

March 31, 1949.

## BERNARDS TOWNSHIP, SOMERSET COUNTY, NEW JERSEY. Including Basking Ridge, Liberty Corner, and Lyons.

Population - 1940 Census - 4,512.

IN GENERAL: Located in the northeast corner of Somerset County adjacent to Bernardsville and along the Delaware, Lackawanna, and Western Railroad. A residential and farming community with many large estates. Area 23.2 square miles. Elevations range from 140 to 590 feet. Main roads concrete, others gravel and macadam in fair to good condition. 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 by the Bernards Water Company, a subsidiary of the American Water Works Company, Inc., which supplies water to Bernards Township and Bernardsville. For complete report of supply works and distribution system see report with map No. 3. Distribution System: In one service, see map. Supply to the district is through two parallel 8-inch and 12-inch mains extending west along Madison Hill Road to Maple Avenue, whence a 6-inch main extends south on Maple Avenue to the district. This is reinforced with two 6-inch connections to the Bernardsville distribution system. Liberty Corner and Lyons are fed through a single 8-inch main extending from the distribu-tion system in Basking Ridge. Arterial system is generally good, but gridiron is poor with several long dead end mains supplying fire hydrants. Consumption: The average and maximum daily consumption in the entire territory served during 1948 was 1.09 and 1.319 m.g.d. On September 30, 1948 there were 1,636 services, of which 823 were in Bernards Township. Eighty-six percent of the services are metered. Pipe: Cast iron, tar coated, bell and spigot joint, laid with a 3½-foot cover. Recent installations are cement lined. with a  $3\frac{1}{2}$ -foot cover. Recent installations are cement lined. Total length, 131,342 feet; 1.8% 12-inch, 35.5% 8-inch, 51.2% 6-inch, and 11.5% 4-inch. No trouble from frozen mains of electrolysis. **Gate Valves:** There are 99 on the system, mainly of Ludlow manufacture set in iron boxes to grade. All turn left to open. Inspected annually. **Hydrants:** There are 87 of standard type of Kennedy, Ludlow, and K.U.T. makes with one or two  $2\frac{1}{2}$ -inch and one  $4\frac{1}{2}$ -inch outlets and 4-inch 6-inch and 8-inch branches of which 95% are gated All outlets have National Standard threads. Hydrants are All outlets have National Standard threads. Hydrants are inspected twice a year. Those operated during resurvey were found to be in fair condition. Pressures: Readings taken at 8 hydrants widely distributed showed pressures ranging from 37 to 160 pounds with an average of 70 pounds. Fire Flow Tests: Probable supply available for fire protection purposes was measured on October 19, 1948 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Old Army Rd. 500 ft. W. of boundary, 360—37—10. Mt. Airy Rd. and Oak St., 480—89—17. Lyons Rd. 500 ft. W. of Mt. Airy Rd., 730—90—15. Valley and Mine Brook Rds., 620—78—21. Valley and King George Rds., 700—67—17. Lyons Rd. and Lyons Pl., 870—72—38. Finley Ave. and Oak St., 730—118—15. Highway No. 32 and Maple Ave., 460—160—3.

FIRE DEPARTMENT: A volunteer organization of two companies under partial control of the township which appropriated \$3,000 for the support of the department in 1948. Companies own houses, apparatus, and equipment. There are a chief, an assistant chief, and 2 foremen in the Basking Ridge Company and a chief and 2 assistant chiefs in the Liberty Corner Fire Company who are elected annually by the companies. Active membership 83, of whom about 18 are available at all times. Companies—The Basking Ridge Fire Company No. 1: Membership 45. Located on the corner of Maple Avenue and Henry Street in Basking Ridge. Build

ing is a 2-story joisted brick structure with a composition roof, concrete apparatus floor, steam heat, electric lights, and siren. Equipment: A 1931 American La France 750-g.p.m. triple combination pumping engine carrying a 100-gallon booster tank, 150 feet of booster hose, 1,250 feet of 2½-inch hose, 2 gas masks, 2 short ladders, and fair minor equipment. A 1938 Pirsch-Diamond "T" 500-gp.m. triple combination pumping engine carrying a 150-gallon booster tank, 200 feet of booster hose, 150 feet of 1½-inch hose, 650 feet of 2½-inch hose, 1 gas mask, 2 short ladders, and fair minor equipment. Liberty Corner Fire Company: Membership 25. Located on Valley Road near Lyons Road in Liberty Corner Fire Company: Membership 25. ner. Building is a 2-story frame and stucco on frame structure with a composition roof, concrete apparatus floor, oil stove, electric lights, and siren. Equipment: A 1932 American La France 500-g.p.m. triple combination pumping engine carrying a 200-gallon booster tank, 200 feet of booster hose, 1,000 feet of 2½-inch hose, 2 short ladders, and some minor equipment. A 1940 American La France 500-g.p.m. triple combination pumping engine carrying a 400-gallon booster tank, 200 feet of booster hose, 300 feet of 12-inch hose, 1,000 feet of 2½-inch hose, 2 short ladders, 2 gas masks, and fair minor equipment. Hose: All 2½-inch hose is C.R.L. with National Standard screw couplings. In the Basking Ridge Fire Company it is tested at 120 pounds twice a year, shifted 4 times a year and dried on apparatus floor; 1,500 feet is over 5 years old. There is 650 feet of reserve hose. In the Liberty Corner Fire Company hose is tested at hydrant pressure, shifted 4 times a year, and placed on apparatus wet. About 1,000 feet of 2½-inch hose is over five years old and there is no reserve hose. Operations: The companies are governed by their own by-laws. Chiefs have control of apparatus at all times and of men at fires and drills. Motors are started daily in the Basking Ridge Company and weekly in the Liberty Corner Company. Twelve members of the companies are appointed as drivers. Drills and Training: Drills held monthly in good weather under the supervision of chiefs consist of hose laying, pump operation, and use of equipment. Fire Methods: Booster streams used on incipient fires reinforced by hydrant lines with shutoff nozzles. Engine seldom hooks up. Gas masks are carried, but no salvage equipment nor heavy stream appliances are provided. Response to Alarms: Each company responds to all alarms in its respective territory. Outside aid may be secured from Bernardsville, Far Hills, and Millington. Building Inspection: The chiefs make an inspection of all schools. Records and Reports: Records consist of time, place, damage, and number of men responding. An annual report is submitted to the township committee. Fire Alarms: Alarms of fire are telephoned to nearby stores and garages and are sounded on siren by means of push button on fire

POLICE DEPARTMENT: Consists of a chief who is a member of the township committee and 7 special officers. Police respond to alarms of fire. One radio car is provided.

BUILDING LAWS: An ordinance adopted December 22, 1937 provides for the annual appointment of a building inspector and requires that plans be filed before building operations may begin. Ordinance has no value from a fire prevention standpoint. Fire limits are not established, and combustible roof coverings are allowed throughout the township.

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 December 22, 1937.