



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

Hillside Township Union County, New Jersey

APRIL 15, 1948

KEY
PROTECTED FIRE ZONE: Shown in Green.
Note.—For description of fire protection, etc., see
other side.
Elevations range from 21 to 180 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
Ⓜ Hose car
Ⓢ Booster tank or tanks on above
Ⓢ Ladders on above

HILLSIDE TOWNSHIP, UNION COUNTY, NEW JERSEY.

Population — 1940 Census — 18,556.

IN GENERAL: Located on the Lehigh Valley Railroad west of Newark and north of Elizabeth. A residential and manufacturing community with 50 plants employing about 4,000. Area 2.74 square miles. Elevations range from 21 to 180. Main roads improved, others macadam and gravel in fair to good condition. Transportation to neighboring communities is afforded by railroad and bus lines. Railroad crossings at grade are said to never have interfered with response of fire apparatus.

WATER SUPPLY: Water for domestic and fire protection purposes is furnished by the Elizabethtown Water Company Consolidated (see report with map No. 343) which furnishes a major portion of the city, with a small area served by the City of Newark. Both the Elizabethtown Water Company and the Newark Water Department are well organized with competent staffs. Records generally good. No provision for employees to respond to alarms, but emergency crew is available at all times. Hillside is mainly supplied by the Elizabethtown Water Company Consolidated by one 10-inch and two 12-inch transmission mains from the Hammock and Springfield Stations and by the City of Newark from the Newark High Service from the Cedar Grove Reservoir. Systems are connected by closed connections with 6-inch meters on Summit Avenue and on Elizabeth Avenue. **Consumption:** The average and maximum daily pumpage during 1946 in the entire territory served by the Springfield and Hammock Stations was 6.42 and 8.57 million gallons. On December 31, 1946 there were 11,918 services in Union, Hillside and Elizabeth served from these stations, of which 4,229 were in Hillside. On December 31, 1947 there were 4,511 services in Hillside, all of which are metered, in addition to which there are a small number of services served directly from Newark. **Distribution System:** In two services; see map. **Pipe:** Cast iron, tar coated, bell and spigot joint, laid with a 3½-foot to 4-foot cover. Total length in the Elizabethtown system 218,400 feet; 0.1% 4-inch, 82.5% 6-inch, 2.2% 8-inch, 13.5% 10-inch, and 1.7% 12-inch. There is 7,600 feet of 6-inch pipe on the Newark system. No trouble from frozen mains or electrolysis. **Gate Valves:** There are 466 valves of Rensselaer and Smith makes on the Elizabethtown system. They are inspected continuously. **Hydrants:** There are 447 hydrants on the Elizabethtown system of Mathews, Corey, Iowa, and Mueller makes. Majority have either one or two 2½-inch and one 4½-inch outlets. 4-inch barrels and 6-inch gated branches. There are 15 hydrants of Ludlow and Smith makes on Newark system with two 2½-inch and one 4½-inch outlets, 6-inch barrels, and 6-inch gated branches. Hydrants are inspected monthly and maintained by fire department. Hydrants operated during inspection were found to be in good condition. Small outlets are 3-inch outside diameter with 8 threads per inch. Large outlets are National Standard. **Pressures:** Readings taken at 7 hydrants on the Elizabethtown system widely distributed showed pressures ranging from 67 to 105 pounds with an average of 91 pounds. Reading taken at one Newark hydrant showed a pressure of 72 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on March 24, 1936 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Elizabethtown System—

Hollywood Ave. and Stone St., 1,540—102—68.
Fitzpatrick St. E. of Liberty Ave., 720—105—95.
Buchanan St. and Paul St., 840—84—72.
Chestnut St., last hydrant, 500—70—18.
Gateway and Exeter, 680—105—67.
Hillside Ave. near State Highway No. 29, 730—103—83.
Bellview Ter. and Compton Ter., 880—67—54.

Newark System—

Next to last hydrant on Aldine St., 840—72—25.

FIRE DEPARTMENT: A full-paid department under a township fire committee. There are 31 men, including a chief, an assistant chief, and four captains. Men are appointed by township committee after a physical and mental examination and placed on a six months' probation period. Promotions are made after examinations. A pension fund established by state law is maintained by assessment on salaries of members and appropriation by township. Members may be retired on half pay in case of total disability or after 25 years of service if 51 years of age and are protected by Tenure of Office Acts. Department divided into two platoons on duty 10 and 14 hours, alternating every third day. Men receive from 16 to 30 days vacation depending on rank; no substitutes provided; during vacation season the department strength is usually 2 less per shift. Off-shift men are required to respond to all but still alarms. Members are not allowed to leave town on short day off without permission of chief, but may do so on long day off without permission. The fire department appropriation for 1947 was \$94,874.

