



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

**CITY**  
**OF**  
**Beverly**  
**Burlington County, New Jersey**

OCTOBER 15, 1949

**KEY**

PROTECTED FIRE ZONE: Shown in Green.  
NOTE.—For description of fire protection, etc., see other side.  
Elevations range from 0 to 30 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

## CITY OF BEVERLY, BURLINGTON COUNTY, NEW JERSEY.

Population—1940 Census—2,691.

**IN GENERAL:** Located on the Delaware River and on the Amboy Division of the Pennsylvania Railroad about 15 miles northwest of Camden. A residential and manufacturing community with about 8 plants employing normally around 700. It is a trading center for the nearby farming section. Area 1.7 square miles. Elevations range from 0 to 30 feet. Main roads improved, others gravel and macadam in fair to poor condition. Railroad crossings at grade and traffic on main highway is said never to have interfered with the response of fire apparatus.

**WATER SUPPLY:** Water for domestic and fire protection purposes is furnished by the Delaware River Water Company which owns supply works and distribution system and furnishes water to Beverly, Delanco, Edgewater Park Township, Riverside and a small section of Delran and Burlington Townships. System is under the supervision of a manager and a superintendent who, with three pumping station engineers, one meter reader, one clerk, one foreman and three utility men, operate system. A consulting engineer is retained. Two well equipped trucks are provided. Alarms of fire are not received at the pumping station. Office, yard, and shop in Beverly near the pumping station. Records consist of cards showing the location and size of fire hydrants. Some member of the company responds to alarms of fire with truck if notified. **Supply Works:** Built in 1886. Supply is obtained from 14 driven wells 6 to 16 inches in diameter and about 65 feet deep with a yield of 2.0 m.g.d. Water is obtained by deep well pumps and discharged into a receiving basin 40 x 40 x 8 feet, capacity 150,000 gallons whence it is pumped directly into the mains with a standpipe and an elevated tank located in Riverside, acting as equalizer. Certain deep well pumps, capacity 1.15 m.g.d., are capable of pumping directly into the mains. **Pumping Station:** Located as shown on map. Consists of two separate one-story adjacent brick structures. The station housing electrically driven pumps has a metal roof, concrete floor, electric lights, and steam heat. Hand protection is provided. Exposures negligible. Wiring in conduit. Housekeeping good. Elevation of pump room floor 5 feet. The station housing the steam equipment has a slate on wood roof, wood floor, electric lights, and steam heat. No hand protection. Exposures negligible. Wiring in conduit. Housekeeping poor. Boiler room not cut off. Elevation of pump room floor 10 feet. **Equipment—Low Lift:** One 0.72-m.g.d. Worthington centrifugal pump driven by a 7½-h.p. Westinghouse electric motor. One 0.36-m.g.d. Worthington deep well turbine driven by a 5-h.p. U. S. electric motor. Two 0.18-m.g.d. Worthington deep well turbines driven by 3-h.p. U. S. electric motors. One 0.432-m.g.d. Pomona deep well turbine driven by a 5-h.p. G. E. electric motor. **High Lift:** One 0.792-m.g.d. DeLaval centrifugal pump driven by a 25-h.p. Westinghouse electric motor. One 1.296-m.g.d. Allis Chalmers centrifugal pump driven by a 50-h.p. Allis Chalmers electric motor. One 1.08-m.g.d. Worthington centrifugal pump driven by a 50-h.p. Buda gasoline engine. One 2.0-m.g.d. Worthington compound duplex pump driven by steam. Two 75-h.p. Erie City steam boilers. **Distribution System:** In one service; see map. Supply to district is through a single 12-inch main poorly gridironed with 4- and 6-inch mains. There are some 4-inch dead end mains supplying hydrants. **Elevated Tank:** Located in Riverside as shown on Map No. 161. Steel, 25 feet by 22 feet, capacity 100,000 gallons mounted on a 98-foot steel tower. Elevation of the base of the tower 21 feet. Elevation of the overflow 141 feet. **Standpipe:** Located in Riverside as shown on Map No. 161, steel, 12 x 120, capacity 102,000 gallons, elevation of base 21, elevation of overflow 141 feet. **Consumption:** The average and maximum daily consumption in the entire territory served, 3,215 services, in 1948 was 0.743 and 1.1 m.g. On December 31, 1948, there were 742 services in Beverly, of which 3 were not metered. **Pipe:** Cast iron, tar coated, bell and spigot joint, laid with a 3¼-foot cover. Total length, 34,840 feet; 50.0% 4-inch, 26.5% 6-inch, 11.0% 8-inch, 7.3% 10-inch, and 5.2% 12-inch. Some trouble from frozen mains, none from electrolysis. **Gate Valves:** 54 of Ludlow, Gloucester, and Wood makes set in iron boxes to grade. All turn right to open. No regular inspection. **Hydrants:** 52 of Ludlow, Wood, and Gloucester makes; 19 have two 2½-inch outlets, one 4½-inch outlet, 4-inch valve openings and 4- or 6-inch branches. The remainder have two 2½-inch outlets, 4-inch valve openings and 4-inch branches; 32 hydrant branches are gated. Hydrants are inspected twice a year. Those operated during resurvey were found to be in fair condition. Two-and-a-half-inch outlets have 7 threads per inch and 2-9/16-inch O.D., 4½-inch outlets have 7 threads per inch and 5-9/16-inch O.D. **Pressures:** Readings taken at 10 hydrants widely distributed showed pressures ranging from 43 to 50 pounds with an average of 49 pounds. Gauge in pumping station showed pressures ranging from 55 to 70 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:

October 1, 1947:  
Spruce St. and Railroad Ave., 83—\*—\*.

