



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

Atlantic Highlands Borough
Monmouth County, New Jersey

JANUARY 15, 1948

KEY

PROTECTED FIRE ZONE: Shown in Green.
Note.—For description of fire protection, etc., see other side.
Elevations range from 0 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
- (H) Hose car
- (A) Ambulance, Squad or Auxiliary car
- (B) Booster tank or tanks on above
- (L) Ladders on above

ATLANTIC HIGHLANDS BOROUGH, MONMOUTH COUNTY, NEW JERSEY.

Population — 1940 Census — 2,335. Present Estimate 3,000.

IN GENERAL: Located on the south shore of Sandy Hook Bay on the C. R. R. of N. J. A few small industries employ about 127. Area 1.3 square miles. Elevations range from 0 to 269 feet. Roads are macadam and gravel in good to fair condition. Railroad crossings at grade have not interfered with the response of fire apparatus.

WATER SUPPLY: Water for domestic and fire protection purposes is furnished by the borough which owns and operates the supply works and distribution system, supplying water to the borough only. **Organization:** System is in charge of a superintendent who, with 2 engineers, operates the system. Maintenance help is obtained from other borough employees. Superintendent usually responds to alarms of fire. Office is in borough hall. Records are poor. **Supply Works:** Originally built in 1894 and subsequently remodeled. Supply is obtained from 3 deep wells, 180 feet, 580 feet, and 572 feet deep and 21-inch to 10-inch, 18-inch, and 16-inch casings respectively. **Pumping Station:** Located at west end of Lincoln Avenue. Building is 1-story cement block with a 2-story section for the storage of lime; concrete floor, slag on wood roof, electric lights, hand extinguishers, and telephone. No exposures; housekeeping good. Elevation of floor 10 feet. **Equipment:** The first two wells are equipped with 750- and 440-g.p.m. Layne deep well pumps. The larger pump is driven by a 25-h.p. electric motor and the smaller pump by a 7½-h.p. electric motor. The third deep well is located outside the station and is equipped with a 700-g.p.m. Worthington deep well pump driven by a 30-h.p. electric motor. Two 350-g.p.m. high lift Pomona pumps driven by two 30-h.p. electric motors. A diesel engine driving an electric generator was being installed at time of inspection to furnish standby power. Water is pumped from the deep wells through an aerator; thence it flows by gravity through a lime feeder to a receiving tank 10 feet by 10 feet by 20 feet deep, whence it is pumped by the high lift pumps through 2 Cochran filters of 21,000 g.p.h. capacity each to the distribution system. System operates automatically discharging to the system at 120 pounds pressure. **Distribution System:** In one service. Supply is through a 10-inch main and 10-inch and 8-inch artery with poor gridiron and numerous long dead end mains supplying hydrants. **Standpipes:** There are two standpipes located as shown on map. One is 30 feet by 35 feet high with the base at elevation 240 feet, capacity 19,800 gallons. The second is 15 feet by 20 feet high with the base at elevation 275 feet, capacity 178,000 gallons. **Consumption:** The average and maximum daily consumption during 1946 was 0.376 m.g. and 0.575 m.g. There were 967 services, as of January 1, 1947, all of which were metered. **Pipe:** All cast iron, tar coated, bell and spigot joint, four to fifteen feet of cover; some trouble from frozen mains; no trouble from electrolysis. Total length of pipe, 84,300 feet; 1.77% 24-inch, 9.49% 10-inch, 5.46% 8-inch, 30.59% 6-inch, 52.69% 4-inch. **Gate Valves:** There are 105 of various makes, set in iron boxes at grade. No regular inspection. **Hydrants:** There are 116 hydrants of various makes mainly Eddy and Corey. Practically all have 4-inch barrels with 4-inch connections, few gated and majority have two 2½-inch outlets. Inspected occasionally. At time of inspection hydrants were found to be in poor condition. **Pressures:** Readings taken on June 25, 1936 at five hydrants well distributed showed pressures ranging from 60 to 112 pounds with an average of 88 pounds. **Fire Flow Tests:** Probable supply available for fire protection with standpipe floating on the system was measured on June 25, 1936 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Front and Bay Aves., 1,114—112—90.
Bevion Road and South Ave., 710—98—48.
Navesink and Asbury Aves., 585—88—20.
Ocean Blvd and Hooper Ave., 291—60—7.
Bayside Dr. and Hillside Rd., 336—84—4.

