

RECOMMENDED IMPROVEMENTS
for
THE CALIFORNIA STATE POLYTECHNIC SCHOOL
WATER SYSTEM

Mr. W. F. McClure, State Engineer,
State Department of Engineering,
Sacramento, California.

Dear Sir;

In accordance with your verbal instructions of June twenty-eighth, instructing me to submit in writing recommendations for the improvement of the water system at the California State Polytechnic School, I do herewith submit the following recommendations named in the order of their importance.

I. That the present system of springs situated some four hundred feet above the school be cleaned, repaired and developed to their fullest extent. The water from these springs to be conveyed to the fire tank through separate lines to prevent the water from the upper springs syphoning into the lower springs. That only the over flow from the fire tank, which is maintained full by these springs, be allowed to be used in the water system.

II. That the present line of pipe leading from the upper tanks, which is now two inch, be replaced with twelve hundred feet of four inch black dipped wrought iron pipe. This will enable the places of greatest elevation to receive a supply of water during the time of greatest consumption.

III. That the fifteen horse power gasoline engines, now driving the pumps, be replaced with electric motors operated from the school's power plant by the regular operators thus effecting a net saving of six hundred dollars per year in operating expenses. This saving ^{is} due to the increased efficiency of the school's power plant with this arrangement and saving in cost of fuel

and labor of operating pumps.

IV. That the present system of wells be deepened and enlarged, according to the plan already outlined.

V. That the two hand operated valves located at the junction of the high and low pressure systems be replaced with two electrically operated remote control valves. The control switches of the valves to be located one at each group of buildings. Thus reducing the time of getting the high pressure system on by about ten minutes.

VI. That the surface drainage of barns etc., be conveyed away from the vicinity of wells in order not to pollute the water.

Respectfully submitted,

R. W. Rydus

Approved: