jr., Sec.-Treas. Aubrey Bass, Jr., Aaron Conner, 2nd V-Pres. Marvin Lucas, H. E. Doyle, Pres. Fred Showalter, Jr., National AGC Executive Director Bill Dunn, Immediate Past Pres. Bay Martin, John Gregory, Buddy Kessler, Emerson Welch, and Harold Miller.

Photos at right: Top photo, left to right: Virginia Branch Past President James Hope, Mrs. Hope, National AGC Executive Director Bill Dunn, Mrs. Bill Reid, and Mr. Reid. Second photo, left to right: Mrs. Harold Miller, Northern Virginia District President Harold Miller, Mrs. Alexander Alexander, and Richmond District President, Alexander Alexander. Third photo, left to right: Virginia Branch Secretary-Treasurer Aubrey Bass, Jr., Mrs. Bass, Virginia Branch 2nd Vice-President Marvin Lucas, Mrs. Lucas, and Mr. Harold Finch. Fourth photo, left to right: Virginia Branch 1st Vice-President Joe Howe, Jr., Immediate Past President Bay Martin, Mrs. Margaret Rutherford (Virginia Branch Staff), National AGC President W. Ray Rogers, and National AGC Director from Virginia, Clint Carpenter.

Photo below, left to right: Sec.-Treas. Aubrey Bass, Jr., 1st V.-Pres. Joe Howe, Jr., Pres. Fred Showalter, Jr., National AGC Pres. W. Ray Rogers, National Director from Virginia, Bobby Lee; Safety Committee Chairman, Bill Bryson; and National Director from Virginia, Clint Carpenter.



Apprenticeship Committee — Under the Chairmanship of Joseph C. Brown, Haycox Construction Company, Inc., Virginia Beach, this Committee continued its work on an apprenticeship program for the Association. This was the third meeting of this Committee since September of 1963.

Contracts, Forms and Specifications Committee — Virginia Branch Secretary-Treasurer Aubrey S. Bass, Jr. was the acting Chairman for this Committee meeting. This Committee has functioning subcommittees on Force Account and Day Labor (Municipal Work), Waiver of Liens and Contracts. In addition to the problems noted, the Committee considered and discussed in detail various insurance requirements contained in contract documents.

Education Committee — Under the Chairmanship of J. A. Kessler, Jr., R. E. Lee & Son, Inc., Charlottesville, this Committee reviewed the educational program for the Virginia Branch which included four basic Critical Path Method Seminars and Field Superintendents Short Courses in Norfolk and Lynchburg. As a new program for the coming winter months, the Committee considered a University of Virginia short course for contractors in law, business, taxation, insurance, engineering, and other subjects. Also considered was a program now being developed by the State Safety Committee for training of construction supervisory personnel in safety.

Legislative Committee — Under the Vice-Chairmanship of Edmund DeJarnette, DeJarnette and Paul, Richmond, this Committee reviewed various bills passed by the 1964 General Assembly Session. The Committee also considered and discussed several bills that were defeated during the Session.

Membership Committee — Under the Chairmanship of Aaron J. Conner, Aaron J. Conner General Contractor, Inc., Roanoke, this Committee continued its establishment of a Membership Program for the Association. The State Committee agreed that one member of the Committee would visit each of the six districts at their respective meetings and work with the District Membership Committees. The Committee recommends that one-half day per month be set aside by the State and District Committees for contacting prospective members.

Safety Committee — Under the Chairmanship of W. G. Bryson, Tidewater Construction Corporation, Norfolk, this Committee finalized arrangements for the supervisory safety train-

ing course scheduled for Norfolk and the Tidewater District in August. It also considered the promoting and the distributing of the safety booklet entitled "Your Guide to Greater Safety" which is being prepared jointly with the West Virginia Chapter of the AGC and the Public Utilities Association of the Virginias. The Committee further reviewed ways and means of creating contractor interest in the National AGC Disabling Injury Tabulation Program and Safety Certification Program.

District Officers Meeting — A total of twelve District Officers, representing six Virginia Branch Districts, met with Virginia Branch 1st Vice-President Joe Howe acting as Chairman. This group discussed the type of meetings held by the various districts, ways and means of creating District interest, functioning of the various District Officers, and other District activities.

Following the committee meetings, the first General Business Session was called to order by President Fred L. Showalter, Jr. The featured speaker was E. Irving Manger, Associate Administrator, U. S. Department of Labor, who was introduced by Arthur F. Hintze of the National AGC staff in Washington. Mr. Manger briefly reviewed the requirements of the Davis-Bacon Act that authorizes the U. S. Department of Labor to predetermine the prevailing wage rates for Federal and Federal-aid construction projects. He appealed to the contractors to submit wage data through the chapter office so that more reliable project information could be obtained on Virginia. He noted that the U. S. Department of Labor sends to the various contractors, based on Dodge Reports, requests for current wage information. Manger also covered in detail the newly established procedures for the operation of the Wage Appeals Board, as well as the method to be followed in predetermining fringe benefits. Mr. Hintze followed Mr. Manger with a short talk on Davis-Bacon problems. Hintze urged the contractors to take a more active part in submitting wage data for wage predetermination purposes. Following Mr. Hintze's remarks, there was a question and answer period for approximately 30 minutes. Numerous questions were asked of both Mr. Manger and Mr. Hintze.

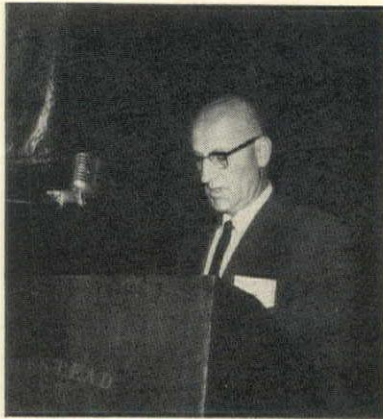
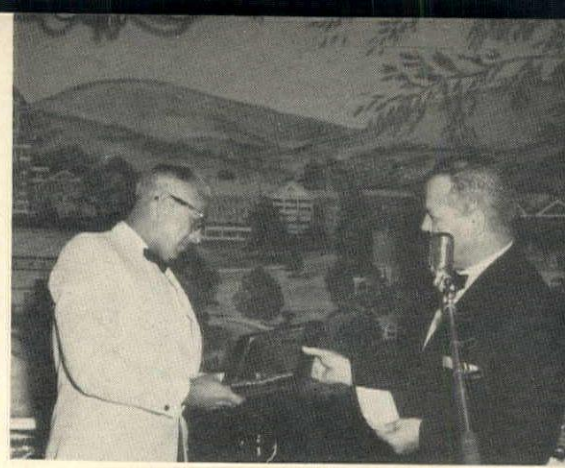
The ladies held a reception and luncheon followed by a 2:00 P.M. Ladies' Auxiliary Meeting. Mrs. Libby Martin presided and the Guest Speaker was Gilbert Paul, Sales Manager

for Carribean Cruises of Washington, D. C. Mr. Paul reviewed the advantages of holding a future convention on a Carribean Cruise ship, outlining with a film the advantages of this type of convention. He also reviewed in detail expenses, etc., for the information of the ladies. Following the talk and film by Mr. Paul, the Auxiliary held its annual election of officers and the following ladies were elected to office: Mrs. Jane Showalter was elected President; Mrs. Margaret Howe was elected 1st Vice-President; Mrs. Montrey Lucas was elected 2nd Vice-President; and Mrs. Ashie Bass was elected Secretary-Treasurer.

The Associate Division, under the Chairmanship of W. E. Cothran, J. H. Cothran Company, Inc., Altavista, held a breakfast meeting at 8:30 A.M. on Tuesday. R. E. Lee, R. E. Lee & Son, Inc., Charlottesville, Chairman of the Joint Cooperative Committee, Virginia Chapter, American Institute of Architects, Virginia Society of Professional Engineers, and Virginia Branch, AGC, requested assistance from the Associate Members in preparing standardized guarantees for all trades and materials for later consideration by the Joint Cooperative Committee. [Mr. Lee explained that on the agenda for the May 29th meeting of the Joint Cooperative Committee was the question of roofing bonds and roof guarantees. As a result of the discussion on this subject, the architects were asked whether they would consider suggestions from the various subcontractor groups concerning standardized guarantees for all trades and materials. The architects were receptive and indicated that they would welcome recommendations from the various specialty trades. Assistance was voted by the Associate Division and a time limit was established for the recommendations to be submitted to Mr. Lee.] Guest Speaker for the Associate Division Meeting was John Snyder, Assistant Golf Pro at the Farmington Country Club, Charlottesville. Mr. Snyder gave an excellent presentation which included a special film.

(Continued on page 23)

First column opposite page, top to bottom: Virginia Branch President Fred L. Showalter, Jr., presiding at the General Business Session. Second from top, Guest Speaker, William E. Dunn, Executive Director, The Associated General Contractors of America, Inc., Washington, D. C. Third photo, District Officer's report by Virginia Branch 1st Vice President Joseph G. Howe, Jr. Bottom photo, presentation by Ladies' Auxiliary President Mrs. Jane Showalter, left, to retiring President Libby Martin, right.



Top photo, above, Piedmont District report by Immediate Past District President, Warren Martin. Center photo, Membership Committee and Southwest Virginia District Report by Chairman and Immediate Past District President Aaron J. Conner. Just above, Northern Virginia District Report by District President Harold I. Miller.

Top photo: presentation by National AGC President W. Ray Rogers (right) of Past President's Plaque to Virginia Branch Immediate Past President George R. Martin. Center: Richmond District report by District President Alexander Alexander. Just above, left to right: Convention Committee Chairman Bernie Frith, Mrs. Frith, and Bill Dudley.



Right: Chairman Ed Cothran presiding at the Associate Division Meeting. Others, left to right, at head table are Jim Satterfield, Phil Brooks, and Guest Speaker John Snyder, assistant golf pro, Farmington Country Club in Charlottesville.



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See Page 24.

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VIRGINIA BRANCH MEETING

(Continued from page 20)

The Tuesday morning General Business Session was called to order at 10:00 A.M. by President Showalter and the first speaker was W. Ray Rogers of Portland, Oregon, President of The Associated General Contractors of America, Inc., who was introduced by C. Clinton Carpenter, Carpenter Construction Company, Inc., Norfolk, a National AGC Heavy Director from Virginia. Mr. Rogers brought greetings from the National AGC staff. He outlined to the membership those activities which he hopes to stress as President of the National AGC. He reviewed his recent trip to Tokyo and commented on construction methods in Japan. William E. Dunn, Executive Director of the National AGC, was the next speaker. He summarized National legislation that affects the construction industry and the many activities of the National staff.

The following are the committees and districts that reported:

Associate Division—Chairman W. E. Cothran, J. H. Cothran Co., Inc., Altavista.

Legislative Committee—Vice-Chairman Edmund T. DeJarnette, DeJarnette & Paul, Richmond.

