



STANDPIPE
 ELEV. BASE ABOUT 20'
 ELEV. OVERFLOW ABOUT 130'
 CAPCY. 210,000 GALS.

PUMPING STATION
 ELEV. OF FLOOR 22'



Schedule Rating Office of New Jersey.
 ENGINEERING DEPARTMENT
 NEWARK, N. J.

Alenhurst Borough
Monmouth County, N. J.

NOVEMBER 30, 1943

(318)

KEY

PROTECTED FIRE ZONE: Shown in Green.
 Note.—For description of fire protection, etc., see other side.
 Elevations range from 0 to 36 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
- (V) Automobile combination pumper and hose car
- (A) Ambulance, Squad or Auxiliary car
- (O) Chemical tank or tanks on above
- (O) Booster tank or tanks on above
- (O) Ladders on above



ALLENHURST BOROUGH, MONMOUTH COUNTY, NEW JERSEY.

Population—Census of 1940 was 520.
Present estimate is 750 permanent residents.
Estimated summer population 1,500.

IN GENERAL: Located on the Atlantic Coast, south of Deal and separated from Asbury Park by Loch Arbour and Deal Lake. It is an exclusive residential community with no manufacturing. There is one hotel and a large distribution and maintenance center for the Jersey Central Power and Light Company. Area is about 0.23 square miles. Elevations range from 0 to 36 feet. Streets are of hard and improved surface in good condition. Transportation is afforded by N. Y. & L. B. R. R. and buses.

WATER SUPPLY: Water is furnished by the municipality through two systems. A fire service system furnishes water for fire service, street sprinkling, and sewer flushing. An independent domestic service system supplies 22 fire hydrants. **Organization:** Water department is in charge of a superintendent of public works appointed under civil service, with two engineers serving as pumping station operators. The borough clerk acts as water clerk and two outside men are regularly employed. Office is in borough hall; yard and shop are at pumping station. A truck is available; one operator proceeds to pumping station on alarms of fire. Records are fair, but not up to date. **Domestic System:** The domestic system, not indicated on the map, dates from 1904. It consists of 4-, 6-, and 8-inch mains paralleling the fire service system and supplies 22 fire hydrants. There are two closed connections to the Monmouth Consolidated Water Company, a 4-inch connection at pumping station and an 8-inch connection at Ocean Road and Cedar Avenue. Water is obtained by air lift from three 10-inch wells 550 feet deep with a total yield of 13 m.g.d., discharging to a 95,000 gallon collecting basin. One well drilled in 1922 and the other two in 1923. Water is repumped to the distribution system with an elevated tank acting as an equalizer. **Domestic Service Pumping Equipment:** Located in Fire Service Pumping Station. One 0.864 m.g.d. Cameron centrifugal pump, with 6-inch suction and 4-inch discharge, is belt driven by 110 h.p. Ingersoll-Rand Diesel engine which is also directly connected to a 390 cubic foot per minute Ingersoll-Rand air compressor. One 1.08-m.g.d. Cameron centrifugal pump, with 6-inch suction and 5-inch discharge, directly connected to a 50-h.p. Allis-Chalmers electric motor. One 400-cubic foot per minute Ingersoll-Rand air compressor directly connected to a 75-h.p. General Electric motor. Pump discharge lines, equipped with check valves and control valves, terminate in a single 8-inch header. There are two 250,000-gallon capacity pressure filters, with 8-inch connections, located at elevated tank. **Elevated Tank:** Tank is steel, with a hemispherical bottom, mounted on a steel tower. Capacity is 250,000 gallons; elevation of overflow 140. **Consumption:** There are 358 services all but 6 of which are metered. The average and maximum daily consumption during the summer is 0.251 and 0.328 m.g.d.; during the winter it is 0.081 and 0.084 m.g.d. **Hydrants:** There are 22 hydrants of standard type of various makes with 4- and 6-inch branches. All have National Standard threads and are inspected and flushed semi-annually. **Pressures:** Recording gauge at pumping station shows an average pressure of 55 pounds with pumps idle. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured in September, 1943 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Corlies Ave E of Main St., 380—57—5

