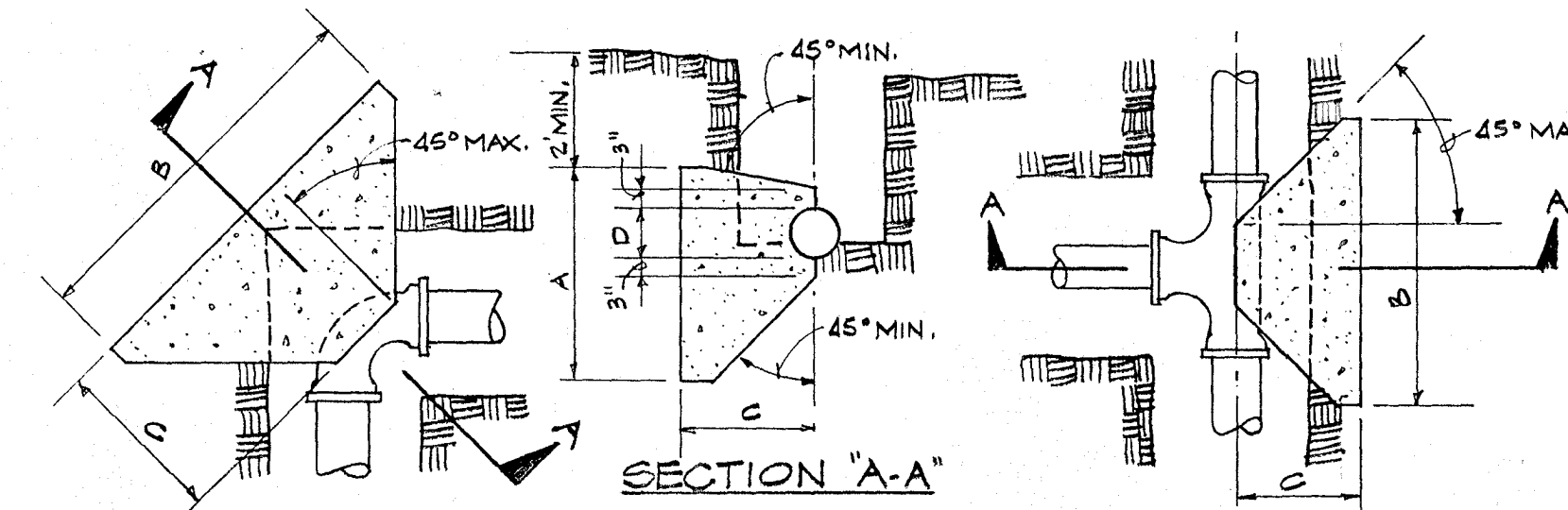
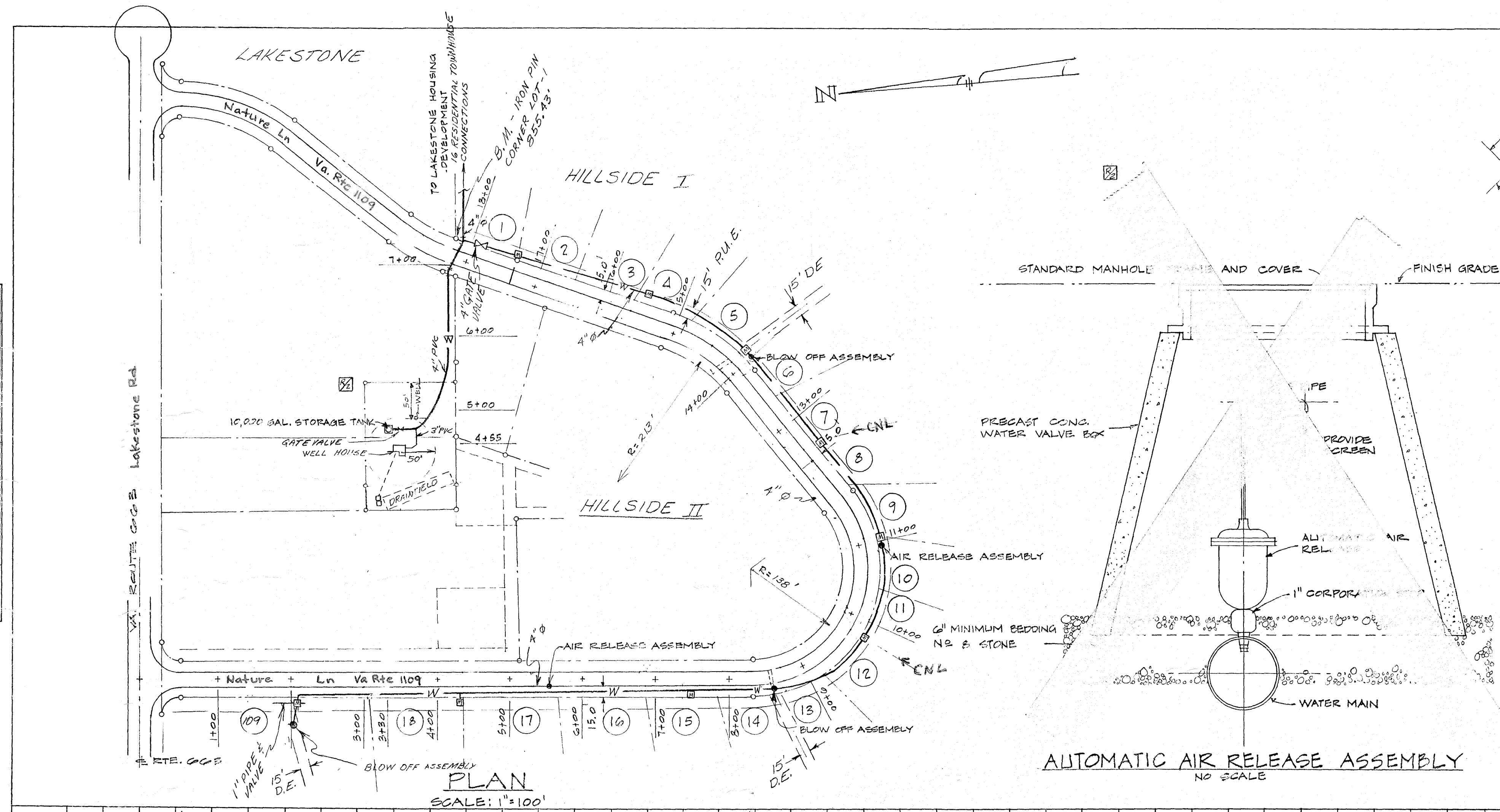