Membership Committee and Southwest Virginia District Report—Chairman and Immediate Past President of the Southwest Virginia District Aaron J. Conner, Aaron J. Conner General Contractor, Inc., Roanoke.

Safety Committee—Chairman W. G. Bryson, Tidewater Construction Corp., Norfolk.

District Officers—Virginia Branch 1st Vice-President Joseph G. Howe, Jr., Basic Construction Co., Newport News.

Northern Virginia District—President Harold I. Miller, Miller Bros. of Arlington, Inc., Arlington.

Piedmont District—Immediate Past President Warren Martin, Edward van Laer, Inc., Charlottesville.

Richmond District—President Alexander Alexander, Alexander Building Construction, Inc., Richmond.

The main banquet was held at 7:30 P.M. on Tuesday, July 14th. Virginia Branch Immediate Past President George R. Martin of Martin Bros. Contractors, Inc., Roanoke, as retiring President, was presented a Past President's Plaque and watch by National AGC President W. Ray Rogers of Portland, Oregon.

DOWNING SPEAKS TO TIDEWATER GROUP

• Congressman Thomas N. Downing was the speaker for the Tidewater District meeting of the Virginia Branch, Associated General Contractors of America, Inc., held at The Shore Drive Inn, Virginia Beach, on July 10, 1964. Representative Downing, speaking to the District, told them that they had done more to maintain the stability of our economy than any other industry in the country.

Representative Downing is running for his fourth term as First District Congressman and will be opposed in November by Williamsburg Republican Wayne C. Thiessen. He was first elected in November of 1958 to the 86th Congress and is a member of the House Committee on Merchant Marine and Fisheries, and the House Science and Astronautics Committee. The Congressman was introduced by Delegate William P. Kellam of Virginia Beach, a member of the Virginia House of Delegates.

Presiding at the meeting was retiring District President Mike Albers of E. C. Ernst, Inc., Virginia Beach. Virginia Branch Safety Committee Chairman, Bill Bryson, of Tidewater Construction Corporation, Norfolk, reported that the safety training course for construction supervisors would begin some time in July at Old Dominion College. This will be the first course of this type held in Virginia and will be a pilot course for similar projects in the other Association Districts of Virginia.

Also reporting to the District was Virginia Branch 2nd Vice-President Marvin Lucas, President of Luke Construction Co., Inc. of Norfolk, who urged the District members to attend the Association's 1964 Mid-Year Convention at The Homestead beginning on July 12.

Following the reports, Mike Albers turned the meeting over to the new District President, Dick Schusterman of Southern Materials Company, Inc., Hampton. Other District Officers are Vice-President J. C. Brown of Hayco Construction Company, Inc., Virginia Beach, and Secretary-Treasurer Lee Duke of F. A. Duke Company, Inc., Portsmouth.



Top photo, left to right: Retiring District President Mike Albers, E. C. Ernst, Inc.; Representative Downing; District President Richard Schusterman, Southern Materials Co., Inc.; District Vice President J. C. Brown, Hayco Construction Co., and District Secretary-Treasurer Lee B. Duke, F. A. Duke Co., Inc. Just above, William P. Kellam of the Virginia House of Delegates introducing Congressman Downing.



Just above, Representative Thomas N. Downing addressing the District. Just below, report by Virginia Branch Safety Committee Chairman William G. Bryson. Bottom photo, report by Virginia Branch 2nd Vice President Marvin Lucas.





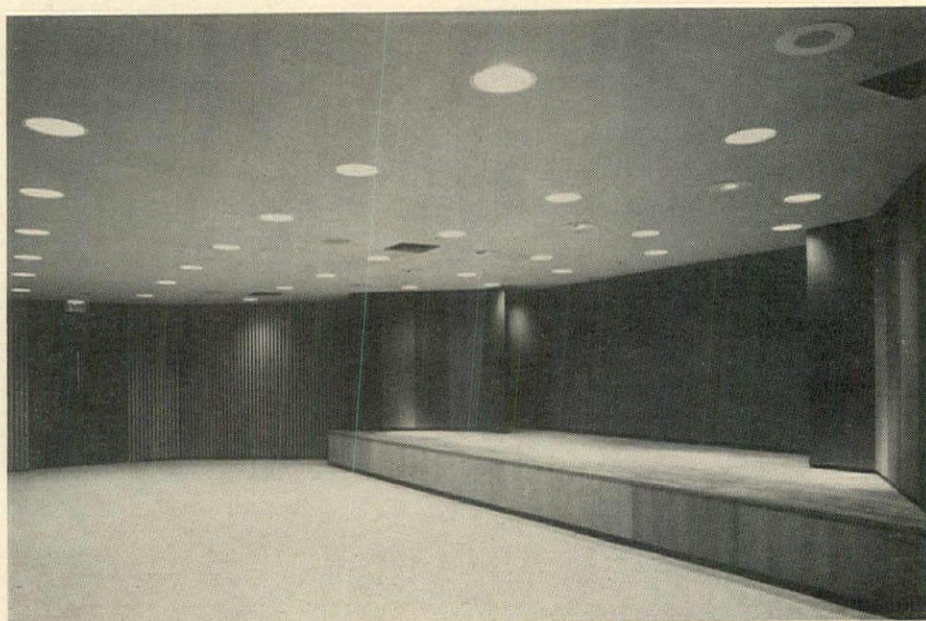
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ONE OF RICHMOND'S most unique buildings, the new home office of First Federal Savings and Loan Association, is in the final stages of construction at Third and Broad Streets.

The three-story structure, being erected by Basic Construction Company, of Newport News, will feature a rooftop heliport, heated sidewalks and a first floor set-back on three sides of the building.

Basic's superintendent on the job has been I. L. Corde, whose ingenuity and years of experience in construction helped his firm perform what amounted to "heart surgery" on the John Marshall Hotel last year. In the course of that job the hotel's main lobby was moved down one floor and the old lobby area converted into a

convention center, all without disturbing the hotel's functions or day-to-day guest traffic.

Design of the new First Federal Building is by Dana G. Stetser, AIA, of Philadelphia, and planning and development has been handled by The Cunneen Company, Philadelphia.

Primary building materials utilized in the modern design are bronze-tinted glass "window walls", bronze anodized aluminum extrusions, Vermont marble and Buckingham slate.

Floor space of the old building, which was demolished to permit construction of the new facility, will be more than doubled by the 38,000 square feet of floor area.

First Federal Savings and Loan Association moved to the Third and Broad street site in 1941, when assets were less than three and one-half million dollars. Present assets of approximately 80 million dollars, and the great need for additional and more modern office and meeting room space necessitated construction of the new building.

Association officials elected to build on the present site, rather than move to the suburbs, in the belief that a strong, so-called "heart" of a city is a prerequisite for a prosperous metropolitan area. This belief has been justified by announced plans and start of construction of numerous other major projects in downtown Richmond during the past year.

The new facility fronts 87 feet on Broad Street and extends 137 feet

along Third Street to the alley. The arcaded ground level will house the public lobby and tellers. The unusual sidewalk, extending from wall to curb-line on Broad and Third Streets and to the alley in the rear, is surfaced with a Fulget tile of Italian polished marble, laid over snow melting equipment. The sidewalk will be heated in winter to eliminate the inconvenience of snow and ice.

The ground floor elevator lobby will be separated from the teller's area after closing hours by a 35-foot wide, electrically operated rolling screen concealed in the ceiling. The second floor, which houses executive and loan offices, also features an open center court overlooking the public lobby below. It is surrounded by a bronze anodized aluminum ornamental railing. Wall surfaces of the second floor are painted, with some accenting by walnut paneling.

The third floor provides space for employee and executive dining rooms, a 165-person capacity staff meeting room with stage, and an exhibit gallery. Walls are covered with vinyl wallpaper in some areas, while others are foil covered with accents in wood paneling.

The rooftop heliport has been specially reinforced with additional steel to take the impact of landing helicopters. It is complete with tie-down lugs, marking lights and landing flood lights. A separate, hydraulically-operated elevator opening on the exterior

of the building at ground level, serves the roof area.

The heliport was included in the early design stages because of a feeling that travel by helicopter or later design point-landing aircraft would make use of the port practical in the near future. Since construction of the building began last year, John Randolph, Jr., president of the association, has been granted a helicopter pilot's license.

Special anchors have been built into the roof structures for suspension of motor operated window washing basket rigs, which will be used to clean the 100 glass panels which make up the major portion of exterior wall surface. Each of the panels is five feet wide, 15 feet high and $\frac{3}{8}$ of an inch thick.

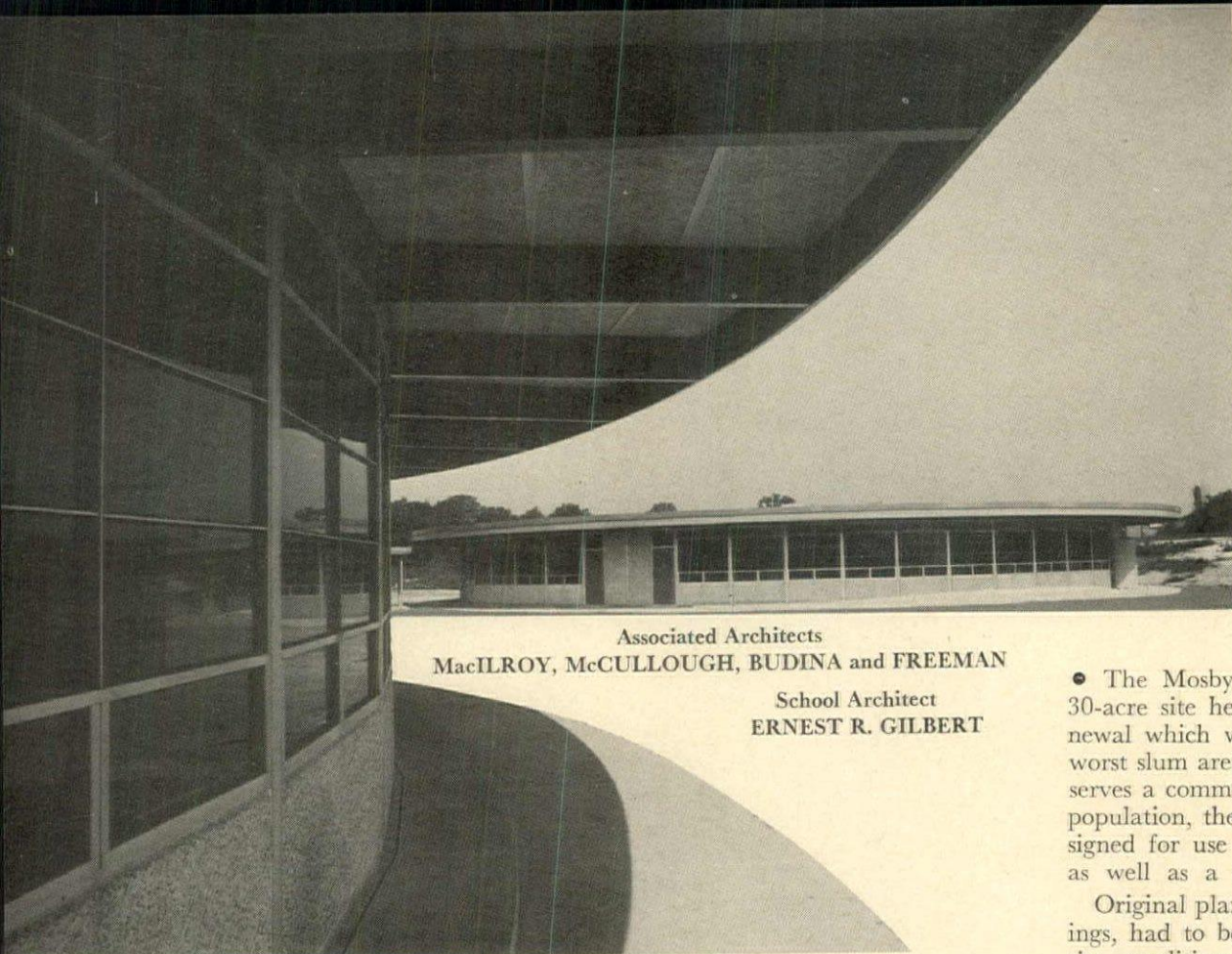
Equipment installed for efficient handling of business includes a four-station, four-inch round automatic pneumatic tube system interconnected throughout the building. A separate four by 12-inch pneumatic tube system has been installed for transfer of mortgage files from the teller's area to the work room on the second floor.

