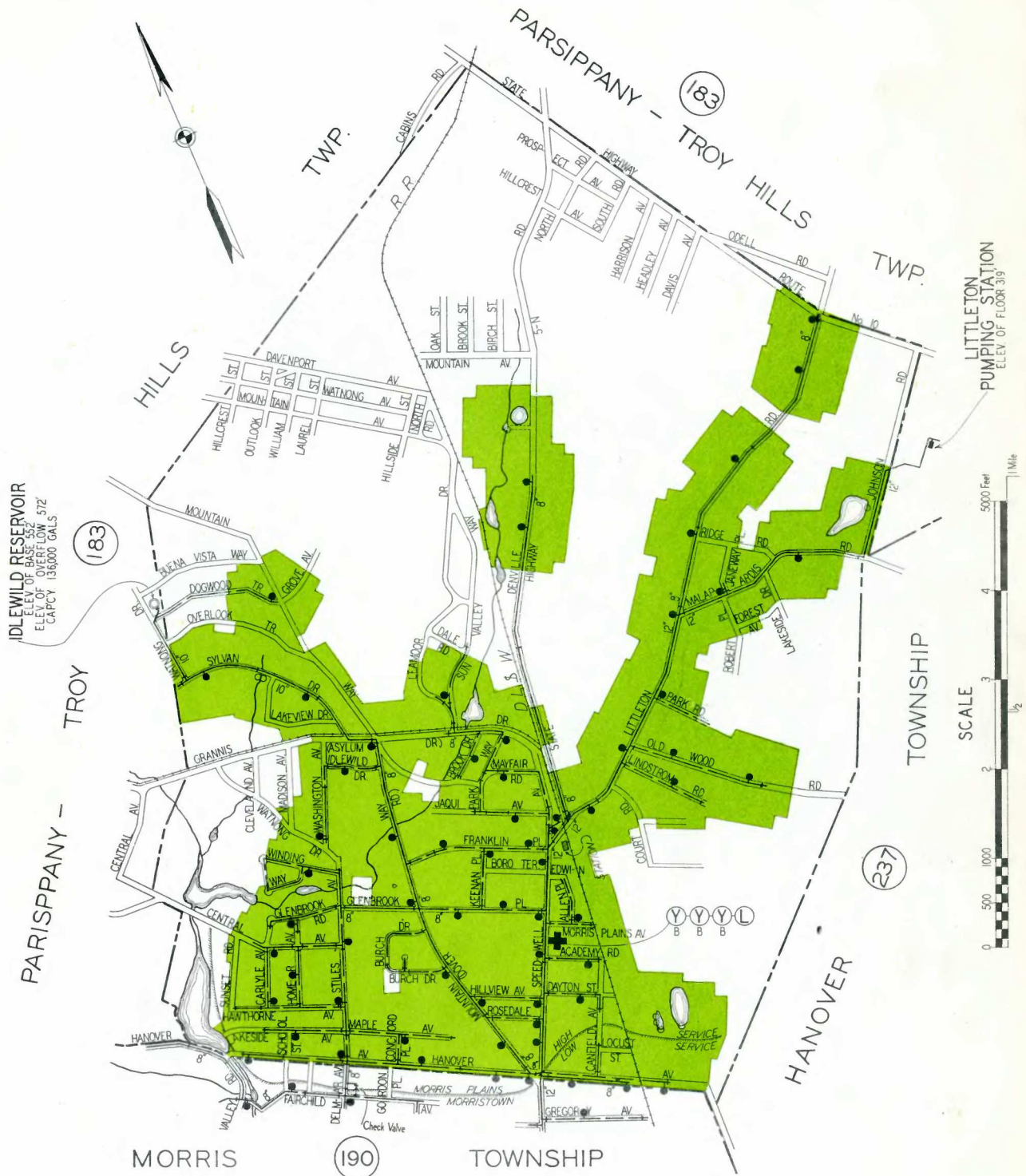


Superseding Map No. 189 of October 15, 1941. Please destroy old issue.



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 370 to 620 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

⊗ Booster tank or tanks on above

(L) Ladder truck

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

Morris Plains Borough
Morris County, New Jersey

FEBRUARY 28, 1951

MORRIS PLAINS BOROUGH, MORRIS COUNTY, NEW JERSEY.

Population—Census of 1940 was 2,018.

