

The Constructor

Buildings Public Works Highways Railroads



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The National Publication of The Associated General Contractors
of America, Inc.

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Highlights in This Issue

• A.G.C. and Department of Commerce predict 20 to 22 billion dollar construction volume this year, with new construction estimated at 15 billions, a 50 per cent gain over 1946 new construction put-in-place. Private volume rising. Page 26.

• Limit of governmental approvals of non-residential construction is raised from \$35,000,000 to \$50,000,000 weekly as latest move in line with the new policy of relaxation of controls. Earlier moves in the new housing program as administered by Housing Expediter Frank B. Creedon, and FHA include inauguration of a permit system; discontinuance of priorities, ceiling prices and set-asides; and actions to encourage construction of rental housing. Page 39.

• Nation's economy reported in "healthy condition," reconversion troubles about over, and "full employment" essentially achieved, by John D. Small in his final report to the President on CPA's operations during past year. Mr. Small also reviews in detail construction activity since V-J Day and the history of the VEP-1 limitation order. Page 47.

• Indications on Capitol Hill when the 80th Congress convened this month were that labor legislation will have foremost consideration in earliest actions, although organization for real work may not be completed before early February. Senate committees have been named, but House is still unorganized. Some of most important legislation proposed which will affect the construction industry is that concerning portal-to-portal pay and a statute of limitations on suits for recovery under the Fair Labor Standards Act. Bills introduced by Congressman Gwyne and Senator Capehart reviewed. Page 33.

• The President's proclamation ending the period of hostilities of World War II as of December 31, 1946, terminated government powers under some 20 statutes immediately, and released flood control projects "consistent with budgetary requirements." Several statutes are listed. Page 30.

• An aggressive home construction program was one of five major policies laid down by the President in his message to Congress on the state of the union, in which he stressed rental housing and advocated some public housing. He proposed a broad program for reducing labor-management strife, dwelt briefly on development of natural resources. Page 35.

• Highway officials at Los Angeles convention recommend that Congress extend periods of availability of funds appropriated for highway construction, and that governmental controls restricting free manufacture, sale and distribution of construction equipment and machinery be removed. Speakers stress need for highway construction at as high a level as is consistent with availability of component resources. Page 51.

• In a move towards reduction of highway construction costs, the A.A.S.H.O.-A.G.C. Joint Cooperative Committee at its Los Angeles meeting recommended that both organizations at their conventions study unnecessary costs incurred in highway specifications. Higher pay for highway engineers also was urged. Page 52.

• H. E. Foreman, A.G.C. managing director, gives views of both the A.G.C. and the U. S. Chamber of Commerce on housing and governmental controls over the construction industry in general, before the Senate Small Business Committee. Page 49.

• Important decisions on taxes, contracts and other legal matters are reviewed in "Sidelights for Contractors," new column by John C. Hayes, legal advisor to The Constructor. Page 55.

• Reasons for highway construction in 1946 falling below expectations are given by Public Roads Commissioner Thomas H. MacDonald as labor and materials shortages, high bids and lack of adequate engineering personnel in state highway departments. Page 32.

• Graphic presentation of construction activity, employment, income payments and materials production as new regular feature supplementing the Constructograph shows trends of business. Page 62.

• Civil Aeronautics and Public Roads officials holding joint conferences to coordinate federal aid highway facilities with national airport plan. Page 44.

• Final article on new accounting system for contractors, by Guy M. Carson, comptroller of Tallman, Robbins & Co., Chicago, appears on page 42.

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Highlights in This Issue

• Strike weary nation welcomes A.G.C.-A.F.L. agreement as advance in industrial management-labor relations. Terms of agreement.

• Associated General Contractors of America, strongest in history, confirms the obligation of the construction industry to meet nation's requirements. Actions of 28th annual convention.

• Study of construction and business cycles reveals the significance of the industry as a component of general business. Strength of underlying construction situation viewed as a strong guarantee against a major depression in the period ahead.

• National Safety Council representative outlines steps to be taken by contractors in formulating a well-planned safety program.

• President recommends \$1,338,746,390 in appropriations for construction in federal budget for fiscal year 1948. Budget analyzed.

• CAA program for fiscal year 1947 calls for improvement or construction of 800 small airports. Final regulations announced.

• Non-residential construction approvals by CPA average only \$10,000,000 per week during first three weeks following limit increase to \$50,000,000.

