



KEY

- PROTECTED FIRE ZONE: Shown in Green.
- NOTE.—For description of fire protection, etc., see other side.
- Elevations range from 40 to 114 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
 - (B) Booster car
 - (O) Booster tank or tanks on above

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

Lawrence Township
Including Slackwood, Fire District No. 1
and Lawrencetonia, Fire District No. 2
Mercer County, New Jersey

JULY 31, 1948

LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY.

Including Slackwood, Fire District No. 1 and Lawrencetonia, Fire District No. 2.

Population—1940 Township Census was 6,522.
Estimated Local Population—6,000.

IN GENERAL: Located along the New Brunswick Pike and the Lincoln Highway, adjoining the northerly limits of the City of Trenton. It is principally a suburban residential community with no industrial establishments. Area of mapped portion about 3.5 square miles. Elevations range from 40 to 114 feet. Main thoroughfares are concrete or macadam in good condition; other streets are part paved and in fair to poor condition. There are no features which should seriously affect the response and operations of the fire department except that through traffic on the highway could effect delays.

WATER SUPPLY: Water for domestic and fire protection purposes is furnished by the City of Trenton which owns and operates the supply works and distribution system. Fells Avenue Booster Station No. 2 supplies all of this district. For details as to supply works, pumping station, storage facilities and appurtenances see the National Board Report on the City of Trenton published April, 1932. **Fells Avenue Booster Station No. 2:** Located in Trenton on Fells Avenue near Princeton Avenue, about one mile south of the southerly township limits. Station is a small brick building with slate covered wood roof, concrete floor, electric lights, hot water heat and open stairways to basement. Electric wiring for light and power is well installed in conduit. Two carbon tetrachloride extinguishers in pump room. Elevation of floor 100 feet. Exposures negligible. Operation is continuous and attendant is on duty at all times. **Equipment:** One 1.0-m.g.d., one 2.0-m.g.d., and one 3.0-m.g.d. DeLaval centrifugal pumps driven respectively by 15-h.p., 30-h.p., and 40-h.p. electric motors. Pumps take suction under 16 to 20 pounds pressure from a 12-inch low service main and discharge at 48 to 50 pounds to the distribution system. **Distribution System:** In one service. Supplied from the Fells Avenue Booster Station No. 2 through a 12-inch and 10-inch feeder supplying a 6-inch and 8-inch artery with very incomplete gridiron and 4-inch and 6-inch unsupported branches. **Consumption:** The average and maximum daily consumption in the entire territory served during 1947 was 26.8 and 31.78 million gallons. Average daily pumpage of above booster station for 1947 was 1.15. There were 37,877 services in the entire territory served on January 1, 1948, of which 16,610 were metered. **Pipe:** All cast iron, tar coated, bell and spigot joint, A.W.W.A. Class "B," laid with about 4½-foot minimum cover. No trouble reported from frozen mains or electrolysis, but considerable trouble has been experienced with water main tuberculation. Total length in fire districts, exclusive of 12-inch supply main, 70,700 feet; 14.7% 8-inch, 58.6% 6-inch, and 26.7% 4-inch. **Gate Valves:** There are 150 of various makes in the fire districts, set with iron boxes at grade. Direction of operation is uniform. Gate valves are subject to continuous inspection. **Hydrants:** There are 83 in the fire districts of Wood, Corey, and Pratt and Cady makes, with one or two 2½-inch and one 4½-inch outlets. Barrels and branches are 4-inch and 6-inch. About 90% of branches are gated. All outlets are National Standard. Hydrants are inspected annually and those operated during inspection were found to be in good condition. **Pressures:** Readings taken at nine well distributed hydrants showed pressures ranging from 45 to 58 pounds with an average of 46 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on May 14, 1948 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Lanning Ave. at Princeton Ave., 180—64—*.
Pear St. at N. Brunswick Pike, 540—61—24.
Putnam Ave. E. of N. Brunswick Pike, 280—61—*.
Slack Ave. at N. Brunswick Pike, 330—62—22.
N. Brunswick Pike E. of Bunker Hill Ave., 220—69—11.
President Ave. at Cambridge Ave., 150—69—*.
Polk Ave. at Lake Dr., 150—68—*.
Marlboro Ave. E. of Lawrenceville Rd., 370—59—2.5
Eggert Rd. at 112th Field Artillery, 310—55—*.

