

June 15, 1940.

## PITMAN BOROUGH, GLOUCESTER COUNTY, NEW JERSEY.

Population—Census of 1930 was 5,411. Estimated Summer—11,000.

IN GENERAL: Located on the W. J. & S. Division of the P. R. R about 15 miles south of Camden It is a residential community surrounding a congested frame camp meeting colony directly to the west of the medium-sized business district. There are about 12 industries including dress factories and smaller establishments employing about 350 Area about 2.3 square miles Elevations range from 70 to 145 feet Main thoroughfares and streets in developed sections are concrete or macadam. Secondary streets are partly improved and partly gravel in fair to poor condition Railroad crossings at grade are such that they might delay the response of apparatus to the eastern portion of the borough and parked vehicles and congestion in the business district afford possible delays to fire department operations

WATER SUPPLY: The Borough of Pitman owns and operates the supply works, distribution system and appurtenances supplying water for domestic and fire protection purposes to territory within the municipal limits except that the Pitman Grove Section is supplied by the Pitman Grove Water Company which owns and operates the system in that section. Municipal System—Organization: Consists of a department of public works operating under the mayor and council with a competent superintendent and two employees appointed annually performing all duties with la-borers as needed. Office in borough hall in business district Supplies and emergency equipment are on hand at the pumping station and a department truck is provided Records are incomplete in that no detailed distribution plans are provided. The superintendent responds to pumping station on alarms of fire Supply Works: The supply is obtained from one 16-inch well 514 feet deep yielding about 0.90 m g.d. Well is equipped with a Layne deep well turbine unit driven by a 50-h p Westinghouse motor rated at 500 g p m and capable of discharging 600 g p.m. against minimum head of 18 pounds and 460 g p m against maximum head of 50 pounds Pumping Station: Equipment is located in a fire-resistive room in a corner of the municipal garage on North Summit Avenue at standpipe as shown on map Building is 43 by 67 feet, 1-story high, of cinder block construction with composition covered wood roof and unprotected steel trusses, concrete floor, electric lights, plain glass windows in metal sash on south and west and wired glass in metal door communicating with garage area. Other walls, exposed by lumber yard, are blank Pump is started manually and is operated daily for 6 to 7 hours, discharging to the distribution system with the standpipe acting as an equalizer. Elevation of floor of pump room about 135 feet. Distribution System: In one service consisting of two 8-inch arteries connecting with 4-inch gridiron and 4- and 6-inch dead ends. See map A normally closed emergency connection is installed on South Broadway at the Glassboro limits It is estimated that this connection could supply 550 gallons per minute at 10 pounds residual pressure. An additional emergency connection is installed between the Pitman Grove system and the municinal system on South Broadway opposite Pitman Avenue. This connection is 6-inch and it is estimated that the emergency supply available at this point would be approximately 580 gallons per minute, depending somewhat on the demand on the Grove system Standpipe: Located on North Summit Avenue north of East Holly Avenue as shown on map It is steel 20 feet in diameter by 125 feet in height with a capacity of 290,000 gallons Elevation of base 135 feet. Elevation of overflow 260 feet Consumption: The average and maximum daily consumption during 1939 was 0 245 and 0 583 million gallons On December 31, 1939, there were 1,262 services, practically all of which are metered Pipe: All cast iron, tar coated, bell and spigot joint, A.W.W A Class "B" laid with 4-foot cover Total length 85,637 feet; 0 3% 10-inch, 16 1% 8-inch, 19.7% 6-inch, 63.9% 4-inch No serious trouble reported from frozen mains or electrolysis Gate Valves. There are 128 on the system of R D Wood make set with

iron boxes at grade. With a few exceptions the direction of operation is uniform Inspection is limited to that necessitated by routine system maintenance. Hydrants: There are 115 on the system, practically all of which are of Matthews make. They are of standard type, about 88% of which have 4-inch branches and 68% of which have two 21/2-inch outlets The balance have 6-inch branches and one 42-inch outlet in addition. About 80% of the branches are ungated. Hydrants are inspected twice annually and were found to be in good condition at time of inspection. Pressures: Pressure gauge installed in pumping station at about elevation 139 showed 25 pounds at time of inspection Full standpipe pressure is 50 pounds and pressures are allowed to drop to 18 pounds at this location Readings taken at 10 well distributed hydrants showed pressures ranging from 21 to 50 pounds with an average of 34 pounds. Fire Flow Tests: Probable supply available for fire protection purposes was measured on March 26, 1940, by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Broadway and E. Holly Ave, 980—34—22 Cyrus Ave, E. of Broadway, 400—29—21. N. Woodbury Ave., S. of Edgemoor Ave., 325—49—7. E. Holly Ave, E of Franklin Ave, 210—50—\* Highland Ter and Columbia Ave, 300—21—17 Lincoln Ave and South Driveway, 210—31—4 \* No reading taken.