• President's first economic report to Congress appraises importance of construction in the national economy. Regularization of public works expenditures advocated.

• H. E. Foreman, A.G.C. managing director, reviews association's work during 1946, reports A.G.C. is now equipped better than ever before to serve industry and the public.

• Striking aerial photographic story of Fort Gibson Dam project on Grand (Neosho) River, Oklahoma.

• Reserve of planned public works held inadequate in annual report of Federal Works Agency. Administrator seeks "timing" of public works.

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In This Issue

• Complete story of Associated General Contractors of America convention actions. New officers and directors.

• Current situation in highways, army and navy civil public works, heavy construction, housing and non-residential building anticipated 1947 volume, construction equipment, materials and labor. Addresses in full of outstanding A.G.C. convention speakers.

• A.G.C. protests low volume of non-residential construction approvals and requests increase in present weekly limit.

• Joint A.G.C.-A.A.S.H.O. Cooperative Committee studies highway problems of mutual concern to contractors and highway officials at sixth meeting in 12 months.

• OTC-CPA special report forecasts ample materials for 20-22 billion dollar construction volume.

• Position of housing program static as Congress begins study of housing legislation. Construction controls to be turned over to housing expediter when CPA activities wind up April 1.

• House-Senate battle on budget reductions continues after Congressional Joint Committee on the Legislative Budget recommends \$6,000,000,000 cut. A.G.C. president submits association views on public works.

• Effect on construction of portal-to-portal pay claims and administration of Fair Labor Standards Act presented by A.G.C. Managing Director H. E. Foreman in statement supporting Gwynne Bill.

• Associated Equipment Distributors' convention actions include endorsement of construction by contract.

• Largest inactive fleet berthing project at Green Cove Springs, Florida, boasts Navy's longest pier. How job was done in record time.

• U. S. Public Health Service issues regulations to govern construction under the federal aid Hospital Construction Act.

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In This Issue

• Have construction costs reached peak? Answers to a number of questions on the cost problem in poll of general contractors are summarized by F. W. Dodge Corporation. Housing Expediter Frank Creedon warns investors waiting for a break in costs that they will be "left waiting for a long time."

• Harry C. Bates, president of the Bricklayers, Masons and Plasterers' International Union, urges all subordinate unions to establish joint apprenticeship committees with their contractors. Interest in apprentice training rises among general contractors.

• Congressional committees begin work on tentative labor bills. Gwynne measure curbing portal pay suits and prohibiting court interpretations of compensable working time which is contrary to agreement or custom, remains deadlocked in conference.

• March preliminary figures show gain in construction volume over February, but still below January volume. Outlook for remainder of year uncertain. Business capital outlay remains high.

• Frank Creedon indicates improvements may be made in construction regulations and their administration after Civilian Production Administration controls are turned over to his office.

• Highway engineer says strong trade associations for contractors preferred method in attempting to attain large-scale economies for the construction industry.

• Hearings proceed on housing legislation. A.G.C. statement on Wolcott Bill presented to House committee.

• Fuller Company vice president tells story of remarkable renovation job on St. Patrick's Cathedral now nearing completion.

• Byrne Organization method of producing low-cost veterans' housing described in story of \$8,000,000 project near Baltimore.

• A.G.C. vice president discusses fundamental problems facing highway construction. Views on costs, public relations, engineer-contractor relations.

• Civil Aeronautics Administration requests Congressional authority to build or improve 306 large airports during next fiscal year. Construction items of interest to highway, airport and building contractors.

• After dipping seasonally, materials production again begins rise at start of 1947. Inventories of some products show increase trend.

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• How members of the Houston Chapter, Associated General Contractors of America, supplied manpower and equipment to stricken Texas City, Texas, certified 3,000 buildings as to safety of occupancy and worked as a unit for 10 days.

• Railroad investment in construction and equipment jumps significantly. Railroads and utilities plan large capital expenditures during remainder of 1947, while other business anticipates decline in latter part of year, according to government surveys.

• Chicago realtor plans "Magnificent Mile." Some capital already committed in plan for most modern downtown business mile in world.

• Commerce Department reduces forecast of 1947 construction activity after first quarter volume falls to meet original estimates. Contract volume declines, cost factor cited.

• Geographical distribution of total construction volume in United States show shift to West and Southwest since 1939. Sharpest decline registered in Middle Atlantic states, largest gain in Pacific states.

