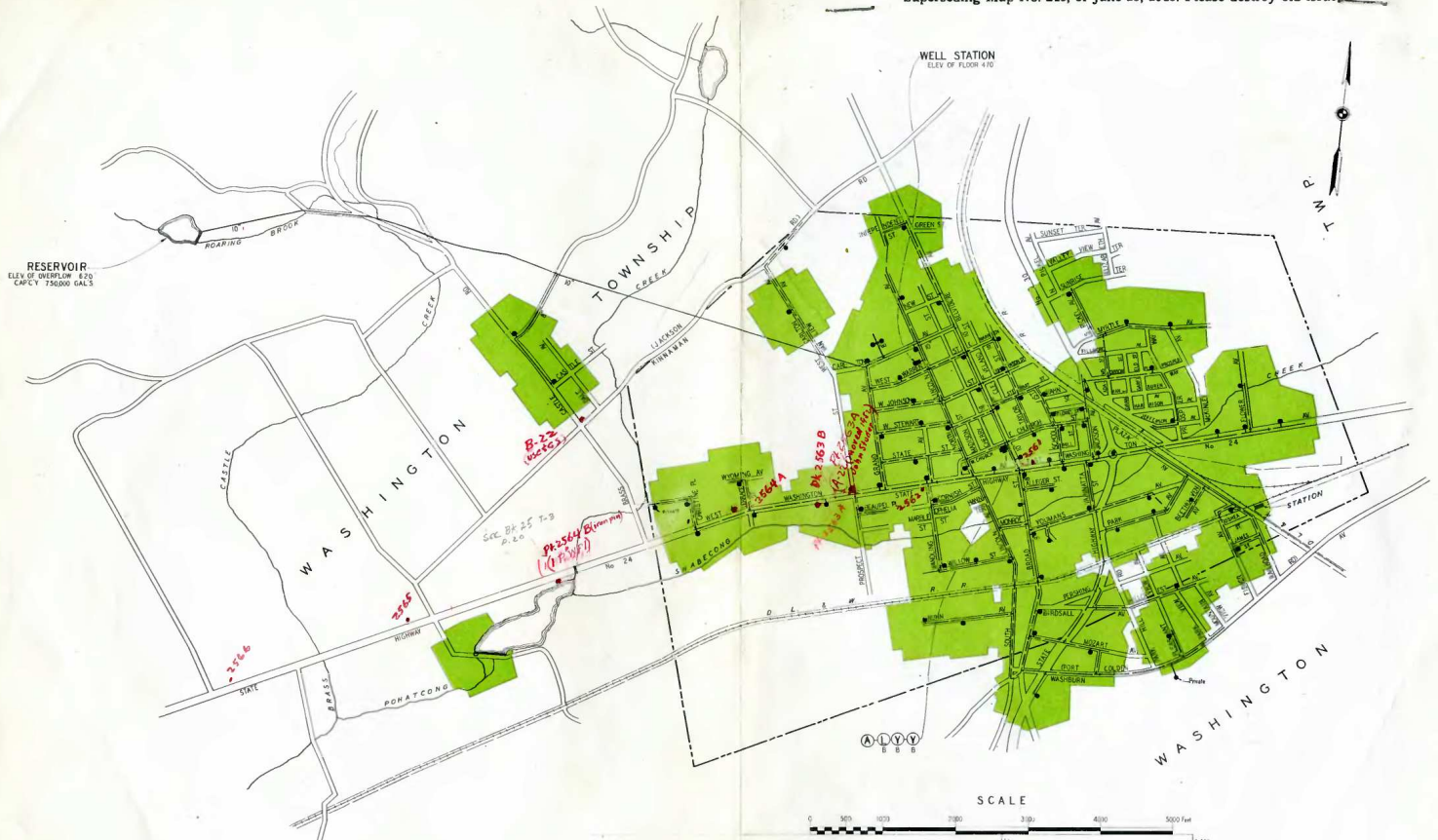


Superseding Map No. 240, of June 15, 1945. Please destroy old issue.



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

Washington Borough
Warren County, New Jersey

OCTOBER 31, 1950

KEY

PROTECTED FIRE ZONE: Shown in Green.

Note: For description of fire protection, etc., see other side.

