

SWIMMING POOL OPERATION

I. To Backwash

Shut off chlorinator
Shut off pump motor
Open 1 (drain)
Close 4 (from pool)
Close 6 (into pool)
Open 5 (into filter)
Open 3 (from main) Use 3 to control water washing filter;
Open slowly and close slowly.
Run until water is clear

II. To Filter

Close 5
Close 1
Open 6
Open 3
Start pump motor and open 4 slowly
To chlorinate, see VI

III. To add Heat -- (Maintain pool temperature at 78°)

Start filter circulation as in II
Open 4 (steam)

IV. To add Water -- (Maintain pool level at one brick below blue line for beginners, and at level of rail for competition)

Stop pump - close No. 4 valve
Open 6
Close 3
Open 5

V. To lower Water

Open large valve in bottom of pit

VI. To Chlorinate

Start filter circulation as in II
Open chlorinator gas tank valve
Open water valve to 40 pounds pressure
Be sure that lighted lamp is next to mixing chamber
Be sure that water in middle tube is up to line

VII. To shut off system

Close chlorine tank valve
Shut off chlorinator water
Close 4
Shut off pump motor

VIII. In Case of

Electrical trouble, call K.U. 59, ask for Mr. Firner
Plumbing trouble, call K.U. 70, ask for Mr. Eberhart
Emergency, call K.U. 6, ask for Mr. Bayles

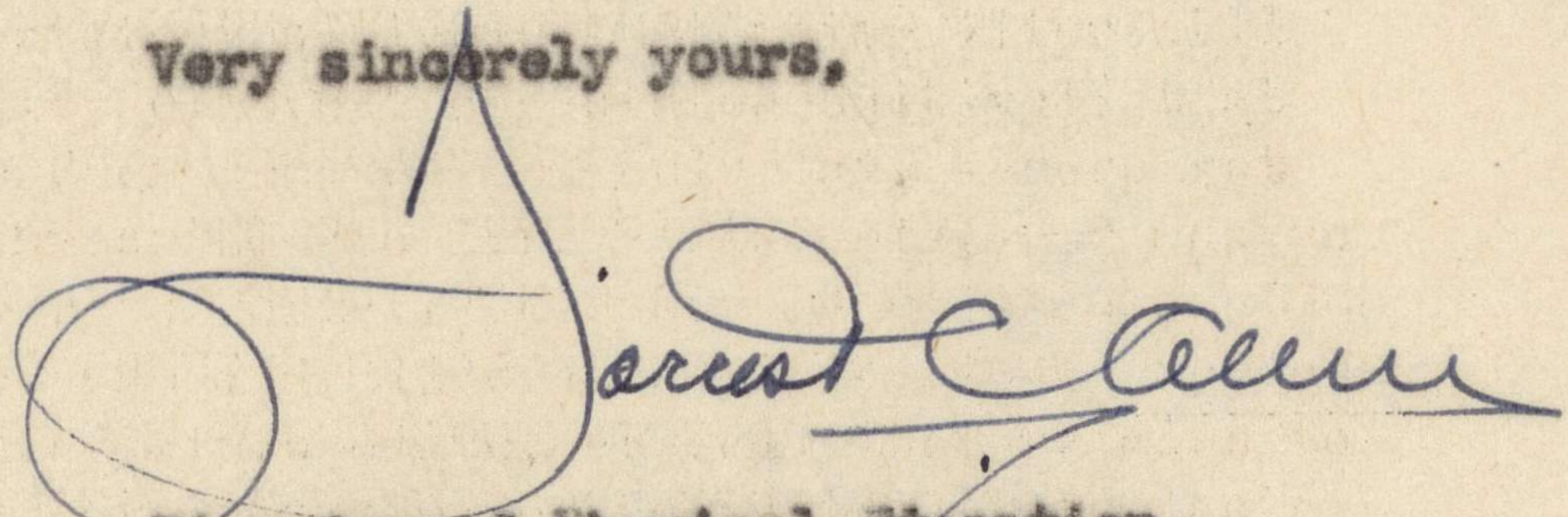
June 30, 1943.