IN GENERAL: Located on the D. L. & W. R. R. about 3 miles north of Morristown. It is a suburban residential community with a coffee processing plant and sand and gravel industries and a few small industries normally employing about 235. Area about 2.5 square miles. Elevations range from 370 to 620 feet. Main thoroughfares and the majority of the side streets are macadam or concrete in good condition; some side streets are gravel in fair condition. Other than traffic congestion on Speedwell Avenue there are no unusual features adversely affecting the response and operations of the fire department.

WATER SUPPLY: The Town of Morristown owns and operates the supply works, distribution system and appurtenances supplying water for domestic and fire protection purposes to Morris Plains, Morristown, and other surrounding communities. The Morris Plains system is segregated through the medium of closed valves and a check valve connection from the major portion of the system and is supplied independently from the Littleton Pumping Station in conjunction with a local reservoir. The local supply is described herewith and for a description of the organization, supply works, distribution system and appurtenances on the balance of the system see report on Morristown with zone map No. 188. **Littleton Supply Works:** Installed in 1926. The supply for Morris Plains is obtained from two deep wells 25 inches in diameter by 50 feet deep one of which yields 1.15 m.g.d. while the other yields 0.29 m.g.d. The larger capacity well, known as No. 1, is normally held in reserve, while the smaller capacity well, known as No. 2, is automatically operated on a 3-foot variation in tank level. Both discharge to the distribution system with reservoir acting as equalizer and providing storage. **Well Stations:** Located in Parsippany-Troy Hills Township adjacent to the easterly limits of the borough. Well pumps are housed in small brick buildings with slate roof and wired glass windows in wooden sash and frames. Housekeeping fair. Hand extinguishers provided and exposures negligible. Elevation of floors about 310 feet. **Well Station No. 1—Equipment:** One 800-g.p.m. American Well Works deep well turbine driven by a 100-h.p. Electric Machinery Company motor. **Well Station No. 2:** One 200-g.p.m. Sterling deep well turbine driven by a 20-h.p. U. S. electric motor. **Distribution System:** In one service except for a small area on either side of Speedwell Avenue east of Academy Road which is supplied from the Morristown service. The distribution system consists primarily of a 12-inch supply line constituting an artery supplying 4- and 6-inch dead end incomplete 6-inch gridiron and an 8-inch line to the reservoir. Normally closed connections between the Morris Plains service and the Morristown service on Speedwell at Academy Road and at Hanover Avenue at Speedwell Avenue and an interconnection including a check valve at Fairchild Avenue and Delmar Avenue normally afford an emergency supply of approximately one-half the normal quantities available under reduced pressure. **Idlewild Reservoir:** Located in the extreme westerly section of the borough north of Sylvan Drive as shown on map. It is masonry and stone construction with a granite lining and concrete roof. It is 34 feet in diameter by 19.5 feet high with a capacity of 137,000 gallons. Elevation of base is 553.5 and elevation of overflow is 572 feet. **Consumption:** The average daily consumption during 1940 in the entire territory served was about 1.86 m.g.d. of which a daily rate of 0.408 m.g.d. is supplied by pumpage. It is estimated that the maximum daily consumption on the entire system is 3.0 m.g.d. The average and maximum daily pumpage at the Littleton Pumping Station supplying Morris Plains is estimated to be 100,000 and 150,000 gallons. On December 31, 1940 there were 5,285 services in the entire territory all of which are metered. **Pipe:** All cast iron, tar coated, bell and spigot joint, Class "B," laid with about 4-foot cover. No serious trouble reported from frozen mains or electrolysis. Total length within the borough limits 45,600 feet; 19.7% 12-inch, 6.2% 10-inch, 17.1% 8-inch, 42.9% 6-inch, 14.1% 4-inch. **Gate Valves:** There are 86 on the system in Morris Plains of Ludlow and Darling makes set with iron boxes at grade. Direction of operation is uniform. Inspections are limited to those necessitated by routine system operation and maintenance. The fire department is notified when valves affecting hydrant supply are operated. Locations of valves are recorded and duplicate records are on file. **Hydrants:** There are 49 on the Morris Plains system of Mathews, Ludlow, and Darling makes of standard type with 4- and 6-inch branches and one 2½-inch outlet and one 4½-inch outlet, except that about 60% have one additional 2½-inch outlet. Hose outlet threads are National Standard, steamer outlet threads are 4 T.P.I. and 5-5/32 inches O.D. Hydrants are generally inspected twice annually and at time of inspection they were found to be in good condition. **Pressures:** No recording gauge on the system, but readings taken at time of inspection at five well distributed locations, with the small No. 2 pump at Littleton operating, showed pressures ranging from 49 to 80 pounds with an average of 71.2 pounds. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured on September 10, 1941 by means of Pitot tube. Location

of hydrant, discharge in gallons per minute, pressure before flow and pressure during flow were as follows:

Morris Plains Service:

Speedwell Ave. and Littleton Rd., 880—75—12.