FIRE DEPARTMENT: Volunteer organization of three companies under partial control of the borough which owns house, apparatus, and equipment and appropriated \$3,000 for the support of the department during 1947. Total active

membership 60, of whom 40 are available during the day and 54 at night. Chief and two assistant chiefs elected annually by the companies and confirmed by the borough council. Fifteen captains and lieutenants are appointed annually by the chief. **Companies:** All located in same building on Mount Avenue near First Street. Building 2-story stucco on tile with composition shingle roof, concrete apparatus floor, steam heat, electric lights, telephone, and siren. **Engine Company No. 1:** Total membership 20. **Equipment:** One 1928 Maxim 750-g.p.m. engine carrying one 300-gallon booster tank, 300 feet of booster hose, 200 feet of 1½-inch hose, 1,000 feet of 2½-inch hose, 2 short ladders, 1 salvage cover, 2 gas masks, and fair minor equipment. **Engine Company No. 2:** Total membership 20. **Equipment:** One 1931 American La France 600-g.p.m. engine carrying a 300-gallon booster tank, 300 feet of booster hose, 250 feet of 1½-inch hose, 1,000 feet of 2½-inch hose, 2 short ladders, 1 salvage cover, 2 gas masks, and fair minor equipment. **Ladder Company No. 1:** Total membership 20. **Equipment:** A 1944 Seagrave 500-g.p.m. quadruple combination pumping engine carrying a 150-gallon booster tank, 200 feet of booster hose, 500 feet of 1½-inch hose, 1,200 feet of 2½-inch hose, 10 ladders ranging from 10 to 50 feet, totaling 249 feet, 1 salvage cover, 2 gas masks, 2 demand type masks, and fair minor equipment. One 1933 Dodge 1½-ton truck carrying 500 feet of 1½-inch hose, electric generator, 3 flood lights, and poor minor equipment. One Cadillac ambulance with 2 inhalators, 2 gas masks, stretcher, and first aid equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings; 1,100 feet in reserve. Hose is shifted occasionally and tested semi-annually at 120 pounds. It is dried on floor after use; 2,500 feet is over 5 years old. **Operations:** Department governed by company by-laws and borough fire department ordinance. Chief has full control of apparatus at all times and of men at fires and drills. Motors started three times a week. No assigned drivers. Engineers are appointed by chief. **Drills and Training:** Ten complete drills are held each year; they consist of stretching hose, making and breaking couplings, pump operation, and ladder work. **Fire Methods:** Booster lines and hand extinguishers supported by hydrant and engine streams with shut-off nozzles and hydrant gates. Salvage covers and gas masks are provided. Foam and heavy stream appliances are lacking. **Response to Alarms:** Entire department responds to alarms. Outside aid may be secured from Highlands and Navesink. **Building Inspection:** Fire chief makes an inspection of mercantile district occasionally. No records. **Records and Reports:** Fairly complete records are kept of location of fires, amount of damage and equipment used. An annual report is made to borough council. **Fire Alarms:** For fire alarm purposes borough is divided into 32 sections. Alarms of fire are telephoned to fire station. Telephone operates a horn until answered by anyone near fire house and alarms are sounded as a coded signal on a compressed air siren by means of a breakwheel transmitter. Manually operated siren in reserve.

POLICE DEPARTMENT: Consists of a chief, 1 captain, and 3 uniformed officers. One man on duty during day and three at night. A patrol car is equipped with 2-way radio.

BUILDING LAWS: Building code adopted July 25, 1922 provides for the appointment of a building inspector and establishes fire limits. Frame construction prohibited in the fire limits. Has a few good regulations in regard to fire stops and chimney construction, but in general does not conform to the Code of Suggested Ordinances for Small Municipalities as recommended by the National Board of Fire Underwriters. No records.

FIRE PREVENTION LAWS: No municipal regulations. 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 July 22, 1930 and amended August 1, 1945.