Elevations range from 400 to 570 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

(L) Ladder truck

(A) Ambulance, Squad or Auxiliary car

(Q) Booster tank or tanks on above

WASHINGTON BOROUGH, WARREN COUNTY, NEW JERSEY.

Population: 1940 Census—4,643.

GENERAL: Located on the D., L. & W. R. about 15 miles northeast of Phillipsburg and Easton. It is a residential and business community in a rich agricultural territory. There are about 16 industrial establishments including textile mills employing about 1,100. Area about 2.0 square miles. Elevations range from 400 to 570. Main thoroughfares are concrete or macadam in good condition and streets in residential areas are generally improved and in fair to good condition. Railroad crossings at grade could effect delays in the response of the fire apparatus to the small areas to the south, and congestion and parked vehicles in the business area could adversely affect the operations of the fire department.

WATER SUPPLY: The Washington Water Company, which is a subsidiary of the Delaware Valley Utilities Company, owns and operates the supply works and distribution system supplying water for domestic and fire protection purposes to territory within and adjoining the municipal limits. The system was originally installed in 1883 and subsequently improved. **Organization:** System is in charge of a local manager with 3 maintenance employees and one clerk. Office located on Broad Street near business district. Records consist primarily of operating data and a general distribution map. They are incomplete as to distribution system details and inspections. The manager is a member of the local fire department and responds to all alarms. Emergency equipment is available. **Supply Works:** The supply is obtained from two impounding reservoirs on Roaring Brook respectively about 2½ and 3½ miles northwest of the business district. **Reservoirs:** The reservoirs are formed by substantial rubble masonry and rip rap dams with adequate spillway capacity. The upper reservoir has a capacity of 5,670,000 gallons and flows to a lower distributing reservoir which has a capacity of 750,000 gallons. The drainage area is about 2.4 square miles and the average daily run-off is estimated to be 400,000 gallons. Water is normally delivered from the distributing reservoir through about 2.5 miles of 10-inch transmission main, equipped with a master Venturi meter. Reservoir piping is arranged so as to permit the distributing reservoir to be by-passed to increase the normal pressure by about 45 pounds. **Distribution System:** In one service. Consists primarily of 8-inch and 10-inch arteries supplying incomplete 4-inch and 6-inch gridiron and dead end mains. **Consumption:** The average daily consumption during 1944 was 0.367 million gallons and the maximum daily consumption is estimated to be 0.55 million gallons. At the time of the inspection there were 1,478 services, most of which are metered. **Pipe:** All cast iron, tar coated, bell and spigot joint, laid with about 3½-foot cover except that there is about 2,000 feet of Universal joint pipe and 2,500 feet of cement asbestos pipe in the system. Total length 65,000 feet; 9.4% 10-inch, 6.3% 8-inch, 45.8% 6-inch, and 38.5% 4-inch. No recent trouble from frozen mains or electrolysis. **Gate Valves:** There are 100 on the system of Eddy make generally set with boxes at grade. With one exception, direction of operation is uniform. Inspection is limited to that necessitated by routine system operation. **Hydrants:** There are 75 on the system of Eddy make of standard type with two 2½-inch outlets and 4-inch and 6-inch branches. About 50% of the hydrants have one 4½-inch outlet in addition and about 50% of the branches are gated. Hydrant hose outlet threads are National Standard and large outlets are 5¼" outside diameter with 4 threads per inch. Hydrants are inspected twice annually and were found to be in good condition at time of inspection. **Pressures:** Pressure recording gauge in water company office at about elevation 460 shows pressures to be fairly well maintained between 75 and 85 pounds. Readings taken at 11 well distributed hydrants showed pressures ranging from 44 to 98 pounds with an average of 61.1 pounds. During this inspection the recording gauge showed a normal day pressure of 75 pounds. **Fire Flow Tests:** 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:

June 16, 1936—

Washington Ave. and Broad St., 760—72—28.

S. Lincoln Ave. and Willow St., 705—78—32.

Mozart Ave. E. of State Highway No. 30, 215—46—.

James St. and Fisher Ave., 305—57—.

Washington Ave. W. of Bryan Ave., 550—76—.

Belvidere Ave. and Independence St., 360—44—.

Kinneman Ave. E. of W. Carlton Ave., 205—67—.

Washington Ave. 800 ft. W. of Prospect St., 480—08—15.

Prosper Way and Jefferson Ave., 310—68—.

