



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

Middlesex Borough
Middlesex County, New Jersey

JUNE 14, 1952

KEY

PROTECTED FIRE ZONE: Shown in Green.
NOTE.—Fire protection report on file in Engineering
Department of F. I. R. O. of N. J.
Elevations range from 20 to 70 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
⊕ Ladders on above

MIDDLESEX BOROUGH, MIDDLESEX COUNTY, NEW JERSEY.**Including Beechwood Heights, East Bound Brook, and Lincoln.****Population — 1940 Census: 3,763**

IN GENERAL: Located on the Central Railroad of New Jersey, Pennsylvania Railroad, Lehigh Valley Railroad, and Baltimore and Ohio Railroad between Bound Brook and Dunellen. It is mainly a manufacturing community with a number of factories in the East Bound Brook Section. Area 3.6 square miles. Elevations range from 20 to 70 feet. About 60% of the streets are paved while remainder are dirt or gravel in fair to poor condition. One railroad crossing at grade reported as not having interfered with the response of fire apparatus.

WATER SUPPLY: Water for domestic and fire protection purposes is furnished to the East Bound Brook section by the Bound Brook Water Company (see report and map No. 288) and to the remainder of the borough by the Elizabethtown Water Company, Consolidated (see report and map No. 343). **Bound Brook Water Company:** This water company supplies the East Bound Brook section through two 8-inch and 10-inch mains from the Bound Brook distribution system. **Consumption:** The average and maximum daily consumption on the entire system of the Bound Brook Water Company for 1944 was .662 m.g.d. and .982 m.g.d. Total number of services on the entire system is 2,209, of which 2,169 are metered. There are 173 services in Middlesex Borough, 4 of which are not metered. **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint, laid with about a 3-foot cover. Total length is 22,100 feet; 5.8% 10-inch, 7.2% 8-inch, 45.7% 6-inch and 41.3% 4-inch. **Gate Valves:** There are 37 on the system with uniform operating direction. **Hydrants:** There are 18 on the system of Kennedy and Thompson makes of standard type with two 2½-inch outlets and 4-inch ungated branches. Hose outlet threads are 3-inch outside diameter with 8 threads per inch. Steamer outlets are National Standard. They are inspected annually and were in good operating condition at time of inspection. **Pressures:** Readings taken at 5 hydrants showed an average pressure of 33 pounds. **The Elizabethtown Water Company Consolidated:** This water company supplies the Beechwood Heights and Lincoln sections of the borough by a 36-inch transmission main from the 48-inch main from the Raritan-Millstone Pumping Station. **Consumption:** The average and maximum daily consumption on this system in Middlesex Borough was .130 and .149 m.g.d. respectively. There are 804 services in the borough, all of which are metered. **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint, laid with about a 3-foot cover. Total length exclusive of the 36-inch transmission main is 62,900 feet; 8.6% 12-inch, 3.5% 10-inch, 17.2% 8-inch, 68.8% 6-inch, and 2.5% 4-inch. **Gate Valves:** There are 62 on the system with uniform operating direction. They are inspected annually. **Hydrants:** There are 66 on the system of Eddy and Mathews makes of standard type, 16 of which have two 2½-inch and one 4½-inch outlets and the remainder have two 2½-inch outlets. Hose outlet threads are 3-inch outside diameter with 8 threads per inch. Steamer outlets are National Standard. About 30 have gated branches. They are inspected annually and were in good operating condition at time of inspection. **Pressures:** Readings taken at 3 hydrants showed an average pressure of 74 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:

Bound Brook Water Company—

Lincoln Blvd. at "A" St., 540—34—12 (6/12/42).

Ashland Rd. at "C" St., 340—34—5 (6/12/42).

Port Reading Ave. at "C" St., 290—30—8 (3/6/40).

Reading Ave. at "A" St., 380—33—* (5/13/35).

Port Reading Ave. 400 ft. E. of River Rd., 460—35—* (5/13/35).

Elizabethtown Water Co. Consolidated—

Lincoln Blvd. at Mountain Ave., 680—72—45 (4/9/36).