To The Budget Committee:

We are making perhaps our last progress report on the swimming pool filter. The enclosed letter from Mr. H. W. Branchfield, of the E. W. Bacharach Company, is self-explanatory.

It has been a long pull, but I believe we will have it ready for our V-12 people without any difficulty. We are also making arrangements for the Machinists' Mates and the Naval Aviation Cadets to use the pool, consistent with their schedule.

Very sincerely yours,



Director of Physical Education,
Varsity Basketball Coach.

FCA:h
Enc.

C O P Y

E. W. BACHARACH & CO.
Kansas City, Missouri

June 29, 1943

Dr. Forrest C. Allen,
Department of Physical Education,
University of Kansas,
Lawrence, Kansas.

Dear Sir:

Answering your request for a progress report on the swimming pool filter, after making a thorough inspection of the under-drain system of this filter the writer finds that it is a lateral system of small pipes imbedded in concrete.

Due to the many years of service this tank would not stand the terrific hammering necessary to remove this under-drain. For this reason we must use extreme caution in retapping the under-drain system for new strainers. This is necessary and takes much more time than if the tank were in good condition. This tank could not possibly be replaced at this time, and should anything happen to it, it would be impossible to operate the swimming pool.

For this reason we are taking the time necessary to be cautious and put the tank in an operating condition for you through this emergency. I could not state positively that this filter will be operating by July 1st, but I believe I can state positively that it will be operating by the end of the week of July 1st. We regret that the conditions make it impossible to hurry this work, and assure you that we will put forth every effort to get your plant in operation as soon as possible. The new pump and all of the piping to be replaced have been installed and are ready to operate, and all that remains to be done is replacing the under-drain system. The matter of replacing sand and gravel will take less than half a day.

Trusting that this answers what you wish to know, I am

Cordially yours,

(Signed). H. W. BRANCHFIELD

July 2, 1943.

Lieut. Commander Webb B. Key,
University of Kansas.

Dear Dr. Key:

I checked up on why you have not been getting reports from the Division of Sanitation regarding our swimming pool. The filter has been undergoing repairs since May 26, hence there have been no inspections since that date. This perhaps explains the absence of reports coming to you.

With kindest regards, I am

Very sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

July 2, 1943.

Miss Cassandra Ritter,
Division of Sanitation,
University of Kansas.

Dear Miss Ritter:

I would appreciate it if you would send a copy of the reports on the swimming pool analyses to Lieut. C. A. Mickelman, of the V-12 program. This is a military request as the students in his program will be using the pool.

Sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

June 25, 1943.

To The Budget Committee:

I desire to make a further report on the progress being made on our swimming pool.

Mr. Branchfield, the steamfitter for the E. W. Bacharach Company, arrived late Tuesday afternoon. He looked over the situation, assembled his tools, and secured some men to help him. Work was started on Wednesday of this week, and we have confidence that the job will be finished by the first of July.

Sincerely yours,

FCA:AH

Director of Physical Education,
Varsity Basketball Coach.

June 22, 1943.

Mr. Harold Eberhart,
Plumber Foreman,
Buildings and Grounds,
University of Kansas.

Dear Mr. Eberhart:

This will introduce Mr. Branchfield, of the E. W. Bacharach Company of Kansas City, who is here to repair the filter for our swimming pool.

Mr. Branchfield would like to talk to you about some tools. I will appreciate any courtesies you may extend to him.

Sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

June 18, 1943.

Col. Washington, Commandant,
Reserve Officers Training Corps,
University of Kansas.

Dear Colonel Washington:

I desire to give you some information regarding the work that is being done on the swimming pool in Robinson Gymnasium.

In April we had Mr. Joseph Gyulay, Jr., of the Wallace & Tiernan Corporation, Kansas City, Mo., come to Lawrence and inspect our chlorinator. He went over the Chlorinator very thoroughly, made certain repairs and replacements, and put it in first class condition.

We then contacted the E. W. Bacharach Water Purification Company of Kansas City, and asked them to send us a representative of their company to look over our filter and make recommendations for repairs. Mr. A. W. Livingston, of the E. W. Bacharach Company, made the inspection, and he impressed me as a man who certainly knows his business. Upon Mr. Livingston's recommendation we emptied the filter of all sand, rock and gravel, and we have a contract with his company to replace the filter sand and gravel, bushings and strainers, as well as the installation of a new recirculating pump and motor.

