



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

**Williamstown**  
**Monroe Township**  
**Gloucester County, New Jersey**  
JULY 31, 1948

# KEY

PROTECTED FIRE ZONE: Shown in Green.  
NOTE.—For description of fire protection, etc., see  
other side.

Elevations range from 130 to 160 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  
Hose car  
Booster tank or tanks on above  
Chemical tank or tanks on above

**WILLIAMSTOWN, MONROE TOWNSHIP, GLOUCESTER COUNTY, NEW JERSEY.**

Population — 1940 Township Census — 4,310.

Estimated Local Population About 2,500.

**IN GENERAL:** Located on the Black Horse Pike and on the Reading Railroad about 20 miles southeast of Camden. It is mainly a residential community and mercantile center for the surrounding agricultural area with about 8 small industries normally employing about 200. Area of mapped portion about 1.5 square miles. Elevations range from 130 to 160 feet. Main roads are concrete or macadam in good condition; other streets are macadam or gravel in fair condition. The response of fire apparatus could be retarded by several railroad grade crossings and by narrow streets and parking conditions.

**WATER SUPPLY:** The township owns and operates the supply works and distribution system supplying water for domestic and fire protection purposes to Williamstown only.

**Organization:** The system is in charge of an annually appointed superintendent and one assistant who operate pumping stations and maintain the system with such labor as is needed. Office and shop at the Washington Street Pumping Station. A small truck is provided. The superintendent proceeds to pumping stations on alarms of fire. Records are limited to a distribution map which is not up to date, and incomplete pumpage statistics. **Supply Works:** Supply is obtained from three deep wells with an aggregate yield of about 1.0 m.g.d. Deep well pumps discharge to the distribution system with an elevated tank acting as an equalizer.

**Well Stations—Station No. 1:** Located east of Blue Bell Road and north of Chestnut Street in a small area one-story brick structure with concrete roof and floor, electric lights, and oil stove. No hand protection. Exposures are mild. Wiring is in conduit. Housekeeping is good. Elevation of floor about 160 feet. **Equipment:** A 0.2-m.g.d. Cook deep well turbine driven by a 10-h.p. U. S. electric motor. **Station No. 2:** Located on Blue Bell Road north of Chestnut Street in a small area one-story brick structure with concrete floor and roof, electric lights, and coal stove. No hand protection. Exposures are mild. Wiring is in conduit. Housekeeping is good. Elevation of floor about 160 feet. **Equipment:** A 0.48-m.g.d. Cook deep well turbine driven by a 25-h.p. U. S. electric motor. Unit is equipped with a Venturi meter and controls for automatic operation. **Station No. 3:** Located on Washington Street southwest of Black Horse Pike in a small area one-story brick structure with asbestos shingle on wood roof, concrete floor, electric lights, and coal stove. Exposure is moderate. Wiring is in conduit. Housekeeping is fair, but no hand protection is provided. Elevation of floor about 150 feet. **Equipment:** A 0.13-m.g.d. Cook deep well turbine driven by a 10-h.p. U. S. electric motor. **Distribution System:** In one service consisting of 6-inch supply lines to an 8-inch artery with incomplete 6-inch gridiron and unsupported dead end mains. **Elevated Tank:** Located adjacent to Well Station No. 1. It is steel, 28 feet in diameter by 23½ feet high with a hemispherical bottom on an 86-foot steel tower with base at about 165 feet. Elevation of overflow about 274 feet. Capacity of tank is 150,000 gallons, and riser is 4 feet in diameter with an additional capacity of about 6,000 gallons. **Consumption:** The average daily consumption during 1947 was 0.112 million gallons. It is estimated that the maximum daily consumption is about 0.22 million gallons. Accurate statistics were not available but at the close of 1947 there were about 500 services, all of which were metered. **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint, laid with about a 3½-foot cover. Total length 46,800 feet; 6.1% 8-inch, and 93.9% 6-inch. No trouble was reported from freezing or electrolysis. **Gate Valves:** There are 52 on the system of R. D. Wood make set with iron boxes at grade. Direction of operation is not uniform and there are no records indicating the valves which operate in a direction contrary to the majority. Casual inspections of valves are made about annually. **Hydrants:** There are 88 of R. D. Wood make of standard type. About 65 have two 2½-inch outlets and the balance have an additional 4½-inch outlet. Hose outlets have an outside diameter of 2-27/32 inches with 8 threads per inch. All hydrants have 6-inch branches, only two of which are gated. Hydrants are subjected to casual inspections semi-annually, but at time of re-survey those operated were found to be in fair condition.