*No reading taken.

FIRE DEPARTMENT: Volunteer organization of two independent companies, not under control of the township. Companies own houses, apparatus and equipment and the township appropriated \$1,666 for each company in 1947. Total active membership 85, of whom a minimum of about

22 members are available at all times. Officers in each company include a chief and 2 assistant chiefs. Slackwood has a captain and 2 lieutenants. Company officers are elected annually without confirmation by the township committee. **Companies—Slackwood Volunteer Fire Company:** Located on Slack Avenue northwest of the Brunswick Pike in Fire District No. 1 as shown on map. Building is a two-story brick and frame structure with slate covered wood roof, concrete floor, steam heat, and electric lighting. Total active membership 40. **Equipment:** A 1947 Mack 750-g.p.m. triple combination pumping engine carrying a 300-gallon booster tank, 200 feet of booster hose, 450 feet of 1½-inch hose, 1,400 feet of 2½-inch hose, 2 short ladders, mechanical foam equipment, 2 gas masks, and good minor equipment. A 1925 Hale 500-g.p.m. triple combination pumping engine carrying a 75-gallon booster tank, 200 feet of booster hose, 2 short ladders, and poor minor equipment. A 1933 Hale-Ford 250-g.p.m. booster car carrying a 300-gallon booster tank, 200 feet of booster hose, 2 short ladders, one 1,500-watt electric generator, 3 flood lights, and poor minor equipment. **Lawrence Volunteer Fire Association:** Located on Lincoln Highway at Marlboro Avenue in Fire District No. 2 as shown on map. Building is a 2-story stuccoed brick structure with slate covered wood roof, concrete floor, electric lights, and steam heat, with boiler in communicating section. Total active membership 45. **Equipment:** One 1931 Sanford 500-g.p.m. triple combination pumping engine carrying one 250-gallon booster tank, 250 feet of booster hose, 1,200 feet of 2½-inch hose, 2 short ladders, 1 electric generator with 2 lights, and fair minor equipment. One 1937 General Fire Truck Diamond "T" 500-g.p.m. triple combination pumping engine carrying one 350-gallon booster tank, 250 feet of booster hose, 500 feet of 2½-inch hose, 250 feet of 1½-inch hose, 4 gas masks, and fair minor equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. Total supply of serviceable 2½-inch hose is 3,100 feet, all of which is carried on the apparatus. Hose is tested and repacked at 200 to 250 pounds at monthly drills. Of the entire supply 50% is more than five years old. Drying provisions are inadequate. **Operations:** The companies are independently governed by company by-laws. Chief has control of apparatus at all times and of men at fires and drills. Motors are started at least weekly and there are at least 6 appointed drivers in each company. **Drills and Training:** Company drills are held monthly under the direction of the chief officers. They consist of hose laying, pump operation, and some ladder work. **Fire Methods:** Booster lines and 1½-inch streams are used on incipient fires supported by engine streams with shut-off nozzles. Gas masks are provided, but no heavy stream appliances nor salvage equipment is installed. **Response to Alarms:** Companies respond with all apparatus on first alarm within their respective fire districts and are subject to call in the entire township. By agreement mutual aid is given to and received from Trenton and nearby volunteer departments. **Building Inspection:** Building inspection by the fire department is limited to annual inspections of schools and mercantile risks and the investigation of complaints. **Records and Reports:** Company records include time and nature of alarms, attendance, and equipment used. No regular reports to the township. **Fire Alarms:** Alarms are telephoned to police headquarters and sounded on electric siren at the respective fire companies.

POLICE DEPARTMENT: Consists of a chief, 1 captain, 1 sergeant, 4 patrolmen, and 25 special officers subject to call. Two radio equipped police cars are provided and one officer answers all fire calls.

BUILDING LAWS: Building code adopted July 29, 1922 provides for the appointment of a building inspector and embodies some structural restrictions and provisions relating to chimneys. Code is not sufficiently comprehensive and contains little of real value from a fire protection standpoint. No fire limits are established and no provision is made for the elimination of combustible roof coverings. Reports and records are incomplete.

FIRE PREVENTION LAWS: No local 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.