• Bureau of Reclamation officials say House bill appropriating funds 54 per cent below budget estimates will have drastic effect on construction.

• Gwynne Bill banning portal-to-portal pay suits printed in full. Agreed upon by both houses, the compromise measure awaits action by President Truman, veto possible.

• Tentative labor bills of House and Senate are compared.

• "American Miracle," a dramatic narrative of the part played in World War II by the construction industry, to be published June 2.

• Office of Education survey shows colleges and universities plan one and three-quarter billion-dollar expansion by 1950.

• Public Roads Administration to hold contract awards to 1946 price levels.

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• A.G.C. Governing and Advisory Boards issue comprehensive statement on construction cost situation after full three-day discussions at spring meeting in Seattle. Full report of board proceedings and report of Managing Director H. E. Foreman.

• Joint Cooperative Committee of A.G.C. and American Association of State Highway Officials study Public Roads Administration's new price policy. Full report and recommendations brought forth in discussion.

• States are in best financial condition in history according to survey of general, highway and post-war reserve funds conducted by Bureau of the Census.

• National Referee of Building and Construction Trades Department, American Federation of Labor, renders four decisions on jurisdictional disputes, first decisions since October 1945.

• Congressional subcommittee to make recommendations regarding issue of adequate protection of Panama Canal; sea level channel possibility.

• 30th Century Fund makes forecast of production in 1950-60 decade; construction to have big role.

• Army Engineers are conducting extensive research program in Arctic to solve problem of permafrost, nemesis of construction projects.

• Bill to make planning advances to local and state governments for public works a permanent federal obligation, introduced in House as War Mobilization and Reconversion Act of 1944 nears termination date.

• Termination of construction controls apparently in offing as conferees work out compromise on differences in Senate and House bills. Some relaxations in controls noted.

• Iowa has model apprenticeship program. First class of on-the-job trainees graduated.

• J. Warren Shoemaker, president, Warren Brothers Roads Co., makes suggestions regarding regulations for construction under the Federal Airport Act and Civil Aeronautics Administration's specimen contract.

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In This Issue

• List of more than 4,200 construction firms affiliated with The Associated General Contractors of America, alphabetically, and by states and chapters. Officers, staff and committees.

• Special section of articles by some of the leading men in the construction industry on how its various segments can cooperate in research and other activities to reduce costs and improve conditions in the industry.

• Modular coordination movement called greatest contribution to building technique in recent times. How modular masonry works, first of a series of articles.

• The structure and functions of the new Building Research Advisory Board which has been set up in the National Academy of Sciences.

• First of a series of articles on the important subject of labor relations in the construction industry, by J. D. Marshall, assistant managing director, The Associated General Contractors of America.

• Public Health Service survey shows \$7,834,581,000 worth of water supply and waste disposal facilities is needed to furnish an adequate healthy environment to the nation.

• Army board suggests mammoth transportation terminals for several cities, with Chicago as the hub.

• Newer, faster planes may force improvements on many runways in order to insure airline service. Budget request for federal aid airport funds cut in half, but chances are that unused money for some lagging small airport construction will be transferred to large airports in fiscal year 1948.

• Release of most construction from federal control July 1 gives industry green light. Remaining controls explained.

• Commissioner of Public Roads Thomas H. MacDonald reiterates PRA's stand against toll roads. Points out that a toll of one cent a mile is equivalent to a gasoline tax of 12 to 16 cents a gallon.

The CONSTRUCTOR

BUILDINGS HIGHWAYS AIRPORTS RAILROADS PUBLIC WORKS



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In This Issue

• Record flood control program is approved by Congress in closing days of session. Corps of Engineers receives \$415,000,000. Projects for which appropriations were made are listed by states.

• Water flows through Alva B. Adams tunnel, bringing water from Pacific side of Continental Divide to the Atlantic side in Colorado.

• An account of early days of railroading in the Northwest, by J. C. Morrison, who went to Minnesota in 1857, and worked with the companies which built the first railroads in that territory.

• A.G.C. president's appeal to engineers for cooperation in industry-wide movement to stabilize and reduce construction costs, made before summer meeting of American Society of Civil Engineers.

• How complications on the job can be reduced through the dimensional coordination of building products: second of a series of articles on modular coordination.

• A continued high level of business investment in industrial plant is called essential in midyear economic report of the President.

• The first month following removal of most federal controls on construction brought no extraordinary surge of new construction, but volume continued to increase while signs of stabilization in costs were evident. Results of A.G.C. nation-wide spot check on effects of decontrol.