At the present moment we are expecting Mr. Livingston and his steamfitter to begin work on revamping the filter. All of the materials are here, but doubtless the high water between here and Kansas City have delayed them in reaching Lawrence. We had expected the steamfitter in May, as soon as he finished up a job in Texas, but he was stricken with an acute attack of appendicitis and was operated. Then Mr. Livingston was called to Utah, and upon his return had to secure another steamfitter. He called me by phone last Monday evening and said that he and his man would be here this morning (Friday) to begin work on the filter and the installation of the recirculating pump.

We have every confidence that all repairs will be made and that our filter and recirculating system will be in first class condition before July 1.

I trust this will give you the information you desire.

Sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

June 16, 1943.

To the Budget Committee:

Mr. A. W. Livingston, of the E. W. Bacharach Company of Kansas City, called Monday night stating that he would be on the job with his plumber Friday morning. All the material and equipment is here, and if we have fairly good luck we should be finished with the swimming pool repairs the last of this week or the first of next.

It has been a long discouraging drag, but I believe that we will have everything in good shape certainly before July 1st.

Very cordially yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

June 3, 1943.

Mr. A. W. Livingston,
E. W. Bacharach & Co.,
Rialto Building,
Kansas City, Mo.

Dear Mr. Livingston:

Right after I finished talking with you over the phone this afternoon the pipe and valves that you mentioned were delivered to us at the gymnasium. I thought you might like to know this.

Very sincerely yours,

FCA:AH

Director of Physical Education,
Varsity Basketball Coach.

June 3, 1943.

The Budget Committee,
University of Kansas.

Gentlemen:

Not having heard from Mr. Livingston, of the Bacharach Company, I called him this afternoon and learned some bad news. The Oklahoma man who was expected here the fore part of this week was stricken with appendicitis and was operated, so he is out of the picture. They now have a man in Texas who is having trouble with a motor. If they can release him they will bring him on.

Mr. Livingston is flying to Salt Lake City tomorrow but he will be back the first of the week and he gives me his promise that this job is very definitely on his mind and heart.

I did learn some good news, however; that the pump that we thought might take two months to procure, under the AA-1 priority rating was secured by Mr. Livingston from a pump man who accepted this priority. He diverted this pump from another shipment. So when we do get fixed up we may get the whole job done at one time.

This is very discouraging, but we know of nothing else we can do, only to be reasonable yet put on the pressure in every possible way.

Sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:h

May 28, 1943.

Slater Tile and Marble Co.,
2514 Summit St.,
Kansas City, Mo.

Dear Sirs:

We have about 1275 broken tile in our swimming pool which we desire replaced. There is a seepage of about five thousand gallons of water a day from this pool and we desire to correct the leakages.

Would it be possible to have one of your men look at our pool and offer a bid on the same?

The pool is used by the Navy and other service people quartered here at the gymnasium and if there are priorities needed I am sure that we can get one.

Let us know ahead of time when your man is coming so that we can meet him.

Sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

May 28, 1943.

Kansas City Tile and Mantel Co.,
1008 Oak Street,
Kansas City, Mo.

Attention: Mr. Henry Ashley.

Dear Heinie:

We have about 1275 broken tile in our swimming pool which we desire replaced. There is a seepage of about five thousand gallons of water a day from this pool and we desire to correct the leakages.

Would it be possible to have one of your men look at our pool and offer a bid on the same?

The pool is used by the Navy and other service people quartered here at the gymnasium and if there are priorities needed I am sure that we can get one.

Let us know ahead of time when your man is coming so that we can meet him.

Sincerely yours,

FCA:AH

Director of Physical Education,
Varsity Basketball Coach.

May 28, 1943.

Kansas City Marble and Tile Co.,
3030 Wyoming St.,
Kansas City, Mo.

Dear Sirs:

We have about 1275 broken tile in our swimming pool which we desire replaced. There is a seepage of about five thousand gallons of water a day from this pool and we desire to correct the leakages.

