## Merrimack Valley

## System Description Prior to September 2018

Figure 1 is a map that shows the general outline of the area impacted by the over pressure event on September 13, 2019.

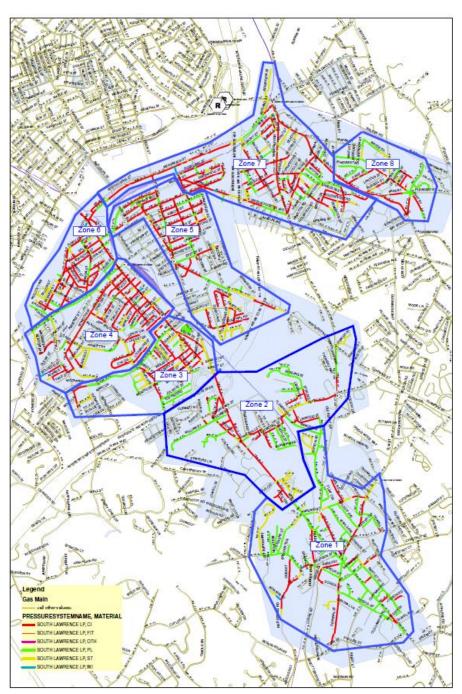


Figure 1.

The impacted system operated at low pressure with a nominal operating pressure range of 7" w.c. to 12 w.c. The low pressure system was supplied gas from the Company's 99 psig distribution system through 14 low pressure regulator stations. The low pressure regulator stations reduced the line pressure in the 99 psig system to low pressure as previously described located at various locations throughout the low pressure system.

The distribution piping in the low pressure system was comprised of plastic, steel, cast iron, and wrought iron ranging in size from less than 1" in diameter to 12" in diameter. Table 1 below shows the estimated distribution of pipe my material, size and length for the low pressure system that existed on September 13, 2018. The impacted low pressure system described here served approximately 8,450 residential and commercial customers.

## Table I.

## ESTIMATED PIPE BY MATERIAL, SIZE AND QUANTITY IN THE MERRIMACK VALLEY PRIOR TO SEPTEMBER 2018

| Pipe Diameter |        |           |              |          |       |         |
|---------------|--------|-----------|--------------|----------|-------|---------|
| (inches)      | Steel  | Cast Iron | Wrought Iron | Plastic  | Other | Total   |
| . ,           |        |           | wrought non  | i lastic |       |         |
| Less than 1"  | 2      | 11        | -            | -        | 25    | 38      |
| 1             | -      | 6         | -            | 93       | -     | 99      |
| 1.25          | 37     | -         | -            | -        | 36    | 73      |
| 1.5           | 2      | -         | -            | -        | 8     | 10      |
| 2             | 3,439  | 1,575     | 989          | 4,009    | 129   | 10,140  |
| 3             | 980    | 4,459     | 36           | -        | 5     | 5,479   |
| 4             | 19,867 | 114,203   | 2            | 47,147   | 59    | 181,278 |
| 6             | 25,088 | 49,131    | 271          | 36,103   | 8     | 110,601 |
| 8             | 5,272  | 21,997    | 341          | 16,015   | 3     | 43,628  |
| 10            | 31     | 5,867     | 4            | -        | -     | 5,901   |
| 12            | -      | 518       | -            | -        | -     | 518     |
| Total:        | 54,718 | 197,767   | 1,643        | 103,365  | 273   | 357,766 |