

Engineering Team-Work Aids Rush Army Job at Camp Upton, N. Y.



Constructing Quartermaster and All of His Division Heads at Yaphank Cantonment Formerly Worked Together in Same Organization—Barracks Sides Built Flat and Raised to Place

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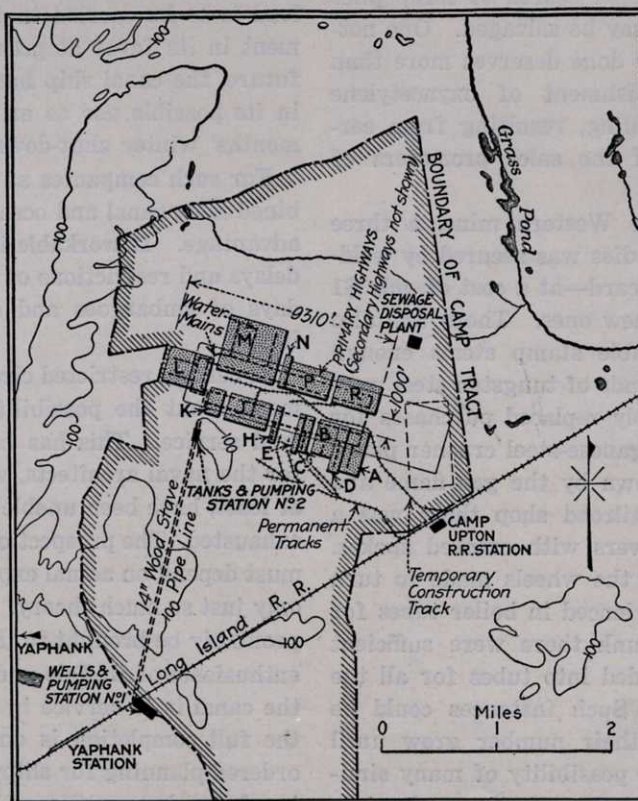
FOR Official Washington to put Yaphank, Long Island, "on the map" by naming it as the site for Camp Upton, one of the sixteen great cantonment cities for the National Army, was an extremely easy problem compared with that of putting this territory on the map, literally—a job upon which engineering and contracting forces, operating under the direction of the Quartermaster Department

of the U. S. Army, have been engaged since the contract was signed June 25. These men are at work filling the stupendous order of producing a complete city for 40,000 inhabitants in only a few months' time, and they had practically nothing to start with except an 11,000-acre tract of land so densely covered with underbrush, scrub oak and pine, as to prevent the running of even the roughest sort of survey line until advance parties had chopped sighting lanes through the thick foliage. In fact, local conditions have really created two big jobs at Camp Upton—the first, getting ready to build; the second, actual building. When I visited the camp early this month the preliminary stage of the great construction project had been about com-

pleted; the first permanent wooden barracks structure was put under roof Aug. 3, although a number of smaller temporary structures had been completed previously.

HOW WORK IS ORGANIZED

The organization of the engineering staff was the first task which confronted Major O'K. Myers; an engineer selected from civil life as Constructing Quartermaster to have supreme charge of the camp work. Prior to his entry into the Government service, Major Myers had seen extensive duty on New York City's Catskill Aqueduct, where the friends he made stood him in good stead in organizing the camp work. He arrived at Camp Upton—then a camp in name only—at 8 a. m., June 21, spent the day inspecting the site, and returned to New York that night to recruit an engineering staff capable of laying out and supervising construction operations involving the expenditure of several million dollars in only a few months' time. The fact that the first unit of the Catskill water system was completed recently was a fortunate one for the camp work on Long Island, for



OWING TO FLATNESS OF SITE IT WAS POSSIBLE TO GROUP BUILDINGS ACCORDING TO WAR DEPARTMENT'S STANDARD PLAN

it made available the services of experienced men from an organization which had won a national reputation for the excellence of its engineering personnel.

FIVE SUBDIVISIONS OF WORK

Major Myers' preliminary analysis of the construction problem indicated that it could be departmentalized under five main subdivisions, as follows: Executive, including inspection and valuation of materials and plant; buildings; sewers and sewage treatment; water supply; roads and surveys. A round-up of Major Myers' acquaintances produced men qualified by training and experience to assume at once charge of each department of the skeleton organization. D. W. Howes was chosen as the Constructing Quartermaster's deputy and given the title "Engineer of Construction." It is noteworthy that every department head has, at some time or other, been engaged in the Catskill Aqueduct construction. The accompanying chart shows the general scheme of organization.

With these men as a nucleus, the subordinate positions were quickly filled. The rush character of the work made it out of the question to go through the usual time-consuming process of civil-service examination. A man is hired on authorization from the Constructing Quartermaster. The camp work is not a training school for young engineers, and if a man cannot jump right into the work assigned him he is replaced by someone who can.

The important thing about the engineering organization at Camp Upton is its smooth-running quality—re-

markable in a brand-new machine. The resulting teamwork, however, is due to the fact that all of the department heads had worked together on the Aqueduct, and were schooled in a single system of administration and office and field routine.

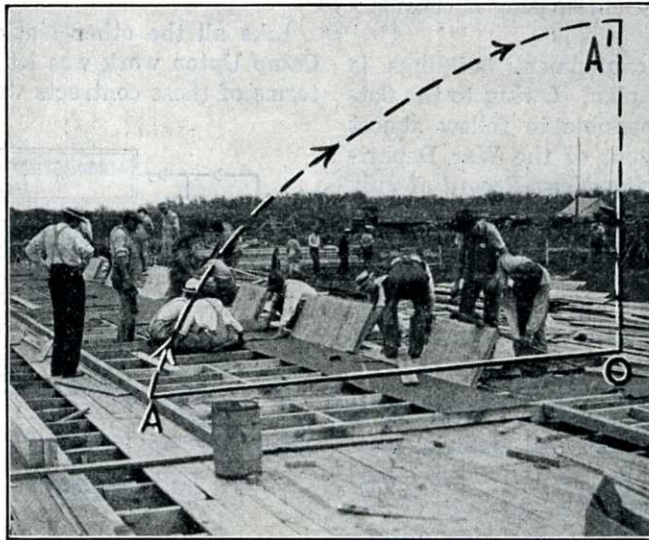
In addition to his regular staff, the Constructing Quartermaster is authorized to employ other engineers in consulting capacities. As the diagram shows, he receives the benefit of the advice of experts on water-supply and sewerage, heating, electric lighting, and roads.

The site of Camp Upton is along the backbone of Long Island, about 60 miles distant from the Pennsylvania R.R. terminal in New York City. It is about two miles north of the single-track line of the Long Island R.R., and is a comparatively flat area covered with a dense undergrowth of scrub oak and pine, which has made the work of preparing a topographical survey an extremely difficult and tedious task. The only

map of the territory available was one of the standard sheets of the U. S. Geological Survey, on which the 20-ft. contour intervals were not close enough to be of much practical value in arriving at a detailed location of the vast wooden city.

TOPOGRAPHICAL MAP THE FIRST NEED

Before work could be planned, therefore, it was necessary to secure a large-scale topographical map, and on June 23 the first field party, recruited in New York, had set out with equipment to secure the desired information. The general method of procedure was to mark up the area in 500-ft. squares, chop sighting lines



SIDES OF BARRACKS ARE FRAMED AND SHEATHED WHILE LYING FLAT ON FINISHED FLOOR AND THEN—



ALL HANDS RAISE THE FINISHED WALL INTO A VERTICAL POSITION—THIS SCHEME OF CONSTRUCTION ELIMINATES ALL SCAFFOLDING

