



SCHEMATIC PIPING DIAGRAM

NOTE:

KEY NOTES:

- ① HOSE CONNECTION
- ② SHUT-OFF VALVE
- ③ THROTTLE VALVE
- ④ PRESSURE REDUCTION VALVE
- ⑤ GAGE COCK
- ⑥ MONITORING PRESSURE GAGE – 0–15 PSI
- ⑦ DELICATE PRESSURE GAGE – 0–5 PSI

- 1 ALL LINES ARE TO BE FLUSHED WITH BALL, SOLID PIG OR FLUTED PIG WITH ROPE FROM MANHOLE TO MANHOLE, AS APPROVED BY CITY OF RIO RANCHO UTILITIES DEPT.
- 2 FOLLOWING INSTALLATION AND BACKFILL OF SEWER LINES, A DEFLECTION TEST USING A HAND PULLED MANDREL SHALL BE PERFORMED IN THE PRESENCE OF THE INSPECTOR.
- 3 ALL SEWER LINES SHALL BE INSPECTED BY TV VIDEO CAMERA PULLED THROUGH FROM MANHOLE TO MANHOLE AND TWO VIDEOTAPES PROVIDED TO CITY OF RIO RANCHO.

TEST PROCEDURES

- 1 THE SECTION OF LINE TO BE TESTED SHALL BE PLUGGED AT EACH END AND AT ALL LATERALS, WYES AND BRANCHES.
- 2 ONE PLUG SHALL HAVE AN INLET TAP FOR CONNECTING AN AIR HOSE.
- 3 SUPPLY AIR TO THE PIPE SECTION. MONITOR AIR PRESSURE SO THAT PRESSURE INSIDE PIPE DOES NOT EXCEED 5.0 PSIG.
- 4 WHEN PRESSURE REACHES 4.0 PSIG, THROTTLE AIR SUPPLY SO THAT INTERNAL AIR PRESSURE IS MAINTAINED BETWEEN 3.5 PSIG AND 4.0 PSIG FOR AT LEAST 10 MINUTES. (THE 10 MINUTE DELAY ALLOWS AIR TEMPERATURE TO STABILIZE)
- 5 SHUT OFF AIR SUPPLY AND ALLOW AIR PRESSURE TO DECREASE TO 2.5 PSIG. THE TIME REQUIRED FOR A LOSS OF 1.0 PSIG AT AN AVERAGE PRESSURE OF 3.0 PSIG SHALL BE USED TO COMPUTE THE RATE OF AIR LOSS.
- 6 IF THE TEST TIME IS LESS THAN THE ALLOWABLE TIME COMPUTED FROM THE ALLOWABLE UNIT TIME TABLE HEREON, THE LINE SHALL BE REJECTED.
- 7 A HYDROSTATIC TEST APPROVED BY THE CITY UTILITIES DEPT. CAN BE USED AS AN ALTERNATIVE TO THE AIR TEST.

ALLOWABLE UNIT TIME TABLE

<u>SIZE</u>	<u>t</u>
4	0.17
6	0.39
8	0.70
10	1.09
12	1.57
15	2.50
18	3.50

$$T(\text{ALLOWABLE TIME}) = t \times L$$

WHERE:

- T = ALLOWABLE TIME IN SECONDS
- t = UNIT TIME FROM TABLE.
- L = LENGTH OF LINE BEING TESTED, IN FEET

City of Rio Rancho-Department of Public Infrastructure

APPROVED BY:

TITLE:

STANDARD AIR TEST FOR SEWER MAINS

DATE:

PUBLIC INFRASTRUCTURE DEPARTMENT ENGINEERING DIVISION

DATE: 7/91
REV.: 2/06

STANDARD DRAWING S-9