|      |           |    |      |
|------|-----------|----|------|
| PLAN | SURVEYED  | BY | DATE |
|      | NOTED     |    |      |
|      | NOTE BOOK |    |      |
|      | NO.       |    |      |

|         |           |    |      |
|---------|-----------|----|------|
| PROFILE | SURVEYED  | BY | DATE |
|         | NOTED     |    |      |
|         | NOTE BOOK |    |      |
|         | NO.       |    |      |

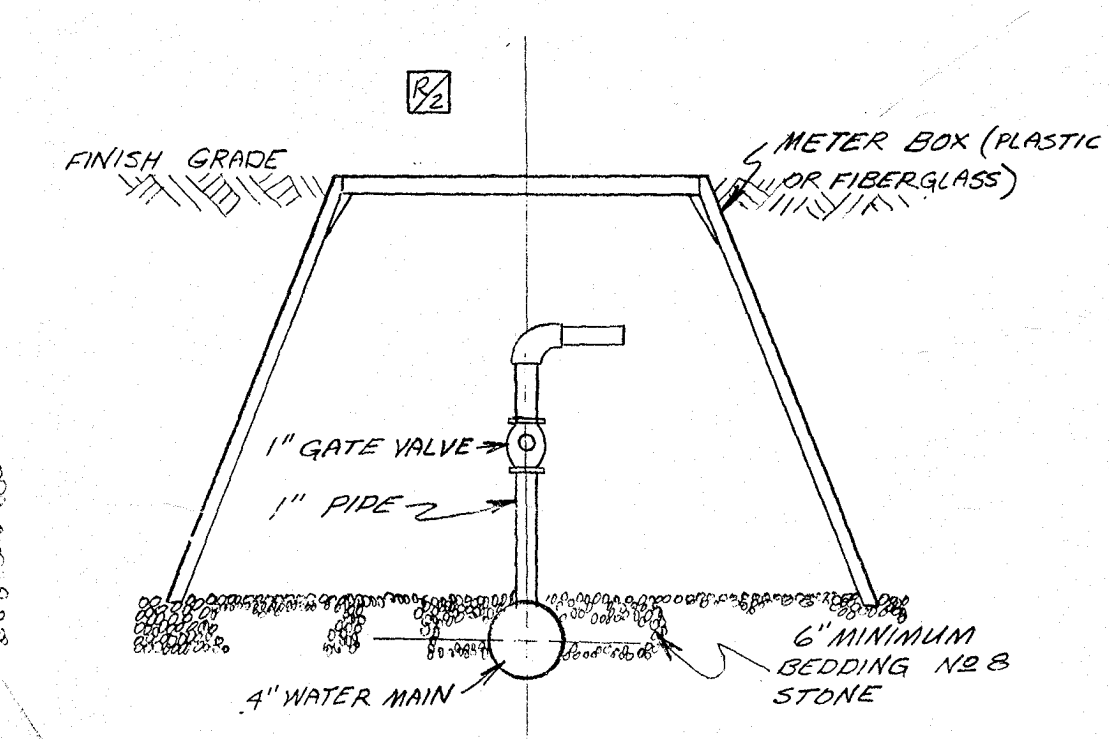


| PIPE SIZE | TEE OR DEAD END |     |     | 90° BEND |     |     | 45° BEND |     |     | 22 1/2° & 11 1/4° BENDS |     |     |
|-----------|-----------------|-----|-----|----------|-----|-----|----------|-----|-----|-------------------------|-----|-----|
|           | A               | B   | C   | A        | B   | C   | A        | B   | C   | A                       | B   | C   |
