

MAPLE SHADE, FIRE DISTRICT No. 1, CHESTER TWP., BURLINGTON COUNTY, N. J.

Population — Township Census of 1940 was 5,535. Estimated Local Population — 3,500.

IN GENERAL: Located on the Pennsylvania Railroad about 7 miles east of Camden It is a residential community with 5 small industries employing about 150 Area of fire district about 4 square miles Elevations range from 5 to 64 feet. Main thorough fares are macadam in good condition, other streets are gravel and cinders in fair condition Railroad crossings at grade and other features are such that they should not seriously interfere with the response or operations of the fire department

WATER SUPPLY: The township owns and operates the supply works and distribution system, supplying water for domestic and fire protection purposes to Maple Shade only Organization: The system is in charge of a competent superintendent assisted by one pumping station engineer who operate pumping station and maintain the system with one laborer and others as needed Em ployees are subject to annual appointment and serve at the pleasure of the governing body. Office in municipal building and yard and shop at pumping station One department truck is provided and others are available. The superintendent is also chief of the fire department. Records include a distribution map and operating data, but detailed valve and hydrant records are lacking Snpply Works: Supply is obtained by direct suction from 3 flowing wells with an aggregate yield of 072 m.g d One well 18 8-inch, 129 feet deep, one is 10-inch, 139 feet deep, and the other is 12-inch, 150 feet deep Low lift pumps operating on a 15-inch vacuum discharge through an aerator to a 70 x 20 x 8-foot concrete suc tion basin with a capacity of 93.600 gallons The high lift pumps take suction and discharge through a pressure filter to the distribution system with a standpipe acting as an equalizer and providing storage. Pumping Station: Located on North Main Street east of Route S-41 as shown on map. It is a one-story con crete block structure with concrete floor, tile covered unprotected steel roof, electric lights, steam heat, and telephone Housekeeping and general condition is good Exposure is mild and protection consists of 3 hand extinguishers and one outside hydrant. Elevation of floor about 7 feet Equipment: Two 75-h.p Fairbanks-Morse semi-Diesel engines directly connected to two Fairbanks Morse 60-k.v.a generators which provide the only power supply Two high lift 400-g.p m. Kinney rotary pumps each driven by a 30-h p Fairbanks Morse electric motor. Two low lift 400-g.p.m. Buffalo Steam Pump Company centrifugal pumps each driven by a 15-h.p Lincoln electric motor. Two compressors for starting Diesel engines are provided, one is driven by a gasoline engine and the other by electric motor. Filters: One American water softener pressure filter rated at .575 m g d. and capable of 25% overload, 18 installed with a sealed by pass Distribution System: In one service consisting of two 8 inch arteries and a very incomplete 4- and 6-inch gridiron with 6-inch unsupported dead ends. There are two normally closed emergency connections, one consisting of an 8-inch connection in Main Street to the Lenola distribution sys tem on the east, and one consisting of a 6-inch connection in Main Street to a 12-inch Pennsauken distribution main on the west. See map. Standpipe: Located north of Main Street opposite Cedar Avenue as shown on map. It is steel, 20 feet in diameter by 120 feet high, with a capacity of 282,000 gallons. Elevation of base 64 feet Elevation of overflow 184 feet. Consumption: The average and maximum daily consumption during 1943 was 225 and .330 mg At time of inspection there were about 1,500 services, 99% of which are metered. Pipe: All cast iron, tar coated, bell and spigot joint, laid with a 4-foot minimum cover. No serious trouble reported from frozen mains or electrolysis. Total length 115,200 feet; 3.8% 10-inch, 10.5% 8-inch, 54.2% 6-inch, 31.5% 4-inch. Gate Valves: There are 164 on the system of R. D. Wood make set with valve boxes at grade Direction of operation is uniform and inspections are limited to those necessitated by system maintenance. Hydrants: There are 184 on the system of Mathews make of standard type with two 21/2-inch outlets and 4-inch ungated branches, except that 80% of the hydrants, including those in the business area, have an additional 41/2-inch outlet and those on Main Street have 6-inch branches Hose and steamer outlets are National Standard Hydrants are inspected annually and were found to be in good condition at time of inspection. Pressures: Direct reading ginge in pumping station at elevation 7 showed 70 pounds with standpipe about 12 feet below the full level Readings taken at 6 weil distributed hydrants showed pressures ranging from 39 to 52 pounds with an average of 482 pounds Fire Flow Tests: Probable supply available for fire protection purposes was measured on July 7th 1936 by means of Pitot tube Location of hydrant, discharge in gallons per minute, pressure before flow, and pres sure during flow were as follows:

