

We thought that, if we were going to do so, this engineering talent should be brought to bear in the very early stages of the design.

As a result of this thinking, we recommended to the Chief of Engineers that we be allowed to let some contracts on overall studies to outside industry. We did not feel we should depend on one contractor only, and we recommended that we be allowed to let more than one contract. This recommendation was approved.

As a result of that approval we let the two contracts under discussion, that is, to Food Machinery & Chemical Corp., and Jered Industries.

In setting out the scope of this work we tried to list everything that we could think of that we wanted these people to investigate. In other words, these were specific things that they must look into, and we emphasized to these people many times that the sky was the limit so far as their investigation was concerned, that anything that they could design or invent would be satisfactory with us so long as it was practical and could be used.

We made it very plain to them that we did not want a lot of so-called harebrained ideas which would be of no practical value to us and which we could not incorporate in our final design.

After these contracts were let, we decided that it would not be a good idea for these contractors to go home and work for 4 months, which was the period the contracts were to run, and come back with the same layout we had worked out here.

We had been working on this job for some months now, and had many drawings quite well along. So we decided to show the contractors everything that we had done so they would know as much as possible about the job before starting their work.

We emphasized to them that they were acting as consulting engineers to us and we expected them to come up with recommendations at the end of these studies as to exactly the type of structures we should use, the arrangement of the machinery, the type of drive line, the type of suspension, the type of water propulsion system, and every other item involved.

Now, that, sir, I think is the statement which will give you the reason why we thought we should let contracts to outside firms to make sure that we had not missed the boat, because this is to be an extremely costly job, and I suppose that we might assume that when completed and adopted that based on military bridges we have bought in the past that we can expect a minimum of probably \$100 million will be involved in procurement of such equipment.

Mr. HARDY. Well, you gave them all the design work that you had done; you made that available to them.

Mr. MULLINS. We showed them everything that we had worked out.

Mr. HARDY. And they came back and said, OK, boys, you did a good job, that is what you ought to go ahead with.

Mr. MULLINS. Not exactly. We got very extensive reports and also this is the type of report, Mr. Hardy, that we got.

Mr. HARDY. Which one is that, Food Machinery?

Mr. MULLINS. Yes.

Mr. HARDY. You said \$116,000 for that.