Township owns apparatus, equipment, and fire stations. There is a captain on each shift at each house. **Companies—Engine Companies Nos. 1 and 3:** Located in headquarters on Hollywood Avenue opposite Leland Place. Building is 2½-story brick and frame with concrete apparatus floor, composition on wood roof, steam heat, electric lights, 2 telephones, hose tower, and repair shop. **Equipment—Engine Company No. 1:** Membership 8. A 1942 American La France 1,000-g.p.m. triple combination pumping engine carrying a 100-gallon booster tank, 200 feet of booster hose, 300 feet of 1½-inch hose, 1,400 feet of 2½-inch hose, 3 gas masks, 3 salvage covers, 2 short ladders, and good minor equipment. **Engine Company No. 3:** Membership 8. A 1947 American La France-GMC 500-g.p.m. triple combination pumping engine carrying a 200-gallon booster tank, 200 feet of booster hose, 300 feet of 1½-inch hose, 1,200 feet of 2½-inch hose, 6 gas masks, 3 salvage covers, 2 short ladders, 1 portable electric generator, and good minor equipment. **Reserve:** A 1921 American La France 600-g.p.m. triple combination pumping engine carrying an 80-gallon booster tank, 150 feet of booster hose, 1,000 feet of 2½-inch hose, 2 salvage covers, 2 short ladders, and fair minor equipment. Chief is provided with a 1940 Chrysler coupe. **Engine Company No. 2:** Membership 8. Located on the corner of Maple Avenue and Oakland Avenue. Building is a 1½-story frame and brick structure with composition roof, concrete apparatus floor, electric lights, steam heat, and telephone. **Equipment:** A 1932 Day-Elder city service ladder truck carrying ladders ranging from 10 to 50 feet, totaling 262 feet, 950 feet of 2½-inch hose, a deluge set, foam generator with 900 pounds of foam, 4 gas masks, 6 salvage covers, 2 cellar pipes, and good minor equipment. **Hose:** All 2½-inch hose is C.R.L. with New York type screw couplings. There is 3,800 feet in reserve. Hose is shifted bi-monthly, tested at 250 pounds, and dried in hose tower. **Operations:** Department governed by municipal ordinance and rules. Chief has control of apparatus and men at all times. Chief may suspend members pending hearing before township fire committee. Motors started daily. There are 28 men who can drive. **Drills and Training:** Drills held weekly under chief, consist of hose laying, ladder raising, and use of equipment. **Fire Methods:** Booster streams used on incipient fires, reinforced by hydrant and engine streams with shut-off nozzles. Engine hooked up only when necessary. Heavy stream appliances are provided and salvage equipment is used. **Response to Alarms:** All the engine companies respond to alarms unless person calling clearly states that fire is rubbish, grass, or similar fire. Hose car used for grass fires. Outside aid may be secured from Newark, Elizabeth, and Irvington. **Building Inspection:** Inspections are made by the department at least twice a year. Records are complete. **Records and Reports:** A journal and fire records are kept and monthly and annual reports are made to township fire committee. **Fire Alarm System:** System is owned and operated by the New Jersey Bell Telephone Company and consists of 27 street signaling boxes with telephones. Alarms may be transmitted over these boxes to switchboard at police headquarters. Each box has its own circuit, is mounted on utility company poles, is labeled "Fire and Police" and has a red indicating band. Fire calls are sounded on electric sirens from police headquarters. Telephone in each fire house is connected to switchboard.

POLICE DEPARTMENT: Consists of a chief, a deputy chief, a captain, 4 sergeants, 21 patrolmen, and 8 special officers who are also uniformed and do regular duty. Men work in 8-hour shifts. A desk man is on duty at all times. Six cars with two-way radio are provided. Men report every 15 minutes over police and fire signaling boxes. Police answer fire calls and maintain fire lines.

BUILDING LAWS: Code adopted April 30, 1930 provides for a building inspector, establishes fire limits which cover entire township and prohibits flammable roof coverings throughout township. Code closely follows one recommended by the National Board of Fire Underwriters.

FIRE PREVENTION LAWS: Adopted July 23, 1930. Complete jurisdiction is in the hands of the fire prevention bureau which is composed of firemen and is in charge of the chief of the fire department. Follows the Suggested Fire Prevention Code of the National Board of Fire Underwriters, but is not as comprehensive. 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.