Park Way and Asylum Rd., 520—75—12.

Hanover and Stiles Aves., 700—77—39.

Morristown Service:

Hanover Rd. E. of Railroad, 290—49—*.

*No reading taken.

Note: Tests conducted with the 200 g.p.m. pump at Littleton Station in operation.

FIRE DEPARTMENT: A volunteer organization of one company under the control of the borough which owns quarters, apparatus, and equipment and makes an annual appropriation of about \$2,000 for the support of the department. Total active membership 57 including a chief, 2 assistant chiefs, 4 captains and 4 lieutenants of whom a minimum of 20 members are available at all times. Officers are elected annually by the company and confirmed by the mayor and council. **Company—Morris Plains Fire Company:** Located on Speedwell Avenue near Academy Road as shown on map. Building under construction at time of inspection will be a 2-story cinder block and brick structure with slate covered wood roof, concrete apparatus floor, steam heat, and electric lights. **Equipment:** One 1940 Mack 750-g.p.m. triple combination pumping engine carrying one 150-gallon booster tank, 150 feet of booster hose, 1,200 feet of 2½-inch hose, 2 short ladders, and some minor equipment. One 1923 Waterous 400-g.p.m. triple combination pumping engine carrying one 100-gallon booster tank, 200 feet of booster hose, 1,000 feet of 2½-inch hose, 2 short ladders, and some minor equipment. One 1923 International 45-foot city service ladder truck carrying ladders from 10 to 45 feet, totaling 112 feet, 200 feet of 1½-inch hose, and fairly complete minor equipment. One 1937 Chevrolet emergency car carrying one 1,800 watt generator, two 500 and two 250 watt portable flood lights, first aid kit, and some emergency equipment. **Hose:** All 2½-inch hose is C.R.L. with National Standard screw couplings. Hose is repacked in part at monthly drills and is tested twice annually at 200 pounds pressure. No adequate drying provisions. About 75% of the total supply is over five years old. **Operations:** Department is governed by by-laws and municipal ordinance under the supervision of the fire committee of the borough council. The chief has full control of apparatus at all times and of men at fires and drills. Motors are started daily and there are six designated drivers, but practically all members can drive and operate the apparatus. **Drills and Training:** Company drills consisting of pump operation and hose and ladder work are held monthly under the direction of the chief officers. **Fire Methods:** Booster lines and hand extinguishers are used on incipient fires supported by engine streams with shut-off nozzles. Gas masks and salvage covers are provided, but no heavy stream appliances are installed. **Response to Alarms:** The department responds to all borough alarms and substantial aid is available from the surrounding volunteer departments at Parsippany-Troy Hills Township, Morris Township, and the part paid department in Morristown. **Building Inspection:** No regular inspections by the fire department except that complaints are investigated by the chief officers. **Records and Reports:** Records consist primarily of fire reports including attendance and nature of alarms and monthly reports are made to the mayor and council. **Fire Alarms:** Telephoned through the Morristown central office to a member's home near the fire station where push button, operating siren on tower at rear of fire station, is provided. Arrangements are made whereby some member of the household is always available at this location to handle fire alarms and remuneration for this service is provided.

POLICE DEPARTMENT: Consists of 4 special officers subject to call. State Police barracks located in Morristown and officers tour this area daily.

BUILDING LAWS: Code adopted September 10, 1929 provides for the annual appointment of a building inspector with the usual duties and requires the filing of plans and specifications, and permits for building operations. The zoning ordinance establishes a business zone where masonry construction is required and combustible roofs are prohibited. Construction requirements are inadequate from a fire protection standpoint.

EXPLOSIVES AND FLAMMABLES: No municipal 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.

ZONING ORDINANCE: Adopted May 28, 1928.