



The Fire Insurance Rating Organization of N. J.  
 ENGINEERING DEPARTMENT  
 NEWARK 2, N. J.

**Sayreville Borough**  
 Including Melrose, Morgan Heights, and  
 Parlin Sections  
 Middlesex County, New Jersey

JULY 31, 1945

# SAYREVILLE BOROUGH, MIDDLESEX COUNTY, NEW JERSEY

## (Including Melrose, Morgan Heights, and Parlin)

Population—1940 Census—8,186.

**IN GENERAL:** Located on the south bank of the Raritan River between South Amboy and South River on the Raritan River Railroad and the New York and Long Branch Railroad. A scattered industrial and residential area with 9 industries employing about 4,400. Area 16.3 square miles. Elevations range from 0 to 155 feet. Main roads improved, others gravel in fair to poor condition. Transportation to neighboring communities is afforded by bus lines. Railroad crossings at grade are said never to have interfered with the response of fire apparatus.

**WATER SUPPLY:** Water for domestic and fire protection purposes is furnished to the major portions of the borough by the Runyon Pumping Station of the Perth Amboy Water Department; see report on City of Perth Amboy Zone Map No. 305. The Morgan Heights section is supplied from the South Amboy Pumping Station through an 8-inch meter; see report on City of South Amboy Zone Map No. 177. The Parlin section and the Titanium Pigment Company plant are supplied by the DuPont Water Supply which is a private system jointly owned by the du Pont Company, the Hercules Powder Company, and the National Lead Company. The Center section of the borough is supplied through a 10-inch meter and a 12,000 foot long 10-inch line from Perth Amboy's Runyon Pumping Station. This line is fed by a 1.0-m.g.d. capacity pump and a 1.5-m.g.d. capacity pump operating at 86 to 90 pounds at an elevation of 26 feet. The Melrose section is supplied through a 6-inch meter off the 16-inch Perth Amboy main in Bordentown Avenue at Ernston Road. An emergency connection through a closed valve is provided between the 30-inch Perth Amboy main and the 6-in Sayreville main in Washington Avenue near Camden Street. **Distribution System:** Owned by the borough. Arteries are 8-inch and 6-inch and the system is poorly grid-ironed with many 6-inch and 4-inch dead end lines. **Sayreville Booster Station:** Located at the foot of Embroidery Street. Building is 1-story brick with wood sash, wood door, composition shingle covered wood roof, concrete floor and pump pit, and electric lights. An electric heater is to be installed. Elevation of pump pit floor about 65 feet. **Equipment:** An Ingersoll-Rand 500-g.p.m. centrifugal pump automatically controlled between 124-foot and 144-foot head driven by a 20-h.p. G. E. motor. A pressure recording gauge is provided and a flow recorder is to be connected to the present Venturi meter in the discharge line from the pump. **Elevated Tank:** Located on Kathryn Avenue as shown on map. It is steel with a hemispherical bottom mounted on a 50-foot steel tower. Elevation of base is 120 feet; elevation of overflow is 210 feet; and the capacity is 100,000 gallons. **Consumption:** The average and maximum daily consumption in the section fed by the 10-inch main from Runyon Pumping Station was 0.34 m.g.d. and 0.41 m.g.d. during 1944. The average and maximum daily consumption in the entire borough during 1944 was 0.62 m.g.d. and 0.88 m.g.d. There was a total of 1,625 services, 99% of which were metered. **Pipe:** Cast iron, tar coated, bell and spigot joint and transite. Total length in the borough distribution system is 112,800 feet; 15.2% 8-inch, 44.2% 6-inch and 40.6% 4-inch. Some trouble from frozen mains, none from electrolysis. **Gate Valves:** 191 of various makes set with iron boxes at grade. All but one open to left. No regular valve inspection. **Hydrants:** 244 of Mathews, Iowa, Corey, Smith, and Columbian makes; 229 have two 2½-inch and one 4½-inch outlets, 4-inch and 6-inch barrels and hydrant branches and remainder have two 2½-inch outlets, 4-inch barrels and 4-inch branches; 178 branches are gated. Hydrants are inspected twice a year. Those operated during inspection were found to be in good condition. All hydrants on the borough system have National Standard outlets. There are 29 hydrants on the du Pont system with 2-inch outlets. These are maintained by company employees. **Pressures:** Readings taken at 11 hydrants widely distributed showed pressures ranging from 35 to 91 pounds with an average of 66 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:

June 17, 1937:

Main St. and Hart St., 750—67—47.  
John St. and Idlewild Ave., 590—43—26.  
Canal St. 1,100 feet N. of Sandfield Rd., 390—80—30.  
Boehmhuurst Ave. and 5th St., 370—80—10.  
Dupont St. and Washington Rd., 280—43—10.  
Ridgeway Ave. and Lanrel St., 820—49—49.  
Garfield Ave. and Harding Ave., 530—64—13.  
Bordentown Ave. 700 feet W. of Orchard St., 380—35—7.

