



THE FIRE INSURANCE RATING
 ORGANIZATION OF N. J.
 ENGINEERING DEPARTMENT
 NEWARK 2, N. J.

Hopewell Borough
Mercer County, New Jersey

MAY 31, 1949

KEY

- PROTECTED FIRE ZONE: Shown in Green.
- NOTE.—For description of fire protection, etc., see other side.
- Elevations range from 150 to 300 feet above mean sea level.
- Water mains 8 inches and larger in diameter
- Water mains 6 inches in diameter
- Water mains 4 inches in diameter
- Fire hydrants shown thus



- Gate valves shown thus
- Fire house shown thus
- Fire apparatus designated by symbols thus:
- Pumping engine and hose car
- Booster tank or tanks on above

HOPEWELL BOROUGH, MERCER COUNTY, NEW JERSEY.

Population—1940 Census—1,678.

IN GENERAL: Located about 14 miles north of Trenton on the Philadelphia and Reading Railroad. It is the center of a farming district and has one industry employing about 235. Area about 0.7 square mile. Elevations range from 150 to 300 feet. Streets are mainly paved and in fair to good condition.

WATER SUPPLY: Water for domestic and fire protection purposes is furnished by the borough which owns supply works, distribution system, and appurtenances and supplies water to the borough only. **Organization:** Department is under the supervision of a superintendent who is appointed annually by the borough. Superintendent is assisted by 3 employees working jointly in the water and street departments. He is provided with one fairly well equipped truck and responds to all alarms of fire. Records consist chiefly of pumpage statistics and a fairly up-to-date map of the system showing pipe, valves, and hydrants. **Supply Works:** Built in 1893 and purchased by the borough in 1907. Water is obtained from two 8-inch wells provided with electrically operated deep well turbines. Well No. 1, 350 feet deep is provided with a 0.25-m.g.d. Fairbanks-Morse deep well turbine driven by a 7½-h.p. Fairbanks-Morse electric motor and discharges directly into distribution system. Well No. 2, 250 feet deep is provided with a 0.25-m.g.d. Fairbanks-Morse deep well turbine driven by a 10-h.p. Fairbanks-Morse electric motor and discharges into a receiving basin. Wells are in the open adjoining the pumping station. Receiving basin is a covered concrete unit 37 x 38 x 7 feet deep with a capacity of 64,000 gallons. **Pumping Station:** Located northeast of Burton Avenue as shown on map. It is a one-story concrete block building with concrete floor, composition on wood roof, electric lights, coal stove for heat, and fire pails. Exposures are negligible. Wiring is in conduit. Housekeeping is fair. Elevation of floor 220 feet. **Equipment:** A 0.33-m.g.d. Gould centrifugal pump driven by a 25-h.p. Crocker-Wheeler electric motor. A 0.31-m.g.d. Gould centrifugal pump driven by a 25-h.p. Crocker-Wheeler electric motor. Pumps are supplied through independent 4-inch suction from the receiving basin. **Distribution System:** In one service consisting of an 8-inch line from the pumping station to the reservoir and to the mercantile district with 6-inch, 4-inch, and 3-inch mains having poor gridiron features, with numerous unsupported dead end branches. See map. **Reservoir:** Located about 2,000 feet north of the borough limits in Hopewell Township. It is of concrete, covered, 50 feet in diameter by 16 feet deep with a capacity of 230,000 gallons. Elevation of base 401 feet. Elevation of overflow 417 feet. **Consumption:** The average and maximum daily consumption during 1948 were 0.13 and 0.17 million gallons. There are 580 live services, all of which are metered. **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint with the exception of about 400 feet of asbestos cement pipe. It is laid with a 4-foot cover. Total length exclusive of the 8-inch supply line from the borough line to the reservoir, 28,850 feet; 9.7% 8-inch, 51.3% 6-inch, 35.7% 4-inch, and 3.3% 3-inch. No trouble was reported from freezing or electrolysis. **Gate Valves:** There are 50 of Kennedy and Darling makes set with iron boxes at grade. Direction of operation is not uniform. No routine inspections. **Hydrants:** There are 43 on the system of Smith, Darling, and Mathews makes of standard type. One hydrant has one 2½-inch outlet and 42 have two 2½-inch outlets; of the latter 12 have an additional 4½-inch outlet. Outlets have National Standard threads. About 50% of the hydrants have independent gates. Hydrants are inspected semi-annually and at time of inspection those operated were found to be in good condition. **Pressures:** Readings taken at 7 well distributed locations showed pressures ranging from 69 to 111 pounds with an average of 96 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on January 25, 1949 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Broad St. and Blackwell Ave., 1,000—97—48.
Hamilton Ave. and Somerset St., 920—104—65.
Broad and Elm Sts., 460—111—*.
Princeton Ave., 525 ft. S. E. of First St., 200—110—*.

