



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

Stone Harbor Borough
 Cape May County, New Jersey

JUNE 30, 1951

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 0 to 15 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
- ⊕ Ambulance, Squad or Auxiliary car
- ⊖ Ladder truck
- ⊙ Booster tank or tanks on above
- ⊙ Chemical tank or tanks on above

STONE HARBOR BOROUGH, CAPE MAY COUNTY, NEW JERSEY.

Population—Census of 1930 was 363.

Estimated summer population 4,000.

IN GENERAL: Located on Seven Mile Beach between Atlantic City and Cape May about four miles southeast of Cape May Court House. It is a seasonal seashore resort with no manufacturing establishments. Area of mapped portion about one square mile. Elevations range from 0 to 15 feet. Main thoroughfares are macadam and other streets are gravel or sand in fair to good condition. No grade crossings or other features which would seriously interfere with the response or operation of the fire department.

WATER SUPPLY: The Borough of Stone Harbor owns and operates the supply works, distribution system and appurtenances and supplies water for domestic and fire protection purposes to territory within the municipal limits. The system was installed in 1908. It is under the control of the mayor and council and in charge of an annually appointed superintendent who performs all duties with one assistant and laborers as needed. Office in borough hall. A pipe yard is provided at 81st Street. The superintendent or his assistant proceeds to pumping station on alarms of fire. A small truck and emergency equipment is provided and additional borough trucks are available. Records are fairly complete as to operating data, but complete detailed distribution system records are lacking. **Supply Works:** The entire supply is obtained from two wells by air lift; one well is 6 inches in diameter, 835 feet deep and yields 550 g.p.m.; the other is 8 inches in diameter, 890 feet deep and yields 725 g.p.m. The combined yield of the two wells is approximately 1,000 g.p.m. Static level of wells is 16 to 24 feet below the surface and the pumping level is approximately 70 feet. Wells discharge to a concrete receiving basin with a capacity of 54,500 gallons whence the supply is pumped to the distribution system with a standpipe acting as an equalizer. Electrically operated pumping equipment is automatic between standpipe level of 65 and 90 feet. **Pumping Station:** Located at Second Avenue and 96th Street as shown on map. Building is a one-story stuccoed tile structure with tile covered steel and wood roof, tile floor, plain glass windows, electric lights and hot air heat. Electric wiring is well installed in conduit. General care and cleanliness excellent. No hand protection. Exposure is negligible. Elevation of floor about 10 feet. **Equipment:** Two Sweigard air compressors 15 x 9 x 10 inches; one driven by a 50-h.p. G. E. induction motor and the other by a 6 cylinder 75-h.p. Chrysler gasoline engine. Two 600-g.p.m. Hill Pump Works centrifugal pumps each directly connected to a 30-h.p. G. E. induction motor and each loose coupled to a 40-h.p. 4-cylinder Wisconsin gasoline engine. Cutler-Hammer automatic electric control switches, phase reverse and overload relays are installed. A venturi meter and recording gauges are mounted on panel. Gasoline stored in outside buried tank. **Distribution System:** In one service consisting of three parallel 8-inch arteries with 4- and 6-inch cross connections and a few short 4- and 6-inch dead end lines; see map. **Standpipe:** Located at pumping station as shown on map. It is steel, 10 feet in diameter by 100 feet in height with a capacity of 58,750 gallons. Elevation of base about 12 feet, elevation of overflow about 112 feet. **Consumption:** The average daily consumption during 1938 was 156,000 gallons and the maximum daily consumption is approximately 500,000 gallons. At time of inspection there were approximately 750 services, all of which are metered. **Pipe:** All cast iron, tar coated, bell and spigot joint laid with 3½-foot cover. Total length, 52,200 feet; 29.8% 4-inch, 22.5% 6-inch, 47.7% 8-inch. No trouble reported from frozen mains or electrolysis. **Gate Valves:** There are 220 on the system of Wood and Wilson makes set with valve boxes at grade. Direction of operation is not uniform. Inspection is limited to that necessitated by routine system maintenance. **Hydrants:** There are 52 hydrants on the system of Pratt and Cady and Wood makes. About 50% of the hydrants have one 4½-inch and two 2½-inch outlets, 6-inch barrels and 6-inch branches. Balance have two 2½-inch outlets and 4-inch barrels and branches. About 90% of the branches are gated. Hydrants are inspected twice annually. At time of inspection they were found to be in good condition. **Pressures:** Direct reading and recording gauges in pumping station at about elevation 16 showed 35 pounds at time of inspection with standpipe about 18 feet below the full level. Readings taken at three well distributed hydrants showed pressures ranging from 36 to 40 pounds with an average of 38.3 pounds. **Fire Flow Tests:** Probable supply available for

