



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

**Woodbridge Township**  
Fire District No. 4, Keasbey; No. 7, Fords;  
No. 8, Hopelawn  
**Middlesex County, New Jersey**

JUNE 30, 1951

**KEY**  
PROTECTED FIRE ZONE: Shown in Green  
and in Blue.  
NOTE.—Fire protection report on file in Engineering  
Department of F. I. R. O. of N. J.  
Elevations range from 0 to 187 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:  
Y Pumping engine and hose car  
O Booster tank or tanks on above  
L Ladders on above

# WOODBIDGE TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY.

Fire District No. 4—Keasbey.

Fire District No. 7—Fords.

Fire District No. 8—Hopelawn.

Population—Census of 1940—Fire District No. 4, 632—Fire District No. 7, 3,965—Fire District No. 8, 1,998.

**IN GENERAL:** Located in the southwest portion of the township on the Lehigh Valley Railroad and the Raritan River west of the City of Perth Amboy. A manufacturing and residential community with about 12 industries employing 1,200. Area about 5.3 square miles. Elevations range from 0 to 187 feet. Main roads are concrete, others gravel and macadam in fair to poor condition. Railroad crossings at grade and traffic on main highway are said never to have interfered with the response of fire apparatus.

**WATER SUPPLY:** Water for domestic and fire protection purposes is furnished by the Middlesex Water Company to the major portion of the districts, and by the City of Perth Amboy to a small section of the districts adjacent to Perth Amboy. For details of this company and municipal department as to organization, supply works, distribution system and appurtenances see reports with maps No. 136 and 305. **Middlesex Water Company—Distribution System:** Supply is through a 12-inch transmission main from the Park Avenue pumping station with 6- and 8-inch arteries extending south from the transmission main to the various districts. Arterial system is generally poor with numerous 4- and 6-inch dead end lines supplying hydrants. **Consumption:** The average and maximum daily consumption in the Middlesex territory (12,360 services) during 1940 was 6,782 and 8,088 m.g.d. On December 31, 1940 there were 6,436 services in Woodbridge Township, all of which were metered. **Pipe:** Cast iron, tar coated, bell and spigot joint, laid with about a 3- to 4-foot cover. Total length, 93,500 feet; 6.9% 12-inch, 16.5% 8-inch, 66.4% 6-inch and 10.2% 4-inch. **Gate Valves:** There are 73 valves of various makes set with iron boxes to grade. Direction of operation is uniform. No regular inspection. **Hydrants:** There are 90 of Corey and Wood makes of standard type; 46 have two 2½-inch outlets and 4-inch gated branches while the remainder have two 2½- and one 4½-inch outlets and 6-inch gated branches. Hose outlet threads are National Standard; steamer outlet threads are 4-13/16 inches outside diameter and have 6 threads per inch. Hydrants are inspected annually. Those operated during inspection were found to be in poor condition. **Pressures:** Readings taken at 5 hydrants widely distributed showed pressures ranging from 38 to 83 pounds with an average of 61 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on October 3, 1941 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Crows Mill Rd. and Smith St., 540—83—8.  
Dunbar Ave. and Beech St., 745—38—9.  
New Brunswick Ave. east of Coriell St., 880—55—15.  
New Brunswick Ave. and Pennsylvania Ave., 860—73—14.  
Florida Grove Rd. and Loretta St., 490—59—11.

**Perth Amboy Water Department—Distribution System:** Supply to this section is through a single unsupported 6-inch main on Smith Street from the Perth Amboy distribution system. System is owned by township and is maintained by township engineering department and water is purchased from the City of Perth Amboy. The average daily consumption during the first six months of 1941 was 0.149 m.g.d. On July 14, 1941 there were 111 services all of which were metered. **Pipe:** Cast iron, tar coated, bell and spigot joint, laid with a 3½-foot cover. Total length 9,687 feet; 100.0% 6-inch. **Gate Valves:** There are 2 of unknown manufacture set with iron boxes to grade. Direction of operation is said to be uniform. No regular inspection. **Hydrants:** There are 7 of Corey and Wood makes of standard type with two 2½- and one 4½-inch outlets and 4- or 6-inch ungated branches. Hose outlets are National Standard. Steamer outlets are 4-13/16 inches outside diameter and have 6 threads per inch. Hydrants are inspected twice a year. The one operated during inspection was found to be in fair condition. **Pressure:** Reading taken at one hydrant showed a pressure of 15½ pounds. **Fire Flow Test:** Probable supply available for fire protection purposes was measured by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Highland Ave. and Greenbrook Ave., 120—15½—0.

**FIRE DEPARTMENT:** A volunteer organization of three companies with each fire district having its own independent company. Companies are under the supervision of a board of fire commissioners consisting of 5 members who are elected for 3-year terms. Districts own their respective houses, apparatus and equipment and appropriated \$4,760 in Fire District No. 4, \$11,193 in Fire District No. 7 and \$5,699 in Fire District No. 8 for the support of the companies in 1941. Total active membership 136 of whom about 60 are available during the day and 90 during the night. Membership includes 1 paid driver who is on duty during the day at the Fords fire house. There are a chief, 2 assistant chiefs, a foreman and assistant foreman in each company who are elected annually by the companies and confirmed by their respective boards of fire commissioners. **Companies—Protection Fire Company No. 1:** Fire District No. 4. Membership 45. Located on Smith Street near New Crows Mill Road. Building is a 2-story hollow tile structure stuccoed with tile roof, concrete apparatus floor, steam heat, electric lights and telephone. **Equipment:** A 1921 American La France city service ladder truck and hose car carrying 8 ladders ranging from 16 to 50 feet, totaling 323 feet, a 40-gallon chemical tank, 200 feet of chemical hose, 1,100 feet of 2½-inch hose, 2 gas masks and fair minor equipment. **Fords Fire Company No. 1:** Fire District No. 7. Membership 44 volunteers and 1 paid man. Located on Coriell Street between Anne Street