Grove St. and Pine Ave. (Old State Highway No. 35), 820—63—40.

Midland Ave. and Highway No. 35, 680—76—45.  
Old Spyre Rd., W. of R. R., 590—91—44.

May 23, 1945:

\*Main and Hart Sts., 767—78—32.

\*Washington Ave. at Dupont St., 350—44—9.

\*Tests run with new booster station operating.

**FIRE DEPARTMENT:** Volunteer organization of 3 companies under the control of the borough which owns hoses, apparatus and equipment and appropriated \$7,550 for the support of the department in 1945. There is a total membership of 63 including a chief and two assistant chiefs, and in each company a foreman and two assistant foremen. Officers are elected annually and confirmed by the mayor and council. **Companies—Engine Company No. 1:** Membership 30 with an average attendance at fires of 10 men. Apparatus is located in the former borough hall on Main Street north of Dolan Street which is adjacent to the present borough hall. Building is a 2-story joisted brick structure with a slate roof, concrete apparatus floor, electric lights and steam heat. No telephone. **Equipment:** A 1941 Buffalo 750-g.p.m. triple combination pumping engine carrying a 200-gallon booster tank, 150 feet of booster hose, 1,400 feet of 2½-inch hose, 2 short ladders and fair minor equipment. A 1916 American La France 350-g.p.m. triple combination pumping engine carrying a 200-gallon booster tank, 250 feet of booster hose, 550 feet of 2½-inch hose, 2 short ladders, and fair minor equipment. **Melrose Hose Company No. 1:** Membership 20 with an average attendance at fires of 10 men. Located on Oak Street between Roll and Perrine Avenues. Building is a 2-story joisted brick structure with composition covered wood roof, concrete floor, steam heat, and electric lights. No telephone. **Equipment:** A 1945 Buffalo 750-g.p.m. triple combination pumping engine carrying a 200-gallon booster tank, 150 feet of booster hose, 950 feet of 2½-inch hose, 2 short ladders, and fair minor equipment. **Morgan Hose and Chemical Company No. 1:** Membership 13 with an average attendance at fires of 6 men. Located on Old Spyre Road near First Street. Building is a 2-story joisted brick structure with slate roof, concrete apparatus floor, steam heat, and electric lights. No telephone. **Equipment:** A 1935 Dodge hose car carrying a 150-g.p.m. booster pump, a 280-gallon booster tank, 250 feet of booster hose, 750 feet of 2½-inch hose, 2 short ladders and a small amount of minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. It is shifted and tested in part occasionally. There is a total reserve supply of 1,200 feet. There is 200 feet of 2½-inch hose at hose houses attached to each hydrant on the private system of the du Pont Company. **Operations:** Department is governed by borough ordinance and company by-laws. Each company foreman has control of his respective apparatus at all times and of men at fires and drills. The chief and assistant chief have over-all control at fires and may suspend members pending charges before the fire committee. Motors are started weekly and about 10 men in each company are assigned as drivers. **Drills and Training:** About 5 drills are held each year consisting of pumping operation and use of equipment. **Fire Methods:** Booster streams are used on incipient fires reinforced by engine and hydrant lines with shut-off nozzles. There are 5 all-service gas masks carried on apparatus. No salvage equipment, nor heavy stream appliances are provided. **Response to Alarms:** Each company responds to alarms in its own locality. Outside aid may be secured from South Amboy and South River. **Building Inspection:** None. **Records and Reports:** Records of attendance only are kept and annual reports made to the mayor and council. **Fire Alarms:** All alarms are telephoned through either the South River Exchange or the South Amboy Exchange to the borough hall where there is a man on duty in the police department at all times. Sirens at all locations may be sounded from the police department. There are five sirens located throughout the borough, three of them at fire houses.

**POLICE DEPARTMENT:** Consists of a chief and 8 men including 3 desk clerks working in 8-hour shifts. Two radio equipped cars are provided.

**BUILDING LAWS:** No local regulations.

**EXPLOSIVES AND FLAMMABLES:** No local regulations. State laws adequately cover the storage and shipment of explosives and flammables and the construction of motion picture booths. They also restrict the discharge of fireworks to responsible bonded parties.