PITMAN GROVE WATER COMPANY: This company serves the territory bounded by Broadway, West Holly Avenue, Lincoln Avenue, Pine Street, and Snyder Avenue. The system is owned by the New Jersey Conference Camp Meeting Association. Organization: Consists of a general superintendent and one engineer who performs all duties with laborers as needed. Office in Pitman business district. A small amount of supplies is on hand, but no vehicle is provided. Records are very incomplete and no definite arrangements have been made whereby a responsible employee responds to alarms of fire. Supply Works: The supply is obtained from one 12-inch well 530 feet deep yielding 0.72 m g d Well is operated by deep well turbine which discharges over top of standpipe located adjacent to station, whence the distribution system is supplied by gravity Connections are such that pump can discharge directly to the distribution system. Pumping Station: Located in Pitman Grove on Wesley Avenue south of Laurel Avenue as shown on map Building is a small area one-story cement block structure with concrete floor, composition covered wool roof, electric lights, and oil stove. No hand protection. Exposure from surrounding congested frame dwellings Elevation of floor 135 feet. Equipment: One 500-g.p.m Cook deep well turbine driven by a 50-h.p. U S motor Pump is automatically controlled and is set to operate between 18 and 28 pounds. Distribution System: In one service consisting primarily of a 6-inch loop supplying incomplete 3- and 4-inch gridiron and 3- and 4-inch dead ends. See map Standpipe: Located adjacent to pumping station as shown on map It is steel, 15 feet in diameter by 70 feet in height with a capacity of 92,500 gallons. Elevation of base 135 feet Elevation of overflow 205 feet. Consumption: The average and maximum daily consumption is estimated to be 65,000 and 130,000 gallons Average daily pumpage during winter months is 52,000 gallons At time of inspection there were 503 active services and there are approximately 250 additional summer services. Services are 100% metered Pipe: All cast iron, tar coated, bell and spigot joint laid with 3- to 3½-foot cover. Total length 13,400 feet; 35 8% 6-inch, 19 4% 4-inch, 44.8% 3-inch No trouble reported from electrolysis, but freezing of small mains was experienced during 1939 and 1940. Gate Valves. There are 20 on this system of R D

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## Continued.

Wood and Thompson makes set with valve boxes at grade Direction of operation is not uniform. Inspection is limited to that necessitated by routine system maintenance Hydrants: There are 27 on the system of Matthews and Thompson makes. Some are of non-standard make with one 21-inch outlet, while others have two 2½-inch outlets and a few hydrants on the 6-inch line have one 42-inch outlet in addition Branches are 4-inch and are ungated. Hydrants are inspected twice annually. At time of inspection they were found to be in fair condition and in need of lubrication. Some operating nuts were found to be non-uniform. Pressures: Pressure gauge installed in pumping station showed 22.5 pounds at time of inspection Readings taken at three well distributed hydrants showed pressures ranging from 29 to 37 pounds with an average of 32.7 pounds. Fire Flow Tests: Probable supply available for fire protection purposes was measured on March 26, 1940 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

East and First Aves., 530—37—25. Snyder Ave. S. of Laurel Ave, 150—29—\*. Pine St. and West Ave., 190—32—\*.

\* No reading taken.

