

DEPARTMENT OF THE INTERIOR

UNITED STATES INDIAN SERVICE
Moqui Indian Agency,
Keams Canon, Arizona.,
April 14, 1915.

Mr. Francis R. Schanck,
Asst. Inspector of Irrigation.,
Washington, D. C.

My dear Mr. Schanck:

I have received your letter of April 5, 1915. I note that you will have prepared and sent forward to me the necessary sketches to indicate the sort of Power-house you desire placed at Keams Canon in the event your estimated sum of money is apportioned. It is assumed that we may make suggestions with respect to these plans when same are received.

You are advised that no effort has been made to locate coal at the point across the arroya suggested by you for the following reasons: When you were at Keams Canon in May 1914 we were successfully procuring coal from the mine immediately in the rear of the plant. You will remember that the coal was brought out in cars and screened at a point midway, thence hauled by wagon to the bunker. During the summer of 1914 this canon suffered from terrific downpours of rain at several times, to the end that the old coal mine in the Canon immediately behind the school was flooded and the roof

(2)

of same settled. Therefore it was impossible to attempt to mine coal in that drift. It was necessary to open a new mine immediately, as the consumption of coal required a steady supply. There was no time for exploration or experimentation. The next most likely point at which to obtain good coal in a location which precluded the possibility of flooding and destruction was at a point several hundred yards west of Hubbell's trading store, distant from the coal bunker approximately one mile. Since the ruination of the old mine coal has been mined at this last described point, and mined under such difficulties that we have barely kept the plant going at an expense that is not proportionate to the amount of coal produced. To explain this: The new mine required and still requires a coal shoot (tipple) and screen --- and the necessary lumber was figured in with our lumber bills and has just of this date practically arrived at Keams Canon. Great delay was encountered in procuring the authority, getting bids, having bids passed on by Indian Office, and thereafter placing the order, coupled with the fact that since January 12 until March 27, 1915 we were not able to freight from railroad. This explanation is made to have your mind somewhat clear. Therefore, until the construction of a proper shoot, etc. at the new coal mine coal has been mined under great difficulty and at a considerable increase in expenses; and therefore there

(3)

has been no time and no money with which to experiment toward other mines.

When you were at the canon it was your opinion that the Powerhouse should be placed on the lower level, close to the arroya, and opposite the three largest buildings. This would place the Powerhouse at a point much closer to the farthest ~~western~~ ^{Eastern} building than it would be to the hospital, the farthest ~~western~~ ^{western} building to be heated. The General Mechanic (Mr. Dickson) is of opinion that this Powerhouse should be placed in the grove of trees immediately behind the office, and it is his opinion that such point is relatively central to all buildings to be heated. This point is on the lower level and close to the arroya, but it is not immediately opposite to the place where you expected coal would be found, and some difficulty might be experienced in locating coal directly across the arroya from the place where Mr. Dickson believes the Powerhouse should be located.

With respect to boilers, we will be guided naturally by your choice. The Stirling type of boiler was merely a suggestion.

Too much emphasis cannot be placed, however, on getting busy at the earliest practicable moment. At present we have but one boiler. When you were here we had two, but since that time one of them has become inefficient and may not be used at all. It is the opinion of the man here that we cannot expect

(4)

the present boiler to last longer than December 1915. Therefore, unless we have a new Powerhouse, new boilers, etc. in working condition by December 1915 we will have no heating apparatus in the middle of winter. And in this respect I wish to state that the winter here is no joke. The winter just experienced was unusually severe and prolonged. As the 1916 Indian Bill has been passed as a duplicate of the 1915 Bill, it would seem to me that bids covering all the equipment necessary might be gotten out at this time so as to purchase immediately on the money becoming available. You should remember also that we may not transport into this country materials at all times of the year. As stated above between practically the first of January and the end of March 1915 it was impossible to transport a pound of Government freight from the railroad to Keams Canon.

Your last paragraph suggests that the amount of money requested by your estimate might be reduced inasmuch as we have had \$2,500 during 1915 for water line repairs. I cannot agree that your estimate should be reduced, for the reason that I do not believe your estimate was large enough originally to cover the amount of material that will be necessary to place this water line in A1 condition. Then too, while \$2,500 was apportioned for repair of the water line in 1915, this money has not been available entirely for pipe.

(5)

We have had to make the following purchases:

Manholes and covers.

New pump, and fittings for same.

Cement for new water reservoir.

Lumber for form for new water reservoir.

The balance may be used for pipe.

You will remember that your estimate does not cover a new water reservoir (ground tank) nor lumber for form for same. The present reservoir is about on its last legs and if we build a new powerplant and install new equipment, we should have as large a reservoir as is needed at a new location, properly built of reinforced concrete, and from the water line moneys apportioned this year I have aimed to procure the necessary materials so as not to reduce your estimate of funds. Bids are now being asked on pipe, and the prices are so high as to indicate that we will only be able to purchase little more than 3,000 feet of pipe, and this will only replace the present eroded pipe from the barn to a point 3,000 feet up canon. You will need all the moneys of your estimate to procure the necessary amount of pipe to reach from that point to the farthest spring. Now with respect to this ground tank or reservoir, it is my judgment that we should have one large

(6)

enough to conserve all the water that comes down the canon-- not less than 60,000 gallons --so that it may be pumped at will into the elevated tank on mesa top. The present ground tank holds but 19,000 gallons, and often when water is plentiful overflows, so that we are forced to allow water to run away for lack of storage. This explanation is made that you may see how the \$2,500, 1915 moneys, have been proposed to be expended; and that you will not be able to reduce your estimate.

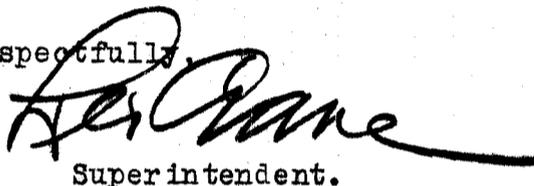
Please remember also that your estimate did not cover one penny for freight transportation between railroad receiving point and Keams Canon. Each year this agency is apportioned \$6,000 to \$7,000 freight moneys which is but little more than necessary to freight in the ordinary Annual Estimate goods. If but \$7,000 are apportioned for freighting for 1916, there will be only about \$1,000 surplus with which to freight all materials for improvements. When it is stated that during 1915 an additional \$5,000 was needed in freight moneys (making about \$12,000 all told) you will see that you cannot depend on my freight moneys, because they are never more than sixty percent sufficient, and I have to call for the rest from

(7)

savings, etc. This is a matter that should be brought to the attention of the Board of Apportionment.

I respectfully again invite to your attention the necessity for getting equipment here prior to the opening of winter, to the necessity for not reducing your estimated funds, and to the necessity for making provision for transportation charges.

Respectfully,

A handwritten signature in cursive script, appearing to read "H. C. Crane". The signature is written in black ink and is positioned above the typed name "Superintendent.".

Superintendent.

C-T