and New Brunswick Avenue. Building is a 2-story hollow tile structure stuccoed, with a composition roof, concrete apparatus floor, steam heat, electric lights and telephone. **Equipment:** A 1924 Stutz 750-g.p.m. triple combination pumping engine carrying a 140-gallon booster tank, 200 feet of booster hose, 1,200 feet of 2½-inch hose, 3 salvage covers, 2 gas masks, 2 short ladders and good minor equipment. **Hopelawn Fire Company No. 1:** Fire District No. 8. Membership 45. Located on the corner of May and Charles Streets. Building is 2-story hollow tile structure stuccoed, with a slag roof, concrete apparatus floor, stove for heating, electric lights and telephone. **Equipment:** A 1925 American La France 750-g.p.m. triple combination pumping engine carrying an 80-gallon booster tank, 200 feet of booster hose, 1,000 feet of 2½-inch hose, 2 short ladders and fair minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. It is tested twice a year at 150 pounds in Fords, annually at 175 pounds in Hopelawn and annually at hydrant pressure in Keasbey; shifted at fires and drills and dried on apparatus floor. There is a total supply of 5,900 feet of 2½-inch hose of which 2,600 feet is held in reserve and 3,300 feet is over 5 years old. **Operations:** Companies are under the supervision of the board of fire commissioners in their respective districts. Chiefs have control of apparatus at all times and of men at fires and drills. They may suspend members pending a hearing before the board of fire commissioners. Motors are started once a day in the Fords company and once a week in the Keasbey and Hopelawn companies. There is an average of 6 men in each company who drive apparatus. **Drills and Training:** Drills held monthly in each company under the supervision of chief officers consist of hose laying, pump operation, ladder raising and use of equipment. **Fire Methods:** Booster and chemical streams used on incipient fires reinforced with engine or hydrant lines with shut-off nozzles. Each company is provided with two gas masks. The Fords company carries 2 salvage covers and has an Eastman deluge set in reserve. **Response to Alarms:** All companies respond to all alarms in the three fire districts. Outside aid may be secured from the other fire districts in Woodbridge Township, Raritan Township and Perth Amboy. **Building Inspection:** None by the department. Township building inspector makes an inspection four times a year of all mercantile and industrial risks. **Records and Reports:** Companies keep a record of the location and attendance of all fires and submit an annual report to their respective boards of fire commissioners. **Fire Alarm System:** System is part of the fire department and under the supervision of and maintained by a local electrician. Headquarters is located in a closet off apparatus floor at the Fords fire house and is seriously exposed and has internal hazards common to a fire station housing automobile apparatus. Equipment is of Gamewell automatic type and includes a 4-circuit operating and charging board with the usual devices for testing and operation. Board is slate on iron frame. Circuit is protected on operating board by ½-ampere enclosed fuses and by inert gas lightning arresters and 5-ampere fuses at the entrance of circuit to fire hose. Current for operation of system is supplied by two oxide film rectifiers serviced from the 110-volt lighting circuit with 2 banks of storage batteries of 10 cells each floating. Batteries are mounted on standard rack and are located in closet with operating board. Batteries are protected by 30-ampere and rectifiers by 1-ampere cartridge fuses. There are a punch register and 6-inch gong in each fire station, an air horn at the Fords and the Keasbey fire houses and a siren at the Hopelawn fire house. There are 23 Gamewell fire alarm boxes of which 22 are of the non-interfering type and one is of the succession type. Boxes are mounted on utility company poles with red indicating bands at or near street intersections. There is one box circuit divided into 3 loops carrying all boxes and alarm instruments. Circuit is No. 10 hard drawn copper, triple braided, weatherproof wire on joint occupancy poles well below other utility wires. A test tap is sent over fire alarm system weekly. No records are kept of any tests. Alarms of fire are telephoned to the Fords fire house during the day and are sounded by means of a breakwheel transmitter; during the night alarms are telephoned to the police who operate the nearest fire alarm box.

**POLICE DEPARTMENT:** Township police department consists of a chief, 2 captains, 6 sergeants and 26 patrolmen working in 8-hour shifts. A Ford combined patrol and ambulance, 4 radio cars equipped with 2-way radio, 1 utility car equipped with 1-way radio and 4 motorcycles are provided. There are 12 police signaling boxes over which patrolmen report hourly. A desk man is always on duty. Police respond to all alarms of fire and report unauthorized building construction to building inspector.

**BUILDING LAWS:** Code adopted June 17, 1935 closely follows that of the National Board of Fire Underwriters. It prohibits flammable roof coverings in the entire township, embodies all the essential good structural requirements and establishes suitable fire limits in each fire district of the township. The building department is well organized with a competent inspector. Records are complete and filing provisions are satisfactory.

**EXPLOSIVES AND FLAMMABLES:** A complete fire prevention code embodying the essential requirements was adopted on May 20, 1935. It establishes a fire prevention bureau which is synonymous with the building department and in charge of the building inspector. State laws adequately cover the storage and shipment of explosives and flammables and the construction of motion picture booths. They also restrict the discharge of fireworks to responsible bonded parties.