FIRE DEPARTMENT: A volunteer organization of one municipally controlled company and two independently operating companies, one located in Pitman Grove and one in the residential district to the north of the business area The headquarters company is under the complete control of the borough which owns quarters, apparatus and equipment and makes an annual appropriation of \$2,000 for the support of the department. The independent companies own their apparatus and equipment and receive \$250 annually from the borough. Pitman Fire Company No. 1: Headquarters. Total active membership, 57 including a chief and two assistant chiefs, three captains and three lieutenants and a part-paid department mechanic, of whom a minimum of 24 members are available at all times. Officers are elected annually and confirmed by the mayor and council Company located in department headquarters on North Broadway opposite Hazel Avenue as shown on map Building is adjacent to borough hall and consists of a one-story cement block structure with asphalt covered wood roof, steam heat, electric lights, concrete floor and oil-fired boiler in cut-off section Equipment: One 1937 Seagrave 750-g.p.m. triple combination pumping engine carrying one 100-gallon booster tank, 150 feet of booster hose, 1,400 feet of 2½-inch hose, two short ladders, one 1,250-watt generator, 3 portable lights and fairly complete minor equipment. One 1925 American La France 400-g.p.m triple combination pumping engine carrying one 200-gallon booster tank, 150 feet of booster hose, 700 feet of 2½-inch hose, 2 short ladders and fair minor equipment. One 1927 American La France 50-foot city service ladder truck carrying ladders from 12 to 50 feet, totaling 363 feet, a 4-inlet deck gun, 200 feet of 12-inch hose, two 35gallon chemical tanks, 150 feet of chemical hose and fairly complete minor equipment. Pitman Fire Patrol: Total active membership 28. including the chief, 2 assistant chiefs, 2 captains and 2 lieutenants, of whom a minimum of 14 members are available at all times Company located in the Pitman Grove Section on South Avenue east of West Avenue as shown on map. Building is a 2-story stucco and composition shingle frame building with composition covered roof, hot water heat, electric lights and telephone. Equipment: One 1939 Pirsch Diamond T 500-g.p.m triple combination pumping engine carrying one 250-gallon booster tank, 150 feet of booster hose, 500 feet of 21-inch hose, 2 short ladders and some minor equipment One 1934 Ford booster car carrying one 120-gallon booster tank, a small booster pump, 200 feet of  $2\frac{1}{2}$ -inch hose and some minor equipment. Highland Chemical Company: Total active membership 12, including a chief and assistant chief, of

whom a minimum of 6 members are available at all times Company located on Oakland Avenue between Woodland and Kenton Avenues as shown on map. Building is a 1story frame structure with wood shingle roof, wood floor, electric lights, hot air heat and telephone. Equipment: One 1927 American La France booster car carrying one 300-gallon booster tank, a small capacity booster pump, 2 short ladders, 350 feet of \(\frac{3}{4}\)-inch booster hose and some minor equipment Hose: All 21-inch hose is C R.L. with Jones snap couplings. Of the total supply of 2,450 feet in Company No. 1, 350 feet is held in reserve, of which 250 feet is more than five years old Hose at Pitman Fire Patrol Company is limited to 700 feet carried on the apparatus all of which is in unreliable condition and is more than five years old. Hose at Company No 1 is tested annually at 150 to 175 pounds with shut-off nozzles Other hose is not tested. No suitable drying provisions installed. Operations: Company No. 1 is governed by municipal ordinance under the direct control of the borough council. Outlying companies operate independently except that they are subject to the chief officers of Company No. 1 at fires. Apparatus is maintained by a paid mechanic and 8 drivers are appointed to Company No. 1 Drills and Training: Company drills are held weekly at Company No. 1 and 20 combined department drills are held each year Drills are under the supervision of the chief officers and consist of training and instruction in all fire department evolutions Company No 1 members have attended county drill school. Fire Methods: Booster lines and hand extinguishers are used on incipient fires supported by engine streams with shut-off nozzles Salvage covers, gas masks and heavy stream appliances consisting of a deck gun, are installed in Company No 1. Response to Alarms: Companies respond with all equipment to all borough alarms except that one piece of equipment is assigned to grass fires and out of town calls Aid may be secured from the surrounding volunteer departments of Glassboro, Wenonah and Woodbury. Building Inspection: Chief officers make annual inspections of mercantile occupancies and public buildings, but effectiveness of inspection is restricted by lack of adequate municipal regulations. Records and Reports: Records in Company No 1 consist of fairly complete log book entries and fire reports which are filed with the mayor and council, other company records consist of fire reports including nature of alarms and attendance Fire Alarms: Fire alarms are telephoned through the local exchange in a frame building in the business district to the police department by police officer during day and by janitor during night Direct tele-phone communication provided to Fire Patrol Company and electric sirens on Headquarters and Pitman Fire Patrol Station are operated from police desk or fire headquarters Highland Chemical Company siren installed on roof and operated from that station.

POLICE DEPARTMENT: Consists of a chief and 3 patrolmen working in 8-hour shifts with one special officer One car is provided and co-operation with fire department is excellent

BUILDING LAWS: Building code adopted April 5, 1926 and subsequently amended embodies good structural restrictions based on building specifications, but does not establish fire limits nor prohibit wood shingle roofs on frame dwellings. The code provides for the annual appointment of a building inspector and restrictions are not sufficiently comprehensive as regards height and area requirements, protection of openings and other features essential from a fire protection standpoint.

**EXPLOSIVES AND FLAMMABLES:** No municipal regulations State laws adequately restrict the storage and shipment of explosives and the construction of motion picture booths and restrict the use of fireworks to responsible bonded parties.