Bound Brook Rd. at Vogel Pl., 920—71—45 (3/4/36).

Beechwood Ave. at Shepherd Ave., 690—79—42 (3/4/36).

*No reading taken.

FIRE DEPARTMENT: A volunteer organization of 54 men including a chief and 3 assistant chiefs and in each of three companies a captain and lieutenant. The borough appropriation for 1945 was \$3,500. An average of 6 men are available during the day and 20 during the night. The department is governed by a Board of Fire Officers composed of 3 men from each company and the chiefs, whose acts are subject to the approval of the mayor and council. Chiefs are elected for a 2-year term subject to the approval of the mayor and council. Companies own the fire houses and the borough owns the equipment. **Companies—Lincoln Hose Company No. 1:** Membership 18. Located on Mountain Avenue near Drake Street. Building is a 1-story frame structure with tar paper roof, wood floor, coal stove for heat, electric lights, and telephone. **Equipment:** A 1927 Pirsch-Hale 500-g.p.m. triple combination pumping engine carrying a 300-gallon booster tank, 250 feet of booster hose, 800 feet of 2½-inch hose, 3 short ladders, and fair minor equipment. **Pierce Hose Company No. 3:** Membership 18. Located on "A" Street near Main Street. Building is a 1-story stucco on tile structure with cement floor, composition covered wood roof, stove for heat, electric lights, and telephone. **Equipment:** A 1942 Mack 750-g.p.m. triple combination pumping engine carrying a 200-gallon booster tank, 300 feet of booster hose, 1,300 feet of 2½-inch hose, 400 feet of 1½-inch hose, 2 short ladders, and fair minor equipment. **Parker Engine Company No. 4:** Membership 18. Located on Bound Brook Road opposite Clay Avenue. Building is a 1½-story stucco on concrete block structure with composition covered wood roof, wood floor, steam heat with oil burner, electric lights, and telephone. **Equipment:** A 1931 Pirsch 500-g.p.m. quadruple combination pumping engine and city service ladder truck carrying a 120-gallon booster tank, 200 feet of booster hose, 1,100 feet of 2½-inch hose, 400 feet of 1½-inch hose, 11 ladders ranging from 12 to 50 feet, totaling 264 feet, and good minor equipment. A 750-watt flood light generator with 3 lights is also carried. One O.C.D. trailer pump unit is available. **Hose:** All 2½-inch hose is C.R.L. with screw couplings, 3 inches outside diameter and 8 threads per inch. There is 750 feet held in reserve and about 800 feet is over 7 years old. It is tested annually at 200 pounds. One drying rack is provided but hose in the other companies is sometimes repacked wet. **Operations:** Governed by Board of Fire Officers, which is established by borough ordinance, and company by-laws. Several drivers are appointed in each company. **Drills and Training:** Drills held under the supervision of the chief officers are held monthly. **Fire Methods:** Booster and 1½-inch lines are used on incipient fires reinforced by engine lines with shut-off nozzles. An insufficient number of gas masks are available and salvage equipment and heavy stream appliances are lacking. **Response to Alarms:** All companies respond to all alarms in the borough. Outside aid may be secured from Bound Brook, Plainfield and Dunellen. **Building Inspection:** No regular inspections. **Records and Reports:** Complete record forms are available and records are generally complete. Reports are made to mayor and council monthly. **Fire Alarms:** Alarms are telephoned to the Pathe plant where there is always someone on duty who sounds the siren at the Parker Company house by means of a push button.

POLICE DEPARTMENT: Consists of a chief and 2 patrolmen with one car two-way radio equipped. The chief's personal car is one-way radio equipped; 20 special officers are also available.

BUILDING LAWS: The code was adopted June 4th, 1930 and amended March 6th, 1935 and May 5th, 1937. Code contains some good features, but does not establish fire limits nor prohibit wood shingle roofs.

FIRE PREVENTION LAWS: No municipal regulations. 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.

ZONING ORDINANCE: Adopted May 6th, 1936.