Broad St. 925 ft. S. W. of Ege Ave., 350—84—*.
Hart Ave. 1,350 ft. S. W. of Shaftsbury St., 200—84—*.
Hart and Greenwood Aves., 750—83—*.

*No reading taken.

FIRE DEPARTMENT: A volunteer organization of one company under partial control of the borough which owns house, apparatus, and equipment and appropriates about \$1,500 annually for the support of the department. Total active membership 28, of whom a minimum of 16 are available at all times. Officers include a chief, 3 assistant chiefs, and 3 foremen. Chief is elected biennially and other officers are elected annually, elections being confirmed by borough council. **Company—Hopewell Volunteer Fire Company No. 1:** Located in the municipal building at Greenwood and Columbia Avenues. Building is a 2-story stone and brick structure of ordinary construction with composition on wood roof, concrete apparatus floor, steam heat, electric lights, telephone, and hose rack. Electric siren is mounted on tower at rear of the building. **Equipment:** A 1948 American La France 750-g.p.m. triple combination pumping engine carrying a 150-gallon booster tank, 100 feet of booster hose, 1,200 feet of 2½-inch hose, 400 feet of 1½-inch hose, a 1,500-watt portable electric generator, 3 flood lights, 1 salvage cover, 2 short ladders, and fair minor equipment. A 1937 Hahn-G.M.C. 500-g.p.m. triple combination pumping engine carrying a 225-gallon booster tank, 100 feet of booster hose, 1,000 feet of 1½-inch hose, 1 salvage cover, 2 short ladders, and fair minor equipment. A 1922 American La France 750-g.p.m. double combination pumping engine carrying 500 feet of 2½-inch hose, 1,200 feet of 1½-inch hose, 2 short ladders, and meager minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. It is shifted and tested semi-annually at 250 pounds pressure and dried on hose rack. There is no reserve hose and about 50% of the hose is over 5 years old. **Operations:** Department is governed by company by-laws. Motors are started bi-weekly. All officers and 8 members are appointed as drivers. **Drills and Training:** Weekly drills are held during the spring and summer months under the supervision of the chief officers and consist of the usual evolutions. In addition about 6 drills are held during the year with Rocky Hill and Pennington departments principally for practice in relay operations. **Fire Methods:** Booster lines are used on incipient fires reinforced by hydrant and engine streams with shut-off nozzles. Department is provided with 2 salvage covers, but is entirely lacking in heavy stream appliances, gas masks, and other salvage equipment. **Response to Alarms:** The Hahn pumper is dispatched to all alarms and if fire is known to be a building fire, both American La France pumpers are also dispatched. Outside aid may be secured from the volunteer departments of nearby communities. **Building Inspection:** Chief officers make annual inspections of schools and garages. No records are maintained. **Records and Reports:** Fairly complete records are kept of all fire department activities and chief makes a monthly report to the borough council. **Fire Alarms:** Alarms of fire are telephoned during the day to a drug store in the mercantile district, and during the night to the fire chief's residence. They are sounded on a siren at the fire house by means of 4 push button switches located at the fire house and in the mercantile district.

POLICE DEPARTMENT: Consists of a chief, 2 patrolmen, and 4 specials. Chief and patrolmen are on call basis and chief uses his own car. Chief usually responds to alarms of fire.

BUILDING LAWS: None.

FIRE PREVENTION LAWS: No municipal regulations. State laws adequately cover the storage and shipment of explosives, the transportation of flammable liquids, and the construction of motion picture booths. They also restrict the discharge of fireworks to responsible bonded parties.

ZONING ORDINANCE: None.