• Western highway officials are urged by A.G.C. managing director to speed up highway program.

• National system of interstate highways receives final approval. Map of system is released.

• Summary of construction legislation enacted or debated by first session of 80th Congress.

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In This Issue

• Importance of contractors and employees working out joint problems amicably is subject of the second in a series of articles on labor relations by J. D. Marshall, assistant managing director, The Associated General Contractors of America.

• Private electric light and power companies plan unprecedented construction program to keep ahead of rising demand for services.

• Third and final article in a series on modular coordination by M. W. Adams, executive secretary, Modular Service Association, discusses working drawings.

• Industry Engineered Housing Program is announced by Producers' Council and National Retail Lumber Dealers Association as a way of reducing residential construction costs.

• Civil Aeronautics Administration plans construction or improvement of 908 airports in fiscal year ending June 30, 1948, at a cost of nearly \$137,000,000.

• While thousands of disabled war veterans have been successfully employed in construction and other industries since the end of the war, their employment still tends to lag.

• Bureau of Reclamation releases details of work schedules for fiscal year ending June 30, 1948. Rate of operation on projects is stepped up 30 per cent.

• A reduction in construction accident rates that has continued steadily for 15 years stopped short in 1946, according to National Safety Council, but rates are substantially below accident records of 1930's.

• "No more important work" for state highway officials than good public relations, Hal Hale, American Association of State Highway Officials, points out at annual meeting of Western Association of State Highway Officials.

• Amount of management ability and engineering skill involved in running a construction project with clock-like precision is basis for article by F. A. Nikirk, equipment advisor to Milton-Hale Machinery Co., Albany, N. Y.

• Better engineers are being developed and are receiving greater public recognition today, the Engineers Council for Professional Development reports, reviewing the association's first 15 years of activity.

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In This Issue

• A.G.C. Governing and Advisory Boards at Des Moines meeting study means of adapting construction to a domestic economy harried by international and national troubles; report higher costs and industry conditions to the public; endorse A.G.C. participation in Department of Army's Affiliation Program by sponsoring 100 construction units.

• Many other highlights of Des Moines meeting reported in detail: conferences on Taft-Hartley Act ramifications; Congressman Cunningham's proposed highway bill for continuing federal aid on permanent basis; increased emphasis on construction courses in colleges and universities; nomination of A.G.C. 1948 officers; managing director's report; the price contractors pay for insurance carriers' accident prevention services.

• Corps of Engineers and A.G.C. begin initial steps in creating 100 reserve construction units as "the backbone of the Engineer program" of affiliation. Ultimate strength would be 45,000 officers and men.

• Survey by A.G.C. shows heavy construction costs remain steady in many areas, but costs of building and highway construction continue slight upward trend.

• American Association of State Highway Officials recommends not less than half billion dollars annually for federal aid; A.A.S.H.O.-A.G.C. Joint Cooperative Committee recommends joint committees on state level; A.G.C. Vice President D. W. Winkelman reviews common objective of engineers and highway contractors; a practical analysis of the engineer's estimate from contractor's point of view is presented by Robert E. O'Connor, Fort Wayne, Ind.; Governor Thomas E. Dewey of New York cites need for good state highway systems.

• Congressional Committee on Housing schedules hearings in 17 cities between October 20 and November 7.

• Railroads granted temporary 10 per cent increase in freight rates pending outcome of Interstate Commerce Commission hearings on petition for increases ranging from 28 to 38 per cent. A.G.C. requests protection of construction contractors to extent of current contract commitments.

• One of the longest, single breakwaters in the world completed for Navy at big Guam base.

• Need for clear specifications, adequate pre-construction tests, and consideration for contractor cited in paper presented at fall meeting of American Society of Civil Engineers. Co-authors are Charles F. Loran, president, Northeastern Florida Chapter, A.G.C., and George B. Hills, both members of the A.S.C.E.

• Urban planning and development problems discussed at Business Men's Conference, U. S. Chamber of Commerce, Washington, D. C.

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In This Issue

• Only \$10,446,984 in airport contracts under the federal aid airport construction program had been let in the United States as of October 23, according to an A.G.C. survey. However, indications were that the program was speeding up. Lack of plans, specifications, other delays cited at annual convention of National Association of State Aviation Officials.