FIRE SYSTEM: The fire system, shown on map, is supplied from Deal Lake, which has ample capacity, by 16-inch suction line with 8- to 10-foot lift. Water is pumped into distribution system with standpipe acting as equalizer. **Pumping Station:** Located on Hume Street near Main Street. It is a one story brick structure built in 1899 with a metal covered wood roof, concrete floor, heated by either steam or coal stove, electric lights, telephone, and fire gong. Station is separated from shop, boiler room, and garage by brick wall with protected communication. Elevation of floor is 18 feet. **Fire Service Equipment:** One 144 Twin Volute pump with 6-inch suction and discharge, driven by a 40 h.p. General Electric motor which is automatically started when pressure drops below 41 pounds. One 432 m.g.d. Cameron centrifugal pump, with 10-inch suction and discharge, driven by a 125 h.p. General Electric motor, manually operated for severe fire conditions. Pump discharge lines equipped with check valves and control valves, terminate in a single 10 inch header. **Distribution System:** The fire system is in one service consisting of an 8-inch artery supplying 4- and 6-inch railroad; see map. **Standpipe:** Located on Lake Road and west of gridiron; it is steel, 18 x 110 feet with a capacity of 210,000 gallons. Elevation of base is 20 feet. Elevation of overflow 130 feet. **Consumption:** There are 475 taps on the fire system for lawn sprinkling. The system is also used for watering streets and flushing sewers. The average and maximum consumption during the summer was 0.35 and 0.52 m.g.d. and during the winter .032 and .05 m.g.d. **Pipe:** All pipe on the fire system is cast iron tar coated, with bell and spigot joint, laid with a 4 foot cover. Total length of pipe is 26,350 feet; 53.4% 4-inch, 30.3% 6-inch and 16.3% 8-inch. No trouble reported from frozen mains or electrolysis. **Gate Valves:** There are 40 gate valves on the fire system of Jenkins make set with iron boxes at grade. All valves open in same direction. **Hydrants:** There are 41 of standard type on the fire system of Wood and Smith makes with 4- and 6-inch branches, 14 of which are gated. They have one 4½-inch and two 2½-inch outlets all of which are National Standard. They are inspected annually and were in good condition at time of inspection. **Pressures:** Average pressure recording at pumping station is 42 pounds on fire system. Readings taken in September, 1943 at five distributed locations, without pump operation, showed average of 39.3 pounds on fire system. **Fire Flow Tests:** Probable supply available for fire protection purposes was measured in September, 1943 by means of Pitot tube. Location of hydrant, discharge in gallons per minute, pressure before flow, and pressure during flow were as follows:

Main St. and Elberon Ave., 670—42—25

Main St. and Spier Ave., 600—40—20

Norwood and Cedar Aves., 530—37—18.

Allen Ave. and Ocean Place, 440—38—24

Ocean Road and Spier Ave., 480—39—19

FIRE DEPARTMENT: A volunteer organization consisting of one company with one paid man who is driver and engineer and