October 17, 1947:  
Spruce and Pine Sts., 121—50—\*.  
Laurel and Putnam Sts., 149—50—\*.

Oak and Laurel Sts., 262—50—\*.  
Laurel between Pine St. and Railroad Ave., 129—50—\*.  
Walton St. and Garfield Ave., 170—48—\*.  
Elizabeth and Pine Sts., 295—43—\*.  
Pine and Parker Sts., 310—49—\*.  
Van Kirk St. and Delaware River, 159—50—\*.  
Vansciver St. and Delaware River, 191—50—\*.

April 27, 1949:

Warren and Cooper Sts., 580—49—25.

\*No reading taken.

**FIRE DEPARTMENT:** A volunteer organization of two companies under partial control of the city. Companies own houses, apparatus, and equipment and received \$3,000 from the City of Beverly and \$1,500 from the Township of Edgewater Park for their support in 1949. Total membership 300, of whom about 20 are available at all times. There are a chief and an assistant chief elected every other year by the companies and confirmed by the city council, and two foremen and two assistant foremen elected annually by the companies. **Companies—Beverly Fire Company No. 1:** Membership 175. Located on Oak Street near Laurel Street. Building is a two-story stuccoed frame structure with a composition roof, concrete and wood apparatus floor, hot water heat, electric lights, and telephone. **Equipment:** A 1946 Ward La France 750-g.p.m. triple combination pumping engine carrying a 250-gallon booster tank, 150 feet of booster hose, 200 feet of 1½-inch hose, 1,100 feet of 2½-inch hose, 2 short ladders, 2 gas masks, 1 Bresnan distributor, 1 mechanical foam nozzle, 75 gallons of foam liquid, a 600-watt electric generator, and fair minor equipment. A 1946 Ward La France 500-g.p.m. triple combination pumping engine carrying a 250-gallon booster tank, 150 feet of booster hose, 400 feet of 1½-inch hose, 900 feet of 2½-inch hose, one 35-foot ladder, 1 short ladder, and fair minor equipment. **Hope Hose Company No. 2:** Membership 125. Located on Broad Street near Warren Street. Building is a two-story brick structure with a composition shingle roof, concrete apparatus floor, hot water heat, electric lights, and telephone. **Equipment:** A 1926 Seagrave 750-g.p.m. triple combination pumping engine carrying a 90-gallon booster tank, 150 feet of booster hose, 200 feet of 1½-inch hose, 1,100 feet of 2½-inch hose, 2 short ladders, 2 gas masks, 1 Bresnan distributor, and fair minor equipment. A 1924 Seagrave 750-g.p.m. triple combination pumping engine carrying a 90-gallon booster tank, 200 feet of booster hose, 900 feet of 2½-inch hose, 2 short ladders, 1 gas mask, and fair minor equipment. **Hose:** All 2½-inch hose is C.R.L. with Jones snap couplings or National Standard threads. It is tested twice a year at 200 pounds, shifted quarterly, and dried on apparatus floor. All 2½-inch hose is carried on the apparatus and about 2,700 feet is over 5 years old. **Operations:** Department governed by company by-laws. Chief has control of apparatus at all times and of men at fires and drills. He has power to suspend members subject to appeal to board of engineers which consist of the officers of the department. Motors are turned over weekly. From 18 to 20 members are appointed drivers. **Drills and Training:** Drills held weekly under supervision of board of engineers consist of hose laying, ladder raising, pump operation, and use of equipment. **Fire Methods:** Booster streams used on incipient fires reinforced by engine streams with shut-off nozzles. Engine usually hooks up. Gas masks are carried, but no salvage equipment nor heavy stream appliances are provided. **Response to Alarms:** Entire department responds to all alarms in Beverly, Edgewater Park, and sections of Willingborough Township. Outside aid may be secured from Burlington, Delanco, and Riverside. **Building Inspection:** An occasional inspection is made of schools and stores by the board of engineers. **Records and Reports:** Records are kept of all fires which include location, amount of damage, cause, and the equipment used. **Fire Alarms:** Alarms of fire are telephoned to the telephone exchange located in a three-story frame building and are sounded from there by operator. Each company calls operator to determine the location of fire.

**POLICE DEPARTMENT:** Consists of a chief, who is the mayor, and 2 uniformed men; 5 constables and 5 specials on call. Police respond to alarms of fire. One car, without radio, is provided.

**BUILDING LAWS:** Code adopted July 9, 1929, provides for the appointment of a building inspector and requires that permits be secured before building operations may begin. No fire limits are established and combustible roofs are not prohibited. Code has some good regulations in regard to chimneys, fire stops and garages, but in general does not conform to the National Building Code.

**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.