June 16, 1939—

State Highway No. S-24 E. of Flower Ave., 475—68—16.

Myrtle Ave. 1,400 ft. E. of State Highway No. 30, 360—48—.

*No reading taken.

FIRE DEPARTMENT: A volunteer organization of two companies under the control of the borough which

owns apparatus and equipment and makes an annual appropriation for the support of the department. Total active membership 27 including a chief, assistant chief, 2 foremen and 2 assistant foremen, of whom a minimum of 10 members are available at all times. Officers are elected annually by the company subject to confirmation by the mayor and council, and chief officers usually serve two terms. **Companies:** Located in municipal building on Belvidere Avenue and Church Street as shown on map. Building is a 1- and 3-story stuccoed brick and frame structure with built-up roof, concrete apparatus floor, steam heat, electric lights, telephone, hose rack, and air horn on roof. **Equipment:** One 1920 Seagrave 750-g.p.m. triple combination pumping engine carrying one 85-gallon booster tank, 100 feet of booster hose, 700 feet of 2½-inch hose, 2 short ladders, and fair minor equipment. One 1942 Seagrave 500-g.p.m. triple combination pumping engine carrying one 150-gallon booster tank, 150 feet of booster hose, 800 feet of 2½-inch hose, 300 feet of 1½-inch hose, one 12-foot roof ladder, one 35-foot extension ladder, and fair minor equipment. One 1925 American La France 50-foot city service ladder truck carrying 8 ladders ranging from 12 to 50 feet and totaling 224 feet, one CO₂ operated 40-gallon booster tank, 100 feet of booster hose, 400 feet of 1½-inch hose, and fair minor equipment. One 1927 Dodge emergency car carrying one 1,200-watt lighting generator, 2 flood lights, 400 feet of 1½-inch hose, one portable pump, 15 covers, 1 foam generator, gas masks, and complete first aid equipment. One ton of foam powder at fire station and an additional supply of two tons is kept at railroad freight house. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. The total supply is 2,700 feet, of which 1,200 feet is held in reserve. Hose is tested at least twice annually at 300 pounds pressure and dried on hose rack in fire station. About 50% of the total supply is more than 5 years old and about 40% is more than 7 years old. **Operations:** The department is governed by borough ordinance and company by-laws. The chief has full control of the men and apparatus at fires and drills. There are 4 appointed drivers for each apparatus and the building janitor, who is the chief driver, is on duty during the night. Motors are started at least twice weekly. **Drills and Training:** Department drills are held twice monthly, except during the winter months, under the direction of the chief officers. They consist of pump operation, hose and ladder work, and use of equipment. **Fire Methods:** Booster and 1½-inch leader lines are used on incipient fires supported by engine streams with line gates and shut-off nozzles. Flood lighting equipment, salvage covers, and 2 gas masks are provided. No heavy stream appliances installed. **Response to Alarms:** The entire department responds to all local alarms and aid may be secured from the surrounding volunteer departments at Hampton at a distance of about 4 miles and from Phillipsburg and Hackettstown at a distance of about 12 miles. **Building Inspection:** The chief officers make casual inspections of mercantile buildings semi-annually, but regulations governing the control of hazardous conditions are lacking. **Records and Reports:** Records consist of complete tabulations of all fires and drills including attendance, nature of alarms, and equipment used. The chief officer reports annually to the mayor and council. **Fire Alarms:** Alarms are telephoned through a local modern central office to the clerk's desk in the municipal building where a break wheel transmitter operating an air whistle on the roof is installed. The borough clerk is on duty during the day and the building janitor at night. Police desk is also located in the same building.

POLICE DEPARTMENT: Consists of two uniformed officers, one on duty during the day and one at night and a relief officer serving on call. One patrol car is provided.

BUILDING LAWS: Code adopted December, 1926 requires permits from the council committee for building operations in an established fire zone which includes the entire business district. Regulations are limited to requirements for incombustible construction and specifications for chimney construction and exit facilities within the fire zone. In general the regulations are not sufficiently comprehensive from a fire protection standpoint.

EXPLOSIVES AND FLAMMABLES: Local regulations are limited to a fire ordinance adopted March 15th, 1943 creating a Division of Fire in the fire department and granting general inspection authority to the officers and requiring standard exit facilities in places of public assembly and restricting the use of flammable decorations and accumulation of combustible materials. The 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.