• First meeting of A.G.C.-N.A.S.A.O. Joint Co-operative Committee asks Civil Aeronautics Administration to revise current procedures in offering grants and awarding contracts, in order to eliminate delays.

• Domestic allocation and price control probably will be considered by special session of Congress for key materials required in the foreign aid program. Would have substantial effect on construction.

• Secretary of Commerce warns that certain materials, including construction items, will be drained from the domestic market in excessive amounts if federal export controls are not extended beyond their expiration date of February 28, 1948.

• Billion-dollar expansion and improvement program of steel industry to be completed next year will augment annual capacity by 2,500,000 tons in steel ingots and 3,000,000 tons in pig iron, says American Iron and Steel Institute. Steel's 1947 expansion sets record.

• Construction dollar volume continues contra-seasonal gain, materials production jumps. Commerce Department official sees upward trend for several months to come, less tendency for a major drop in costs. Federal Works Administrator forecasts \$3,700,000,000 public construction volume next year. Business plans for expenditures on plant and equipment this year revised upward again.

• Western Chapters Conference hits National Reclamation Association resolution asking removal of Bureau of Reclamation force account limitations.

• A.G.C. chapters and branches act to sponsor reserve construction units in Corps of Engineers affiliation program. How program works.

• Educators explain need for more emphasis on construction courses in engineering curricula of universities and colleges. How A.G.C. could help.

• Congressman Cunningham explains his bill to provide federal aid funds for long-range highway program, based on receipts from federal excise tax on gasoline.

• A.G.C. public relations program to be an integral part of association operations, will emphasize distribution through chapters and members. Results of survey to determine knowledge and recognition of the association.

• Corps of Engineers announces many revisions have been made in veterans' hospital plans and specifications, and a 30-day award clause designed to meet contractors' objections. Veterans' Administration begins designing 15 new hospitals to add to program.

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In This Issue

• Federal flood control expenditures of around \$400,000,000 are anticipated for next year by Representative Albert J. Engel of Michigan. A smaller construction program would "result not in economy but in increased cost," according to Mr. Engel, who is chairman of the House appropriations subcommittee for the War Department.

• President Truman presents Congress with a 10-point anti-inflation program and Secretary of Commerce Harriman follows up with a proposed bill which would give broad allocation and rationing powers to the administration. But Congress favors milder measures.

• Commerce Department estimates 1948 new construction at \$15,200,000,000 if no serious recession occurs. 1947 volume placed at \$12,665,000,000.

• Steel production high, and industry is in midst of great expansion, but no surplus steel seen for next year. Possible effects of Marshall plan, shipment breakdown by industries and production difficulties.

• Senator McCarthy speaks against public housing at Chamber of Commerce meeting. Industry problems, and actions of Construction Industry Advisory Council.

• Management's views on labor productivity in the construction industry, by Carl B. Jansen, chairman, A.G.C. Labor Relations Committee. Digest of labor's views by Richard Gray, A.F.L.

• A.G.C.-A.A.S.H.O. Joint Cooperative Committee at Miami meeting recommends long-range highway construction legislation, adequate pay and merit system for engineers, prequalification of contractors.

• New York State projects future highway needs in planning long-range program.

• CAA airport regulations undergoing revision. Some "red tape" to be cut out, expected to benefit airport project sponsors and contractors. Standard lengths and strengths set for runways.

• Materials production high, but unusual increase in building activity upsets lumber market. Breakdown of exports shows substantial amounts of construction materials still going overseas.

• Housing at peak, yet many groups still cooking up housing program broths. Story and editorial.

• Bureau of Budget investigating adequacy of construction statistics and methods. May recommend changes.

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An Engineering Approach to Safety

By Robert L. Moore

Staff Representative, Construction Section, National Safety Council

Reprinted from National Safety News, August 1946

To prevent accidents on any construction job, top management must recognize the importance of a sound and well-planned safety program. Such a program should incorporate the following important parts:

1. Analysis and planning of operations to minimize accident exposures.
2. Education in proper working methods.

3. Adequate medical service.

4. Statistical analyses of accident experience to determine results and guide future action.

Coincidental with the organization of safety work, the contractor must select the person in the organization to administer the program. Even though the operations of the average contractor may not warrant the employment of a

full time safety engineer, some person in the main office of the organization should be given the responsibility for carrying out the program. In addition, on every job one man should be in charge of and responsible for the safety program.

