5-374

INSPECTION REPORT

Report of John Charles, Supervisor of Construction.

Agency or school Carlisle, Pa.

Date of report September 13, 1911.

Section 1 Subject Repairs and improvements needed at the Carlisle plant.

Inspection's call-up: November 15, 1911.

FINAL ACTION TAKEN.

Action should be taken or memorandum prepared on each of the following matters referred to in the report:

6—1951

1. Special appropriation of $8000, to be immediately available, needed to complete the heating system.

Handled under previous file number. No action here required

2. Discontinue the use of tin wash basins.

3. Construction of toilets in the girls building.

4. Better lavatory facilities for the boys buildings.

5. Ten thousand dollars will be required to improve the toilet and lavatory facilities in the girls and boys buildings.

6. Manholes should be constructed at the proper places.

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DEPARTMENT OF THE INTERIOR

UNITED STATES INDIAN SERVICE

Carlisle, Pa.,

September 13, 1911.

The Commissioner of Indian Affairs,

Washington, D.C.

FILED BY C. P. C.

Sir:

I have made an inspection of the heating system at Carlisle as directed in Office letter "Education" Employees B S G Instructions" dated August 3, 1911 and respectfully report on same.

The hospital, physicians cottage and green house are supplied with heat from separate boilers located in the basement of the different buildings. All other buildings of the school plant are heated by steam generated at the power house. The boiler plant is in excellent condition and is ample for the work required at this time.

Ten thousand dollars was made available for improvements in the heating system during the fiscal year 1910. Concrete tunnels were constructed and new steam and return mains installed between the power house and all the principal buildings of the school and the Webster Vacuum system was installed in a portion of the plant.

It was impossible to complete this system with the funds available and the work was carried as far as possible. This included the work in the power house, girls building, employees quarters, school building and gymnasium.

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The above buildings are being operated on a vacuum while all the other buildings are operated on a gravity system, requiring from two to five pounds pressure to secure circulation. The unequal conditions made it very difficult to properly drain the gravity side of the plant last winter and a great deal of suffering was experienced as a result. Another winter must pass before it is possible to complete this system and it was for the purpose of assisting the Superintendent and Engineer that I was requested to visit Carlisle at this time.

The buildings that are equipped for operation under a vacuum are provided with motor valves at each radiator and coil and it is impossible for steam to reach the main return which runs to the pumps located in the boiler house. Separate returns run from the buildings that are being operated by gravity to the pumps and it was found impossible to pump from these returns without introducing a jet of cold water to condense the steam that passed through the system to the pumps. This proved to be extremely wasteful, without properly heating the buildings and also proved to be expensive as well as unsatisfactory. The returns from the gravity system pass the large boys'building and an effort will be made to overcome the difficulty temporarily by installing a battery of four Thermo Traps at this point. These traps are a part of the vacuum system and are to be installed permanently when the system is completed. It is thought that these traps will hold the steam back into the system and condense same before it reaches the power house and better results will be secured throughout the buildings not equipped with the vacuum system.

Provision should be made for completing this vacuum system by special appropiation by the next Congress. I respectfully reccommend that Congress be asked to appropiate $8000.00 for completing this system and that it be made immediately available, as work should be commenced as early as possible in the season in order to complete the system during the summer of 1912.

New Guard House.

The new Guard House is nearing completion. It is being built of re-inforced concrete, the work being done by the school force. It contains space for six pupils, each having a lberal space that will be well ventilated. The ceiling was intended to be of 3" oak plank set ¾" apart. It would be a simple matter to secure a key-hole saw from a pupil and cut one of these planks and escape, so it was decided to construct the ceiling of reinforced concrete also, which has been done. Lavatories and water closets are provided for the pupils and a ring shower bath is to be installed in the corridor for use when necessary. It is intended to serve these pupil-prisoners with meals in the general dining room after the regular pupils have been served, which I consider a very much better plan than the present one of carrying the food to the Guard house. Most of these pupils work during the day and are locked up at night. I am of the opinion that the discontinuation of the present guard house will have a good effect on the pupils. The new building is located at the rear of the large boys' building and pupils can be taken there without crossing the campus and without disturbing the other pupils of the school.

Supervisor Charles
Sept 13 '11

Work Shop for Engineer.