| 4"        | 2.0             | 3.0 | 1.5 | 3.0      | 4.0 | 1.5 | 2.0      | 3.0 | 1.5 | 2.0                     | 3.0 | 1.5 |
| 6"-8"     | 2.5             | 4.0 | 2.0 | 3.5      | 4.5 | 2.0 | 2.5      | 3.5 | 2.0 | 2.5                     | 3.5 | 2.0 |
| 10"       | 3.0             | 4.5 | 2.0 | 4.0      | 5.0 | 2.5 | 2.5      | 4.0 | 2.0 | 2.5                     | 4.0 | 2.5 |
| 12"       | 3.5             | 5.0 | 2.5 | 4.0      | 5.0 | 3.0 | 3.0      | 4.5 | 2.5 | 3.0                     | 4.5 | 2.5 |
| 15"       | 3.5             | 5.5 | 2.5 | 4.5      | 5.5 | 3.0 | 3.5      | 5.0 | 3.0 | 3.5                     | 5.0 | 3.0 |

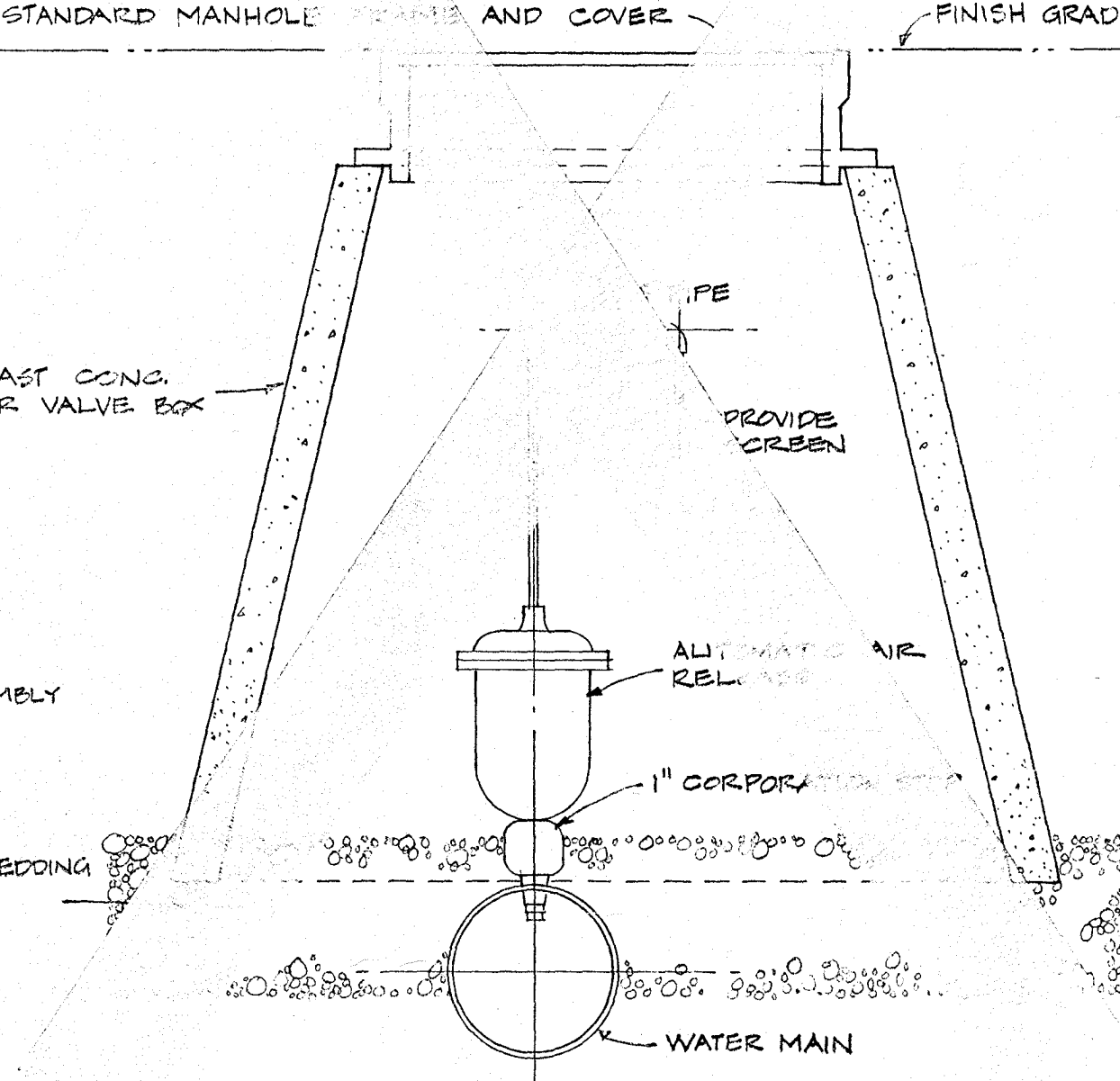
NOTE: CONCRETE SHALL NOT BE PAIRED ON JOINTS, LIMITING FLEXIBILITY. ALL DIMENSIONS ARE IN FEET.