Continuous mechanical areas from basement to roof, and underfloor ducts installed during construction, provide for addition of wires or mechanical equipment at a future date, as well as repair or alteration. Air conditioning and heating are provided by a combination radiant hot water and air

(Continued on page 34)



TWO RICHMOND COMPLETE COMPANIES



Associated Architects
MacILROY, McCULLOUGH, BUDINA and FREEMAN
School Architect
ERNEST R. GILBERT

(Photos by Jim McElroy)

Mosby School For Elementary and Junior High Students

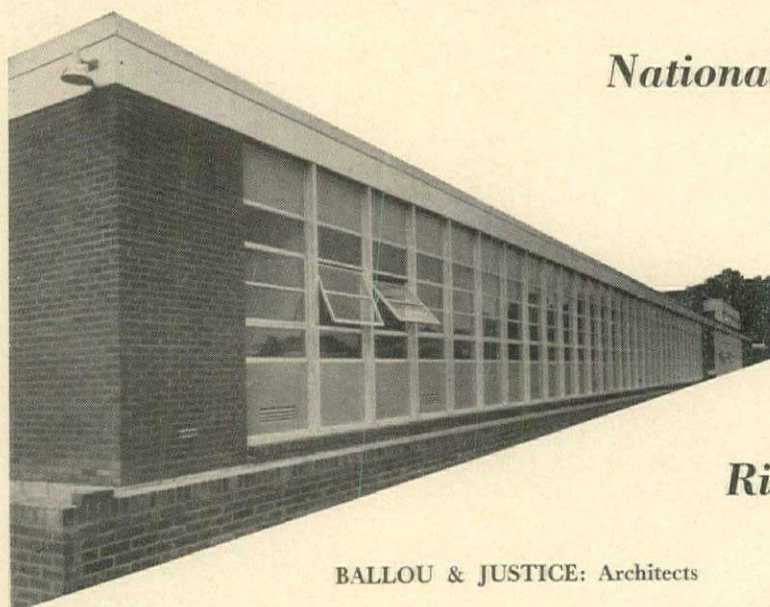
Mechanical & Electrical
Consultants
ROACHE, MERCER & FAISON
Structural Consultant
HENRY P. SADLER

Consulting Civil Engineer
AUSTIN BROCKENBROUGH & ASSOCIATES
Consulting Foundation Soils Engineer
ARTHUR CASAGRANDE

• The Mosby School is located on a 30-acre site hewed from an urban renewal which was formerly one of the worst slum areas in Richmond. Since it serves a community of extremely dense population, the play area has been designed for use as a public playground as well as a school playground.

Original plans, calling for two buildings, had to be abandoned because of site conditions, but the one-building combination provides for isolation of junior high and elementary school age groups, with joint service facilities.

There are separate cafeterias with joint kitchen facilities and the library is designed so that one section may be used for elementary school activities and the other for junior high, but permitting overlapping use when desirable. Auditorium and gymnasium, art and music facilities will be jointly used.



National Guard

Armory

in

Richmond

BALLOU & JUSTICE: Architects

• The National Guard Armory, located on Dove Street in Richmond, has recently been completed by Wise at a total cost of \$957,000. Ballou & Justice, Richmond, were architects.

Exterior and interior walls are masonry, with composition roof, aluminum windows and floors of Vinyl tile. Principal subcontractors and suppliers included the following, all of Richmond unless otherwise noted:

Aluminum Manufacturing Corp. of Va., aluminum mullions, trim, aluminum sills; J. S. Archer Co., folding partitions; Atlas Fence Co., Inc., security fencing; Bacock-Davis Associates (through John W. Walsh), flagpoles; Alfred Bertozzi, lath and plaster; E. G. Bowles, excavation, backfill, site work, grading and seeding, parking paving, sewers, catch basins, man-

OND STRUCTURES

Y WISE CONTRACTING

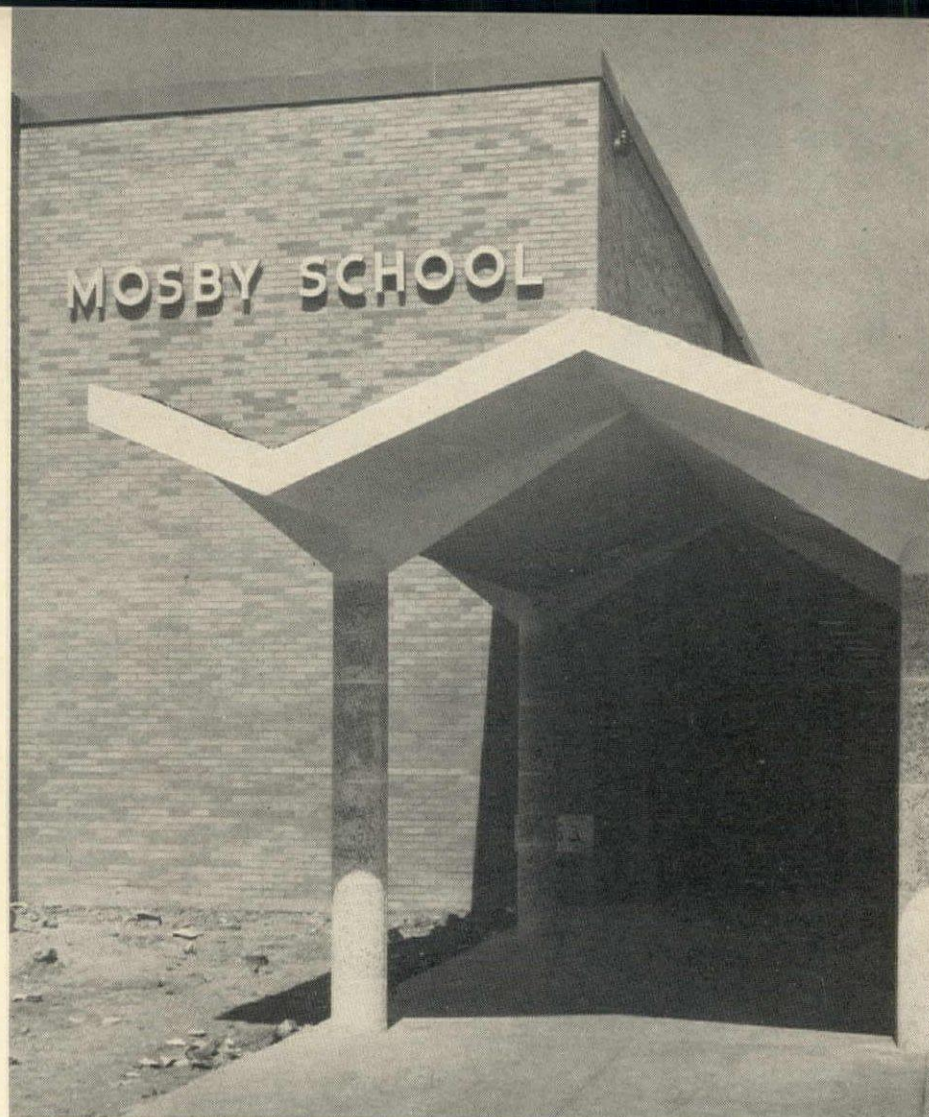
IC.

Administrative facilities are flexibly designed so that the plant may be administered jointly or separately.

The three circular buildings will house primary and intermediate grades, their central core room providing multi-use facilities. The junior high school section has been designed for semi-departmentalized organization.

The site varies in elevation by about 60 feet between extreme east and west property lines. The grading design provided two large plateaus: the school buildings face the street on the upper east level at the approximate level of Mosby Street. The athletic fields are located on a plateau to the west, below the school elevation, with a sloping bank dividing the two areas.

Steel frame construction was selected for reasons of economy, flexibility and speed of erection. Interior



(Photos by Jim McElroy)

masonry walls are non-bearing to permit movable partitions for enlargement or rearrangement of rooms. Steel roof deck is used, with 3-hour, fire rated acoustical tile ceilings in fire-

proof areas where required. Acoustical tile used elsewhere is mineral tile in instructional areas and Sonofaced fiberglass in food service areas and toilet areas.

(Continued on page 35)

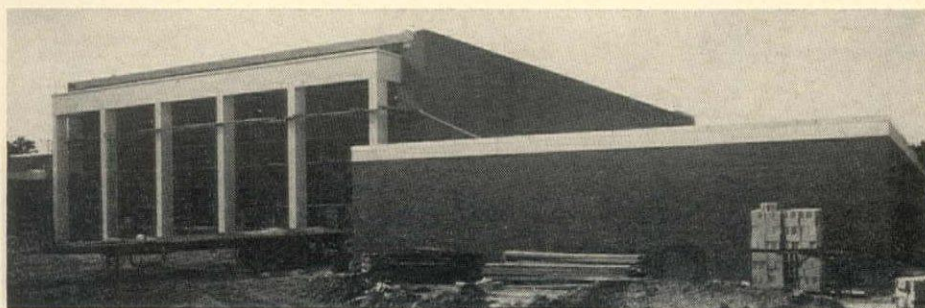
holes, access roads; Brisk Waterproofing Co., Inc., masonry waterproofing; Burke-Hoggard, Inc., base cabinets, tile and wall cabinets.

