Mr. CARPENTER. This is due to the holding time, the capacity to hold

the sewage to allow the biological process?

Mr. BARNHILL. Essentially that is correct, but it goes back to this problem of available space at the present time. The 22 acres is only large enough at this time for them to be able to construct what we call a full primary treatment facility.

Mr. CARPENTER. That removes the floating, suspended, and settle-

able material?

Mr. Barnhill. That is correct. And a modified activated sludge process, as a secondary treatment.

Mr. CARPENTER. What will be the initial percent removal, then?

Mr. BARNHILL. Seventy percent.

Now the city, since this plant was designed, has acquired an additional 2.8 acres of land on which they propose to extend the secondary treatment facilities. When this work is completed at design capacity, it will remove 70 percent of the BOD. Again in the initial years of the expanded facility it will go higher than that.

Mr. Carpenter. Tell me what percent of the BOD of the raw sewage

is removed by the primary treatment alone?

Mr. BARNHILL. Normally that will run, depending on the individual sewage, 40 to 60 percent removal BOD.

Mr. CARPENTER. And the secondary treatment then adds another 10 percent, with the capacity which they will have?

Mr. BARNHILL. Well, it adds another 10 to 30 percent, depending on what you achieve in the primary treatment.

Mr. Felton. When will the secondary treatment be completed?

Mr. Barnhill. You mean the extended treatment works?

Mr. Felton. Yes.

Mr. Barnhill. I don't know.

This, of course, has to deal with what they have to clear off, the 2.8

acres they have acquired and so forth.

Mr. Felton. Is it just a question of building it? In other words, do they plan to start in 1975, or is it just a question of how soon they can build it?

Mr. BARNHILL. Well, I think it is a question of how soon they proceed to build it. I don't believe they have designed the additions to the secondary treatment facilities yet. It is my understanding they have

only recently acquired this 2.8 acres.

Now the city has also initiated administrative procedures to acquire another 4.9 acres on which they propose to further extend the secondary treatment facilities. This will provide them with enough facilities to remove 90 percent of the BOD at design capacity. This will meet the water quality standards requirements and enforcement conference recommendations that the Secretary made.

Mr. Moore. I think—if I may interrupt at this point—that this is important, that this is a staged construction process. It would be staged in any event. That is, the normal procedure to construct first a primary plant, and then a secondary plant—then the secondary plant extension, so to speak. It is also important, I think, to understand the significance of this land acquisition question. With 22 acres available now and then 2.8 that has been acquired since this plant was designed, and then the process for acquiring another 4.9 acres, you would then have a plant that would remove 90 percent of the BOD.