**Pressures:** Readings taken at 5 well distributed hydrants showed pressures ranging from 49 to 57 pounds with an average of 52 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on May 20, 1936 by means of Pitot tube. Location of hydrant, dis-

charge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Main St., opposite Blue Bell Rd., 760—52—46.

Main St., 1,100 feet west of Saybrook Ave., 350—49—11.

Clayton Rd., 750 feet south of Railroad Ave., 390—51—14.

Main St., 1,500 feet east of Walnut St., 390—57—16.

Brooklyn Rd., 550 feet east of Acton Rd., 400—52—15.

**FIRE DEPARTMENT:** A volunteer organization of one company under partial control of the township which owns house, apparatus, and equipment, and makes an annual appropriation for the support of the department. Total active membership 47 including a chief, assistant chief, captain, and 2 lieutenants. A minimum of 30 members are available at all times. Officers are elected annually by the company and confirmed by the township committee. **Company:** Located in municipal building on Main Street near Hall Street. Building is a 2-story joisted brick structure with slag roof, concrete apparatus floor, steam heat, electric lights, telephone at police desk adjoining the apparatus room, and siren on roof. **Equipment:** A 1928 American La France 500-g.p.m. triple combination pumping engine carrying a 35-gallon foamite tank, 150 feet of double, parallel, ¾-inch foamite hose, 1,450 feet of 2½-inch hose, 2 short ladders, and fair minor equipment. A 1939 Chevrolet hose and booster car carrying a 425-gallon booster tank, 200-g.p.m. booster pump, 200 feet of booster hose, 800 feet of 2½-inch hose, 600 feet of 1½-inch hose, 4 short ladders, 2 all-purpose gas masks, and meager minor equipment. A 1933 Chevrolet hose car equipped with a 300-g.p.m. Barton front mounted pump and a 285-gallon booster tank and carrying 400 feet of 1½-inch hose, 1 all-purpose gas mask, 2 short ladders, and practically no minor equipment. In addition there is a small two-wheeled trailer carrying about 500 feet of 2½-inch hose and 200 feet of 1½-inch hose, but no minor equipment. **Hose:** All 2½-inch hose is C.R.L. with Jones Snap couplings. It is shifted and tested semi-annually at 300 pounds pressure and repacked wet or dried in a heated drying cabinet. Practically no hose is over 5 years old and there is a reserve supply of about 500 feet. **Operations:** There is no township fire department ordinance, but department is governed by company by-laws. The chief has control of apparatus at all times and of men at fires and drills. Motors are started about three times per week and practically all members may drive apparatus. **Drills and Training:** Company drills are held weekly except during winter months. They are held under the direction of the chief officers and consist of pump operation, hose laying, and use of minor equipment. **Fire Methods:** Foam or booster streams and 1½-inch leader lines are used on incipient fires reinforced by hydrant lines and engine streams with shut-off nozzles. Department is provided with three all-purpose gas masks but there is no salvage nor heavy stream equipment. **Response to Alarms:** Entire department responds to all alarms within the township, and outside aid may be obtained from the volunteer departments in Clayton, Glassboro, and Berlin. **Building Inspection:** Fire chief makes an annual inspection of stores, schools, and taverns, but there is no fire prevention ordinance and no records of inspections are maintained. **Records and Reports:** Fairly complete records are kept of fire department activities and chief makes an annual report to the township committee and monthly reports to the County Firemen's Association. **Fire Alarms:** Alarms of fire are telephoned to the local telephone exchange where there is a switch controlling the siren at the fire house. An additional control for the siren is located at the fire house.

**POLICE DEPARTMENT:** Consists of a chief and one uniformed officer alternately on duty and subject to call at all times. They are provided with one radio equipped patrol car.

**BUILDING LAWS:** Code adopted December 19, 1946 provides for the appointment of a building inspector and requires that permits be obtained for all building operations. However, code does not establish fire limits nor prohibit wood shingled roofs in the mercantile district. Code is of little value from a fire protection standpoint.

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

**ZONING ORDINANCE:** None.