Also, E. S. Chappell Co., Inc., caulking, weatherstripping, thresholds; Construction Specialties (through The Staley Co., Inc.), sunshades; Economy Cast Stone Co., cast stone; E. C. Ernst, Inc., electrical work; J. B. Eurell Co., gypsum roof deck; John H. Hampshire, Inc., resilient floor, acoustic ceiling; W. K. Hawkins Engineering Co., insulation; Liphart Steel Co., Inc., structural steel and miscellaneous iron; N. W. Martin & Bros., Inc., roofing and sheet metal work.

Others were Mosler Safe Co. (through Roanoke Engineering Sales Co., Inc.) folding doors; Oliva & Lazuri, Inc., ceramic tile and bath ac-

cessories; Pleasants Hardware, finishing hardware; Richmond Glass Shop, Inc., glass and glazing; Richmond Ready-Mix Corp., ready-mix concrete; Ruffin & Payne, Inc., millwork; Rich-Line Mfg. Co., Inc., millwork; The Staley Co., Inc., Truscon aluminum window wall units; Street & Branch, painting; Talley Neon, aluminum letters; Wm. E. Tucker, masonry; Nick

Ulisse, removing concrete from truck, place, screed finish and cure; Virginia Metal Products, Inc., Orange, office partitions; Bethlehem Steel Co., reinforcing steel; Wade Mechanical Corp., plumbing, heating, ventilating, air conditioning; Welton Co., toilet partitions; West Sand & Gravel Co., Inc., fill sand; Cecil E. Bryant, Madison Heights, erection of curtain walls.





ROBERT R. MARQUIS COMPLETED TO OPEN

BAYSIDE JUNIOR HIGH SCHOOL

BERNARD B. SPIGEL, AIA.: Architect

VANSANT & GUSLER
Mechanical & Electrical Consultants

E. B. SMALL
Structural Consultant

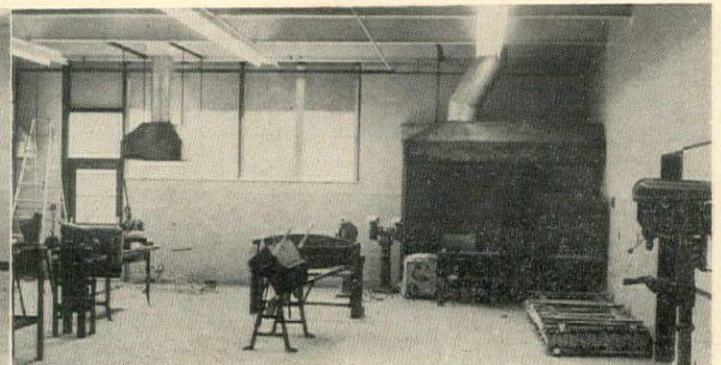
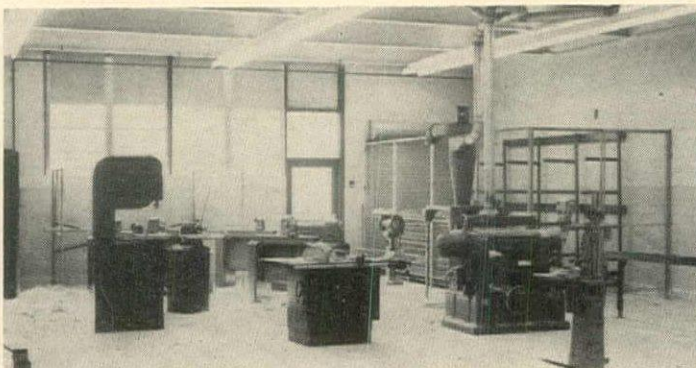
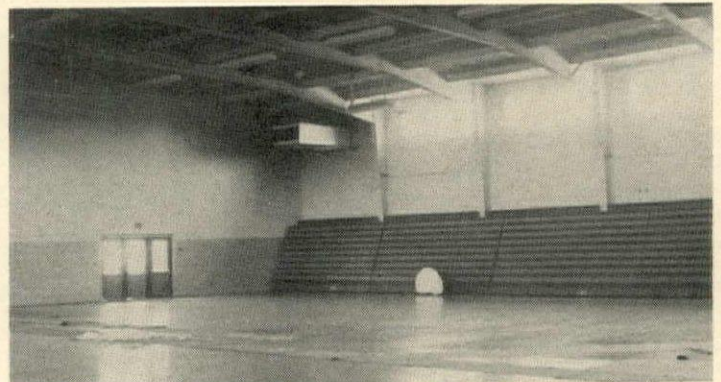
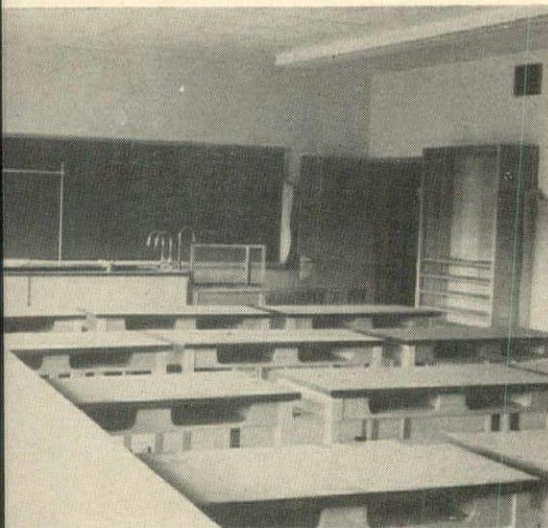
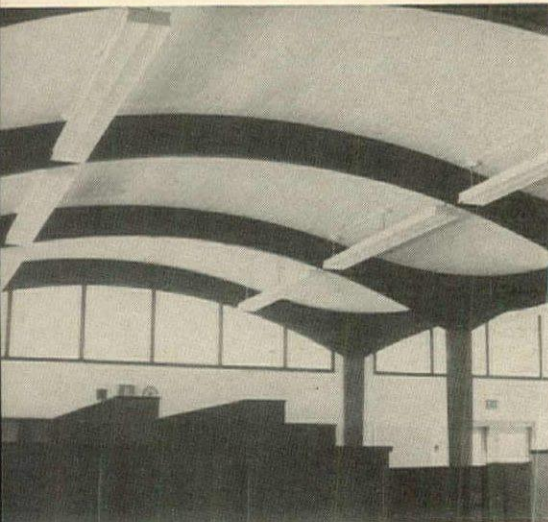
• Robert R. Marquis, Inc., Portsmouth general contractor, has completed two new schools for opening this fall.

The Bayside Junior High School, at Virginia Beach, completed at a cost of \$1,819,000, is a sister project to the Southside Junior High, completed in September, 1962.

Covering 142,250 square feet, the single story building has exterior walls of masonry with block interiors. The roof is a combination of wood, metal and fibre. Windows are aluminum and floors are terrazzo.

The Churchland Junior High School, located in Chesapeake, is a sister project to Indian River Junior High, completed last fall. This is a completely air conditioned school with many interior windowless classrooms. Total cost was \$1,302,288, for an area covering 99,800 square feet. The one-story masonry building has interior walls of block, a built-up fibre roof, aluminum windows and terrazzo floors.

Top photo shows elevation of library at Bayside School, and below it, the wood arches in the library. Second from bottom photo shows science classroom and bottom photo, the Bayside wood shop. At right, top, is the gymnasium; bottom photo shows metal shop.



MARQUIS, INC. TWO SCHOOLS R FALL TERM



CHURCHLAND JUNIOR HIGH SCHOOL

A. RAY PENTECOST, JR., AIA: Architect

VANSANT & GUSLER
Mechanical & Electrical Consultants

BAYSIDE

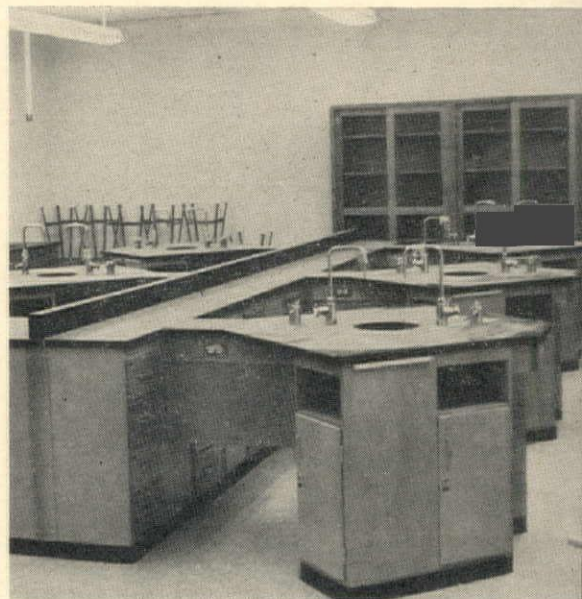
Subcontractors & Suppliers

ROBERT R. MARQUIS, INC., Portsmouth:
General contractor, foundations, concrete, carpentry,
paneling
UNITED FIREPROOFING CORP., Hampton:
Masonry
TIDEWATER STEEL CO., INC., Norfolk:
Steel, handrails
TRUSCON DIV., REPUBLIC STEEL CORP., Nor-
folk:
Steel roof deck
J. B. EURELL CO., Richmond:
Roof deck—fibre
AMERICAN SHEET METAL CORP., Norfolk:
Roofing
BROWN & GRIST, INC., Newport News:
Windows, window walls
UNIT STRUCTURES, INC.:
Structural wood
WALKER & LABERGE CO., INC., Norfolk:
Glazing
HARRY E. PAUL, INC., Norfolk:
Painting, plastic wall finish
BRISK WATERPROOFING CO., INC., Ridgefield,
N.J.:
Waterproofing
MANSON & UTLEY, INC., Norfolk:
Acoustical
FEBRE & CO., OF NORFOLK, INC.:
Plaster
CERAMIC TILE OF FLA., INC., Virginia Beach:
Ceramic and resilient tile, terrazzo, Granwood gym-
nasium floor
PREMIER MILLWORK & LUMBER CO., Virginia
Beach:
Millwork
AMERICAN METALS CO., New Orleans, La.:
Handrails
W. T. BYRNS, Norfolk:
Lighting fixtures, electrical work
W. B. MIDDLETON, INC., Norfolk:
Plumbing, plumbing fixtures
BAKER & CO., Norfolk:
Air conditioning, heating, ventilating