fire protection purposes was measured on June 1, 1939 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

96th St. and Third Ave., 560—36—30

Second Ave. and 81st St., 940—39—26

110th St. and First Ave., 1,130—40—22

FIRE DEPARTMENT: A volunteer organization of one company with three pieces of equipment under partial control of the borough which appropriated \$2,200 for the support of the department during 1939. The company owns quarters and the borough owns apparatus and equipment. Total active membership 21 in addition to which there are 32 exempt members who perform fire duty. A minimum of 20 members are available at all times. Officers including a chief and two assistant chiefs are elected annually and confirmed by the mayor and council. Membership requirements are limited to the usual age restrictions. **Company:** Located on 96th Street at Railroad Avenue as shown on map. Building is a 2-story concrete block structure with asbestos shingled wood roof, concrete floor, electric lights, steam heat and telephone. **Equipment:** One 1937 Peter Pirsch Diamond T 500-g.p.m. triple combination pumping engine carrying one 250-gallon booster tank, 200 feet of booster hose, 1,100 feet of 2½-inch hose, 300 feet of 1½-inch hose, one 12-foot roof ladder, one 35-foot extension ladder and some minor equipment. One 1927 Reo 300-g.p.m. triple combination pumping engine carrying one 40-gallon chemical tank, 200 feet of chemical hose, 800 feet of 2½-inch hose, 2 short ladders and some minor equipment. One 1924 Reo 300-g.p.m. triple combination pumping engine carrying one 40-gallon chemical tank, 200 feet of chemical hose, 800 feet of 2½-inch hose, 200 feet of 1½-inch hose, 2 short ladders and some minor equipment. One completely equipped ambulance. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. In addition to that carried on the apparatus there is 350 feet in reserve at fire station. Of the total all except 500 feet is more than five years old. Hose is tested twice annually at 200 to 250 pounds pressure with shut-off nozzles. A drying rack is installed in the fire station. **Operations:** Department is governed by company by-laws. No borough ordinance in effect. The chief has control of apparatus at all times and of men at fires and drills. Motors are started twice weekly and there are 12 appointed drivers and operators. **Drills and Training:** Company drills are held twice monthly in favorable weather under the direction of the chief officers. They consist of hose laying, pump operation and some ladder work. **Fire Methods:** Booster and chemical streams and leader lines are used on incipient fires supported by engine streams with shut-off nozzles. Two gas masks are provided, but no heavy stream appliances or salvage equipment are installed. **Response to Alarms:** The company responds to all borough alarms with the larger and one of the smaller pumping engines. The third pumping engine responds to second alarms and one engine affords outside response. **Building Inspection:** No routine inspections by the fire department except that complaints are investigated. **Records and Reports:** Company records consist chiefly of nature of alarms and attendance and equipment used. Monthly reports are made to the County Firemen's Association. **Fire Alarms:** Telephoned through the local exchange located in a frame dwelling at 94th Street whence the electric siren at the fire station is operated.

POLICE DEPARTMENT: Consists of a chief and two uniformed officers one of whom is on duty during the day. A police car is provided. Special officers include firemen and four citizens.

BUILDING LAWS: A zoning ordinance and building code adopted October 26, 1929 provides for the appointment of a building inspector and contains some construction requirements which in general are not sufficiently comprehensive from a fire protection standpoint.

EXPLOSIVES AND FLAMMABLES: No local regulations. The state laws limit the use of fireworks to responsible bonded parties and regulate the storage and shipment of explosives and the construction of motion picture booths.