Would it be possible to have one of your men look at our pool and offer a bid on the same?

The pool is used by the Navy and other service people quartered here at the gymnasium and if there are priorities needed I am sure that we can get one.

Let us know ahead of time when your man is coming so that we can meet him.

Sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

May 27, 1943.

Dean E. B. Stouffer
Dean P. B. Lawson
Dean F. J. Moreau
Dean J. W. Twente
Mr. Raymond Nichols

Gentlemen:

I am making the fifth progress report on the swimming pool.

The gravel and sand for the swimming pool filter have just arrived this afternoon. It is stored in sacks piled at the southeast corner back of the gymnasium. I talked to Mr. A. W. Livingston, of the Bacharach Company, and he states that he will have their plumber here about the middle of next week. So we should get the pool in operation before the end of the week.

We have also obtained an AA-1 priority rating on the pump, and as soon as the Business Office sends the order to Kansas City the pump will be ordered. We are using all possible haste in getting this very necessary project through. The pump, of course, will come much later, as the shipments are slow on this material, but we can handle a usual load without the pump. But after the Navy engineers and others come to overload the pool, then the new pump will be a necessity. However, the pool will be in good shape with proper chlorination with our normal load.

Very cordially yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

May 15, 1943.

To the Budget Committee:

Mr. A. W. Livingston, chief engineer for E. W. Bacharach & Company of Kansas City, Missouri, after making a final inspection of the swimming pool filter and recirculating system in our gymnasium, has offered the suggestions in his letter of May 14. A carbon copy of the same is attached, for your observation.

After removing the filter, rock and gravel from the mammoth steel drum, Mr. Livingston recommends a replacement of 100 brass bushings and 100 Type S strainers, together with 2100 pounds of filter gravel and 4200 pounds of Blue Diamond filter sand. The total is \$107.00. This sand and gravel come from Red Wing, Minnesota, and it is apparently the only sharp-grained sand that will do the job. This material is necessary to get the filter functioning for our Summer School program. This is a "must", and it is listed as an emergency. I am therefore sending a requisition through the Business Office for this needed material.

You will see by Mr. Livingston's letter that his total bid is \$847.00, including the item of \$107.00 for sand and so forth. Therefore, I would like to recommend to the Budget Committee that we ask Mr. Livingston to go ahead with the recirculating pump and motor and the other additional items that he mentions in his letter. The other items would amount to \$740.00. This includes the labor of installation, plumbers, and material and all equipment. This is a bid to complete the job.

I asked Mr. Livingston for the address of some tile and marble people so that we could get bids on the possible installation of the 1275 tile to replace the broken ones. Of course this would be an additional expenditure and rather a heavy one. I am going ahead and asking that these various firms submit bids for the replacement of these tile and I will submit that to you at an early date. I called attention to the heavy expense to the University through the leakage of five thousand gallons a day due to faulty tile.

Very cordially yours,

Director of Physical Education,
Varsity ^Basketball ^Coach.

May 10, 1945.

Dean E. B. Stouffer
Dean P. B. Lawson
Dean F. J. Moreau
Dean J. W. Twente
Mr. Raymond Nichols

Third Progress Report to Budget Committee

Gentlemen:

I desire to keep you informed on the progress we are making with regard to the swimming pool.

Mr. Eberhart, the plumber, does not have the personnel to empty the filter, so we have made arrangements with Mr. Dell Davidson to take out all the sand, gravel and rock, and wash it.

We have just received a letter from Mr. A. W. Livingston, of the water purification plant in Kansas City, stating that just as soon as the filter is cleaned out he will come and make the inspection. We of course had to wait until final examinations began before we could empty the filter. Mr. Livingston should be able to make his inspection this week. After he has done this I will be able to give you his estimate on the filter changes that are necessary.

Mr. Livingston states that the pump we have is entirely inadequate as it does not change the water rapidly enough for the load we now have on the pool. Therefore, apparently we will be forced to buy a new pump.

Sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

1 - 60 gallon per minute centrifugal pump, motor
and starter. Total head 45 feet.
Cast iron case, bronze impeller.
2 Horsepower, 1725 R.P.M. standard motor.
Pump inlet 2", pump discharge 1-1/2".
Standard magnetic starter.