There should be a sound approach to the construction safety program and full use should be made of engineering principles. A great amount of safety is incorporated by engineers and architects when plans are being created for the finished building, bridge, highway or other structure. Similar planning must be done by the contractor, who builds the finished structure from the working drawings.

The previous two statements merely summarize well-known facts. To be totally effective, the construction safety program should embody all of the four parts mentioned and also there should be a detailed plan worked out for every phase of the program. Planning is important in every phase of building operations.

In typical engineering style, most contractors will make up an estimated progress chart with starting and completion dates as a guide on anticipated operations. In recent times, when labor and material shortages were of prime concern, there might have been a reluctance on the part of the contractor to attempt to predict progress on the job. However, the presence of these shortages should emphasize the importance of determining what progress schedule will be set up for the job.

Progress Charts

Various types of progress charts are used by contractors. When safety is integrated into construction job operations, a simple progress chart similar to the sample shown may be used. It will be interesting to note the addition of the column headed "Estimated Number of Men on Each Operation." This is an important addition to the "Estimated Progress Chart," and the use of this information will be explained later.

The progress chart will indicate the operations that will be started first. The listed number of men will give the estimated exposure over a definite period of time. By considering the operations in the order of their expected starting dates, an engineering study can be made



Planning is vitally important in every phase of building operations. No job is well planned unless it includes adequate protection at every stage of the work for workers and for the public.



of each operation to minimize accident exposures.

To be most effective, this study should be made in advance of each operation and the indicated precautionary measures should be incorporated into the planned method for the particular operation. Usually the safe way is the economical way and it is highly important that the best possible method be chosen for the present job rather than on the next job, which quite conceivably might never be done due to financial loss traceable to inaccuracies in operation and lack of planning on the first job.

Temporary Structures

An investigation for structural stability of all temporary job structures should be made. Scaffolds, ramps and runways should be checked to assure proper design so that there will be no collapse of any temporary structure. This assurance of stability should be obtained before the temporary structure is erected. Any indicated changes can be made on paper much more cheaply than after erection.

Another important item that should be considered on any job is the routing of traffic. Traffic flow, if not controlled, will be the source of many accidents. Whether the problem consists of the layout of haul roads on an airport or a dam, the layout of plant roads on any large project or the routing of trucks to and from a job in a large city, there is an engineering problem which should involve the proper layout of routes to eliminate, where possible, the crossing of moving equipment routes and of the crossing of paths of men and equipment. Parking areas and traffic control also require special study.

If hazardous conditions can be anticipated accurately, the contemplated plan for a particular operation can be reconsidered, incorporating the indicated precautionary measures. A thorough study of the progress chart and of the methods to be used in the contemplated opera-

tions will reveal hazardous conditions, which can be corrected or controlled. For instance, on many jobs a large fleet of dump trucks will be operated with a continual repair job on the fleet scheduled to be done at the job site. Recognition of the hazards in such an operation indicates a problem in the protection of men working under raised dump bodies, also the prevention of locking rings flying off of tires as they are being inflated.

This study will prompt management to control these hazards and they might choose to use some standard design such as is shown on the illustrated work-

ing drawings titled "Dump Truck Safety Block" and "Safety Tire Rack." These working drawings can be used to develop made-on-the-job safety devices. When the drawings carry approval of the top man on the job, foremen and workmen know that special consideration is being given to safety.

A further study of the progress chart will indicate whether pile driving operations will be carried on at the same time as the excavation and concrete work. A more detailed study will point toward any hazards that may be present and show where overlapping of operations may be the source of accidents.

Right—An estimated progress chart for each job, with starting and completing dates and number of men to be employed, is helpful in planning safe methods.

Below—Detailed instructions on methods and equipment correct many hazards. The diagram at the left shows details of a tire safety rack, and the one at the right a dump truck safety block.

PROGRESS CHART FOR YOUR JOB SHOULD BE FILLED OUT AS PER SAMPLE CHART

ENVELOPE SHOULD BE MAILED IN ADVANCE OF THE START OF ALL OPERATIONS SO THAT MATERIAL PERTAINING TO SAFETY ON EACH PHASE OF YOUR WORK CAN BE MAILED BEFORE THE START OF EACH OPERATION

IT IS IMPORTANT THAT AN ESTIMATE ON NUMBER OF MEN ON EACH OPERATION BE SHOWN IN COLUMN SO THAT REQUIRED AMOUNT OF SAFETY MATERIAL CAN BE SENT TO THE JOB

ITEM	MONTHS												MEN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
EXCAVATION													25
PILE DRIVING													13
CONCRETE WORK													30
BRICKWORK													20
STEEL BASH													10
CARPENTRY WORK													10
WELD IRON													10
GLASS GLAZING													10
DOORS SPECIAL													5
ELEVATORS													10
CATH & PLASTER													35
ROOFING													10
FLOORING-THEATER													10
PLUMBING													30
ELECTRICAL													25
HEATING-VENTILATION													40
SPRINKLERS													40
CLEAN-UP													15

COMPANY NAME: RABBIT SENSON INC.

