



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

# **Glen Ridge Borough** **Essex County, New Jersey**

SEPTEMBER 30, 1948

**KEY**  
PROTECTED FIRE ZONE: Shown in Green.  
NOTE — For description of fire protection, etc., see other side.  
Elevations range from 130 to 250 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  
B Booster tank or tanks on above



**GLEN RIDGE BOROUGH, ESSEX COUNTY, NEW JERSEY.**

Population — 1940 Census — 7,331.

**IN GENERAL:** Located adjoining Montclair on the east and Bloomfield on the west on the D., L. & W. and Erie Railroads. It is a high grade residential community with a restricted shopping center and two industries employing about 250 persons. Area about 1.25 square miles. Elevations range from 130 to 250 feet. Streets mostly paved in good condition. One railroad grade crossing reported as not having interfered with response of fire apparatus.

**WATER SUPPLY:** Borough owns distribution system which was constructed by a private company in 1880 and purchased by the borough in 1912. Since September 22, 1930 water has been supplied through the Montclair distribution system. (See Montclair National Board of Fire Underwriters' Report No. 358.) The Glen Ridge Water Department is under the control of the borough engineer who also functions as water superintendent and building inspector. An assistant handles details of the building department. Department consists of one mechanic, one assistant mechanic, one bookkeeper, one part-time clerk and laborers as required. Five laborers in public works department are available in an emergency. Extensions made by contract under supervision of borough engineers. Office in municipal buildings. Records and maps generally good. **Supply Works:** Supply at Grove Street Station in Montclair obtained from the 74-inch conduit from Wanaque Reservoir. Water is pumped direct to the low service in Montclair and to the Watchung Station, thence to the high service and the high service reservoir. The middle service is supplied through regulating valves from the high service. In case of emergency the low service can be supplied through regulating valves from the middle service and at a reduced head through the emergency connection with the 60-inch Newark supply main. Glen Ridge is supplied through one 10-inch and two 6-inch meters with regulating valves from the Montclair low service. Meters are equipped with bypass and are connected to 12-inch or 16-inch mains in Montclair. **Distribution System:** In one service; see map and description above. **Consumption:** The average and maximum daily consumption for 1947 was 0.54 and 0.80 million gallons. On December 31, 1947 there were 1,860 services in Glen Ridge, all of which were metered. **Pipe:** All pipe is cast iron, tar coated, bell and spigot joint, except 1,346 feet of Universal joint, laid with 4-foot cover. No trouble reported from frozen mains or electrolysis. Total length, 137,302 feet; 5.4% 12-inch, 8.4% 8-inch, 66.1% 6-inch, 20.1% 4-inch. **Gate Valves:** There are 508 on the system of Darling and Ludlow makes, set with iron boxes at grade. No regular valve inspections. Fire department notified when valves affecting hydrant supply are operated. **Hydrants:** There are 235 of Darling, Ludlow, Eddy, and Smith makes, each with two 2½-inch outlets, 4-inch barrel and branch; 40 hydrants have 6-inch barrel and branch and a 4½-inch outlet in addition. Some have gated branches. Small outlets are 3-inch outside diameter with 8 threads per inch, and large outlets are National Standard. Hydrants are inspected and oiled annually. **Pressures:** Recording gauge at municipal building. Readings taken at 6 hydrants showed pressures ranging from 60 to 108 pounds with an average of 87 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on May 27, 1937 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Bloomfield Ave. and Herman St., 900—85—34.  
Ridgewood Ave. and Appleton St., 860—85—45.  
Adams and Astor Pl., 720—108—50.  
Ridgewood Ave. and Glen Ridge Parkway, 980—60—20.  
Hawthorne and Victor Aves., 410—85—65.  
Forest Ave. and Burnet Pl., 890—100—66.