Price pump, motor & starter \$255.00.

1 - 3" McAlear #528 suction & pressure hair & lint
catcher. Standard flanged cast iron body.
125# working pressure.
Strainer constructed of bronze, special plated
inside.

Price \$55.00.

May 10, 1943.

Mr. A. W. Livingston,
E. W. Bacharach & Co.,
Rialto Building,
Kansas City, Mo.

Dear Mr. Livingston:

We now have our filter cleaned of all sand and rock. It is ready for your inspection, and the earliest possible date you can come will suit us.

Sincerely yours,

FCA:AH

Director of Physical Education,
Varsity Basketball Coach.

P.S. If you desire, you might call us at K. U. 83 and let us know when it will be possible for you to come.

May 6, 1943.

Mr. A. W. Livingston,
E. W. Bacharach & Co.,
Rialto Building,
Kansas City, Mo.

Dear Mr. Livingston:

Thanks for your good letter of May 5th. I was a little hazy on the matter and was rather expecting to hear from you regarding the pump.

We will have the sand and gravel removed from the filter, and communicate with you as soon as it is ready to be inspected.

Sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

E. W. BACHARACH & CO.

FILTER PLANT EQUIPMENT
GRAVITY AND PRESSURE FILTERS
WATER SOFTENING PLANTS
CHEMICAL TREATING PLANTS
SEWAGE DISPOSAL EQUIPMENT



Water Purification Plants

RIALTO BLDG · KANSAS CITY · MISSOURI

May 5, 1943

Mr. Forrest C. Allen
Director of Physical Education
Varsity Basketball Coach
University of Kansas
Lawrence, Kansas

Dear Sir:

Your letter of the 4th received.

Our reason for not writing is due to the fact that as we told you when we were at Lawrence a week ago, it would be necessary that we return after you have the sand and gravel removed from the filter. After the inspection has been made, we will then be in a position to give a full report. Incidentally, your present pump is too small and it will of course be necessary to furnish a new one. However, as mentioned above, after we have inspected the filter we will give you a final report including the estimated cost for revamping the filter.

Very truly yours,

E. W. BACHARACH & COMPANY

A handwritten signature in cursive script, appearing to read 'A. Livingston', is written over the typed name of the company.

AWL:rh

Strait

May 4, 1943.

Mr. A. W. Livingston,
c/o E. W. Bacharach Co.,
800 Rialto Building,
Kansas City, Mo.

Dear Mr. Livingston:

It has been several days since we sent you the information you desired on the pump in our swimming pool, and to date we have not heard from you.

I shall be glad to hear from you at your early convenience.

Sincerely yours,

FCA:AH

Director of Physical Education,
Varsity Basketball Coach.

April 23, 1943.

Mr. A. W. Livingston,
c/o E. W. Bacharach Co.,
800 Rialto Building,
Kansas City, Mo.

Dear Mr. Livingston:

As I promised you yesterday, I am sending you
the information you desired on the pump in our swimming
pool.

Capacity: 40 gallons per minute
R.P.M. 1750 Head: 45 feet
Size: 3 H
Number: 195362
Union Steam Pump Company

Very sincerely yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

April 22, 1943.

Dean E. B. Stouffer
Dean P. B. Lawson
Dean F. J. Moreau
Dean J. W. Twente
Mr. Raymond Nichols

Second Progress Report to Budget Committee

Gentlemen:

Mr. Joseph Gyulay, Jr., of Wallace & Tiernan Sales Corporation, Kansas City, Mo., after his first visit here to inspect the chlorinator, contacted Mr. E. W. Bacharach, of the Bacharach Water Purification Plant, of Kansas City, a specialist on swimming pools. Mr. Bacharach was called back to Olathe today on a government swimming pool letting, but he sent his first assistant, Mr. A. W. Livingston, to check on our swimming pool difficulties.

Mr. Livingston has just spent an hour going over the pump, filter, and pool. He impressed me as a man who certainly knows his business. First, it was necessary for him to get the capacity of the pump that pumps water from the pool to the filter, because as he estimates the capacity of this pump, at present we are getting a complete change of filtration every 12½ hours. Mr. Livingston states that at the rate we have been using the pool, we are badly crowding the sanitary conditions.