JOB NAME: CADILLAC SEAVES BLDG. 2ND & 3RD FLOORS N. HULLER

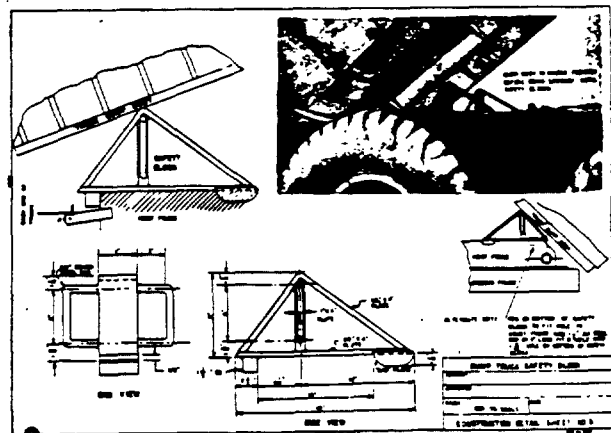
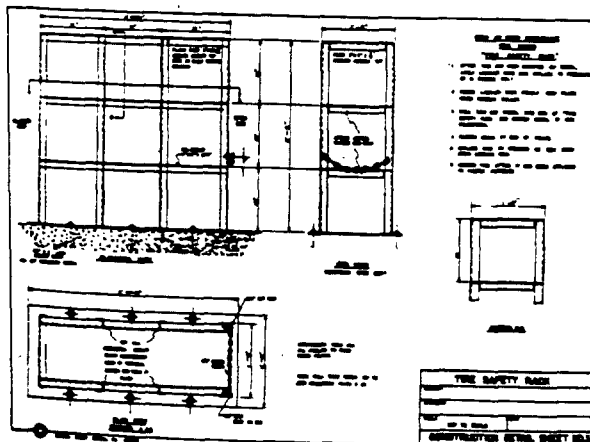
JOB ADDRESS: ONTARIO & BURNHAMPTON CHICAGO ILL. NO. 11 STATE ILLINOIS

JOB DESCRIPTION: 3 STORY SALES & SERVICE BLDG.

STARTING DATE: JAN. 1, 1946 COMPLETION DATE: DEC. 1, 1946

CONTRACT PRICE: \$1,200,000 ADDRESS MATERIAL ON: CONSTRUCTION SAFETY TO 424 ONTARIO ST.

NATIONAL SAFETY COUNCIL, INC. 10-741



Lack of storage space for materials may be the cause of accidents due to unusual material-handling problems and to the fact that normal routing of materials and equipment cannot take place. A real challenge is represented in the solution of a problem such as this.

Supervisory Interest

Management should create the interest and desire on the part of top supervisory personnel to tackle the analysis and planning of operations to minimize accident exposures. It should be emphasized again and again that the analysis and planning of operations definitely ties in with accident exposure. When this importance is realized, and when safety and efficiency become closely integrated on any job, a genuine interest in safety is built up at all levels of employment.

Up to this point emphasis has been placed on the analysis and planning of operations, but just as much attention should be given to education in proper working methods. After the various operations and hazardous conditions have been anticipated, steps should be taken to see that the construction foremen give detailed instructions on proper working methods. By having a well planned program, management can make available to the job project manager or superintendent certain informative materials which can be used by the foremen, who have the responsibility of training the workmen. As part of the education program, provision should be made for reaching the workmen through posters, handouts, payroll inserts, sound slidefilms and safety meetings. When the foreman is assisted to this extent it is reasonably certain that he can do a thorough job of training.

Facilities for the handling of first-aid cases on any job are important. These facilities might be a first aid kit on the small job, a portable first aid station on a medium sized job, or an infirmary on a large project. But whether the job be small or large, medical care is very important.