resides in fire house. The borough owns fire house, apparatus, and all equipment, and appropriated \$6,000 for fire department salaries and maintenance during 1942. The fire department responds under contract to Loch Arbour calls, and to all calls from Interlaken under a verbal agreement. Total active membership is 18 active and 17 exempt members, of whom 14 are available at all times; in addition there are 6 fire police. Officers consisting of a chief, 2 assistant chiefs, and 2 foremen are elected annually and confirmed by borough commissioners. **Company—Allenhurst Volunteer Fire Company No. 1:** Located on Hume Street near Main Street and contains all apparatus. Building is a frame 2-story structure communicating with frame 1-story storage sheds that adjoin a 1-story frame company club house. Roofs are composition, apparatus floor is concrete, steam heat, electric lights, telephone, and 28-foot hose tower. There are two apartments on second floor. **Equipment:** A 1921 Stutz triple combination 350-g.p.m. pumping engine carrying one 35-gallon booster tank connected to pump, 350 feet of ¾-inch booster hose, 1,100 feet of 2½-inch hose, 2 short ladders, a portable deck nozzle, and fair minor equipment. A 1925 Stutz quadruple combination pumping engine carrying a 600-g.p.m. pump, one 35 gallon chemical tank, 250 feet of ¾-inch hose, 450 feet of 2½-inch hose, 10 ladders ranging from 12 to 50 feet and totaling 240 feet, life net, and good minor equipment. A 1941 auxiliary car carrying 500 feet of 1½ inch hose, 200 feet of 2½ inch hose, one short ladder, 5 Indian tanks and fair minor equipment. **Hose:** All hose is C.R.L. with National Standard screw couplings. The supply of 2½-inch hose totals 3,500 feet, of which 1,750 feet is held in reserve. All hose is about 5 years old and is in good condition. A hose closet 25 feet high is provided in fire house for drying purposes. All hose is shifted after drills and fire calls. Hose is tested at drills to 200 pounds pressure. **Operations:** Department is governed by company by-laws. Chief has control of apparatus at all times and of men at fires and drills. He may suspend members pending a hearing before company. One paid man and 5 volunteers are appointed as drivers and engineers. **Drills and Training:** Drills are held monthly under supervision of chief. Average drill attendance is 15 active and 5 exempt firemen. Drills consist of hose laying, pump operation, and use of equipment. All members have been instructed in driving and pump operation. **Fire Methods:** Booster and chemical streams are used on incipient fires reinforced by engine and hydrant lines with shut-off nozzles. Gas masks and salvage covers are provided. No heavy stream appliances installed. **Response to Alarms:** Both engines respond to all calls in Allenhurst and Loch Arbour and triple combination to other calls. Outside aid may be secured from Asbury Park, Deal, and Wanamassa, all within three miles over good roads. **Building Inspections:** No regular inspections are made by fire department. **Records and Reports:** Attendance and fire records are in fair condition. Chief makes annual report to the commissioners. **Fire Alarms:** The borough commissioners are responsible for maintenance and operation of the fire alarm system. Inspections and tests are made by the deputy chief of the Asbury Park Fire Department. It is a single circuit system having two loops with Gamewell operating panel located in engine room of water pumping station. Panel contains voltmeter, ammeter, and necessary switches for operation. Current for operating is supplied by glass wet cell batteries floating on trickle charger and wired to motor generator. One and one-half ampere fuses on panel. Circuit is protected where entering pumping station by three-ampere, 2,000-volt fuses, carbon block lightning arresters, and sneak coil fuses. A break wheel transmitter is located in police headquarters in the borough hall. This is a frame 2-story structure located on the corner of Norwood and Corlies Avenues. Most all of circuit is underground in Parkway cable. All overhead is No 10 hard drawn copper triple braided wire. There are a gong and punch register in the fire house and a gong in both police headquarters and water pumping station. Alarms are sounded on siren located on roof of water pumping station. In addition there is a manually operated air whistle on roof which is connected to air compressor tank. There are 14 non-interfering Gamewell fire alarm boxes on one loop, five of which are private boxes, two of same being accessible to the public. A separate loop has two Gamewell boxes located in Loch Arbour. Public boxes are mounted on red painted iron pedestals with red lights. There are six phantom boxes at the beach front, two of which are located in Loch Arbour. Circuit is tested daily and occasional tests are made from boxes. Alarms may be telephoned to police desk where there are two phones and extension board with someone always on duty. Desk man sounds nearest box on transmitter and phones location to the fire department.

POLICE DEPARTMENT: Paid police force consisting of chief, 6 patrolmen, and 1 desk man work on eight-hour shifts. Patrolmen report over 6 police signaling boxes and respond to fire alarms. One patrol car provided; no radio communication. Police department cooperates with building inspector reporting all new structural work.

BUILDING LAWS: Code adopted March 29th, 1938 provides for the appointment of a building inspector who is the superintendent of the water department. Fire limits are designated on zoning map. Flammable roof coverings are prohibited within the fire limits and on buildings exposed within 12 feet; in other instances approved vertical or edge grain shingles are required. Code closely follows the Code of Suggested Ordinances for Small Municipalities as recommended by the National Board of Fire Underwriters.

EXPLOSIVES AND FLAMMABLES: Ordinance adopted March 29th, 1938 closely follows the Suggested Fire Prevention Ordinance as recommended by the National Board of Fire Underwriters. 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 March 4th, 1929 establishes nine residential districts and one business and dwelling district. Manufacturing is prohibited within borough.