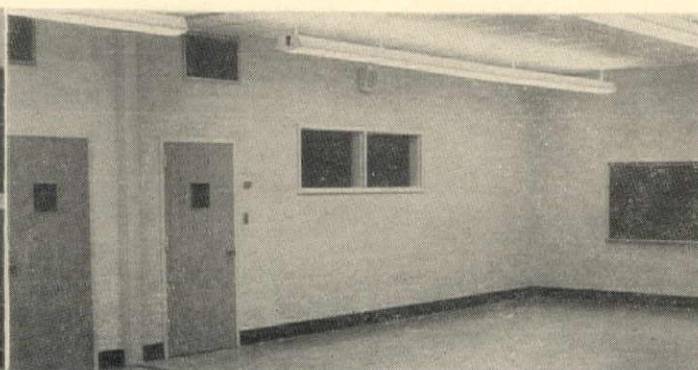
CHURCHLAND

Subcontractors & Suppliers

ROBERT R. MARQUIS, INC., Portsmouth: General
contractor, excavating, foundations, concrete, car-
pentry, paneling
M. R. WELCH CO., INC., Norfolk:
Piling
SNOW, JR. & KING, INC., Norfolk:
Masonry
RICHMOND STEEL CO., INC., Richmond:
Steel
J. B. EURELL CO., Richmond:
Roof deck—fibre
VIRGINIA SHEET METAL & ROOFING CORP.,
Norfolk:
Roofing
OVERMEYER & ENNIS, Norfolk:
Stone work
REPUBLIC STEEL CORP., Norfolk:
Windows
WALKER & LABERGE CO., INC., Norfolk:
Glazing
BURGESS BROS. PAINTING CONTRACTORS,
INC., Portsmouth:
Painting, plastic wall finish
BRISK WATERPROOFING CO., INC., Ridgefield,
N.J.:
Waterproofing
R. L. DRESSER, INC., Raleigh, N.C.:
Acoustical, wood flooring for gymnasium
FEBRE & CO. OF NORFOLK, INC.:
Plaster
JOSHUA SWAIN & CO., INC., Portsmouth:
Ceramic tile, terrazzo
AJAX CO., INC., Norfolk:
Resilient tile
POWELL-McCLELLAN LUMBER CO., Norfolk:
Millwork
AMERICAN METALS, INC., New Orleans, La.:
Steel doors and bucks
VIRGINIA-CAROLINA ELECTRICAL WORKS,
INC., Norfolk:
Lighting fixtures, electrical works
W. B. MIDDLETON, INC., Norfolk:
Plumbing fixtures, plumbing
BAKER & CO., Norfolk:
Air conditioning, heating, ventilating



Photos, top to bottom, show main entrance to Churchland School, a typical corridor featuring tile and terrazzo, the science classroom. Below, left, counters in the new library and, right, a double classroom.



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Suppliers of kitchen equipment for Union Hall
Elementary School, page 33.

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Roof Deck Fibre for—
• Churchland Junior High School, page 29.
• Bayside Junior High School, page 28.

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NORFOLK, VA.
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Contractor for Dover Elevators for First Federal Savings &
Loan Association, Page 24.

HAMMOND MASONRY CORP.

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SANDSTON, VA.

Masonry Contractor for First Federal Savings &
Loan Association, page 24.

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Plastering contractor for Mosby School, page 26.

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Painting contractor for the First Federal Savings &
Loan Association, page 24.

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Hardware suppliers for Huntington High School, page 31.

HUNTINGTON HIGH SCHOOL Newport News



(Acme Photo Co., Inc.)

SILAS S. KEA & SONS, IVOR, BUILDS ADDITION TO HIGH SCHOOL

The Huntington High School in Newport News was constructed in three stages, with Unit C, containing four shops, five classrooms and cafeteria occupied for the 1963-64 term.

Unit B, containing library, offices and 20 classrooms was occupied after Christmas holidays last year.

Unit A, with band room, choral room, locker rooms and gymnasium was to be completed in time for the coming term. It was necessary to remove a 75 by 160 foot swimming pool in order to construct the gymnasium.

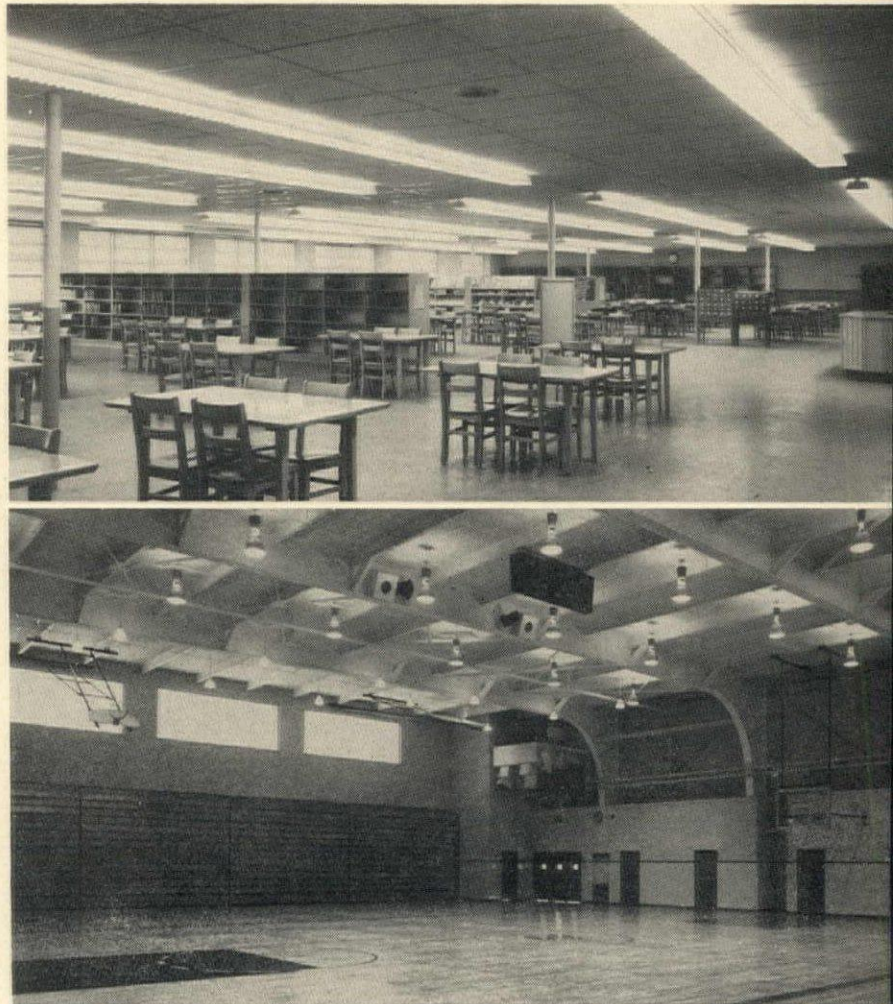
Total cost of the addition was \$1,300,000, covering 124,000 square feet. Exterior walls are brick with interior walls of block and tile. The roof is built-up, windows are aluminum and floors are vinyl.

(Continued on page 36)

to tell the Virginia Story

SAMUEL N. MAYO, AIA: Architect

W. G. BRANDT, JR.
Mechanical & Electrical Consultant



SEPTEMBER 1964

PAGE THIRTY-ONE

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Roofing contractors for the Bayside Junior High School, page 28.

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NORFOLK 4, VA.

Haycox Construction Company, Inc.

WILLIAM C. HAYCOX, *President*

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Mechanical Contractors for Churchland Junior High School, page 29

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Electrical contractor for Huntington
High School, page 31.

Joshua Swain & Company, Inc.

CERAMIC TILE — MARBLE — TERRAZZO

COMMERCIAL — INDUSTRIAL — INSTITUTIONAL



Phones:

EX 7-8861

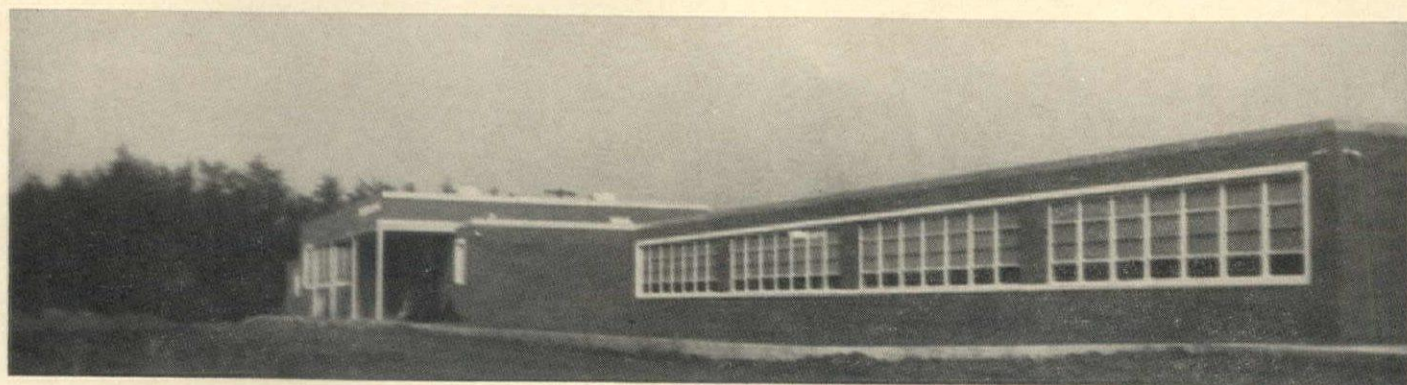
393-6231

2420 High St.

Portsmouth, Virginia

Subcontractor:

Ceramic tile and terrazzo for Churchland Junior High School, page 29.



UNION HALL ELEMENTARY SCHOOL, RECENT PROJECT OF J. E. BURTON CONSTRUCTION

J. COATES CARTER, AIA
Architect

■ Recently completed by J. E. Burton Construction, South Boston, is the Union Hall Elementary School. Contract cost was \$338,000. J. Coates Carter, AIA, of Martinsville, was the architect for this and another recent Burton project, Mount Airy Elementary School, material on which was not available at presstime.

Subcontractors and suppliers on the Union Hall school included Thompson-Arthur Paving Co., Danville, paving; Lewis Brown, Madison Heights, plastering; J. H. Cothran Co., Inc., Altavista, plumbing; Danville Lumber & Manufacturing Co., Danville, mill supplies; General Specialties Co., Inc., Charlotte, N.C., windows; Graves-Humphreys, Inc., Roanoke, hardware; Hite Tile Co., Collinsville,

tile, stone and terrazzo; Montague-Betts Co., Inc., Lynchburg, steel.

Others were W. Morton Northern & Co., Inc., Richmond, resilient floors; J. H. Pence Co., Roanoke, school equipment; Powell & Co., Inc., Waynesboro, kitchen equipment; Pritchard Paint & Glass Co., Durham, N.C., glazing; George W. Reynolds, Bassett, painting; Rusco Window Co., Inc., Roanoke, windows; Shenandoah Structures, Inc., Salem, steel doors and bucks; Southern Roof Deck Co., Inc., Roanoke, concrete deck; Southside Manufacturing Corp., Danville, special classroom cabinets; Superior Block Co., Charlotte, cast stone; Valley Roofing Corp., Roanoke, 20-year built-up roof; Wise-Hundley Electric Co., Inc., Danville, electrical work; E. W. Yeatts, Altavista, grading.