**FIRE DEPARTMENT:** A part-paid and volunteer department of 3 companies under control of the borough. Chief appointed by council for one-year term. Borough owns equipment, apparatus, and house. Total membership 66, including 5 paid men and 61 volunteers. About 20 of the volunteers are available at all times. There are 1 paid chief, a paid captain, and 3 paid men working 2 on each shift with the extra man filling in for days off and vacation periods. Two men who work and live nearby are part-paid and respond to all alarms. Only paid men act as drivers. Paid men are eligible for pension and are subject to Tenure of Office Act. **Companies:** All companies are located in a part of the municipal building, a two-story brick building with steam heat, electric lights, and hose tower, located at Bloomfield Avenue and

Herman Street. **Equipment: Engine Company No. 1:** A 1941 Mack 750-g.p.m. triple combination pumping engine carrying a 100-gallon booster tank, 200 feet of booster hose, 1,500 feet of 2½-inch hose, 2 short ladders, 1 gas mask, 1 mechanical foam nozzle, and fair minor equipment. **Engine Company No. 2:** A 1935 Mack 600-g.p.m. triple combination pumping engine carrying a 100-gallon booster tank, 350 feet of booster hose, 1,200 feet of 2½-inch hose, 2 short ladders, 2 gas masks, and fair minor equipment. **Ladder Company No. 1:** A 1937 Seagrave 65-foot aerial ladder carrying 10 ground ladders ranging from 8 to 50 feet and totaling 236 feet, a 100-gallon booster tank, 300 feet of booster hose, 200 feet of 1½-inch hose, 1 life net, 2 gas masks, 1 distributing nozzle, one 1,250-watt electric generator, 6 salvage covers, and good minor equipment. **Hose:** All 2½-inch hose is C.R.L. with New York type screw couplings. It is tested semi-annually at 200 pounds, dried in tower, and frequently recoiled. Fifty percent is over 7 years old. **Operations:** Department governed by ordinance and company by-laws. Chief has control of apparatus at all times and of men at fires and drills. He may suspend members and prefer charges to the council. **Drills and Training:** About 10 times a year drills are held consisting of hose, pump, and ladder work. About every two months paid men operate the engine at hydrant or draft. **Fire Methods:** Booster lines are used on incipient fires reinforced by hydrant or engine lines with shut-off nozzles. **Response to Alarms:** All apparatus responds to box alarms. For telephone alarms for grass, automobile or fires not in a building, one piece responds. Aid may be secured from Bloomfield, Montclair, East Orange, and Newark. **Building Inspection:** Department makes an annual inspection of schools and occupancies where hazardous conditions are likely to exist. **Records and Reports:** Monthly and annual reports are made to the mayor and council. Generally good records are kept. **Fire Alarm System:** The fire alarm system is part of the fire department and is maintained by a paid fireman. A Gamewell automatic system consisting of three underground box circuits and one local alarm circuit entirely in the station. **Equipment:** One 4-circuit operating board equipped with the usual testing and operating devices, a 4-circuit automatic repeater with contacts for one closed alarm circuit, four rectox rectifiers and 58 cells of storage battery. Equipment is located in a well-ventilated cut-off section of basement of the municipal building. Batteries are well mounted in the same room. There are three box circuits all underground except for about 300 feet where one circuit enters a building. Wires are No. 14 rubber covered copper in lead sheath run in telephone and city conduits. There is a total of 30 boxes, one of which is private; all are of succession type. Nine are on metal standards and the remainder on substantial wood posts; all are newly painted and have upper half of nearby light globes painted red. Boxes are tested monthly by shunting and pulling. There are 3 air horns located at Forest Avenue, fire headquarters, and Baldwin Street, and a hand operated steam whistle at the Nevins-Church Press. Headquarters has a register, gong, and indicator and there is an indicator at the factory for the steam whistle. A breakwheel transmitter with 51 wheels is located at the watch desk. For alarms of fires not in buildings one round of box is transmitted by the outside sounding devices; for house fires the location of the nearest box is sounded. Tests are made for current, voltage, and grounds daily. No records are kept. There is one telephone from the Bloomfield exchange building. Line is not reserved for fire calls.

**POLICE DEPARTMENT:** Consists of a chief, 2 lieutenants, 3 sergeants, and 15 patrolmen. They have two motorcycles and three radio equipped cars. Desk man is always on duty.

**BUILDING LAWS:** Code adopted September 12, 1910 contains provisions for heating installations, wall thickness, and height of buildings, but does not establish fire limits, nor prohibit wood shingle roofs.

**FIRE PREVENTION LAWS:** Building code contains some regulations on the storage of flammable materials. 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:** Adopted June 13, 1921, and amended March 12, 1923.