### THRUST BLOCKS

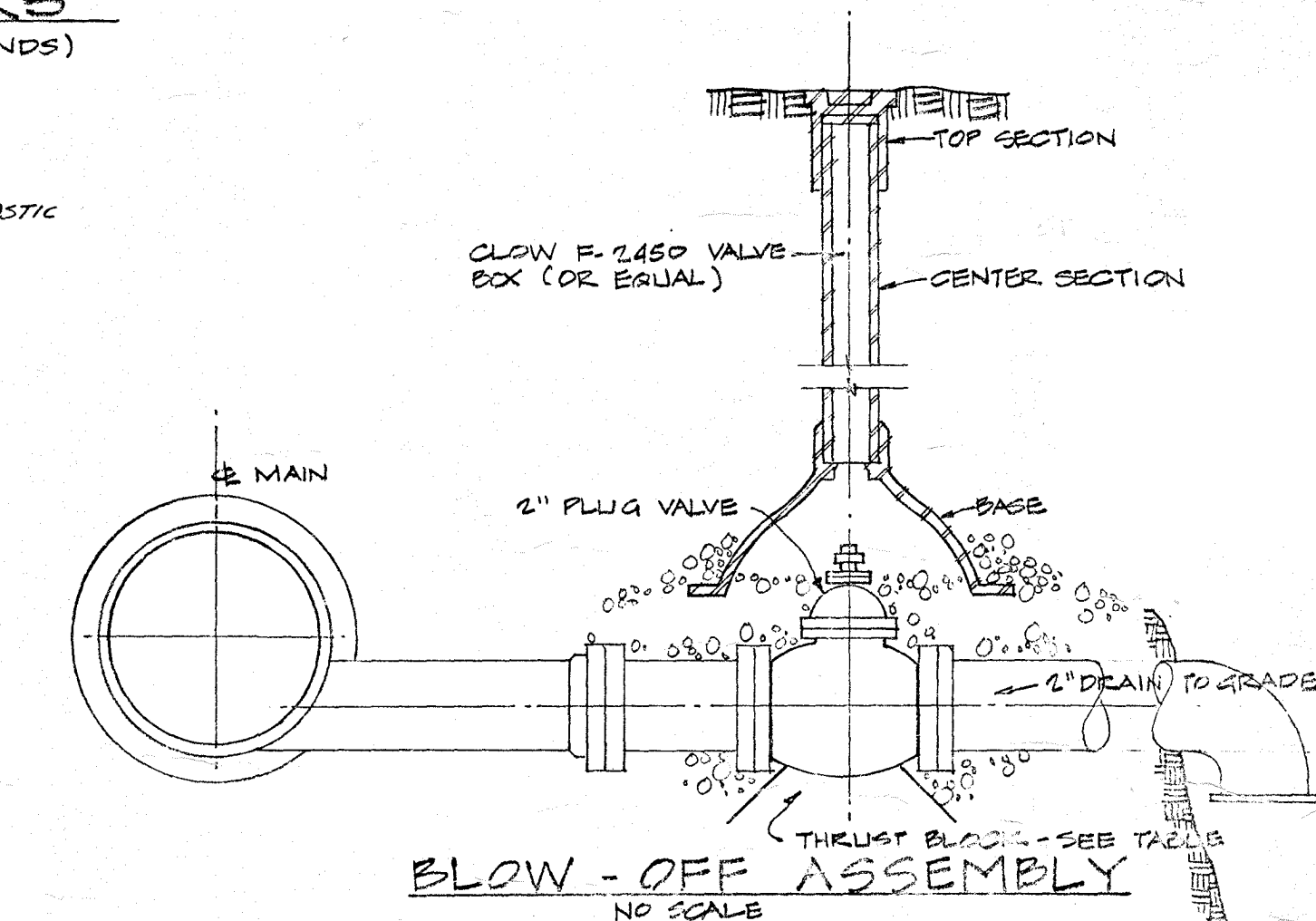
(HORIZONTAL AND VERTICAL BENDS)