FIRST FEDERAL SAVINGS & LOAN

(Continued from page 25)

Total gross sq. ft.: 38,000

Sq. ft. per floor sq.:

Basement—7,000, First Floor—8,000, Second Floor—11,000, Third Floor—11,000, Penthouse—1,000

First Floor setback:

25 ft. at street entrance and parking lot entrance

Parking accommodations:

For 70 cars, landscaped with honey locust and birch trees and numerous shrubs

Sidewalk material:

Italian "Fulget" marble tiles polished with recessed matrix laid over snow melting system.

Building materials:

A. Buckingham Virginia slate, 1 1/2" thick, cleft surface;

B. Marble—Vermont "Imperial Danby" hone finish, 1 1/4" thick;

C. Window system—10" special aluminum extrusions anodized bronze; "Duranodic" anodizing process; and

D. Glass—tinted bronze, 3/8" twin ground plate glass.

Air conditioning and heating system:

Combination radiant hot water and air heating system, oil fired. Air handling system incorporating electrostatic air purifiers for maximum air cleaning. Air conditioning system 150 tons.

Structural system:

Longspan structural steel framing system above grade; basement reinforced concrete; foundations bell bottom caissons. Roof level specially reinforced with additional steel to take impact of landing helicopters. Structural frame and foundations sized for three additional stories.

Window washing:

Special anchors built into roof structure for suspension of motor operated window washing basket rig.

Electrical system:

Predominantly incandescent lighting used throughout; fluorescent lighting incorporated at second floor for better illumination of first floor through open court. Dimmers used throughout job for lighting control. Electrically operated overhead rolling screen concealed above first floor lobby entrance for after hours closing. 35 foot width.

Elevators:

Two electric elevators, 3,000 lbs. capacity, 300 ft. per minute, speed; one hydraulic private elevator, 2,000 lbs. capacity, 150 feet per minute, speed.

Pneumatic tube system:

Four station, 4" round automatic pneumatic tube system interconnected throughout building. Separate pneumatic tube system installed for transfer of mortgage files from tellers' area to work room at second floor, 4" x 12" tube size.

Community Room, Third Floor:

Capacity: over 150 persons

heating, oil fired, system. The air conditioning facility also incorporated an air handling system with electrostatic air purifiers for maximum air cleaning.

Heating, cooling and other mechanical equipment is housed in the basement, along with lounges and locker rooms for employees. Elevator electrical equipment is housed in a penthouse on the roof.

Structural frame and foundations, bell-bottom caissons, have been sized for three additional floors. The basement is of reinforced concrete with longspan structural steel framing above grade.

The brick building on Third street which now serves as temporary quarters for First Federal will be demolished once the move to the new offices is complete. A 70-car paved parking area fronting on Marshall and Third streets will be constructed. Landscape will make use of honey locust and birch trees and numerous shrubs.

Officials of First Federal believe their new building, with its creative design in the current tradition of savings and loan association buildings, will provide an important anchor-point for the revitalization of the "north-of-Broad-street" area of downtown Richmond.

SUBCONTRACTORS

(Richmond firms unless otherwise noted)

K. F. Wilson, Hampton, demolition; Caisson Corporation, Niles, Ill., caissons; Sash, Door & Glass Corp., glass, glazing, aluminum window walls and doors, aluminum coping and column covers; S. H. Guza Co., mechanical work; Hammond Masonry Corp., Sandston, masonry; Ellison Bronze Co., Inc. through Hope's Windows, Inc., Arlington, Ellison Balanced Doors; Roanoke Engineering Sales Co., Inc., recessed overhead rolling grills, overhead coat-room rolling shutters; W. W. Moore & Sons, ele-

vators; Union Electric Co., Inc., electrical work; Richmond Steel Co., Inc., structural steel, miscellaneous metal, steel joists, slabform.

The Powers Regulator Co., Inc., Skokie, Ill., pneumatic tube system; Empire Granite Corp., marble, slate, ceramic tile, marble paving and floors; Grinnell Co., Inc., sprinkler system; J. A. Wilton, Jr., furring, lathing, plastering, fireproofing; W. Morton Northen & Co., Inc., resilient flooring and base; N. W. Martin & Bros., Inc., roofing, sheet metal, insulation, flashing; The Guaranteed Waterproofing Co., Greensboro, N. C., dampproofing, waterproofing; The Mosler Safe Co., Inc., Washington, D. C., night depository and record, vault doors; James C. Chancey, installation of reinforcing steel; Garrett & Co., excavation, etc.; Froehling & Robertson, Inc., testing; S. P. Terry, painting, finishing; Ezekiel & Weilman Co., Inc., kitchen equipment; Spider Staging Sales Co., Inc., West Conshohocken, Penna., window washing equipment; Talley Neon, exterior metal lettering, interior and exterior signs, "Hours Signs"; R. W. Askew Nurseries, Suffolk, landscaping; Southeastern Waterproofing Co., Inc., Charlotte, N. C., caulking, paving and marble.

SUPPLIERS

(Richmond firms unless otherwise noted)

Bethlehem Steel Co., reinforcing steel and mesh; J. A. Deatherage Stone Co., Inc., Greensboro, N. C., limestone; Southern Materials Co., Inc., ready mix concrete; J. S. Archer Co., hollow metal work, metal toilet compartments; Door Engineering, Norfolk, stainless steel doors and frames; Standard Fire Hose Company through Frederic J. Weiss Co., hose cabinets and fire extinguishers; Richmond Rubber Co., Inc., Arafé recessed cocoa mats; Suttle Equipment Corp., Chicago, directory rack; Tom Jones Hardware Co., Inc., finish hardware; Tidewater Audio-Visual Center, Norfolk, "Radiant" center, projection screen; Acoustics Development Corp., Park Ridge, Ill., Acousti-Call telephone booths; Ruffin & Payne, Inc., millwork; John E. Lingo & Son, Inc., Camden, N. J., flagpoles, flags; Noland Co., Inc., Newport News, toilet room accessories.

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Painting Contractors

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RICHMOND, VIRGINIA

Painting contractors for
National Guard Armory, page 26

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First Federal Savings & Loan Association, page 24.

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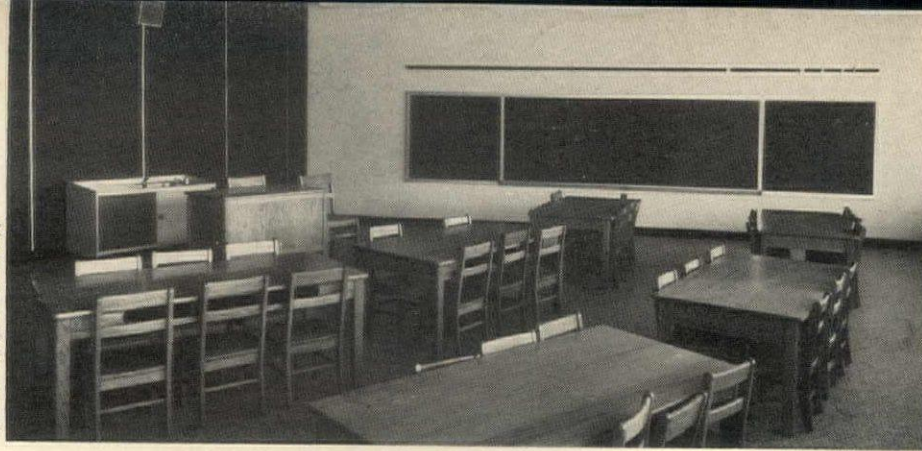
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Mechanical work for First Federal Savings & Loan
Association, page 24.



MOSBY SCHOOL (Continued from page 27)

lets. Insulrock roof deck, with ceilings omitted, is used in the gymnasium, shop areas and circular buildings.

Aluminum window wall systems using exposed aggregate precast concrete panels were selected for the large perimeters and areas involved. Interior masonry walls are generally of masonry block for paint finish in classrooms, shops and laboratories. Ceramic tile wainscots are applied in corridors, food service areas and toilets. There is limited use of structural glazed units and glazed brick. Flameproof plastic wall covering on Homasote board is used above lockers in corridors for colorful tackboard. Monolithic terrazzo is used throughout for floors.

The school is heated by two No. 6 oil-fired, hot water generators with gas ring for possible future gas firing. All classroom areas are heated with finned tube radiation with automatic valves and rooms thermostats for individual control. Ventilation is provided by exhaust fans located on the roof.

The auditorium, cafeteria, gymnasium, auxiliary gymnasium and library in the main building and the material centers in the three circular buildings are heated and ventilated by units that can handle 100 per cent outside air if the space conditions indicate that it is necessary. The administrative area is air conditioned.

Lighting is predominantly fluorescent, utilizing louvered fixtures in

classrooms and prismatic lens enclosed fixtures in corridors. A two-channel intercommunication system allows programs to be carried to all or any one or groups of selected rooms.

Total cost, including site, special earth work, site improvements, walks, driveways, site utilities, paved play areas, was \$2,658,994, amounting to a cost of approximately \$1,063 or 80 square feet per pupil.

SUBCONTRACTORS & SUPPLIERS

(All Richmond firms unless otherwise noted)

Aluminum Manufacturing Corp. of Va., aluminum trim, miscellaneous trim for window walls, door frames, transoms and sidelights; American Metal, Inc., Birmingham, Ala., hollow metal doors and frames; J. S. Archer Co., Modernfold partitions; G. C. Budd, excavation; Charlottesville Lumber Co., Inc., Charlottesville, millwork, wood doors; Davidson Southern, Inc., porcelain enamel; Dillard Paper Co. of Richmond, Inc., insulation, polyethylene; John G. Duggan & Co., lath, plaster; Drummond Metal Window Erector Corp., Tonawanda, N. Y., erection of window walls, precast concrete panels, aluminum windows and trim, aluminum door frames, sidelights, transoms; Economy Cast Stone Co., supplier of precast concrete panels; E. C. Ernst, Inc., electrical work.

Also, J. B. Eurell Co., furnish and install Insulrock on bulb tees for concrete slab; Liphart Steel Co., Inc., structural steel, miscellaneous metals and materials; Manson & Utley, Inc., caulking; Maple Floors, Inc., Charlotte, N. C., installation of wood flooring; N. W. Martin & Bros., Inc., roofing, sheet metal, waterproofing, skylights, cornerstone copper box; W. W. Nash & Sons, Inc., painting, wall covering, field spot steel; Natural Slate Blackboard Co., Pen Argyl, Penn., chalkboard, tackboards, trim; McL. T. O'Ferrall, acoustical ceiling, resilient flooring; Oliva & Lazzari, Inc., tile, marble, terrazzo, Alberene stone; J. H. Pence Co., erection of lockers and benches; Pittsburgh Plate Glass Co., glass, glazing; Pleasants Hardware, finishing hardware; Republic Steel Corp., wire mesh; Southern Materials Co., Inc., Norfolk, concrete; The Staley Co., Inc., aluminum windows; T. A. Talley, Jr. & Co., plumbing, heating, ventilating, air conditioning; Terminix Engineers, Termite control; Wm. E. Tucker, masonry, stone setting; Universal Window Cleaning Co., Inc., washing and cleaning all glass and aluminum.