Accident statistics, when recorded accurately and studied carefully, will indicate to management if additional attention should be given to safety work within an operation, which might be shown to have a high frequency and severity. There will also be the indication that the frequency and severity are above or below the national average, or that within the construction firm itself one job has a better safety record than another of a similar type. Statistics serve as a measure of accomplishment and a guide to future action.

In the construction safety program, the common sense approach to the problem is one which embodies engineering principles.

Engineers Plan to Place 32 Veterans' Hospital Contracts

ARMY engineers expect to have 32 Veterans' Administration hospitals under contract for construction by June 30, 1947, the end of the fiscal year. This group includes five hospitals for which Veterans' Administration supplied plans and 27 for which the engineers selected architect-engineers.

Veterans' Administration to date has turned 63 hospitals over to the Army Engineers for construction. This is a large part of the \$770,000,000 construction program, involving 74 hospitals and 23 major additions. An additional 16 hospitals have been authorized but as yet no funds have been appropriated for their construction.

Two of the hospitals for which Veterans' Administration furnished the design, those in Providence, Rhode Island, and Sioux Falls, South Dakota, are now under construction. Of the other three, bids on the Peekskill, New York, and Grand Junction, Colorado, hospitals were held too high and attempts are being made to negotiate with the low bidders. Attempts to negotiate a contract for the Minot, North Dakota, hospital failed and the engineers are awaiting results on the Grand Junction negotiations before deciding whether or not to re-advertise for bids.

The only hospital handled exclusively by the Army Engineers on which a contract has been let is a 1,000-bed project at Buffalo, New York. This contract was for the substructure only. Ground was broken on the Buffalo site on January 14, with Lieutenant General Raymond A. Wheeler, Chief of Engineers, as principal speaker.

Following is the list of hospitals on which the Army Engineers expect to award construction contracts by June 30:

Manchester, New Hampshire, 150-bed general medical and surgical.

Albany, New York, 1000-beds, 800 general medical and surgical and 200 neuropsychiatric.

Buffalo, New York, 1000-beds, 800 general medical and surgical and 200 neuropsychiatric.

Fort Hamilton, New York, 1000-beds, 800 general medical and surgical and 200 neuropsychiatric.

Wilmington, Delaware, 300-bed general medical and surgical.

Newark, New Jersey, 1000-bed general medical and surgical.

Altoona, Pennsylvania, 200-bed general medical and surgical.

Erie, Pennsylvania, 200-bed general medical and surgical.

Wilkes-Barre, Pennsylvania, 475-bed general medical and surgical.

Beckley, West Virginia, 200-bed general medical and surgical.

Clarksburg, West Virginia, 200-bed general medical and surgical.

Tallahassee, Florida, 200-bed general medical and surgical.

Greenville, South Carolina, 200-bed general medical and surgical.

Grand Rapids, Michigan, 200-bed general medical and surgical.

Iron Mountain, Michigan, 200-bed general medical and surgical.

Decatur, Illinois, 250-bed general medical and surgical.

Fort Wayne, Indiana, 200-bed general medical and surgical.

Iowa City, Iowa, 500-bed general medical and surgical.

Duluth, Minnesota, 200-bed general medical and surgical.

Grand Island, Nebraska, 200-bed general medical and surgical.

Omaha, Nebraska, 200-bed general medical and surgical.

Poplar Bluff, Missouri, 200-bed general medical and surgical.

Big Spring, Texas, 250-bed general medical and surgical.

Bonham, Texas, 50-bed general medical and surgical and 300 dormitory beds.

Miles City, Montana, 100-bed general medical and surgical.

Klamath Falls, Oregon, 200-bed general medical and surgical.

Fresno, California, 250-bed general medical and surgical.

Providence, Rhode Island, 418-bed general medical and surgical.

Sioux Falls, South Dakota, 300-bed general medical and surgical.

Grand Junction, Colorado, 150-bed general medical and surgical.

Minot, North Dakota, 150-bed general medical and surgical.

Peekskill, New York, 1984-bed neuropsychiatric.

Safety Award to Contractor's Superintendent

C. A. BALDWIN, The Rust Engineering Co., has been presented a "General Manager's Safety Award" by E. I. du Pont de Nemours and Co. for his part in preventing lost-time accidents at DuPont's Sabine River Works. Mr. Baldwin is superintendent of Rust's contracting force at Sabine River, where a perfect safety record was maintained during a seven months' operating period.