Main St and Maple Ave., 1,390—50—35. Stiles and Haverford Aves., 385—48—11. Fernwood Ave and High St, 225—48—9 Coles and Rynning Aves., 250—52—7 Alexander Ave. and Route No 38, 410—52—14 Haynes and June Aves., 285—39—9

FIRE DEPARTMENT: A volunteer organization under partial control of the district fire commissioners who own quarters, apparatus, and equipment, and defray the operating expenses of the department Total active membership 35, including 15 exempt mem bers, including a chief, assistant chief, foreman, and 2 engineers. A minimum of 10 members including the chief are available at all times Officers are elected annually by the company and confirmed by the fire commissioners Company: Located in municipal building on Main Street at Maple Avenue as shown on map. Building is a 2-story joisted brick structure with metal covered wood roof, concrete apparatus floor, electric lights. and steam heat Telephone is installed in municipal offices adjoining the apparatus room Equipment: One 1925 Seagrave 600-g pm double combination pumping engine carrying 1,200 feet of 21/2-inch hose, one 45 foot extension ladder and good minor equipment This apparatus was overhauled in 1943 and is in good condition. One 1935 Hahn 350 g.p.m. triple combination pumping engine carrying one 150 gallon booster tank, 200 feet of booster hose, 700 feet of 11/2-inch hose, a portable lighting generator, and fair minor equipment. This appa ratus was purchased in 1938, having been completely reconditioned One 1934 Ford hose car carrying 800 feet of 21/2-inch hose one 30-foot extension ladder, and two 40-gallon chemical tanks which were being converted at time of inspection to booster tanks with CO2 cylinders One Ford 800 gallon booster tank truck equipped with a small independent gasoline driven rotary gear pump One completely equipped Packard First Ald ambulance. Hose: All 21/2-inch hose is CRL with National Standard screw couplings There is a total supply of 2,800 feet of 21/2 inch hose, 800 feet of which is kept in reserve. Hose is repacked at monthly drills and is tested semi-annually at 200 pounds; none of the supply is more than 5 years old. No adequate drying facilities provided Operations: Department is governed by rulings of the district fire commissioners and company by laws The chief has control of appa ratus and equipment at all times and of men at fires and drills Motors are started daily and there are 12 appointed drivers Drills and Training: Company drills are held monthly under the direc tion of the chief officers and 25 members have been graduated from a local fire school conducted in 1938 by the local fire marshal who is a graduate of the Philadelphia Fire School Monthly drills con sist of pump operation, hose and ladder work, and use of appa ratus Fire Methods: Hand extinguishers and booster streams are used on incipient fires supported by engine streams with shut-off nozzles Four all-service gas masks are provided, but salvage equipment and heavy stream appliances are lacking Response to Alarms: The entire department responds to all township alarms and substantial aid may be secured from the surrounding volunteer departments at Moorestown, Lenola, Palmyra, Merchantville, and Pennsauken Building Inspection: A local fire marshal appointed under township ordinance, investigates complaints, and an annual inspection of principal mercantile and public buildings is made by the chief of the department. Records and Reports: Fairly complete fire records including nature and extent of fires, attendance, equipment used, and losses are maintained by the chief of the department. Annual reports are made to the fire commissioners and township committee. Fire Alarms: Telephoned through the Merchantville Central Office to the police desk in the municipal building where constant watch is maintained Alarms are sounded on electric siren at municipal building

POLICE DEPARTMENT: Consists of an acting chief, 4 patrolmen, and 2 desk men working in alternate shifts. One patrol car is provided

BUILDING LAWS: Building code adopted May 18th, 1937 establishes adequate fire limits, provides for the appointment of the building inspector, probibits combustible roof coverings, and is identical with the Code of Suggested Ordinances for Small Municipalities recommended by the National Board of Fire Under writers Enforcement appears to be good

EXPLOSIVES AND FLAMMABLES: Local regulations are limited to an ordinance adopted December 11th, 1928 prohibiting the storage of combustible materials and the burning of refuse, in other than a container, without a permit issued by the fire marshal appointed under the township ordinance. In general the regulations are not sufficiently comprehensive from a fire protection standpoint. The state laws adequately cover the storage and shipment of explosives and fiammables and the construction of motion picture booths. They also restrict the discbarge of fireworks to responsible bonded parties.