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Suppliers of recessed mats for First Federal Savings & Loan Association, page 24



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- Ceramic tile and bath accessories for National Guard Armory, page 26

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page 26

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Painting contractor for
Union Hall Elementary School,
page 33

Huntington High School

(Continued from page 31)

Principal subcontractors and suppliers included Benson-Phillips Co., Inc., Newport News, concrete suppliers; M. D. Knox, Emporia, masonry; Richmond Steel Co., Inc., Richmond, steel, steel roof deck; Bethlehem Steel Co., Richmond, steel joist; Heath Roofing Co., Newport News, roofing; Economy Cast Stone Co., Richmond, stone work; Sash, Door & Glass Corp., Richmond, windows; Tom Jones Hardware, Richmond, hardware.

Also, Walker & Laberge Co., Inc., Norfolk, glazing; Shaw Paint & Wall Paper Co., Inc., Hampton, painting; A. D. Whitney Co., Inc., Richmond, lockers; Warner Moore & Co., Inc., Norfolk, gymnasium equipment; W. Morton Northen & Co., Inc., Richmond, acoustical, resilient tile; Pompei Tile Co., Inc., Newport News, ceramic tile, terrazzo; Hampton Roads Plastering Co., Inc., Norfolk, plaster; Ruffin & Payne, Inc., Richmond, millwork; Hall-Hodges Co., Inc., Norfolk, steel doors and bucks; Southside Electric Supply Co., Farmville, electrical work; Harris Heating & Plumbing Co., Inc., plumbing, heating, ventilating; Rich-Line Mfg. Co., Inc., Richmond, art room equipment.

CORRECTIONS FOR OUR JULY DIRECTORY OF VIRGINIA OFFICIALS

- COL. WILLARD G. PLENTL replaced COL. ALLAN C. PERKINSON as Director of the Division of Aeronautics of the State Corporation Commission, effective last December 31.
- COLEMAN BASKERVILLE replaced JAMES W. BREED, whose term expired June 30, 1964, on the State Board for the Examination and Certification of Architects, Professional Engineers and Land Surveyors.

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Painting contractor for
Huntington High School, page 31

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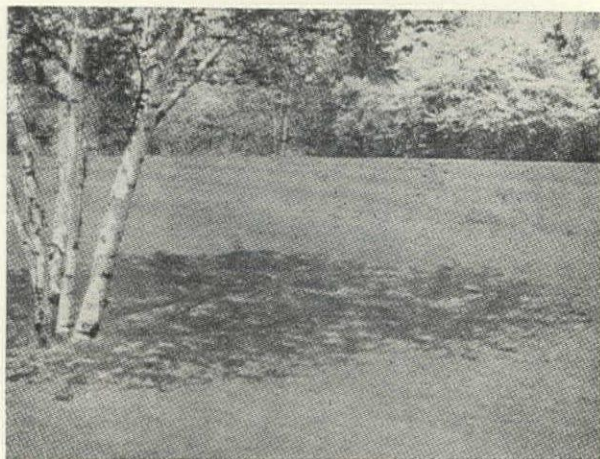
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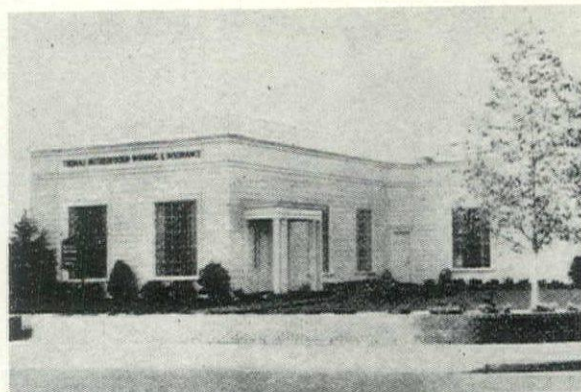
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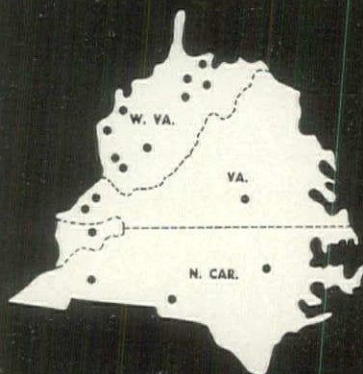
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(Continued from page 11)

H. Raymond Glover of Lynchburg, chairman, and Tom H. Lewis of McLean, Gordon Penick of Richmond, John M. Bratten of Norfolk and Jim White of Roanoke.

From such cooperation have come actions such as these:

(a) For years, the Department did not pay for excavations on standard bridges and standard culvert and drain-pipe operations, considering this a hidden cost item on the bid. Now the contractor gets paid for excavation on 36 inch or larger pipe and standard structures.

(b) There was a time when, if a contractor had a problem in building a bridge and needed a change of plans, he often would face a several weeks delay—keeping machinery, personnel and capital tied up, waiting—until the changes could be made and approved in Richmond and sent on to the field. Now, if there's a snag, the builder calls a Highway Department bridge engineer in Richmond. The engineers have standing instructions to proceed immediately, flying if necessary, to the project and iron out the problem on the spot.

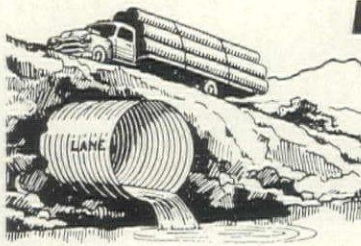
(c) At present, the Association's specifications committee is working to bring about mutual agreement as the Department of Highways rewrites specifications.

As laws and specifications and policies change, so do equipment and methods.

Seeing the massive pieces of equipment at work along the roads of today, it's hard to remember the primitive ways of doing things in years past.

The first blade grader was built in 1879 by Western-Wheeled Scraper Co. of Mt. Pleasant, Iowa. It consisted of a curved blade suspended beneath a conventional wagon box which held the huge hand levers necessary to raise or lower the blade. The power was furnished by four horses and three men. But even this was a vast improvement over the pick, shovel and wheelbarrow methods then in vogue.

Even 20 years ago one seldom saw an earthmoving scraper bigger than a few yards—now they're big enough to drive a truck into. The coming of more sophisticated machinery and equipment brought big changes throughout the road construction industry. Contractors had to employ skilled and semi-skilled workers to operate equipment. And it's been estimated nationally that there are



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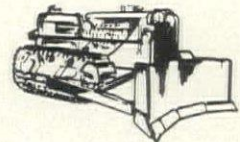
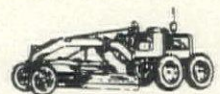
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five men behind the scenes for every man in the field—suppliers, maintenance men, engineers, bonding and finance men and the like. In Virginia, the ratio could run higher with construction industry employment set at about 12,000 directly and about 60,000 indirectly.

The cost of carrying on a highway construction business has increased too, says VRBA Engineer-Director Howard. "Fifteen or 20 years ago a contractor on a grading job could do a good, satisfactory job with equipment valued at one-fourth of the contract value. Now, it takes millions of dollars in equipment and sometimes the equipment is valued at more than the cost of the work. A contractor might have to have several jobs to pay for the equipment.

Efficiency and quality of work have gone up also, says Howard. Two decades ago a contractor worked on an anticipated profit margin of about 20 per cent. Now, because of increased competition and increased efficiency, the anticipated profit margin is two to five per cent. The contractor, says Howard, could afford to work less economically when he had a large profit margin but not now, and to the general good. "The public is getting more for its money now. Last year contract bids

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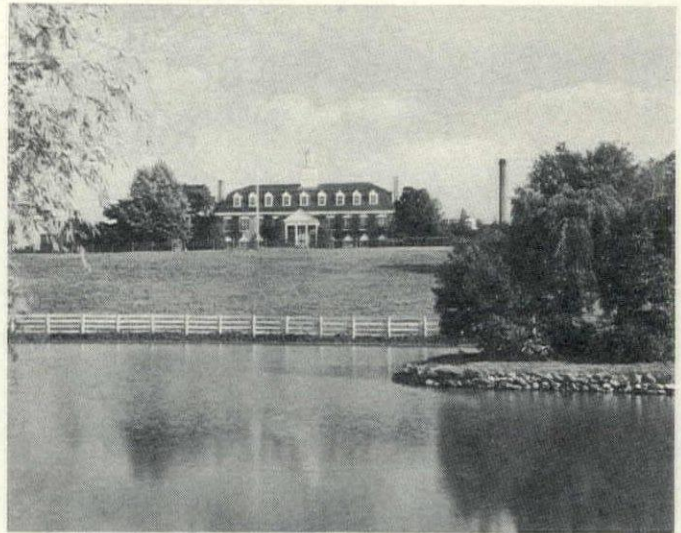
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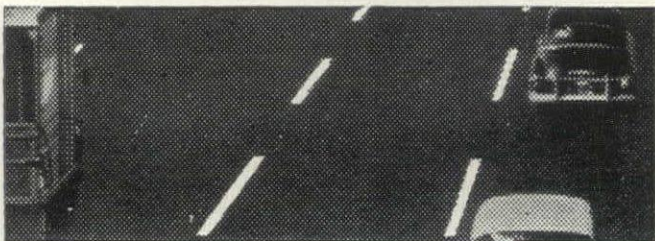
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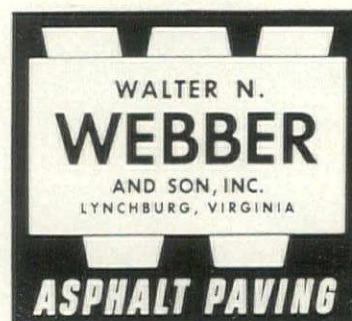
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were 17 per cent lower than the engineers' estimates," says Howard.

Competition, however, hasn't driven contractors from the fray, says the engineer-director. Instead the number of builders in Virginia has increased and the ones already in business have expanded. The Interstate Highway System and the more than one and a half billion dollars being spent on it in Virginia are the impetus to this industrial expansion. Construction on the 1,053-mile system being built with 90 per cent Federal funds and 10 per cent State funds is going on in addition to secondary, primary and urban road maintenance and replacement. When the system was launched in 1956, the construction industry was operating at less than 50 per cent—like many other industries across the nation, it was feeling the effects of the economic slump of the early 50's. Today, the employment situation is fairly stable and the outlook for continued stability at least for the next five or six years is good.

Wages, generally, have gone up too as a result of the Interstate System work. The U. S. Department of Labor sets wage rates for various crafts on the Interstate. The joint VRBA-Highway Department committee worked out a corresponding job classification for

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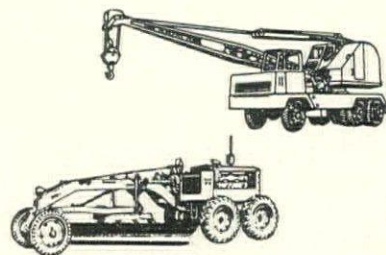
Interstate work in Virginia. This resulted in holding wages to a uniform level on Interstate projects and it has affected wages for work on secondary, primary roads and other work too.