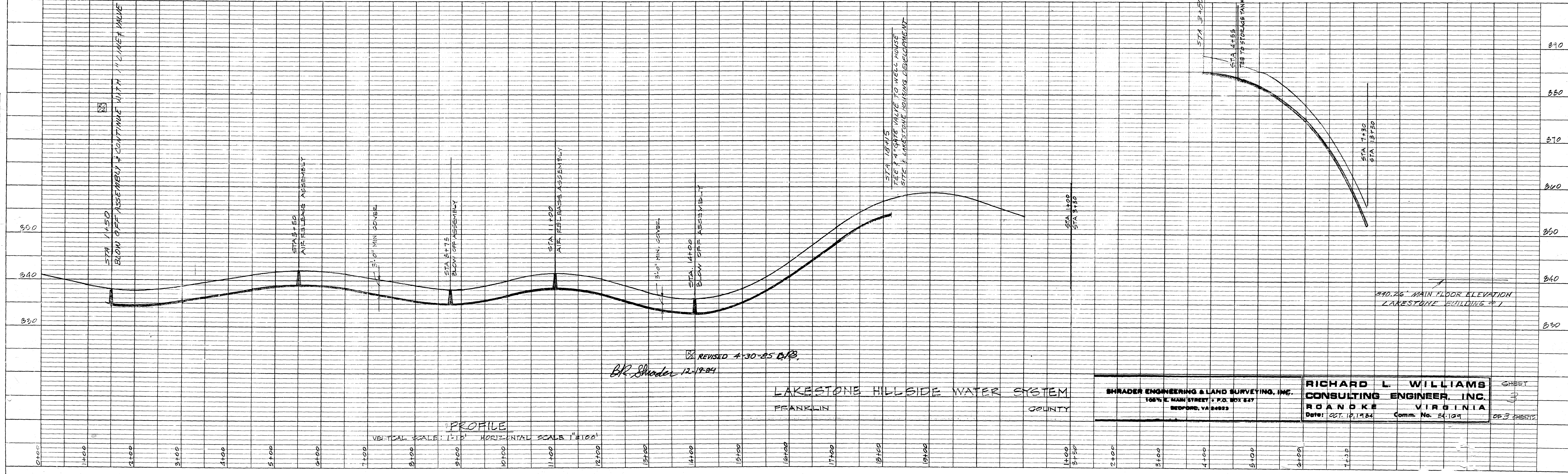
MANUAL AIR RELEASE ASSEMBLY  
NO SCALE



AUTOMATIC AIR RELEASE ASSEMBLY  
NO SCALE



BLOW-OFF ASSEMBLY  
NO SCALE



REVISED 4-30-85 D/B  
BR Shader 12-19-84

LAKESTONE HILLSIDE WATER SYSTEM  
FRANKLIN COUNTY

SHRADER ENGINEERING & LAND SURVEYING, INC.  
108% E. MAIN STREET • P.O. BOX 527  
BEDFORD, VA 24005

RICHARD L. WILLIAMS  
CONSULTING ENGINEER, INC.  
ROANOKE VIRGINIA  
Date: 12-19-84 Comm. No. 84-109

SHEET  
3  
OF 3 SHEETS