We had Mr. Eberhart, the plumber, with us, together with Mr. Strait, but Mr. Eberhart was unable to give us the capacity of the pump. Therefore, he is going back over the records of the Buildings and Grounds Department to find when Mr. Martin installed the pump, and to get the specifications on the size of the thing. This is the first step before Mr. Livingston can go further.

The next step will be to have the filter emptied of all sand, rock, and so forth, so that Mr. Livingston can get on the inside. It will not be possible to empty the filter until after the start of final examinations, and then we must hasten the necessary installations so as to be ready for our cadets, machinists mates, and other summer school students who are first screened through the swimming test. It is Mr. Livingston's opinion at the present time that he can repair the steel shell so that it will be useable. It is practically impossible to get AA-1 rating for steel under the present conditions for the University swimming pool.

We next visited the pool and I showed him the 1275 tile that are broken, causing a leakage of approximately 5,000 gallons of water a day. Each one of the tile is 4 inches wide, and the pool leaks over night the width of two tile. The pool's capacity is 50,000 gallons, so Mr. Livingston feels we are losing 5,000 gallons of water from the pool every day.

The Buildings and Grounds Department tells me that they are paying 11.6¢ per thousand gallons of water. We formerly paid 12.6¢, so a fair computation would be 12¢ per thousand gallons of water over a period of years. Figuring the leakage at 5,000 gallons a day, for 26 days of the month, or 312 days per year, it would amount to \$187.20, and counting a period of fifteen years this leakage

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alone has cost the University an estimated amount of \$2,808.00.

We will endeavor to get an estimate on the replacing of these 1275 tile as soon as we can get Mr. Livingston back here, and we can get a comprehensive statement of our needs and an estimate on the same. We will then submit it to the Budget Committee for your consideration.

Very cordially yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

cc - Chancellor Malott

April 21, 1943.

Dean E. B. Stouffer,
Chairman, Budget Committee,
University of Kansas.

Dear Dean Stouffer:

When I met with the Budget Committee we adjourned to meet at some future date when we could have more information available regarding the budget. Last week I made a progress report on the swimming pool. Tomorrow Mr. E. W. Bacharach, of the E. W. Bacharach Company Water Purification Plant, of Kansas City, will be here to look over our filter and to make recommendations and give estimates as to what will be the cost of proper replacements.

Progress is necessarily slow due to the fact that all of these firms are equipping government swimming pools. Mr. Bacharach was to be here yesterday, but was diverted to answer a government call at Olathe where they are installing a mammoth pool with proper chlorination and filtration.

The Budget Committee did not ask for my recommendations for promotions of rank. I made my nomination for salary increases, number one and two for both the women and the men, but rank was not mentioned.

I would like to nominate Mr. Reginald Strait for consideration for promotion in rank. He has done a most wonderful job here this year and is fitting wonderfully well into the scheme of things. His undergraduate work was done at Ottawa, and his Master's degree was taken at the University of Iowa, where he has also done work toward the Ph. D. He is not only a hard worker, but a clean, fine, courageous and energetic young man. He is 38 years of age.

Very cordially yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH

April 13, 1943.

Dean E. B. Stouffer
Dean P. B. Lawson
Dean F. J. Moreau
Dean J. W. Twente
Mr. Raymond Nichols

Gentlemen:

I am making a progress report on the swimming pool.

Last week we called the Wallace-Tiernan Corporation. They send a consulting engineer and charge \$25.00 per day to give necessary and expert opinion on swimming pool sanitation and construction. They informed us that they would send someone this week but we are not certain of the time. We asked that their representative not come on Thursday, as I am to speak at the P.T.A. State meeting in Emporia on that date.

I remember the instructions were to have a report to the Budget Committee by Thursday. My report will be contingent on the arrival of the Wallace-Tiernan man and his findings, which, I am sure, will take more than a week from this date. I will advise you as soon as we have anything to offer.

Very cordially yours,

Director of Physical Education,
Varsity Basketball Coach.

FCA:AH