While the Interstate Highway System is attracting much attention now, there were other projects and programs in the past, and still more planned for the future. And the history of the highway construction industry in Virginia really is the history of the State's roads.

Zooming along modern highways at 60 miles an hour, it's difficult to imagine a motorist's plight in 1920. By then, the automobile was becoming a definite part of everyday life. But cars, trucks and buses were struggling through mudbound highways inadequate even for the horse and buggy era of the turn of the century. There was no time for planning, much less building really good roads—cities and towns had to be linked and quickly.

The State did most of the linking with the newly-formed State Department of Highways building primary roads. Although Virginia had had a State Highway Commission since July 1, 1906, it did not get a Highway Department until 1918, just in time to qualify for the first Federal funds made available by the Federal Post

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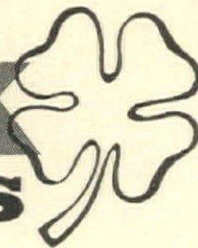
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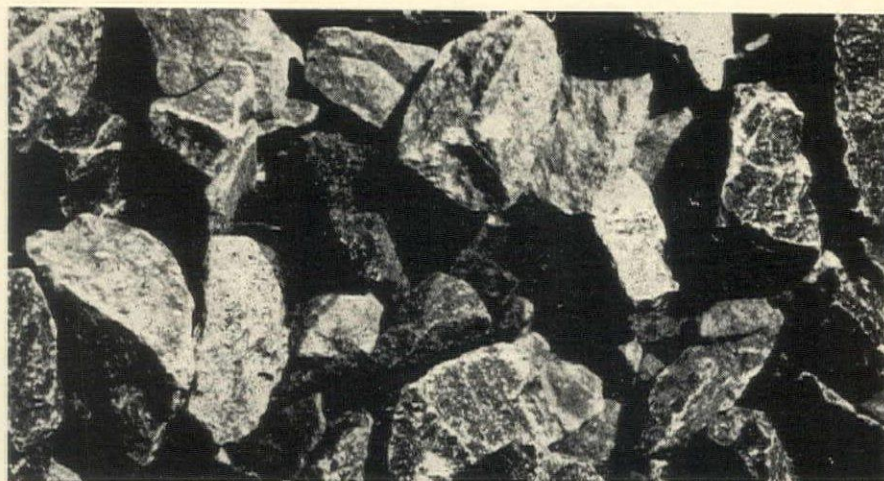
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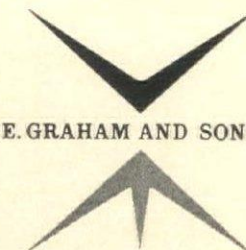
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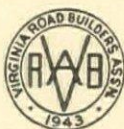
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Roads Act of 1912. Under this act, participating states had to have highway departments. The Old Dominion declared her intent to meet this qualification and, by so doing, was allowed to receive Federal funds for the years 1916-17. From then until 1932, there was a separation of road building authority in Virginia with the individual counties levying taxes to build and maintain secondary roads within their boundaries and the State operating the primary system. In 1932 the State took over most of the secondary system, admittedly in unequal state of repair or disrepair. This was during the Depression, some counties were and had been wealthier than others and the roads showed the inequality of this wealth. The State embarked on a program to get all the secondary roads in better shape and to continue the primary road building and maintenance programs. Then along came World War II and the emphasis was switched to roads with military priorities.

The State emerged from the war with a backlog of work, multiple problems, plenty of plans and a shortage of materials and funds.

In 1946, the first full postwar year, the *Virginia Road Builder* magazine carried an editorial of explanation and entreaty. It said, in effect: "Mr. Congressmen, please don't think Virginia contractors aren't interested in bidding on new projects and make this a basis for decreasing Federal road fund allocations to the state." It seems the winter of 1946 had been unusually severe and the Department of Highways had asked producers of aggregates to give it top priority to meet the needs of repairing the secondary roads. Contractors, having difficulty in obtaining materials, were not entering bids on projects. There was no animosity—everyone had his problems and there was understanding of the problems.

Besides, everyone knew there was plenty of work to be done when materials were more plentiful, with 9,230 miles of road in the primary system and 37,604 in the secondary. And everyone worked together to meet a goal set by the late Gen. J. A. Anderson, then State Highway Commissioner: "Not a school day lost due to mud during the winter, 1946-47."

Virtual assurance of future work came for the contractors in the form of a 20-year plan launched by the Department of Highways in 1945. This called for expenditure of nearly 662 million dollars on the secondary and primary highways. There was just one thing wrong with the plan—it was outdated in only 12 years when motor

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vehicle registrations and travel on the roads reached the peaks predicted for 1965. Now there are more up-to-date plans.

Since the first contract on the Interstate Highway System was awarded on May 4, 1957 (to Talbott-Marks Company, Inc. of Clarksville for \$1,-602,455 for 2.531 miles of road and five structures on a dual lane highway in Greenville County near Emporia), more than one-fourth of the program has been completed in Virginia. The Department of Highways hopes to put 150 million dollars more in work under contract before the end of this year and to have the entire project of 1,053 miles completed on schedule in 1972. There also will be a state-planned 1,600 mile arterial system of primary roads that will link most communities not served by the Interstate. Work on the arterial system already is in progress and should be completed by 1972 at a cost of 345 million dollars. The citizens of Virginia can be sure, too, that their highways are being engineered more and more for safety and scenic beauty, for everyone recognizes that unsafe roads are not wanted and that endless bands of concrete that gouge through hills and across flatlands are unsafe, unattractive and uneconomical.

How well Virginia's engineers and contractors are doing in their efforts to keep up and meet future highway needs can be told only in the years to come. Ethically, if things continue as now, Virginians can count themselves among the fortunate. "Virginia is singularly free of politics in its highway building. Highway Department people are given time off to vote but they aren't asked about their political affiliations," says VRBA Engineer-Director Howard. As for the contractors, VRBA members face suspension from the Association and disqualification in bidding by the Department of Highways for unethical dealings. "But at least 99 per cent of the contractors are trying to do a good, honest job."



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The award means that Thompson-Arthur has the best safety record in the nation's highway construction industry, an honor previously held by S. J. Groves & Sons, Inc. of Minneapolis with 888,-697 manhours without a disabling injury.

C. S. Shaw, Jr., Director of Industrial Relations for Thompson-Arthur said the company's safety record is still intact and has now passed 1.3 million manhours. The award was based on the period from January 9, 1963 to June 6 of this year.

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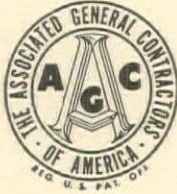
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Who Is A "Liberal"?

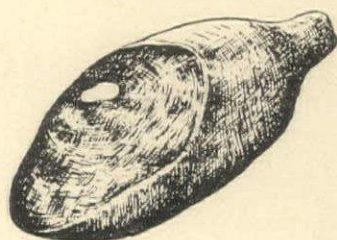
(Continued from page 5)

and after all they've given away too, but of course this could not be said. The purpose was to discredit the standard-bearer.

Now that is where the confusion became, for me, total. The liberal establishment has an awful lot of writers and a lot of good ones, and by a consistency of shading, of allusions, by delicate distortion and sly humor, they have succeeded in presenting Goldwater as a racist with a pointed head whose only pleasure in life is in dropping nuclear bombs on people. Also, Lyndon's handling of the racial violence in the North raised some doubt as to even his cleverness.

The Harlem and Rochester riots burst on him just as newspapers were carrying his speeches about his determination to use Federal force to control order. When he made his straight-faced turnabout by declaring that in the North local authorities could control order, he would seem to have exposed the expediency of his "liberal racial attitude" about as awkwardly as was possible. They tell me that his expertise in the use of "authority, manipulation and coercion" is a thing of

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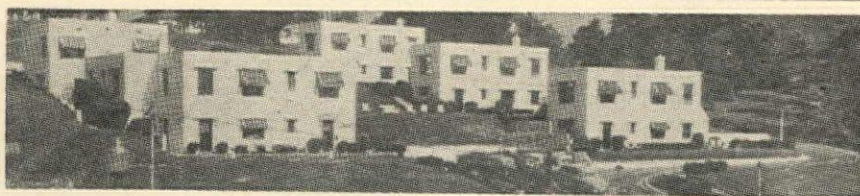
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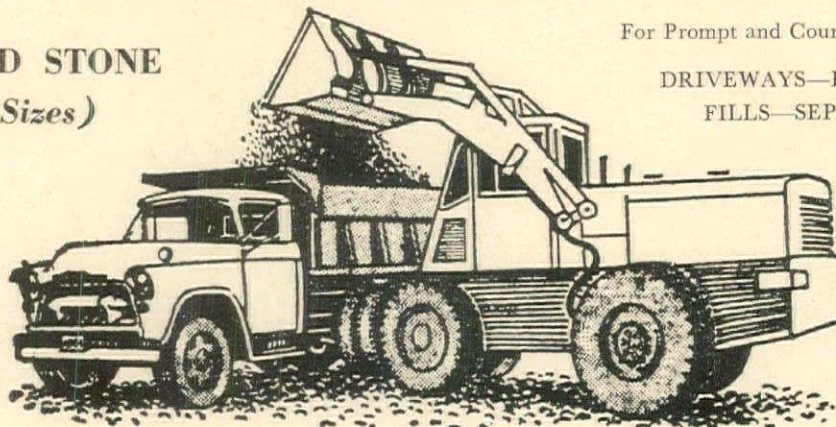
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wonder to behold in the private corners of Washington, but I suspect his larger intelligence when he believes the public to be equally malleable.

It is possible that the revolt against the current brand of liberalism—one of the most intolerant, superficial governments by coterie in the world's history—will be so strong that people will swing to Goldwater.

If they do, the boys who swing the vote will be the liberal writers: their splenetic bias will inevitably cause a reaction in favor of the object of their hatred. For they have grown so wise in their own conceit that, like Johnson, they seem to assume *all* the people are *totally* ignorant. As an example, it is a recorded fact that Goldwater opposed two measures in the civil rights bill on the grounds that they were unsound, unconstitutional means to a desirable end; but I have read 100 times that he opposed the civil rights bill, that he is against the Negro, that he is appealing to racists.

It seems to me that if they were convinced their liberalism truly served the country's good, the appeal would be a positive stand on their own virtues. But in their fear of the peoples' revolt they have lost their poise. Of course, they also might be frightened that someone will look at Johnson's voting record in the Senate and see just what kind of liberal he is. Just as New York keeps the lid on Harlem while pointing at Mississippi, they are keeping the lid on Lyndon and pointing at Goldwater as some kind of freak.

But, to paraphrase the old line of W. C. Fields, "No one who was hated that much by the liberals could be *all* bad."

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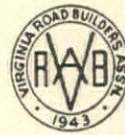
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