The school force is fitting up a work shop of liberal size over coal storage room at the power house for the use of the Engineer. This will be of great value to the school. The Engineer, Mr. Harry T. Weber does a great deal of repair work and saves considerable money as a result.

The material for this improvement waspurchased from 1911 "repair and improvement "funds. A great deal of repairs and improvement work is necessary each year at a school of this size. Most of the buildings are old and require a great deal of repair work. All of the repair work is done by the school employees and the pupils. Important improvements are continually being made by the school force, which should be encouraged as it proves to be of great educational value to the pupils and is found to be economical. The "Repair and Improvement" fund was reduced to $5000.00 this year which amount is not sufficient, as 70% was hypothecated by the annual estimate, leaving only 30% for emergencies that are liable to arise at any time at a plant of this size. Not less than $10,000.00 should be provided for repairs and improvements for this school for 1913.

Defective Lavatory Provisions.

The lavatory and toilet provisions are limited in all the buildings of this plant . The pupils are divided into small groups (usually three pupils to a room). A tin wash basin is used in each room, waste water being poured into metal pails. I am of the opinion that this is unsanitary and should be discontinued. The girls building is three stories high. One of the rooms at each end of this building on each floor now being used as pupils quarters should be fitted up for lavatory purposes, installing enameled iron wash sinks making

it possible for the pupils to wash in running water and connecting the waste water with the main sewer system. The lavatory buildings at the rear of each of the two buildings occupied by the boys should be enlarged and suitable lavatories installed for the pupils, abandoning the bowl and buckets now ~~now~~ used by them. The water closets are installed in these rear buildings and are found to be unsanitary, Seat operating closets should be installed . It will require approximately $10,000. for these improvements in addition to the regular repair fund. I consider these are important matters and respectfully reccommend that provision be made for making these improvemants during the fiscal year 1913.

Sewer System

The sewage from the school is carried to a small stream which passes the school grounds forming its boundry line. The system works reasonably well, considering the manner of installation, being without manholes altogether. Only one or two buildings are provided with man-holes and when stoppages occur it is found necessary to break into the pipes to locate the trouble. Properly constructed man-holes should be provided at each out let from the several buildings with outflow constructed so as to prevent any thing from passing into the main lines that might form a stoppage. Similar man holes ,with gratings, should be made at junctions and turns in the sewer line to make it possible to locate a stoppage, should it occur. This work can be done by the school force, using concrete for the walls. The gratings can be made at blacksmith shop - a substantial cast iron cover and frame must be provided and would have to be purchased.

The waste from one of the cottages was carried to a cesspool in the rear of the school building several years ago. This cesspool was covered with wood and graded over . The wood work became rotten and gave way at about the time of my visit to Carlisle, A small septic tank has now been constructed to take the place of this cess--pool,the outflow being disposed of on a sewage bed in the garden below, The old cesspool being filled up and graded.

Industrial Shops.

The shops are in excellent condition and are generally in charge of competent instructors.The pupils appear to have agreater interest in their work here than is generally found at Indian schools. The shops are well equipped and they are doing good,practical work.

Mr.Edgar K.Miller, "Printer", is an expert workman and an excellent instructor.

Harry T.Weber, "Engineer",is an excellent mechanic,is industrous and a valuable employee. His salary should be increased to $1200. per year.

Wm.Nornast,"Tailor", is very capable.

John A.Herr, "Carpenter" an excellent mechanic and a good instructor.

H.Gardner,"Carpenter",a good workman. No instructor.

Chas.A.Carns,"Painter",a valuable employee who gets excellent results from his detail.

Martin L.Lan,"Carriage maker", very good.

Wm.C.Shambaugh,Blacksmith, very good.

Harry P.Lamson,"Mason", good.

Robert B.George,"Tinner", very good.

John Blatz,"Shoemaker", very good.

I am of the opinion that all the above employees are efficient and industrious.

I sincerely hope that the reccommendations made in this report will receive favorable consideration for 1913 as follows;

For completing vacuum system,heating,	$8000.00
The above to be immediately available	
For repairs and improvements	10000.00
For improved lavatory equipment	10000.00
Total	$28000.00

Respectfully submitted,

John Charles

Supervisor of Construction.